

*Final*

# **Environmental Impact Report for Santa Margarita Ranch Agricultural Residential Cluster Subdivision Project and Future Development Program**

State Clearinghouse No. 2004111112



*Volume 1 of 2: EIR Analysis*

*Prepared for:*  
**County of San Luis Obispo  
Department of Planning and Building**

*Prepared by:*  
**Rincon Consultants, Inc.**

**June 2008**











# San Luis Obispo County

## Department of Planning and Building Environmental Division

**TO:** Interested Party  
**DATE:** June 6, 2008  
**FROM:** Trevor Keith, EIR Manager  
**SUBJECT:** Santa Margarita Ranch Agricultural Cluster Subdivision Project and Future Development Program -- Notice of Availability of Final EIR (Tract 2586)

The Final Environmental Impact Report (FEIR) for the Santa Margarita Ranch Agricultural Cluster Subdivision Project and Future Development Program is complete and available for review. The FEIR document is composed of two (2) volumes, each bound separately, and one (1) compact disc (CD).

- Volume 1 consists of the Final EIR analysis, with changes from the Draft Environmental Impact Report (DEIR, January 2007) and Revised Draft Environmental Impact Report (RDEIR, February 2008) incorporated.
- Volume 2 consists of comments and responses on both the DEIR and RDEIR.
- The CD is enclosed in Volume 1 and consists of Appendices to the FEIR.

Changes made to the EIR analysis as a result of the RDEIR and comments received on both the DEIR and RDEIR are included in the FEIR text (Volume 1). Changes are signified by strikeouts (~~strikeouts~~) where text is removed and by bold font (**bold font**) where text is added. If text is added where the font is already bold, additions are noted using underlined bold font (**underlined bold font**).

### **ENVIRONMENTAL IMPACTS:**

The FEIR includes the following issues: agricultural resources; air quality; biological resources; cultural resources; drainage, erosion and sedimentation; geologic stability; land use; noise; public safety; public services and utilities; recreation; transportation and circulation; visual resources; and water and wastewater. The FEIR also considers 14 alternatives, including a "No Project" alternative. The proposed project is within the Agriculture land use category and is located south of the community of Santa Margarita southwest of West Pozo Road.

### **HOW TO GET MORE INFORMATION:**

Hard copies and CDs of the FEIR are available at the following locations: Santa Margarita Library, Cal Poly Library and City/ County Library of San Luis Obispo. Copies are also available on loan and for review at the Environmental Division of the Planning Department, located at the 976 Osos St., Room 300,



San Luis Obispo, 93408-2040. The EIR is on the Planning Department's web site at: **www.sloplanning.org** under "Environmental Information and Natural Resources", then "Environmental Notices, Proposed Negative Declarations, EIRs and other Documents".

If you need more information about this project, please contact Trevor Keith at (805) 781-1431 (or e-mail: [tkeith@co.slo.ca.us](mailto:tkeith@co.slo.ca.us)) or Bill Robeson at (805) 781-5607 (or e-mail: [brobeson@co.slo.ca.us](mailto:brobeson@co.slo.ca.us)).

**PUBLIC HEARING:**

The public hearing before the Planning Commission to certify the EIR and consider the project is scheduled on **July 7<sup>th</sup>, 2008**, in the Board of Supervisors Chambers, County Government Center, San Luis Obispo.



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**Environmental Impact Report for  
Santa Margarita Ranch  
Agricultural Residential Cluster Subdivision Project  
and Future Development Program**

State Clearinghouse No. 2004111112

*Volume 1 of 2: EIR Analysis*

*Case number:*  
VTTM 2586

*Prepared for:*  
**County of San Luis Obispo**  
**Department of Planning and Building**  
County Government Center  
San Luis Obispo, California 93408

*Contact:*  
Bill Robeson, Project Manager, or Trevor Keith, EIR Manager  
(805) 781-5706 or (805) 781-1431

*Prepared by:*  
**Rincon Consultants, Inc.**  
1530 Monterey Street, Suite D  
San Luis Obispo, California 93401

June 2008







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**Appendices (CD Enclosed)**

- Appendix A: Notice of Preparation and Responses
- Appendix B: Baseline Special Events
- Appendix C: Policy Consistency
- Appendix D: Air Emission Calculations
- Appendix E: Cultural Landscape Report
- Appendix F: Native American Contacts
- Appendix G: Paleontology Study
- Appendix H: Drainage and Wastewater Analysis



Appendix I: Noise Calculations  
Appendix J: Traffic Study Technical Calculations  
Appendix K: Hydrogeological Study  
Appendix L: Biological Studies





## **EXECUTIVE SUMMARY**

This section summarizes the characteristics of the proposed Agricultural Residential Cluster Subdivision and envisioned Future Development Program, alternatives to the Agricultural Residential Cluster Subdivision and Future Development Program, as well as environmental impacts, mitigation measures, and residual impacts associated with the Agricultural Residential Cluster Subdivision and Future Development Program.

### **PROJECT SYNOPSIS**

#### **Project Applicant**

The project applicant for the Santa Margarita Ranch Agricultural Residential Cluster Subdivision Project is:

Santa Margarita Ranch, LLC  
5875 Stockdale Road  
Paso Robles, CA 93446  
Contact: Karl Wittstrom

#### **Project Description**

The proposed project, known as the Santa Margarita Ranch Agricultural Residential Cluster Subdivision Project and Future Development Program, includes two components: 1) an Agricultural Residential Cluster Subdivision (Tentative Tract 2586), for which an application has been filed with the County, and 2) a Future Development Program, for which no application has been filed. Despite its status, the Future Development Program is evaluated in the EIR because of a settlement agreement between the community group Santa Margarita Area Residents Together (SMART), the County, and the applicant (Santa Margarita Ranch, LLC). This agreement required that the applicant submit a Future Development Program for the Ranch at the time of any specific entitlement request (such as the proposed Tentative Tract Map and Conditional Use Permit).

The Santa Margarita Ranch property (hereinafter, “the Ranch”) encompasses approximately 14,000 acres and is located immediately east of U.S. Highway 101, and surrounds the community of Santa Margarita. The proposed Agricultural Residential Cluster Subdivision includes 3,778 acres near the middle of the Ranch, southeast of the community of Santa Margarita, while the Future Development Program occurs in various locations throughout the balance of the 14,000-acre property (refer to Figure ES-1). The proposed subdivision also includes a 2,417 acre remainder lot that is not proposed for development at this time. The remainder parcel is located north of the proposed Agricultural Residential Cluster Subdivision lots, south of the community of Santa Margarita (refer to Figure ES-2).

The specific components of the Agricultural Residential Cluster Subdivision and Future Development Program are described below and summarized in Table ES-1.



**Table ES-1. Summary of Project and Program Components**

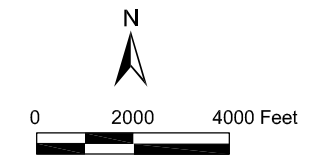
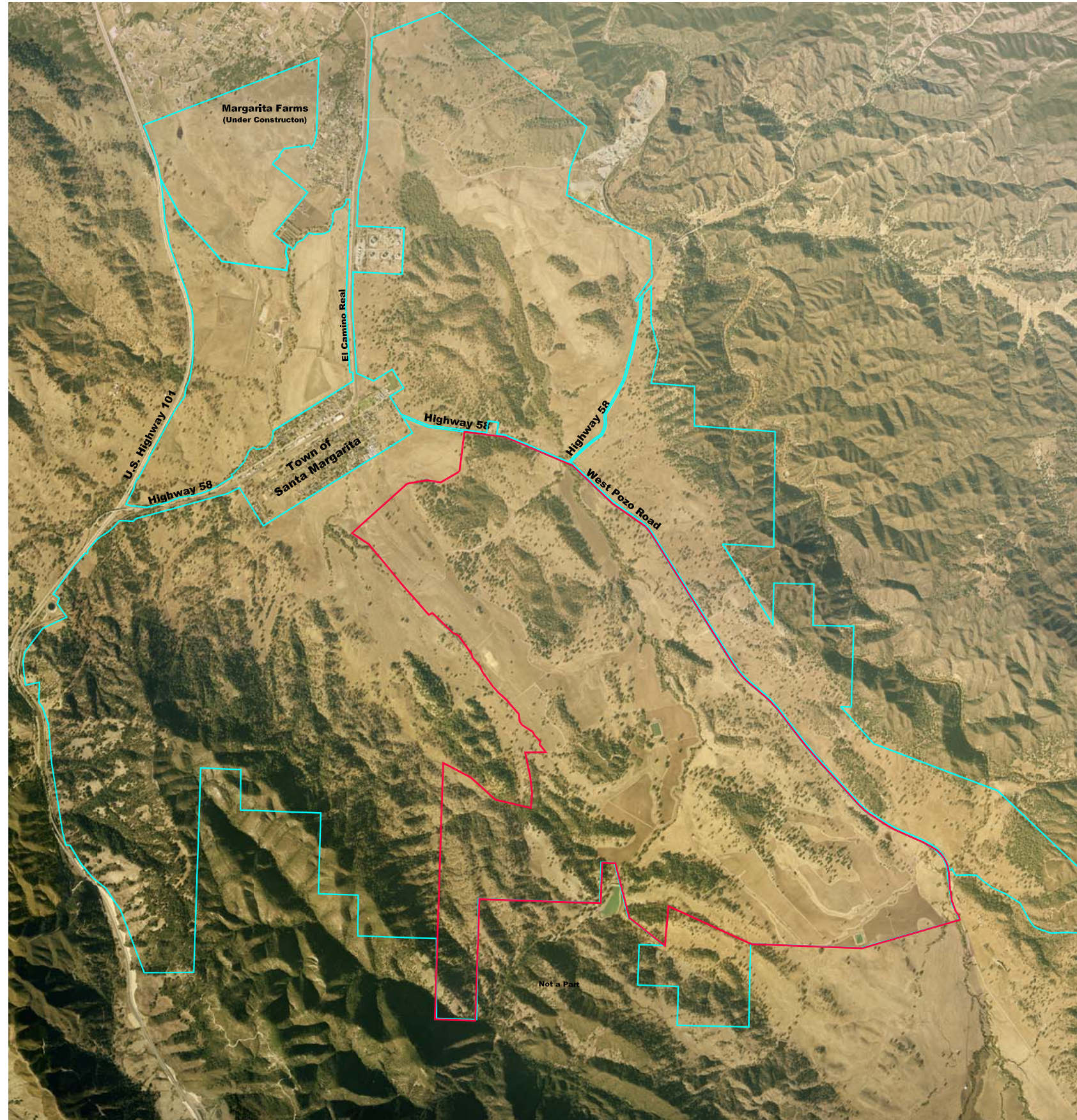
<b>Project Element</b>	<b>Project Characteristics</b>
<b>Agricultural Residential Cluster Tract 2586</b>	
111 residential clustered lots	1.0 to 2.5 acres in size (128 acres)
1 Dwelling Unit at Headquarters Parcel, Parcel 42	
40-foot wide private easements (residential) and 30-foot wide driveway easements	16 acres
40-foot wide private easements (residential and agricultural)	19.1 acres
Paved roads	20 and 18 feet wide (or narrow if approved)
Water and Septic Utilities	Water tank, service main and service lines; water wells. 112 on-site septic systems
Underground and aboveground utilities	State Water, Salinas Water, Pacific Gas and Electric, Southern California Gas Company, Phillips Petroleum, telephone, and cable
<b>Drainage Facilities</b>	<b>Storm Drains and Detention Basins</b>
<b>Future Development Program</b>	
Remainder of the 550 residential units allowable under the Salinas River Area Plan (minus 36 residential units in Tract 1, and 112 units on Tract 2586)	402 residential lots, approximately 400 acres (includes 50 affordable workforce units)
Private golf course, club house, shop	27 to 36 holes / 220 to 280 acres
Guest ranch, lodge, and restaurant	150 to 250 units, 40 tables/200 patrons, 100 acres
Restaurant	40 tables/ 200 patrons
Bed and breakfast	12 rooms
Café	20 tables/ 100 patrons
Amphitheater	200 to 600 seats
Craft studios, galleries, and shops	6,000 square feet
Interpretive center and gift shops	3,000 square feet
Nine wineries, tasting rooms, and special events	8 @ 20,000 to 40,000 square feet each, 1 @ 80,000 square feet / 42 events per year per facility: six events with 1,000 people; six events with 500 people; six events with 300 people; ten events with 200 people, and; fourteen events with 100 people
Five ranch/farm headquarters	2.5 acres each
Livestock sales yard and café	20 acres / one Saturday per month with 80 to 100 people / 75 patrons
Horse ranch	30 (+) horses
Three places of worship	2,000 to 5,000 square feet each
40 Year Williamson Act parcels (various agricultural uses)	3,600 acres
Oakenshaw Retreat Center	16 to 24 units on 30 acres with lodge and residence
Neighborhood parkland and swimming pool	5 acres east of Santa Margarita Community
Dedication of land for future Sewage Treatment Plant	Location to be determined: 10 acres
Dedication of land for expansion of cemetery	5 acres
Public Hiking / Equestrian Trails	Various locations to be determined upon future non-agricultural development
Drainage Facilities	Various Locations, with a community drainage basin upstream of the Community of Santa Margarita

**Agricultural Residential Cluster Subdivision**

The proposed Agricultural Residential Cluster Subdivision consists of 111 residential parcels (1.0 to 2.5 acres in size), 1 dwelling unit at the Ranch Headquarters on Parcel 42, and permanent agricultural conservation easements (approximately 3,633 acres). The proposed subdivision also includes a 2,417 acre remainder lot that is not proposed for development at this time. The







- Agricultural Residential Cluster Subdivision Boundary
- Future Development Program Boundary

Proposed Agricultural Residential Cluster Subdivision and Future Development Program Boundaries

Figure ES-1







remainder parcel is located north of the proposed Agricultural Residential Cluster Subdivision lots, south of the community of Santa Margarita (refer to Figure ES-2). Development of the Agricultural Residential Cluster Subdivision would occur in three phases, each including an agricultural conservation easement (ACE) area, as depicted on Figure 2-6. Each phase is described in greater detail in the following paragraphs:

Phase One (1,518 acres) - 40 residential cluster lots (44.8 acres); 1 dwelling unit at the Ranch Headquarters on Parcel 42; 40-foot wide private residential access easement (4.0 acres); 40-foot wide private agricultural and residential access easement (8.7 acres), 22-foot wide or less paved road; water service improvements including a water tank with a minimum capacity of 188,000 gallons that would be screened with vegetation or located underground, looped service main, and service lines to residential parcels; underground wire utilities; 41 individual on-site septic systems and leach fields (located on-site or within the ACE by easement(s)); and, an agricultural conservation easement parcel of approximately 1,469 acres (refer to Figure ES-2). Phase One is scheduled for completion in January 2008.

Phase Two (1,201 acres) - 42 residential clustered lots (49.8 acres); 40-foot wide private residential access easement and 30-foot wide driveway easements (7.8 acres); 40-foot wide private agricultural and residential access easement (5.9 acres); 18-foot wide or less paved road; water service improvements including a looped service main and service lines to residential parcels; underground wire utilities; 42 on-site septic systems and leach fields; and an agricultural conservation easement parcel of approximately 1,144 acres. Phase Two is scheduled for completion in January 2009.

Phase Three (1,057 acres) - 29 residential clustered lots (33.1 acres), 40-foot wide private residential access easement and 30-foot wide driveway easements (4.2 acres); 40-foot wide private agricultural and residential access easement (4.5 acres); 22-foot wide or less paved road; water service improvements including a looped water main and service lines to residential parcels, underground wire utilities, 29 individual on-site septic systems, and an agricultural conservation easement parcel of approximately 1,019 acres. Phase Three is scheduled for completion in January 2010.

Covenants, Conditions and Restrictions (CC&Rs) are required for the 111 clustered residential home sites. The applicant does not propose a Homeowners Association, since no areas would be under common ownership.

An existing access road, located approximately 775 feet northwest of the one-mile bridge or the El Camino Real turn-off for Highway 58, provides primary access to the agricultural cluster subdivision site. Phase Two of the development includes the addition of a secondary access point from Highway 58. The internal roadway system consists of looped, two-lane roadways that connect to driveways to individual home sites. The applicant does not propose public access through the agricultural cluster subdivision. The cluster residential site will remain fenced with two gated entry points to contain cattle within the site, separate residential uses from vineyards, and provide security.

The proposed Agricultural Residential Cluster Subdivision includes 3,633 acres of permanent agricultural conservation easements (ACE's) applied to the areas designated within the proposed tract map. The ACE's provide for the protection of the existing and future on-site

agricultural resources and operations, as well as ongoing recreation and natural resource protection activities, while keeping the land in private ownership and on local tax rolls. The terms of ACE's can be tailored to suit the needs of the landowner and his or her property. While agricultural easements generally restrict all non-agricultural use of the land, continued ranching and farming are permitted, and some limited development may be allowed. For example, an ACE generally permits the construction of new farm buildings and can allow construction of a home for family members or the subdivision of a lot for resale. In addition, ACE's often permit commercial development related to the farm operation. The flexibility of these and other restrictions vary with the characteristics of the agricultural land and the conservation objectives of the easement.

The applicant proposes an ACE rather than a Williamson Act Contract, which preserves agriculture and open space over a rolling term 10 year contract. Williamson Act parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than potential market value.

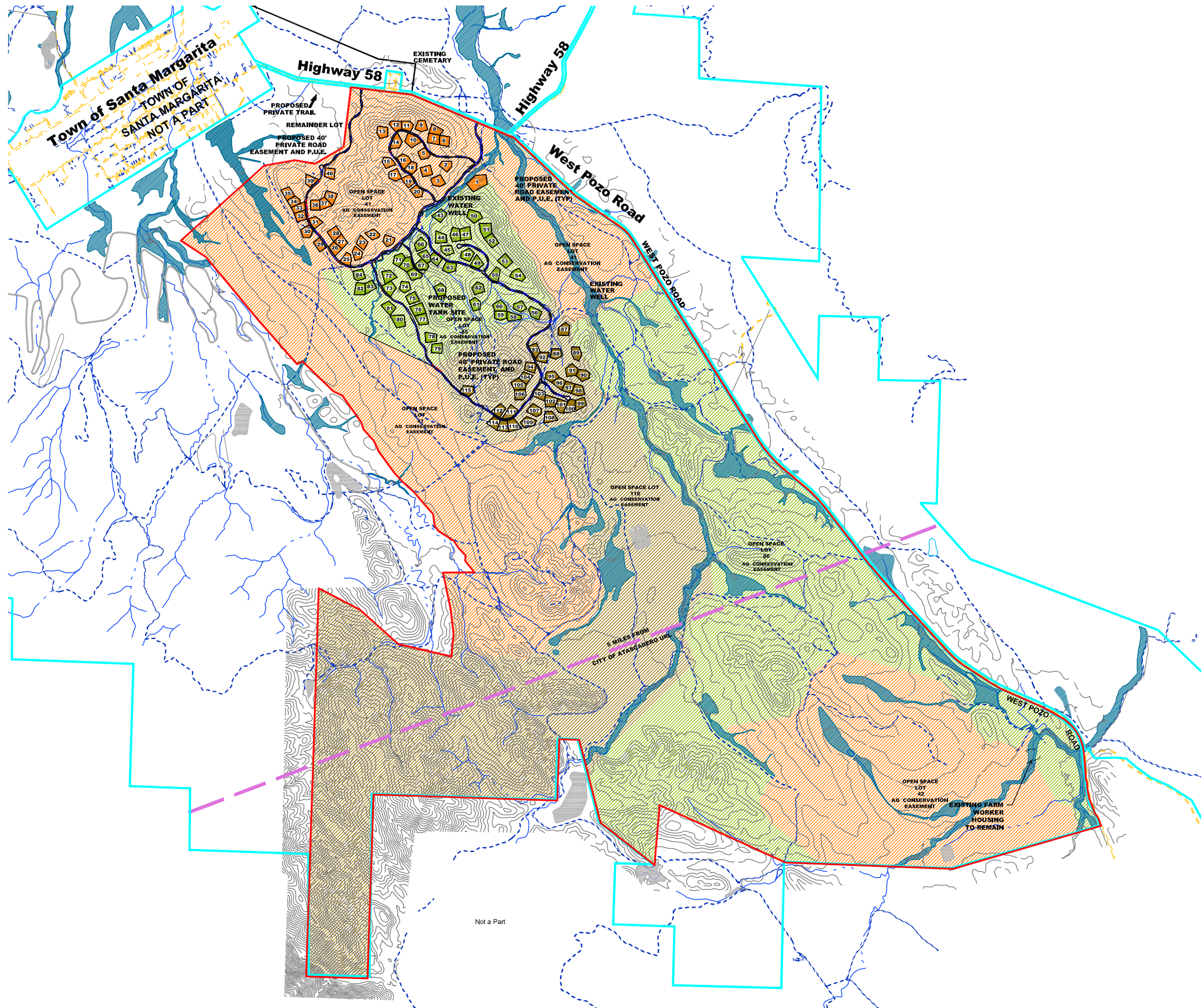
The applicant proposes that the ACE's be included in the Santa Margarita Preserve, a non-profit conservation entity that, in combination with other non-profit agencies such as the California Rangeland Trust, will hold the ACE's and provide funding for operation and management oversight. The applicant proposes that the ACE areas continue to operate as a private ranch in private ownership.

### **Future Development Program**

The Future Development Program occurs throughout the portions of the Santa Margarita Ranch property generally outside the boundaries of the Agricultural Residential Cluster Subdivision, east of Highway 101 and surrounding both the community of Santa Margarita and the proposed Agricultural Residential Cluster Subdivision (refer to Figure ES-3). The Future Development Program includes the balance of the 550 single-family residential units allowable pursuant to the Salinas River Area Plan (approximately 402 residences) and the additional following uses: private golf course, club house and pro shop; guest ranch, lodge, and restaurant; 12-room bed and breakfast; cafe; amphitheater; crafts studios, galleries and shops; interpretive center and gift shops; nine wineries with tasting rooms and permitted special events; neighborhood park and swimming pool; five ranch/farm headquarters; one livestock sales yard and café; three places of worship; and a retreat center. The Future Development Program contemplates two of the envisioned wineries and two of the anticipated ranch headquarters within the Agricultural Conservation Easements (ACEs) associated with the proposed Agricultural Residential Cluster Subdivision.

Table ES-2 lists the Future Development Program contemplated uses with corresponding reasonable worst-case buildout characteristics and required County discretionary approvals. The Future Development Program conceptual land uses and locations are depicted on Figure ES-3.





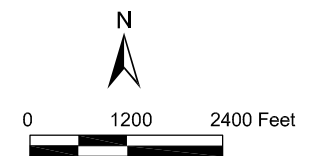
**LEGEND**

- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- ~ WATERS-OF-THE-US
- ~ CONTOURS - 25' INTERVAL

**PHASING LEGEND**

- PHASE ONE DEVELOPED AREA = 44.5 AC (36 LOTS, ROAD, DRIVEWAY EASEMENTS)
- PHASE ONE AG CONSERVATION EASEMENT (1469.4 AC)
- PHASE TWO DEVELOPED AREA = 63.7 AC (47 LOTS, ROAD/ DRIVEWAY EASEMENTS)
- PHASE TWO AG CONSERVATION EASEMENTS (1144.1 AC)
- PHASE THREE DEVELOPED AREA = 36.5 ACRES (28 LOTS, ROAD/ DRIVEWAY EASEMENTS)
- PHASE THREE AG CONSERVATION EASEMENT (1019.8 AC)

NOTE:  
 SEE PRELIMINARY GRADING AND DRAINAGE PLANS FOR INDIVIDUAL RESIDENTIAL LOT DIMENSIONS.

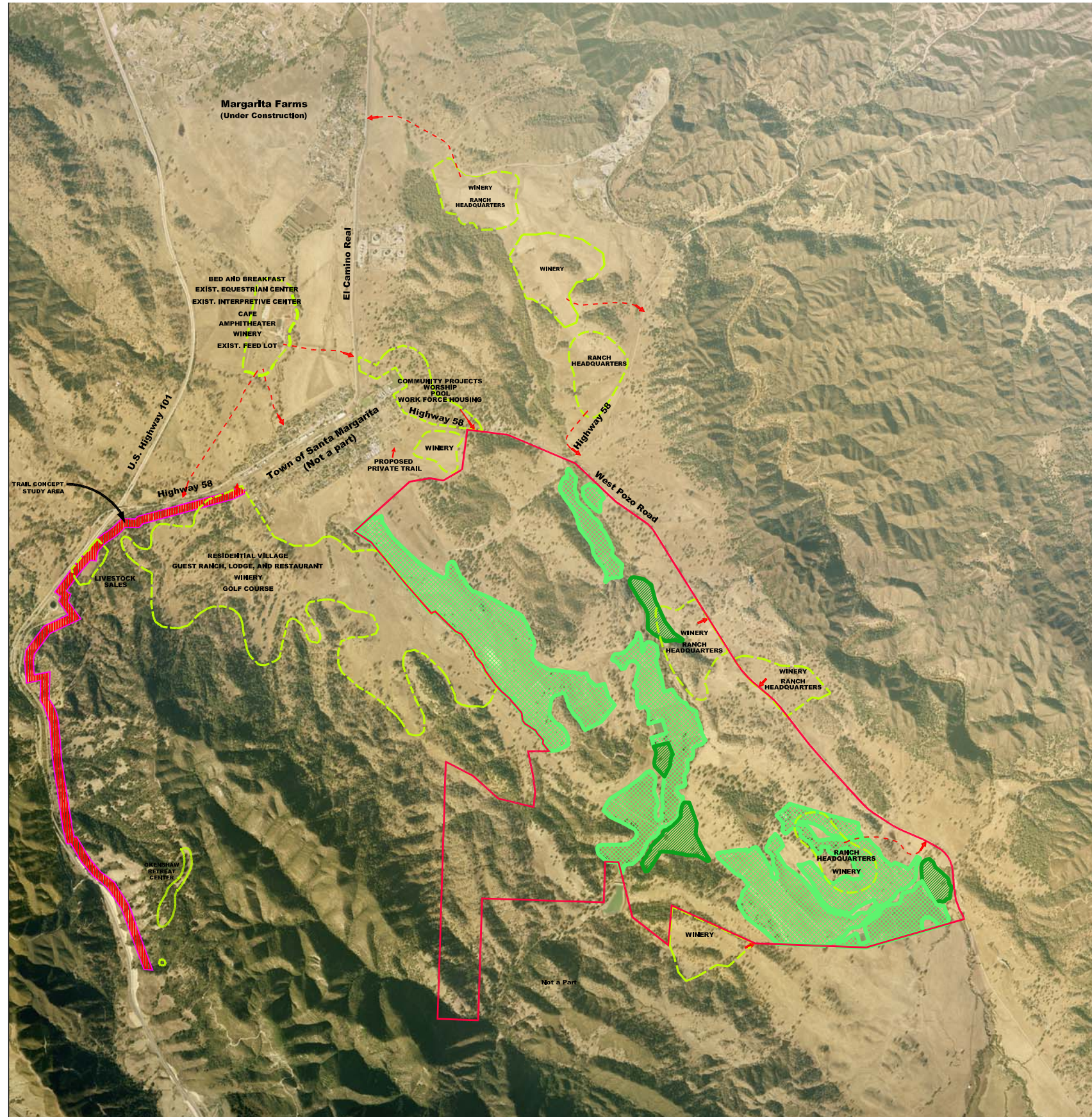


Proposed Agricultural Residential Cluster Subdivision Development Plan Phasing

Figure ES-2

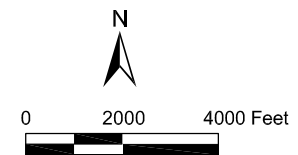






LEGEND

- TENTATIVE TRACT 2586 BOUNDARY (3,778 ACRES)
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION (112 ACRES FOR RESIDENTIAL LOTS, 163 ACRES TOTAL DISTURBANCE)
- RANCH PROPERTY BOUNDARY (APPROXIMATELY 14,000 ACRES)
- - - FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS (1,836 ACRES TOTAL)
- EXISTING VINEYARD (973.9 ACRES)
- AG IN PROGRESS (INCLUDED IN EXISTING VINEYARD ACREAGE)
- ROADWAYS
- TRAIL CONCEPT STUDY AREA



Future Development Program  
 Conceptual Land Uses and Locations







**Table ES-2. Future Development Program Components**

Potential Use	Projected Location	Future Buildout	Land Use Approvals Required
347 Single-Family Residential Lots	Southwest of Town surrounding potential Golf Course; east of town near potential park; scattered throughout the Ranch	347 single-family residences on 1-acre lots. Residences would each be 3,500 square feet and two stories in height.	Ag Cluster, Building Permit for Existing Lots, and/or Specific Plan for Subdivision other than Ag Cluster
50 affordable housing units	East of town, north of SR 58/West Pozo Rd.	50 multi-family residential units in one two-story structure	Specific Plan
Private Golf Course with Club House and Shop, and associated ancillary facilities (i.e. maintenance)	Southwest of town, south of SR 58/El Camino Real	36 holes on 280 acres, with 25,000 square foot clubhouse and shop	General Plan Amendment/ zone change and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Guest Ranch and Lodge with Restaurant	Southwest of town, south of SR 58/El Camino Real	250 guest units; 24,000 square foot restaurant with capacity for 40 tables/200 patron restaurant	General Plan Amendment/ zone change, Use Permit, and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Bed and Breakfast	North of town at existing headquarters' parcel	12,000 square foot of structures with 12 suites	Use Permit and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Café	North of town at existing headquarters' parcel	6,000 square foot café with capacity for 20 tables/200 patrons	General Plan Amendment/ zone change, Use Permit, and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Amphitheater	North of town at existing headquarters' parcel	600 seats	General Plan Amendment/ zone change, Use Permit, and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Craft studios, galleries and shops	North of town at existing headquarters' parcel and/or on potential winery sites	6,000 square feet total	General Plan Amendment/ zone change, Use Permit, and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Interpretive center and gift shops	North of town at existing headquarters' parcel	3,000 square feet total	Specific Plan and/or General Plan Amendment/zone change
Nine Wineries	Within ACE associated with proposed Agricultural Residential Cluster Subdivision (adjacent to West Pozo Road)	8 @ 40,000 square feet each with on-site tasting and 42 permitted events per year (up to 14,200 guests). Each winery would contain a retail component including galleries and gift shops. 1 winery at 80,000 Square Feet	Use Permit and/or Specific Plan if Subdivision other than Ag Cluster is proposed
	Within ACE associated with proposed Agricultural Residential Cluster Subdivision (southern portion)		
	North of town at existing headquarters' parcel		



**Table ES-2. Future Development Program Components**

Potential Use	Projected Location	Future Buildout	Land Use Approvals Required
	Northeast corner of Ranch (northernmost winery)		
	Southeast of northern-most winery		
	Northwest of Cluster subdivision, south of SR 58/West Pozo Road		
	Southwest of town, near potential golf course		
	East side of West Pozo Road, approximately 5.5 miles south of town		
	Southwest of Lot 42 Cluster ACE (southern-most winery)		
Five ranch/farm headquarters	Within ACE associated with proposed Agricultural Residential Cluster Subdivision (adjacent to West Pozo Road)	5,000 square feet residence on 2.5 acre lots each plus, Barns, Shops, etc.	Zoning clearance and / or Specific Plan if Subdivision other than Ag Cluster is proposed
	Within ACE associated with proposed Agricultural Residential Cluster Subdivision (southern portion)		
	On northernmost winery site		
	North side of SR 58, northeastern portion of Ranch property		
	On winery site east of West Pozo Road, approximately 5.5 miles south of town		
Livestock sales yard and café	West of town and potential golf course, near Highway 101	20 acres; one Saturday per month with up to 100 people; 2,250 square foot café with capacity for 75 patrons	Use Permit and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Horse Ranch	North of town at existing headquarters' parcel	40 horses, with stables structures	Minor Use Permit (MUP) and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Three places of worship	East of town, north of SR 58/West Pozo Rd.	20,000 square feet each (includes parking and related infrastructure/ improvements)	Specific Plan or Use Permit
Oakenshaw Retreat Center	Southwestern edge of Ranch property, along Highway 101	12,000 square feet and 24 individual cabins	Use Permit and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Neighborhood park and swimming pool	East of town, north of SR 58/West Pozo Rd.	5 acres, with 1,000 square foot pool house	Specific Plan and/or General Plan Amendment/zone change
Dedication of land for future sewage treatment plant	Location to be determined	10 acres	Acceptance of dedication
Dedication of land for expansion of cemetery	Adjacent to existing cemetery, north of SR 58/West Pozo Rd.	Additional 5 acres of cemetery development	Acceptance of dedication



**Table ES-2. Future Development Program Components**

Potential Use	Projected Location	Future Buildout	Land Use Approvals Required
Public hiking/ equestrian trails	Various locations to be determined upon future non-agricultural development	Hiking/equestrian trails connecting and looping between Santa Margarita, Garden Farms, national forest and the ranch boundary ("De Anza Trail")	N/A
Drainage facilities	Various locations. Community Drainage Basin location to be determined in coordination with Specific Plan.	N/A	N/A
Special Events	Various Locations	120,000 people per year including the 22,000 existing served	Use Permit and / or Specific Plan if Subdivision other than Ag Cluster is proposed

## ALTERNATIVES

Fourteen (14) alternatives to the proposed Agricultural Residential Cluster Subdivision and Future Development Program were selected for consideration as follows:

- Alternative 1: No Project/No Development
- Alternative 2: No Project/Existing Zoning
- Alternative 3: Revised Cluster Design
- Alternative 4: Revised Cluster Location 1
- Alternative 5: Revised Cluster Location 2
- Alternative 6: Revised Cluster Location 3
- Alternative 7: Tighter Cluster Alternative
- Alternative 8: Alternative Future Development Program Scenario 1
- Alternative 9: Alternative Future Development Program Scenario 2
- Alternative 10: Alternative Future Development Program Scenario 3
- Alternative 11: Alternative Location for Livestock Sales
- Alternative 12: Amended Project
- Alternative 13: Santa Margarita Town Expansion
- Alternative 14: Reduced Project

The No Project/No Development Alternative (Alternative 1) is considered environmentally superior overall, since no development that could result in significant environmental impacts would occur. The No Project/Existing Zoning Alternative (Alternative 2) is also environmentally superior to the proposed Agricultural Residential Cluster Subdivision and Future Development Program. However, the No Project/Existing Zoning Alternative would not preclude future development on the Santa Margarita Ranch. The current land use designation that governs most of the Ranch (i.e., Agriculture) would keep the possibility of development open, pursuant to the County’s agricultural cluster subdivision ordinance and other development regulations.

Among the other development alternatives, Alternative 14 (Reduced Project Alternative) is environmentally superior overall, while Alternatives 12 (Amended Project), 7 (Tighter Cluster



Alternative), 3 (Revised Cluster Design), and 13 (Santa Margarita Town Expansion) are all superior to the proposed Agricultural Residential Cluster Subdivision in certain respects. Each of the Alternative Future Development Program Scenarios (Alternatives 8, 9, and 10) would be environmentally superior to the Future Development Program.

Alternative 14 (Reduced Project Alternative) is environmentally superior to the Agricultural Residential Cluster Subdivision because it would reduce the size of the project from 112 to 40 lots and would reduce associated site disturbance by approximately 64%. The reduced site disturbance would result in fewer impacts related to agricultural resources, biological resources, drainage, erosion and sedimentation, and visual resources. Fewer lots and an associated decrease in project residents would further reduce impacts to air quality, noise, public safety, public services, recreation, transportation and circulation, and water and wastewater. Remaining impact areas (cultural resources, geologic stability and land use) would be reduced through a combination of the lesser site disturbance and fewer project residents. Overall, this alternative would be environmentally superior to the proposed Agricultural Residential Cluster Subdivision for 12 of the 14 issue areas, and environmentally superior/equal to the Agricultural Residential Cluster Subdivision for the remaining two issue areas.

Alternative 9 (Alternative Future Development Program Scenario 2) and Alternative 10 (Alternative Future Development Program Scenario 3) are both environmentally superior to the Future Development Program for all 14 issue areas. Of the two, Alternative 10 is more environmentally superior because it reduces development potential to a greater extent.

Alternative 10 (Alternative Future Development Program Scenario 3) would eliminate Future Development Program land uses in the most sensitive cultural resource areas. This would involve the elimination of the following uses: a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater, 9,000 square feet of craft studios, galleries, an interpretive center, and gift shops, and a 40,000 square foot winery on the existing Ranch headquarters parcel; a 347-unit residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery including an additional 6,000 square foot retail component, and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop located southwest of the community of Santa Margarita; one Ranch headquarter located northwest of SR 58 (after SR 58 curves northerly); and one winery/Ranch headquarter located in the southern portion of the Ranch property, west of West Pozo Road. Due to the extent of eliminated envisioned uses, impacts related to construction and long-term site disturbances, such as biological resources, cultural resources, geologic stability and visual resources would decrease considerably. In addition, since 942 fewer residents (68% less) would be added to area, impacts based on a per capita generation would also decrease considerably. These issues include public services, recreation, and water and wastewater. In addition, this alternative would result in a decrease of approximately 6,843 daily trips (74% less) as compared to the currently envisioned Future Development Program. Air quality, noise, and transportation and circulation would therefore be reduced. Because 942 fewer residences would be developed, fewer additional residents or property would be exposed to geologic or other public safety hazards. Overall, this alternative would be environmentally superior to the currently envisioned Future Development Program.

The alternatives analysis is described in further detail in Section 6.0, *Alternatives*.



## AREAS OF CONCERN

Pursuant to State CEQA Guidelines § 15123(b)(2), this EIR acknowledges the areas of controversy and issues to be resolved which are known to the County of San Luis Obispo or were raised during the scoping process. A Notice of Preparation (NOP) was prepared and circulated for a 30-day public review period that began on November 19, 2004 and ended December 20, 2004. Several comment letters from the public, and comment letters from public agencies (i.e., U.S. Department of Transportation, Federal Aviation Administration; U.S. Department of Agriculture; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; California Highway Patrol; California Department of Conservation; California Department of Forestry/San Luis Obispo County Fire Department; San Luis Obispo County Air Pollution Control District; County of San Luis Obispo Department of Agriculture; County of San Luis Obispo Public Works Department; San Luis Obispo County Parks), were received in response to the NOP. NOP comment letters are included in Appendix A of this EIR.

Primary environmental areas of concern raised by the commenting agencies and public include:

- Aviation hazards
- Impacts and trail connections to Santa Lucia Wilderness
- Water supply, including groundwater impacts
- Water quality
- Fire safety
- Erosion, sedimentation and water supply impacts on Steelhead
- Construction traffic
- Operational traffic
- Traffic and pedestrian safety
- Site access
- Impacts on agricultural production, including existing vineyard operations
- Growth-inducing impacts
- Consistency with Land Use Ordinance requirements
- Air contaminant emissions
- Provision of parks, recreation, and trail facilities
- Drainage and flood hazards
- Winery noise, light, traffic, air quality, and biological impacts
- Impacts from special events
- Visual impacts from lighting

## SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table ES-3 identifies Agricultural Residential Cluster Subdivision environmental impacts, proposed mitigation measures, and residual impacts. Table ES-4 follows to identify Future Development Program impacts, which represent the impacts of cumulative buildout of the Ranch property. Impacts are organized by classes. Each bolded impact listing also contains a statement of the significance determination for the environmental impact as follows:

*Class I. Significant and Unavoidable: An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an*



*impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the State CEQA Guidelines.*

*Class II. Significant but Mitigable: An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings to be made under §15091 of the State CEQA Guidelines.*

*Class III. Not Significant: An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.*

*Class IV. Beneficial: An effect that would reduce existing environmental problems or hazards.*

Refer to Section 1.5 of this EIR for a discussion of additional effects found not to be significant through the scoping process for the proposed Agricultural Residential Cluster Subdivision and Future Development Program. Issue areas with effects found not to be significant include: mineral resources; housing displacement; and Habitat or Community Conservation Plan consistency.

## **SIGNIFICANT AND UNAVOIDABLE IMPACTS**

The proposed Agricultural Residential Cluster Subdivision would result in eleven (11) significant and unavoidable (Class I) impacts. Issue areas with Class I impacts include: agricultural resources; air quality; biological resources; cultural resources; noise; transportation and circulation; visual resources; and water and wastewater. Each of these issue areas would result in one Class I impact, with the exception of agricultural resource, air quality and cultural resources, which would each result in two. Impacts are discussed in greater detail in Section 4.0 of this EIR and are summarized in Table ES-3 below.

The Future Development Program would result in eleven (11) significant and unavoidable (Class I) impacts. Issue areas with Class I impacts include: agricultural resources; air quality; biological resources; cultural resources; noise; transportation and circulation; visual resources; and water and wastewater. Each of these issue areas would result in one Class I impact, with the exception of agricultural resources, cultural resources and transportation and circulation, which would each result in two. Impacts are discussed in greater detail in Section 4.0 of this EIR and are summarized in Table ES-4 below.



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS I IMPACTS: SIGNIFICANT AND UNAVOIDABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<b>AGRICULTURAL RESOURCES</b>		
<p><b>ARCS Impact AG-1</b> The proposed Agricultural Residential Cluster Subdivision would permanently compromise the sustainability of a 676.7-acre grazing unit and would permanently convert 21.2 acres containing prime soils to non-agricultural uses. Impacts related to agricultural conversion would be Class I, <i>significant and unavoidable</i>.</p>	<p>No feasible measures are available that would mitigate impacts to the on-site grazing unit and prime soils located on the Agricultural Residential Cluster Subdivision site without substantial redesign of the proposed Agricultural Residential Cluster Subdivision.</p>	<p>Impacts would remain Class I, <i>significant and unavoidable</i>.</p>
<p><b>ARCS Impact AG-2</b> The proposed Agricultural Residential Cluster Subdivision would create conflicts between proposed urban uses and existing and future agricultural uses. Potential land use conflicts are a Class I, <i>significant and unavoidable</i>, impact.</p>	<p><b>ARCS AG-2(a) Disclosure of Potential Nuisance.</b> In accordance with the County Right to Farm Ordinance (No. 2050), upon the transfer of real property on the Agricultural Residential Cluster Subdivision site, the transferor shall deliver to the prospective transferee a written disclosure statement that shall make all prospective homeowners in the proposed Agricultural Residential Cluster Subdivision aware that although potential impacts or discomforts between agricultural and non-agricultural uses may be lessened by proper maintenance, some level of incompatibility between the two uses would remain. This notification shall include disclosure of potential nuisances associated with on-site agricultural uses, including the frequency, type, and technique for pesticide spraying, frequency of noise-making bird control devices, dust, and any other vineyard practices that may present potential health and safety effects. In addition, the notification shall identify that adjoining agricultural land is permanently protected for agricultural uses, and that future agricultural uses may vary from current uses and might include processing facilities, nighttime operation, wind machines, odor, dust, noise, legal chemical applications, use and creation of compost, and/or changes in irrigation patterns and water use. The establishment of new agricultural uses, if established in accordance with standard agricultural practices, will not be considered a nuisance from the time of establishment.</p> <p><b>ARCS AG-2(b) Agricultural Buffers.</b> The applicant shall maintain buffered lot locations as approved by the Agricultural Commissioner. Additionally, a building limit line shall be established for habitable structures on Lots 1, 99 and 100.</p> <p><b>ARCS AG-2(c) Oak Tree Retention.</b> All existing oak trees located between Agricultural Residential Cluster Subdivision lots and vineyards shall be retained for screening/buffering purposes. Should oak tree removal be required for safety</p>	<p>Implementation of the above mitigation measures and the proposed agricultural conservation easements would partially reduce land use compatibility impacts. However, given the non-contiguous design of proposed lots and the intensity of existing agricultural activities on the site (vineyards), impacts would remain Class I, <i>significant and unavoidable</i>.</p> <p>Refer to Section 4.9, <i>Public Safety</i>, for a discussion of impacts related to agricultural chemicals and agricultural vehicle conflicts. Refer to Section 4.4, <i>Cultural Resources</i>, for a discussion of impacts to the historical agricultural values of the site.</p> <p>It should be noted that the proposed Agricultural Residential Cluster Subdivision and envisioned Future Development</p>





**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS I IMPACTS: SIGNIFICANT AND UNAVOIDABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>reasons, trees shall be replaced in accordance with Agricultural Residential Cluster Subdivision measure B-3(b) (Oak Tree Replacement, Monitoring, and Conservation).</p> <p><b>ARCS AG-2(d) No-Climb Fencing.</b> Existing fencing located between the outer perimeter of Agricultural Residential Cluster Subdivision residential lots and vineyards shall be maintained in perpetuity, or new no-climb fencing shall be installed, to reduce trespass potential.</p>	<p>Program would not result in impacts related to agricultural tourism activities on the site (e.g., tours, dude ranch activities), when compared to existing conditions, because no intensification of existing baseline agricultural tourism activities is proposed with the exception of the guest ranch and other lodging units evaluated throughout this EIR. Ongoing and/or intensified agricultural tourism activities are subject to County land use regulations and nuisance ordinances.</p>
<b>AIR QUALITY</b>		
<p><b>ARCS Impact AQ-1</b> The proposed Agricultural Residential Cluster Subdivision will result in operational air pollutant emissions, primarily from vehicular traffic. This would result in an exceedance of the APCD thresholds, and would be a Class I, <i>significant and unavoidable</i>, impact.</p>	<p>The San Luis Obispo County APCD <i>CEQA Air Quality Handbook</i> (April 2003) requires that all projects generating 25 or more pounds per day of any individual pollutant implement standard site design and energy efficiency measures, as well as all feasible discretionary site design and energy efficiency mitigation measures. Standard and discretionary measures are described in greater detail below. In addition, in certain cases further mitigation measures are required for projects generating 25 or more pounds per day, including off-site measures, which are designed to offset emissions from large projects that cannot be fully mitigated with on-site measures. Standard site-design measures include: linking cul-de-sacs and dead-end streets to encourage pedestrian and bicycle travel; providing traffic calming modifications to project roads, such as narrower streets, speed platforms, bulb-outs and intersection modifications designed to reduce vehicle speeds; easements or land dedications for bikeways and pedestrian walkways; and, providing continuous sidewalks separated from the roadway by landscaping and on-street parking. These measures apply primarily to urban residential development and would not be applicable to the Agricultural Residential Cluster Subdivision. Similarly, not all discretionary site-design measures would be feasible due to the rural location of the Agricultural Residential Cluster Subdivision, including providing transit turnouts and pedestrian signalization and signage. Due to the infeasibility of standard and discretionary site-design measures, as well as the remote nature and size of the Agricultural Residential Cluster Subdivision, off-site mitigation would be required. It should be noted, however, that several Agricultural Residential Cluster Subdivision measures in Section 4.12, <i>Transportation and Circulation</i>, improve pedestrian and</p>	<p>Standard site-design mitigation measures required by the APCD would not be applicable to the proposed Agricultural Residential Cluster Subdivision, and discretionary site design measures would be largely infeasible. Off-site measures would reduce emissions to below Tier 2 thresholds. However, the Agricultural Residential Cluster Subdivision would still exceed Tier 1 thresholds. Impacts would therefore remain Class I, <i>significant and unavoidable</i>.</p>



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS I IMPACTS: SIGNIFICANT AND UNAVOIDABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>bicyclist infrastructure. These measures include Agricultural Residential Cluster Subdivision measures T-1(a) (SR 58 South of J Street), T-1(e) (Estrada Avenue/H Street Warning Beacon), T-4(a) (El Camino Real/Encina Avenue In-Pavement Flashing Lights) and T-4(b) (Pedestrian Pathway). Although these measures would not reduce the transportation-related air quality impacts to a less than significant level, they would partially reduce vehicle trips in the vicinity. The following mitigation measures are required, which incorporate all applicable and feasible standard and discretionary measures, as well as off-site measures in accordance with APCD guidance:</p> <p><b>ARCS AQ-1(a) Energy Efficiency.</b> The applicant shall increase building energy efficiency ratings by at least 10% above what is required by Title 24 requirements. Potential energy consumption reduction measures include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Using roof material with a solar reflectance value meeting the EPA/DOE Energy Star® rating to reduce summer cooling needs and/or installing photovoltaic roof tiles;</li> <li>• Using high efficiency gas or solar water heaters;</li> <li>• Using built-in energy efficient appliances;</li> <li>• Installing double-paned windows;</li> <li>• Installing door sweeps and weather stripping if more efficient doors and windows are not available;</li> <li>• Installing low energy interior lighting;</li> <li>• Using low energy street lights (i.e. sodium); and</li> <li>• Installing high efficiency or gas space heating.</li> </ul> <p><b>ARCS AQ-1(b) Shade Trees.</b> Shade trees native to the Santa Margarita Ranch shall be planted to shade the southern exposure of on-site homes and structures, decreasing indoor temperatures and reducing energy demand for air conditioning. The landscape plan shall be submitted to the San Luis Obispo APCD for review and comment. County Planning and Building shall review project landscaping plans for consistency with this mitigation measure.</p> <p><b>ARCS AQ-1(c) Outdoor Electrical Outlets.</b> All new homes shall be constructed with outdoor electrical outlets to encourage the use of electric appliances and tools.</p> <p><b>ARCS AQ-1(d) Telecommuting.</b> All new homes shall be constructed with internal wiring/cabling that allows telecommuting, teleconferencing, and telelearning to occur simultaneously in at least three locations in each home. This control measure seeks</p>	



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS I IMPACTS: SIGNIFICANT AND UNAVOIDABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>to reduce emissions by promoting telecommuting for any employee whose job can accommodate working from home.</p> <p><b>ARCS AQ-1(e) Residential Wood Combustion.</b> All new homes shall only be permitted to install APCD-approved wood burning devices, as applicable. Approved devices include:</p> <ul style="list-style-type: none"> <li>• All EPA-certified phase II wood burning devices;</li> <li>• Catalytic wood burning devices which emit less than or equal to 4.1 grams per hour of particulate matter which are not EPA-certified but have been verified by a nationally-recognized testing lab;</li> <li>• Non-catalytic wood burning devices which emit less than or equal to 7.5 grams per hour of particulate matter which are not EPA-certified but have been verified by a nationally-recognized testing lab;</li> <li>• Pellet-fueled wood heaters; and</li> <li>• Dedicated gas-fired fireplaces.</li> </ul> <p>“Backyard” green waste burning shall be prohibited due to nuisance and negative health effects.</p> <p><b>ARCS AQ-1(f) Off-Site Mitigation.</b> Prior to issuance of grading permits, the applicant shall work with APCD to define and implement off-site emission reduction measures to reduce emissions to below Tier 2 levels. In accordance with APCD methodology, the excess emissions shall be multiplied by the cost effectiveness of mitigation as defined in the State’s current Carl Moyer Incentive Program Guidelines to determine the annual off-site mitigation amount. This amount shall then be extrapolated over the life of the project to determine total off-site mitigation. Off-site emission reduction measures may include, but would not be limited to:</p> <ul style="list-style-type: none"> <li>• Developing or improving park-and-ride lots;</li> <li>• Retrofitting existing homes in the project area with APCD-approved wood combustion devices;</li> <li>• Retrofitting existing homes in the project area with energy-efficient devices;</li> <li>• Constructing satellite worksites;</li> <li>• Funding a program to buy and scrap older, higher emission passenger and heavy-duty vehicles;</li> <li>• Replacing/re-powering transit buses;</li> <li>• Replacing/re-powering heavy-duty diesel school vehicles (i.e. bus, passenger or maintenance vehicles);</li> </ul>	



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<ul style="list-style-type: none"> <li>• Funding an electric lawn and garden equipment exchange program;</li> <li>• Retrofitting or re-powering heavy-duty construction equipment, or on-road vehicles;</li> <li>• Re-powering marine vessels;</li> <li>• Re-powering or contributing to funding clean diesel locomotive main or auxiliary engines;</li> <li>• Installing bicycle racks on transit buses;</li> <li>• Purchasing particulate filters or oxidation catalysts for local school buses, transit buses or construction fleets;</li> <li>• Installing or contributing to funding alternative fueling infrastructure (i.e. fueling stations for CNG, LPG, conductive and inductive electric vehicle charging, etc.);</li> <li>• Funding expansion of existing transit services;</li> <li>• Funding public transit bus shelters;</li> <li>• Subsidizing vanpool programs;</li> <li>• Subsidizing transportation alternative incentive programs;</li> <li>• Contributing to funding of new bike lanes;</li> <li>• Installing bicycle storage facilities; and</li> <li>• Providing assistance in the implementation of projects that are identified in City or County Bicycle Master Plans.</li> </ul>	
<p><b>ARCS Impact AQ-4</b> The Agricultural Residential Cluster Subdivision would exceed the population growth assumptions of the 2001 Clean Air Plan (CAP). In addition, due to the distance of the site from services, Agricultural Residential Cluster Subdivision implementation would result in a substantial increase in vehicle miles traveled. Therefore, the Agricultural Residential Cluster Subdivision is inconsistent with the CAP. This is a Class I, <i>significant and unavoidable</i> impact.</p>	<p>No feasible measures are available to reduce the population generation associated with the Agricultural Residential Cluster Subdivision without substantially redesigning the proposed subdivision. In addition, no measures are available to substantially reduce the vehicle miles traveled associated with the Agricultural Residential Cluster Subdivision, due to the distance between the project and community services.</p>	<p>Impacts would remain Class I, <i>significant and unavoidable</i>.</p>



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<b>BIOLOGICAL RESOURCES</b>		
<p><b>ARCS Impact B-3</b> The proposed Agricultural Residential Cluster Subdivision would result in the removal of and/or impacts to an estimated 200 to 400 blue oak, coast live oak, and valley oak trees as well as the conversion of 60.1 acres of native oak woodland habitat. In accordance with Kuehl Bill mitigation techniques, half of the oak trees that are removed or impacted can be replaced, but due to the long time-period required for the planted trees to possess equivalent oak woodland habitat values and the fact that there is no assurance that oak trees designated to remain on the lots will be protected in the future, impacts to oak trees and oak woodlands are Class I, <i>significant and unavoidable</i>.</p>	<p>Individual oak trees are considered to be a special-status biological resource by the County of San Luis Obispo and mitigation measures are required. The following measures are designed to reduce development-related impacts to oak trees. Agricultural Residential Cluster Subdivision measure B-9(c) (Pre-Construction Bird Survey) contains requirements for avoiding impacts to potential nesting raptors or other migratory birds.</p> <p><b>ARCS B-3(a) Oak Tree Inventory, Avoidance, and Protection Plan.</b> The applicant shall prepare an Oak Tree Inventory, Avoidance and Protection Plan as outlined herein. The plan shall be reviewed by the County approved arborist prior to approval of grading permits, and shall include the following items:</p> <ol style="list-style-type: none"> <li>1. <u>Comprehensive Oak Tree Inventory.</u> This shall include the following information:               <ol style="list-style-type: none"> <li>a) An inventory of all trees at least 5 inches in diameter at breast height within 50 feet of all proposed Agriculture Residential Cluster Subdivision impact areas. All inventoried trees shall be shown on maps. The species, diameter at breast height, location, and condition of these trees shall be documented in data tables.</li> <li>b) Identification of trees which will be retained, removed, or impacted. This information shall be shown on maps and cross-referenced to data tables described in Item (a).</li> <li>c) The location of proposed structures, utilities, driveways, septic tanks, leach fields, grading, retaining walls, outbuildings, and impervious surfaces shall be shown on maps. The applicant shall clearly delineate the building sites/building control lines containing these features on the project plans. In addition, the plans shall include any fenced areas for livestock or pets and clearance areas prescribed by CalFire.</li> <li>d) A landscaping plan that describes the size and species of all trees, shrubs, and lawns proposed to be planted in the project area, including the limits of irrigated areas.</li> <li>e) Revised drainage patterns that are within 100 feet upslope of any existing oak trees to remain. All reasonable efforts shall be made to maintain historic drainage patterns and flow volumes to these trees. If not feasible,</li> </ol> </li> </ol>	<p>Implementation of the above mitigation measures would reduce impacts to oak trees and oak woodland habitat to the extent feasible. The effectiveness of the long-term provisions of the oak tree replacement would be a function of the financial capabilities of the applicant and the willingness of that entity to implement the recommendations of the County-approved arborist conducting the monitoring program.</p> <p>In the short-term, impacts to oak trees and oak woodland habitats cannot be mitigated, because of the length of time required for replacement trees to reach maturity and for the conservation areas to have a similar habitat values as the oak woodland areas that are-removed and /or impacted. Therefore, impacts remain Class I, <i>significant and unavoidable</i>.</p>



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	<p>the drainage plan shall clearly show which trees would be receiving more or less drainage.</p> <p>2. <u>Oak Tree Avoidance Measures.</u> Grading and development within proposed lots shall avoid the removal of oak trees to the maximum extent possible. Such activities must minimize potential disturbance to oaks and their associated root zones to the maximum extent possible, with final site plans requiring concurrence from County staff to ensure compliance with this provision.</p> <p>3. <u>Oak Tree Protection Guidelines.</u> Tree protection guidelines and a root protection zone shall be established and implemented for each tree to be retained that occurs within 50 feet of impact areas. The following guidelines shall be included:</p> <p>a) A qualified arborist shall determine the critical root zone for each retained tree on a case-by-case basis, based upon tree species, age, and size. This area will vary from 1.0 to 1.5 times its diameter at breast height [as specified in Harris, Clark and Matheny (2004) Arboriculture]. At a minimum, the critical root zone shall be the distance from the trunk to the drip line of the tree.</p> <p>b) All oak trees to remain within 50 feet of impact areas (construction or grading) shall be marked for protection and the root zone fenced prior to any grading. Grading, utility trenching, compaction of soil, or placement of fill shall be avoided within these fenced areas. If grading in the root zone cannot be avoided, retaining walls shall be constructed to minimize cut and fill impacts. The project arborist must approve any work within the root protection zone.</p> <p>c) Care shall be taken to avoid surface roots within the top 18 inches of soil. If any roots must be removed or exposed, they shall be cleanly cut and not left exposed above ground surface.</p> <p>d) Unless previously approved by the County, the following activities shall be prohibited within the root zone of remaining oak trees: year-round irrigation (no summer watering, unless “establishing” a new tree or native compatible plant for up to 3 years); grading (includes cutting and filling of material); compaction (e.g., regular use of vehicles); placement of impermeable surfaces (e.g., pavement); or disturbance of soil that impacts roots (e.g., tilling).</p>	



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	<p>Trimming oak branches shall be minimized, especially for larger lower branches, and the amount done in one season shall be limited to 10 to 30% of the canopy to reduce stress/shock. If trimming is necessary, the applicant shall either use a qualified arborist or utilize accepted arborist's techniques.</p> <p><b>ARCS B-3(b) Oak Tree Replacement, Monitoring, and Conservation.</b> Of those trees identified under Agricultural Residential Cluster Subdivision measure B-3(a) as being removed or impacted, 50% shall be replaced per County and Kuehl Bill standards. A conservation easement or monetary contribution to the Oak Woodlands Conservation Fund shall be used for the remaining mitigation.</p> <p>1. <u>Replacement.</u> The County approved arborist shall provide or approve an oak tree replacement plan at a minimum 4:1 ratio for oak trees removed and a minimum replacement ratio of 2:1 for oak trees impacted (i.e., disturbance within the root zone area).</p> <p>a) Replacement plantings shall be from regionally- or locally-collected seed stock grown in vertical tubes or deep one-gallon tree pots. Four-foot diameter shelters shall be placed over each oak tree to protect it from deer and other herbivores, and shall consist of 54" tall welded wire cattle panels (or equivalent material) and be staked using T-posts. Wire mesh baskets, at least two-foot diameter and 2-feet deep, shall be used below ground. Planting during the warmest, driest months (June through September) shall be avoided. The plan shall provide a species-specific planting schedule. If planting occurs outside this time period, a landscape and irrigation plan shall be submitted prior to permit issuance and implemented after approved by the County. Average tree densities shall be no greater than one tree every twenty feet and shall average no more than four planted per 2,000 square feet. Trees shall be planted in random and clustered patterns to create a natural appearance. Replacement trees shall be planted in a natural setting on the north side of and at the canopy/dripline edge of existing mature native oak trees; on north-facing slopes; within drainage swales (except when riparian habitat present); where topsoil is present; and away from continuously wet areas (e.g., lawns, leach lines, etc). Replanting areas shall be either in native topsoil or areas where native topsoil has been reapplied. A seasonally timed maintenance program, which includes regular weeding (hand removal at a minimum of once early fall and once early spring within at least a three-foot radius from the tree or installation of a staked "weed</p>	





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	<p>mat” or weed-free mulch) and a temporary watering program, shall be developed for all oak tree planting areas on the Agricultural Residential Cluster Subdivision. A qualified arborist/botanist shall be retained to monitor the acquisition, installation, and maintenance of all oak trees to be replaced within the Agricultural Residential Cluster Subdivision. Replacement trees shall be monitored and maintained by a qualified arborist/botanist for at least seven years or until the trees have successfully established as determined by the County’s Environmental Coordinator. Annual monitoring reports will be prepared by a qualified arborist/botanist and submitted to the County by October 15 each year. Annual monitoring reports will include specifics discussed below.</p> <p>b) The restored area shall be at a minimum equal in size to the area of oak woodlands lost or disturbed.</p> <p>c) An approved arborist shall submit to the County an initial post-planting letter report, and thereafter annual monitoring reports shall be submitted. All trees planted as mitigation shall have an 80% survival rate after seven years. If any trees planted as mitigation do not survive at seven years from the time of planting, they will be replaced as soon as possible as determined by the arborist/botanist.</p> <p>d) A cost estimate for the planting plan, installation of new trees, and maintenance of new trees for a period of seven years shall be prepared by a qualified individual and approved by the County. Prior to site grading/issuance of construction permits, a performance bond, equal to the cost of the estimate, shall be posted by the applicant. The replacement mitigation trees shall also have an overall survival rate of 80% after seven years from date of planting.</p> <p>2. <u>Maintenance</u>. Unless previously approved by the County, the following activities are not allowed within the root zone of newly planted oak trees:</p> <p>a) Year-round irrigation (no summer watering, unless ‘establishing’ a new tree or native compatible plant for up to 3 years);</p> <p>b) Grading (includes cutting and filling of material);</p> <p>c) Compaction (e.g., regular use of vehicles);</p> <p>d) Placement of impermeable surfaces (e.g., pavement); or</p> <p>e) Disturbance of soil that impacts roots (e.g., tilling).</p>	



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	<p>Trimming oak branches shall be minimized, especially for larger lower branches, and the amount done in one season shall be limited to 10 to 30% of the canopy to reduce stress/shock. If trimming is necessary, the applicant shall either use a qualified arborist or utilize accepted arborist's techniques.</p> <p>3. <u>Conservation Easements and/or Contribution to the Oak Woodlands Conservation Fund.</u> Replanting detailed above can account for up to 50% of the mitigation requirement. The remaining mitigation shall be in accordance with the County's Oak Woodland Mitigation Plan. Per the County's draft Plan, the mitigation shall be a minimum of a 2,000 square foot conservation easement per tree removed (based upon an average 50 foot diameter canopy). The oak conservation area shall be designated on-site and be managed by a third party.</p>	
<b>CULTURAL RESOURCES</b>		
<p><b>ARCS Impact CR-1</b> As defined in Appendix E (Cultural Landscape Report), the historic core of the Santa Margarita Ranch is a rural historic district eligible for the CRHR. The proposed Agricultural Residential Cluster Subdivision is located in one of the character-defining areas of the district. Development of the proposed residential cluster in this area would substantially diminish the integrity of the design, setting, materials, feeling, and association of this important character-defining area. In addition, implementation of the Agricultural Residential Cluster Subdivision would adversely impact traditional Native American values. This is considered a Class I, <i>significant and unavoidable</i>, impact.</p>	<p><b>ARCS CR-1(a) Avoidance.</b> The preferred mitigation measure is avoidance of the impacts described above. If avoidance cannot be achieved, other forms of mitigation, such as graphic documentation (photographs, drawings, etc.) and archaeological data recovery, will lessen the impacts but will not mitigate the loss of integrity to a less than significant level.</p> <p><b>ARCS CR-1(b) Cultural Design Guidelines.</b> The Architecture and Landscape Guidelines (refer to Agricultural Residential Cluster Subdivision measure VR-1(b) in Section 4.13, <i>Visual Resources</i>) shall incorporate the design principles, plans, and massing of historic ranch structures, such as sandstone or adobe construction, one-story height, gable roofs, shiplap siding, and natural landscaping. The County will have final approval over the project design elements, based in part on consultation with a qualified historian.</p> <p><b>ARCS CR-1(c) Viewshed Preservation.</b> Because the native flora of the ranch is a key character defining feature of the historic landscape and a critical element of the historic viewshed, non-agricultural open space should be left in natural grasses, with native trees and other flora.</p> <p>It should be noted that Agricultural Residential Cluster Subdivision measure VR-1(a) in Section 4.13, <i>Visual Resources</i>, which prohibits structural silhouetting on ridgelines, would also reduce this impact.</p> <p><b>ARCS CR-1(d) Preservation of Key Landscape Elements.</b> New roads on the ranch shall follow the natural topography to the extent possible, without substantial cuts or</p>	<p>Although impacts would be reduced through the above mitigation measures, no mitigation is available to avoid significantly impacting the integrity of the design, setting, materials, feeling, and association of this important character-defining area, or its Native American values. Impacts would remain <i>significant and unavoidable</i>.</p>



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	<p>fills; the roads shall be as narrow as allowed by County requirements, with no verges. Signage must be subdued, and not mar or interfere with the views. Historic types of fencing shall be used.</p> <p>To facilitate preservation of these landscape elements, historic roads and other landscape remnants shall be recorded and mapped in greater detail. In particular, a survey of El Camino Real shall be carried out by a qualified professional using the location on the 1858 and 1889 maps as a guide. Any remnants or other physical evidence of these roads shall be thoroughly documented, and no development of any kind shall be located in the path of El Camino Real or other historical transportation elements.</p> <p>The current local historic place names indicate the history of the ranch and the people who impacted the landscape. These names shall be retained and incorporated into any development. New place names shall reflect the historical usage.</p> <p><b>ARCS CR-1(e) Nomination to the National Register of Historic Places.</b> The Santa Margarita Ranch <b>Rural Historic District</b> shall be nominated to the National Register of Historic Places <del>as a Rural Historic District</del>. At a minimum, the NRHP nomination shall include the following elements:</p> <ul style="list-style-type: none"> <li>• documentation of all extant historical buildings and structures in the ranch headquarters area to the level of the Historic American Building Survey (HABS), particularly including measured drawings and large format photographs of the interior and exterior of the main asistencia building, ranch house, Wells Fargo building, and associated structures and features;</li> <li>• reconstruction of the asistencia layout and the placement of buildings, structures, walls, and other features utilizing historical photographs, artwork, and other documentary evidence; and</li> <li>• preparation of an ethnographic history of the ranch.</li> </ul>	
<p><b>ARCS Impact CR-2</b> Thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site. All of these resources contribute to the</p>	<p><b>ARCS CR-2(a) Avoidance.</b> As feasible, all cultural sites within Tract 2586 shall be avoided during development. To ensure avoidance, the boundaries of all sites within or adjacent to the housing cluster shall be defined through a program of systematic subsurface boundary testing using shovel probes, surface test units, and other appropriate sampling units. The type and distribution of sampling units shall be determined by a qualified professional archaeologist, who will carry out the boundary testing in the presence of a Native American monitor. After site boundaries are defined, an exclusion zone shall be placed around each site. An exclusion zone is a</p>	<p>Although impacts would be reduced through the above mitigation measures, no mitigation is available to avoid significantly impacting identified cultural resources. Impacts would remain <i>significant and unavoidable</i>.</p>



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<p>significance of the Santa Margarita Ranch Rural Historic District and are eligible for the California Register of Historic Resources (CRHR) under multiple significance criteria. Recovery of the important information in these sites through excavation would lessen the impacts. However, damage to or destruction of the important associations of these sites, and disruption of their setting and feeling, is a Class I, <i>significant and unavoidable</i> impact.</p>	<p>fenced area where construction equipment and personnel are not permitted. The exclusion zone fencing shall be installed (and later removed) under the direction of a qualified archaeologist and shall be placed five meters beyond the defined site boundary to avoid inadvertent damage to sites during installation. If multiple pieces of heavy equipment are in use simultaneously at diverse locations during construction, each location may be monitored individually. If avoidance cannot be achieved, other forms of mitigation, such as data recovery, will lessen the impacts but will not mitigate the loss of integrity to a less than significant level.</p> <p><b>ARCS CR-2(b) Mitigative Data Recovery Excavation.</b> If avoidance of an archaeological site(s) is not possible, data recovery excavation shall be completed prior to issuance of grading permits. A data recovery plan shall be submitted by a qualified archaeologist for review by the County Environmental Coordinator. Data recovery shall be funded by the applicant, shall be performed by a County-qualified archaeologist, and shall be carried out in accordance with a research design consistent with the requirements of the California Office of Historic Preservation Planning Bulletin 5, <i>Guidelines for Archaeological Research Design</i>. At a minimum, data recovery shall include:</p> <ul style="list-style-type: none"> <li>• Mapping of site boundaries and the distribution of surface remains;</li> <li>• Surface collection of artifacts;</li> <li>• Excavation of a sample of the cultural deposit to characterize the nature of the site and retrieve a representative sample of artifacts and other remains within the proposed impact area;</li> <li>• Monitoring of excavations at Native American sites by a tribal representative;</li> <li>• Technical studies and analysis of the recovered sample, including radiocarbon dating, typological and technical analysis of tools and debris, identification and analysis of preserved faunal and floral remains, and other studies appropriate to the research questions outlined in the research design;</li> <li>• Cataloguing and curation of all artifacts and records detailing the results of the investigations at a county approved curation facility;</li> <li>• submission of a final technical report detailing the results of the investigations;</li> <li>• preparation of an interpretive report suitable for distribution to the general public.</li> </ul>	
<b>NOISE</b>		
<p><b>ARCS Impact N-2</b> Long-term traffic generated by the Agricultural</p>	<p>Although structural measures such as solid berms (e.g., sound walls), solid core doors, and/or double paned windows could reduce noise levels at existing receptors</p>	<p>Impacts would remain Class I, <i>significant and unavoidable</i>.</p>



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Residential Cluster Subdivision would incrementally increase noise levels at existing receptors located adjacent to roadways in the Santa Margarita Ranch vicinity. The effect of this noise on off-site sensitive receptors in the area is a Class I, <i>significant and unavoidable</i> , impact.	in the Santa Margarita Ranch vicinity, the implementation of structural measures would be infeasible due to physical, economic, or other constraints, and would rely upon the cooperation of off-site property owners, which cannot be assured. Therefore, no feasible measures are available that would mitigate impacts to existing sensitive receptors.	
<b>TRANSPORTATION AND CIRCULATION</b>		
<b>ARCS Impact T-1</b> Development of the Agricultural Residential Cluster Subdivision would result in the addition of 1,154 average daily trips (88 AM peak hour and 119 PM peak hour trips) to study-area roadways and intersections. Although this would not result in exceedances of roadway or intersection LOS standards, with the exception of the US 101/SR 58 interchange northbound off-ramp, the Agricultural Residential Cluster Subdivision will add traffic to locations with existing hazards and deficiencies. Implementation of proposed mitigation measures would improve hazards and deficiencies. However, due to uncertainty regarding Caltrans approval of facilities within State jurisdiction, Class I, <i>significant and unavoidable</i> , impacts would result.	<p><b>ARCS T-1(a) SR 58 South of J Street.</b> To mitigate the project's impacts to the two 90-degree curves on SR 58 near J Street, the following improvements are required:</p> <ol style="list-style-type: none"> <li>1. Widen both sides of SR 58 (from El Camino Real to the Agricultural Residential Cluster Subdivision eastern site access) to provide four foot shoulders and/or bike lanes in accordance with County standards.</li> <li>2. Install radar feedback signs and advisory speeds on each approach to the 90-degree on SR 58 near J Street.</li> </ol> <p>As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and associated approval from Caltrans would be required if the cost of the improvements exceeds three million dollars.</p> <p><b>ARCS T-1(b) U.S. 101 Northbound Off-Ramp to SR 58.</b> The applicant shall lengthen the deceleration length from 140 feet to 250 feet from the US 101 mainline to the northbound off-ramp to mitigate the Agricultural Residential Cluster Subdivision's impact to the ramp junction.</p> <p>In addition, the applicant shall reconstruct the area where the northbound U.S. 101 off-ramp merges with eastbound SR 58 to provide 400 feet of merging distance to meet Caltrans' current design standards. Since the park-and-ride facility is located adjacent to the northbound off-ramp, reconfiguration of the parking lot and access to a nearby frontage road is required. The applicant shall include designs for the revised park and ride and frontage road access in the permit with Caltrans. A field assessment indicates that the merge area could be lengthened by physically separating the park and ride lot from the roadway, which would improve the existing condition and reduce the impact.</p>	<p>If the construction and occupation of residences occurs prior to completion of the above improvements, existing deficiencies and associated impacts would remain. Although proposed mitigation would reduce impacts to the extent possible, due to the uncertainty regarding Caltrans approval of improvements within their jurisdiction, and uncertainty regarding right-of-way acquisition, it cannot be assured that all improvements would be feasibly constructed prior to occupation of the proposed residences. As a result, impacts would remain significant and unavoidable.</p> <p>Implementation of many transportation improvements required as mitigation (i.e., improvements to SR 58 south of J Street and the Estrada Avenue/H Street Warning Beacon) would not result in significant environmental impacts related to site disturbance since improvements would occur</p>



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	<p>As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.</p> <p><b>ARCS T-1(c) U.S. 101 Southbound Off-Ramp to SR 58.</b> The project applicant shall extend the deceleration length from 250 to 550 feet for the southbound off-ramp to provide acceptable freeway ramp diverge operations under Cumulative Plus Agricultural Residential Cluster Subdivision conditions.</p> <p>As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.</p> <p><b>ARCS T-1(d) El Camino Real/Estrada Avenue Redesign.</b> With the addition of Agricultural Residential Cluster Subdivision traffic, the project applicant shall construct the following improvements:</p> <ol style="list-style-type: none"> <li>1. Widen Estrada Avenue, between El Camino Real and the railroad tracks, to provide a dedicated northbound right-turn lane.</li> <li>2. Widen El Camino Real to provide a separate left-turn lane for westbound El Camino Real traffic to turn onto southbound Estrada Avenue.</li> <li>3. Reduce the superelevation of the El Camino Real curve at Estrada Avenue</li> <li>4. Prior to implementation of Future Development Program measure T-1(d), traffic signal installation and rail pre-emption, advance limit lines for northbound Estrada traffic shall be provided immediately south of the rail tracks, and a Manual on Uniform Traffic Control Devices (2003 Edition) R8-10 sign which states "Stop Here When Flashing" shall be provided to minimize the potential for vehicles to stop directly on the railroad tracks.</li> </ol> <p>According to San Luis Obispo County Public Works staff, extension of an existing culvert is required as part of this improvement. The applicant shall secure any regulatory permits for the necessary construction of intersection improvements to meet Caltrans standards.</p> <p>As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans</p>	<p>within existing disturbed rights-of-way. It should be noted that impacts associated with implementation of required transportation improvements (e.g., construction impacts, aesthetic impacts) are discussed in other impact sections of this EIR to the extent possible. Refer to Section 4.3, <i>Biological Resources</i>, for a discussion of biological resources impacts related to transportation improvements, such as redesign of the intersection of El Camino Real/Estrada Avenue. Since the precise location of the U.S. 101 Southbound Off-Ramp to SR 58 and U.S. 101 Northbound Off-Ramp to SR 58 roadway improvements has not been determined, precise environmental impacts associated with such improvements would be too speculative to address at this time. Environmental impacts associated with implementation of required transportation improvements would be evaluated during the preparation of a Permit Engineering Evaluation Report (PEER), if one is determined necessary during the encroachment permit process and/or separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA).</p>



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<p>would be required if the cost of the improvements exceeds three million dollars.</p> <p><b>ARCS T-1(e) Estrada Avenue/H Street Warning Beacon.</b> A pedestrian-activated advanced warning beacon shall be installed on the northbound approach to the intersection of Estrada Avenue and H Street, before the crest on Estrada Avenue, to warn drivers of the presence of pedestrians crossing at the intersection. A pedestrian-activated beacon shall also be installed for southbound Estrada Avenue traffic. The precise location for beacon installation shall be determined in consultation with Caltrans under the encroachment permit process, and shall include any required ramps or other Americans with Disabilities Act (ADA) upgrades. The applicant shall fund and install both advanced warning beacons.</p> <p>The <i>Santa Margarita Design Plan</i>, adopted October 9, 2001, recommended the following long-term improvements to Estrada Avenue between H Street and I Street:</p> <ul style="list-style-type: none"> <li>• Improve sight distance by eliminating the hill/crest</li> <li>• Add curbs and textured crossings at Estrada Avenue/H Street</li> <li>• Provide bike lanes on Estrada Avenue</li> </ul> <p>These improvements represent alternative mitigation measures for this intersection. However, eliminating the crest would require extensive earthwork and roadbed reconstruction. Depending on the final design of the long-term improvements, the flashing beacons could be integrated into the plan.</p> <p>As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.</p>	
<b>VISUAL RESOURCES</b>		
<p><b>ARCS Impact VR-1</b> The clustering of the proposed Agricultural Residential Cluster Subdivision units and preservation of open space and agricultural lands would partially maintain the rural character of the site. However, the proposed development has the potential to alter the aesthetic character of the</p>	<p><b>ARCS VR-1(a) Prohibition of Structural Silhouetting.</b> Proposed lots located on on-site ridgelines shall be relocated, building heights shall be limited, and vegetative screening shall be provided such that the residential units do not silhouette against the sky when viewed from off-site viewpoints. If structural setbacks are implemented, structures shall be setback as follows: units on Lots 50 through 54 shall be setback to the west from the top of the bluff a sufficient vertical distance to preclude silhouetting of units on the top of on-site bluffs. This could also require the relocation of Lots 47 and 55.</p> <p><b>ARCS VR-1(b) Architectural and Landscape Guidelines.</b> The applicant shall</p>	<p>Although impacts would be reduced through the above mitigation measures, no mitigation is available to avoid changing the site from its rural condition to a more suburban condition. This is considered a substantial adverse effect. Impacts would remain <i>significant and unavoidable</i>.</p>





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<p>Agricultural Residential Cluster Subdivision vicinity through alteration of scenic vistas, the introduction of new light and glare generators in to the area, and the changing of the area’s character from a rural to rural-residential condition. This is Class I, <i>significant and unavoidable</i>, impact to the aesthetic character of the area.</p>	<p>develop and implement Architectural and Landscape Guidelines that include the components listed below. The Guidelines shall include clear criteria and requirements to guide the design, layout, and landscaping of individual residential lots. All future development shall comply with the Guidelines. Enforcement of compliance with the Guidelines shall be the responsibility of the Planning and Building Department.</p> <p><b>Tract landscaping.</b> Landscaping guidelines shall describe the following elements:</p> <ul style="list-style-type: none"> <li>• Landscaping shall emulate and be compatible with the surrounding natural environment; only natural fiber, biodegradable materials shall be used;</li> <li>• Fuel management techniques shall be used, including, but not limited to, fire resistive landscaping, defensible space features, and strictly controlled vegetation within defensible space;</li> <li>• Fire-resistant vegetation shall be used in tract landscaping.</li> </ul> <p><b>Individual House Landscaping.</b> Landscaping Plans for individual houses shall be prepared by a qualified Landscape Architect, and shall be designed to screen and blend the proposed development into the surrounding area while preserving identified viewsheds. Individual lot landscaping plans shall incorporate plants consistent with the San Luis Obispo County Approved Plant List. Only natural fiber, biodegradable materials shall be used.</p> <p><b>Roofing and Feature Color and Material.</b> Development plans shall include earth-tone colors on structure roofing and other on-site features to lessen potential visual contrast between the structures and the hilly terrain that constitutes the visual backdrop of the area. Natural building materials and colors compatible with surrounding terrain (earthtones and non-reflective paints) shall be used on exterior surfaces of all structures, including fences.</p> <p><b>Avoidance of Visual Prominence.</b> To avoid the visual prominence of structures located at Lots 1 through 4, 6 through 11, 14, 30, 52, 90, 92 through 95, 97 through 99, 101, 104 through 106, and 112, no structure shall exceed a height of 22 feet, except for ancillary features such as antennas or other elements determined to be compatible by Planning and Building.</p> <p><b>Understory and Retaining Wall Treatment.</b> Understories and retaining walls higher than six (6) feet shall be in tones compatible with surrounding terrain using textured materials or construction methods which create a textured effect.</p>	



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	<p><b>ARCS VR-1(c) Oak Tree Avoidance.</b> The removal of oak trees shall be avoided where feasible. New roads shall be designed around existing trees by using modified street design, off-street parking, bulb-outs, or split lanes. Home sites should be located where oak trees are less dense on the lot. For additional oak tree impact mitigation, refer to Section 4.3, <i>Biological Resources</i>.</p> <p><b>ARCS VR-1(d) Bury Water Tanks.</b> The water tanks shall be placed below grade to reduce their visual profile. The tanks shall be placed at a depth such that the tanks do not silhouette against the sky. If burying water tanks is infeasible, natural building materials and colors compatible with surrounding terrain (earthtones and non-reflective paints) shall be used on exterior surfaces.</p> <p><b>ARCS VR-1(e) Lighting.</b> New lighting shall be oriented away from sensitive uses, and should be hooded, shielded, and located to direct light pools downward and prevent glare. The following standards shall also be implemented:</p> <ul style="list-style-type: none"> <li>• All exterior lighting shall be designed as part of the overall architectural concept. Fixtures, standards and all exposed accessories shall be harmonious with the building design, the lighting design and hardware of the public spaces, and the overall visual environment of the County.</li> <li>• Lighting shall be used for safety and security to illuminate building entrances, parking and loading areas, and pedestrian walkways.</li> <li>• Light fixtures with exposed light bulbs shall generally be avoided.</li> <li>• All light fixtures shall be shielded to confine the spread of light within the Agricultural Residential Cluster Subdivision boundaries.</li> </ul> <p><b>ARCS VR-1(f) Street Light Limitations.</b> Streetlights shall be pedestrian in scale, not to exceed a height of 10 feet, and shall be architecturally compatible with surrounding development. Streetlights, where they are included, shall be primarily for pedestrian safety (at roadway intersections only), and shall not provide widespread illumination.</p> <p><b>ARCS VR-1(g) Clear Excess Debris.</b> Upon completion of each phase of development, the developer shall clear the project site of all excess construction debris.</p> <p><b>ARCS VR-1(h) Grading.</b> Grading should preserve hillsides and natural topography to the maximum extent feasible. Grading transitions should be gentle rather than abrupt.</p>	



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	<p><b>ARCS VR-1(i) Accessory Structures/Infrastructure.</b> New roads shall be blended into the landscape and follow existing topography and vegetation patterns. Cut and fill slopes shall be contoured to conform to the prevailing adjacent landforms and landscapes and drainage swales should be used rather than curbs. Utility service for new development shall be underground.</p>	
<b>WATER AND WASTEWATER</b>		
<p><b>ARCS Impact W-1</b> The Agricultural Residential Cluster Subdivision would increase the use of water from area aquifer units, including the Paso Robles and Santa Margarita Formations, by 96 acre-feet per year (afy). This net consumptive use may contribute to overdraft of the aquifer system. Groundwater use associated with the Agricultural Residential Cluster Subdivision is a Class I, <i>significant and unavoidable</i>, impact.</p>	<p><b>ARCS W-1(a) Groundwater and Surface Water Monitoring Programs.</b> A comprehensive groundwater monitoring program shall be established by the applicant in consultation with the County Public Works Department, Planning and Building Department, and the Regional Water Quality Control Board (RWQCB) to collect annual well production data, semiannual groundwater level data from all available wells, and semi-annual (dry and wet weather) water quality testing of key constituents of potential concern (i.e., nitrate). The applicant shall provide additional facilities as necessary to monitor the anticipated impacts on groundwater resources for each phase of Agricultural Residential Cluster development. Up gradient and down gradient monitoring locations shall be established.</p> <p>A comprehensive stream flow monitoring program shall also be established and funded by the applicant in consultation with the County Public Works Department, Planning and Building Department, and RWQCB. The monitoring program shall include new monitoring stations on Trout Creek and Rinconada Creek.</p> <p>Monitoring data shall be provided by the applicant annually to County Public Works, Planning and Building, and RWQCB. Remedial action shall be developed based on the significance of the adverse conditions documented by the groundwater and surface water monitoring programs and subsequently implemented. Remedial action may include water rationing, including the prohibition of later phases of development until adequate water supply is demonstrated, and/or the importation of additional water supply [refer to Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply)].</p> <p><b>ARCS W-1(b) Water Conservation Measures.</b> The applicant shall implement water conservation measures, including, but not limited to:</p> <ul style="list-style-type: none"> <li>Using available and proven technologies and equipment that provide adequate performance with a substantial water savings. This may include the installation of high efficiency washing machines and ultra-low flush toilets and/or the use of micro sprinklers or drip tape for domestic and agricultural irrigation, installation of hot water pipe circulating systems or “point-of-use”</li> </ul>	<p>Implementation of Agricultural Residential Cluster Subdivision measures W-1(a) (Groundwater and Surface Water Monitoring Program) and W-1(b) (Water Conservation Measures) would reduce the overall water system demand for the Agricultural Residential Cluster Subdivision from an estimated 161.28 afy to approximately 139.94 afy (about 13 percent). This represents a reduction in net consumptive use from an estimated 96 afy to approximately 84 afy [refer to Section 4.14.1(a) <i>Consumptive Use</i>]. However, additional water supply would still be required. Additional water may be available for the Agricultural Residential Cluster Subdivision through the State Water Project and/or the Nacimiento Water Project, as outlined in Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply) above. It should be noted that Santa Margarita Ranch, LLC does not currently have an allocation for the State Water Project (SWP), although SWP pipelines are located in the vicinity of the</p>



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	<p>water heaters. Installation of these water conservation measures shall be included in CC&amp;Rs for residential lots and monitored by a homeowners association or similar entity;</p> <ul style="list-style-type: none"> <li>• Implementing tiered commodity rates for water sales that increase with higher water usage to financially encourage each resident to conserve water;</li> <li>• Establishing low water use landscaping on all common landscaped areas greater than 0.1 acres, including low water use irrigation methods such as drip irrigation;</li> <li>• Limiting total residential irrigated landscape areas to 1,500 square feet and limiting turf (lawn) areas to no more than 20% of residential irrigated landscape areas (or 300 square feet at maximum); and</li> <li>• Providing and updating an educational brochure regarding water conservation.</li> </ul> <p><b>ARCS W-1(c) Imported Water Supply.</b> The applicant shall acquire imported water supply to serve the Agricultural Residential Cluster Subdivision. Potential sources include State Water and/or the Nacimiento Water Project.</p>	<p>Ranch. The Santa Margarita Ranch Mutual Water Company (SMRMWC), which is proposed by Santa Margarita Ranch, LLC as part of the Agricultural Residential Cluster Subdivision, is identified as an eligible agency for the Nacimiento Water Project (NWP). Pursuant to execution of a Water Delivery Entitlement Contract (WDEC), the SMRMWC could receive an allocation for the NWP, which has not yet been constructed. Due to resulting uncertainties regarding timing and availability of these sources, additional water supply cannot be assured at this time. Impacts would remain significant and unavoidable.</p> <p>Despite the uncertainties discussed above, it may one day be feasible for the applicants to obtain imported water (i.e. through obtainment of SWP allocations or construction of the NWP pipeline). Resultant implementation of Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply) would require extension of water lines, which could result in residual environmental impacts. Physical impacts associated with infrastructure necessary to import water to the property have been addressed in several adopted Environmental Impact Reports</p>



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		<p>(EIRs) and one Mitigated Negative Declaration (MND). These EIRs and MND are herein incorporated by reference into this Revised Draft EIR: State Water Project (SWP) Coastal Branch Phase II and Mission Hills Extension Final EIR (State of California Division of Planning, May 1991), State Water Project Coastal Branch (Phase II) Local Distribution Lines and Facilities Final EIR (ERCE, March 1992), Nacimiento Water Project (NWP) Final EIR (Marine Research Specialists, December 2003), Addendum No. 1 to the NWP Final EIR (ESA Associates, June 2007), and Santa Margarita Water System Project MND (County of San Luis Obispo Public Works, June 2007) . A Supplement to the SWP Coastal Branch Phase II and Mission Hills Extension Final EIR (State of California Division of Planning, October 1994) addressed technical design changes and realignment of Reach 5 of the project, which does not cover the Santa Margarita area. Addenda to the SWP Coastal Branch (Phase II) Local Distribution Lines and Facilities Final EIR are similarly not applicable to the area.</p> <p>The above documents are available for review at the County of San Luis Obispo Department of Planning and Building and/or</p>



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		<p><a href="http://www.slocounty.ca.gov/PW/Na cWP/General_Project_Information/reports.htm">http://www.slocounty.ca.gov/PW/Na cWP/General_Project_Information/reports.htm</a>.</p> <p>Implementation of Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply) would require connection to SWP or NWP water lines as well as installation of additional connector pipelines and associated infrastructure. Possible locations for such connections and pipelines include: SWP Connection via Encina Avenue, SWP Connection West of Santa Margarita, NWP Connection via Encina Avenue, NWP Connection via Yerba Buena Avenue, and NWP Connection via El Camino Real. Impacts associated with these connections that have not been analyzed in previous CEQA documents may include impacts related to grading and associated erosion, tree removal, and impacts to California annual grassland and emergent wetlands.</p>





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<b>AIR QUALITY</b>		
<p><b>ARCS Impact AQ-2</b> The Agricultural Residential Cluster Subdivision will generate construction-related emissions as the site develops. These emissions would exceed PM10 significance thresholds. Construction related emissions are Class II, <i>significant but mitigable</i>.</p>	<p>Portable equipment 50 horsepower or greater will require California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit. In addition, the following mitigation measures are recommended to minimize emissions and to reduce the amount of dust that drifts onto adjacent properties. These measures would apply to both tract grading and development of individual lots:</p> <p><b>ARCS AQ-2(a) Construction Equipment Controls.</b> Upon application for grading permits, the applicant shall submit grading plans, the proposed rate of material movement and a construction equipment schedule to the APCD. In addition, the applicant shall implement the following measures to mitigate equipment emissions:</p> <ul style="list-style-type: none"> <li>• All construction equipment and portable engines shall be properly maintained and tuned according to manufacturer's specifications;</li> <li>• All off-road and portable diesel powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB-certified motor vehicle diesel fuel;</li> <li>• The applicant shall maximize to the extent feasible, the use of diesel construction equipment meeting the California Air Resources Board's 1996 (or newer) certification standard for off-road heavy-duty diesel engines.</li> <li>• All on and off-road diesel equipment shall not be allowed to idle for more than 5 minutes. Signs shall be posted in the designated queuing areas to remind drivers and operators of the 5 minute idling limit;</li> <li>• The applicant shall electrify equipment where feasible;</li> <li>• The applicant shall substitute gasoline-powered for diesel-powered equipment where feasible;</li> <li>• The applicant shall use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, where feasible; and</li> <li>• The applicant shall apply Best Available Control Technology (CBACT) as determined by the APCD.</li> </ul> <p><b>ARCS AQ-2(b) Dust Control.</b> The following measures shall be implemented to reduce PM<sub>10</sub> emissions during Agricultural Residential Cluster Subdivision construction:</p> <ul style="list-style-type: none"> <li>• Reduce the amount of the disturbed area where possible;</li> <li>• Use water trucks or sprinkler systems in sufficient quantities to prevent</li> </ul>	<p>With implementation of the above mitigation measures, construction air quality impacts would be reduced to a less than significant level.</p>



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	<p>airborne dust from leaving the site. Water shall be applied as soon as possible whenever wind speeds exceed 15 miles per hour. Reclaimed (nonpotable) water should be used whenever possible;</p> <ul style="list-style-type: none"> <li>• All dirt-stock-pile areas shall be sprayed daily as needed;</li> <li>• Permanent dust control measures shall be identified in the approved project revegetation and landscape plans and implemented as soon as possible following completion of any soil disturbing activities;</li> <li>• 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;</li> <li>• 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 the APCD;</li> <li>• All roadways, driveways, sidewalks, etc., to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used;</li> <li>• Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;</li> <li>• All trucks hauling dirt, sand, soil or other loose materials shall be covered or shall maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;</li> <li>• Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site; and</li> <li>• Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible.</li> </ul> <p>The above measures shall be shown on development plans.</p> <p><b>ARCS AQ-2(c) Cover Stockpiled Soils.</b> If importation, exportation, or stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting material shall be tarped from the point of origin.</p> <p><b>ARCS AQ-2(d) Dust Control Monitor.</b> The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering as necessary to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress.</p>	



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	<p><b>ARCS AQ-2(e) Active Grading Areas.</b> Prior to commencement of tract improvements, a Construction Management Plan shall be submitted for county approval that shows how the project will not exceed continuous working of more than four acres at any given time (according to the APCD, any project with a grading area greater than 4 acres of continuously worked area will exceed the 2.5 ton PM<sub>10</sub> quarterly threshold). The Dust Control Monitor shall verify in the field during tract improvements that the Construction Management Plan is being followed.</p> <p><b>ARCS AQ-2(f) Naturally Occurring Asbestos.</b> Prior to grading on the Agricultural Residential Cluster Subdivision site, the applicant shall ensure that a geologic evaluation is conducted to determine if naturally occurring asbestos is present within the areas that will be disturbed. At a minimum, the geologic evaluation must include:</p> <ol style="list-style-type: none"> <li>1. A general description of the property and the proposed use;</li> <li>2. A detailed site characterization which may include:               <ol style="list-style-type: none"> <li>a. A physical site inspection;</li> <li>b. Offsite geologic evaluation of adjacent property;</li> <li>c. Evaluation of existing geological maps and studies of the site and surrounding area;</li> <li>d. Development of geologic maps of the site and vicinity;</li> <li>e. Identification and description of geologic units, rock and soil types, and features that could be related to the presence of ultramafic rocks, serpentine, or asbestos mineralization; and</li> <li>f. A subsurface investigation to evaluate the nature and extent of geologic materials in the subsurface where vertical excavation is planned; methods of subsurface investigation may include, but are not limited to borings, test pits, trenching, and geophysical surveys;</li> </ol> </li> <li>3. A classification of rock types found must conform to the nomenclature based on the International Union of Geological Science system;</li> <li>4. A description of the sampling procedures used;</li> <li>5. A description of the analytical procedures used, which may include mineralogical analyses, petrographic analyses, chemical analyses, or analyses for asbestos content;</li> <li>6. An archive of collected rock samples for third party examination; and</li> <li>7. A geologic evaluation report documenting observations, methods, data, and findings; the format and content of the report should follow the Guidelines for Engineering Geologic Reports issued by the State Board of Registration for Geologists and Geophysicists.</li> </ol>	



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	<p>If naturally occurring asbestos is not present, an exemption request must be filed with the APCD. If naturally occurring asbestos is found, the applicant must comply with all requirements outlined in the State ARB's Asbestos Air Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations. These requirements may include but are not limited to: 1) an Asbestos Dust Mitigation Plan which must be approved by APCD before construction begins, and 2) an Asbestos Health and Safety Program.</p> <p>The Asbestos Dust Mitigation Plan must specify dust mitigation practices which are sufficient to ensure that no equipment or operation emits dust that is visible crossing the property line, and must include one or more provisions addressing: track-out prevention and control measures; adequately watering or covering with tarps active storage piles; and controlling for disturbed surface areas and storage piles that will remain inactive for more than seven (7) days.</p> <p>An Asbestos Health and Safety Program would be required if grading were to occur in serpentine or ultramafic rock deposits with such concentrations of asbestos present that there is potential to exceed the Cal OSHA asbestos permissible exposure limit (PEL: 0.1 fiber/cc). If required, the Asbestos Health and Safety Program shall be designed by a certified asbestos consultant to ensure the personal protection of workers. The Asbestos Health and Safety Program will include, but will not be limited to, an air monitoring plan approved by the APCD to include: air monitoring in the worker breathing zone, the use of respirators, and/or decontamination.</p>	
<b>BIOLOGICAL RESOURCES</b>		
<p><b>ARCS Impact B-2</b> The proposed Agricultural Residential Cluster Subdivision would result in direct impacts to Native Perennial Grassland, which is a rare plant community and includes Valley Needlegrass Grassland, which is a CDFG Plant Community of Special Concern. This would be a Class II, <i>significant but mitigable</i> impact.</p>	<p><b>ARCS B-2(a) Native Perennial Grassland Restoration Plan.</b> The applicant shall contract with a qualified biologist to develop a Native Perennial Grassland Restoration Plan. The Plan would consist of enhancing the remaining Native Perennial grassland habitat found on-site or creating Native Perennial Grassland habitat within areas presently vegetated by California annual grassland. Specifically, the area of restoration should include at least 69 acres (2:1 ratio) with at least 10% cover by purple needlegrass, deergrass, or California oatgrass, and should include open areas within blue oak woodland and coast live oak woodland. In addition, native forbs shall be established in the restoration areas representing the species composition and relative cover that is present in the areas to be lost. Other areas consisting of California Annual Grassland such as between Lots 88 and 108 are also suitable for enhancement. In such areas, grassland management strategies such as seasonal mowing shall be employed, which will allow for a higher likelihood that perennial grasses could compete with the annual grasses found within these areas.</p>	<p>The implementation of the above mitigation measure would reduce impacts to Native Perennial Grassland habitat to a less than significant level. Seasonal mowing or low-impact grazing practices could have beneficial secondary impacts with respect to wildland fire protection.</p>



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>The following measures shall be implemented.</p> <ol style="list-style-type: none"> <li>1. A county-approved botanist/biologist shall develop a Plan that provides specific measures to enhance and maintain the remaining on-site occurrences of Perennial Grassland. This Plan shall be focused on adaptive management principles, and shall identify detailed enhancement areas and strategies based on the parameters outlined below, with timing and monitoring long-term requirements. The Plan shall:               <ol style="list-style-type: none"> <li>a. Provide an up-to-date inventory of on-site occurrences of Native Perennial Grassland habitat;</li> <li>b. Define attainable and measurable goals and objectives to achieve through implementation of the Plan;</li> <li>c. Provide site selection and justification;</li> <li>d. Detail restoration work plan including methodologies, restoration schedule, plant materials (seed), and implementation strategies.</li> <li>e. Provide a detailed maintenance plan to include mowing to provide a sufficient disturbance regime to keep non-native plant species from further reducing the extent of this habitat type on the property over time. This approach would also have the residual benefit of providing wildland fire protection. Enhancement and maintenance options shall employ recent techniques and effective strategies for increasing the overall area of Native Perennial Grassland on-site and shall include but not be limited to reseeding disturbed areas with an appropriate native plant palette;</li> <li>f. Define performance standards. Within the agriculture residential cluster subdivision project area, the restored area should include at least 69 acres (2:1 ratio) with at least 10% cover by native perennial grasses; and,</li> <li>g. Provide a monitoring plan to include methods and analysis of results. Also, include goal success or failure and an adaptive management plan and suggestions for failed restoration efforts.</li> </ol> </li> </ol>	
<p><b>ARCS Impact B-4</b> The proposed Agricultural Residential Cluster Subdivision would impact wetland and waters of the U.S. regulated by the U.S. Army</p>	<p>The following mitigation would reduce impacts related to state and federal jurisdictional wetlands, ephemeral drainages (other waters), and riparian habitat to a less than significant level. In addition, these habitat types support special-status wildlife species, namely California red-legged frog (CRLF) and South/Central California Coast Steelhead. Agricultural Residential Cluster Subdivision measures B-</p>	<p>Implementation of the above recommended mitigation measure would reduce impacts to a less than significant level. In addition, obtaining all the</p>



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<p>Corps of Engineers (ACOE) and Regional Water Quality Control Board (RWQCB) and riparian areas regulated by the California Department of Fish and Game (CDFG). These impacts are Class II, <i>significant but mitigable</i>.</p>	<p>6(a) (VPFS Presence/Absence Determination), B-6(b) (Mitigation for VPFS), B-7(a) (South/Central California Coast Steelhead (Steelhead) Mitigation, Minimization and Protection Plan), B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation Measures) and B-9(b) (Southwestern Pond Turtle Avoidance, Capture and Relocation) would reduce impacts to special-status species that may use the on-site wetland, seasonal pool, and riparian habitat types to a less than significant level. It should be noted that the grading and erosion control plan required to be prepared by the applicant [refer to Agricultural Residential Cluster Subdivision measure G-2(b) (Grading and Erosion Control Plan) in Section 4.6, <i>Geologic Stability</i>] includes measures, such as installation of silt fences, straw bales and sand bags, and buffers for temporary construction equipment storage and washing areas, that specifically protect wetland, other waters, and riparian resources, during and following construction.</p> <p><b>ARCS B-4(a) Wetland and Riparian Protection.</b> Implementation of the following measures are required to mitigate the loss of riparian/wetland habitat:</p> <ol style="list-style-type: none"> <li>1. Building envelopes shall be located so that all riparian and wetland habitat is buffered from development (including grading) by a minimum 200-foot setback from Trout, Yerba Buena and Tostada Creeks, or any other habitats found to support CRLF or Steelhead. Other wetlands, and waters of the U.S. or state shall have a minimum setback of 100 feet. If seasonal pools contain VPFS, a minimum 300 foot setback shall be required. Setback requirements may be increased by the Corps, RWQCB, CDFG, NMFS and/or USFWS.</li> <li>2. The wetland and riparian habitat area buffer zones for preserved wetland and riparian areas shall be shown on all grading plans and shall be demarcated with highly visible construction fencing to ensure that these areas are not impacted during construction-related activities.</li> <li>3. Erosion control measures including, but not limited to straw wattles, silt fences, and fiber mats shall be implemented at the limits of grading to reduce sediments from entering the wetland and riparian habitat area buffer zones.</li> <li>4. Outlet structures shall minimize disturbance to the natural drainage and avoid use of hard bank structures. Where erosion of outlet structures is a concern and bank stabilization must be utilized, bioengineering techniques (e.g., fiber mats and rolls, willow wattling, and natural anchors) shall be used for bank retaining walls. If concrete must be used, then prefabricated crib wall construction shall be used rather than pouring concrete. Rock grouting shall only be used if no other feasible</li> </ol>	<p>required ACOE, CDFG, and RWQCB permits for impacts within jurisdictional areas would result in a no-net-loss of functions and values to riparian/wetland habitats on-site.</p>





**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<p>alternative is available as determined by Planning and Building.</p> <p>5. Disturbance to drainage bottoms due to the installation of any drain or outlet structures shall be minimized to the greatest extent possible and shall be permitted by all appropriate regulatory agencies as described in 8 below.</p> <p>6. A grease trap and/or silt basin shall be installed in all drop inlets closest to the creek to prevent oil, silt and other debris from entering the creek. Such traps/basins shall be maintained and cleaned out every spring and fall to prevent overflow situations and potential mosquito habitats from forming;</p> <p>If impacts to wetland and riparian habitat are not fully avoided, the following shall be implemented to mitigate impacts.</p> <p>7. The applicant shall obtain a permit from the ACOE pursuant to Section 404 of the Clean Water Act, a water quality certification from the RWQCB pursuant to Section 401 of the Clean Water Act, and a Streambed Alteration Agreement from the CDFG pursuant to Section 1600 et seq. of the California Fish and Game Code for any grading or fill activity within drainages and wetlands.</p> <p>For development of Roads C, D, and H, which are proposed to cross Tostada Creek, the applicant shall consult with the ACOE and CDFG in designing creek crossings. Where appropriate, and if there is concurrence with ACOE and CDFG, pre-engineered bridge structures are recommended to minimize disturbance within the western portion of Tostada Creek.</p> <p>It is recommended that the applicant contact these agencies prior to final plan submittal in order to incorporate any additional requirements into the project design. As part of the permitting process, the applicant will be required to provide a compensatory habitat mitigation and monitoring program for impacts to jurisdictional areas. The Plan shall follow the minimum criteria described in Item 8 below.</p> <p>8. A compensatory mitigation program at a minimum 2:1 ratio for the loss of any wetlands, including those not under federal or state jurisdiction but meeting one-parameter criteria (hydrology, vegetation, or soils), shall be designed. Regulatory agencies may require a greater mitigation ratio. At a minimum, the plan shall include the following components:</p> <p>a. Mitigation plantings for the loss of existing wetland and riparian habitat shall be</p>	



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	<p>located in the drainages that are proposed to be modified or preserved as part of the proposed Agricultural Residential Cluster Subdivision to the fullest extent feasible.</p> <p>b. As part of the plan, the applicant shall include a mitigation-phasing section to ensure that all restoration plantings are in place with sufficient irrigation prior to final inspection.</p> <p>c. Restoration/revegetation activities shall use native riparian and wetland species from locally collected stock.</p> <p>d. Removal of native species in the creeks/drainages that are to be retained shall be prohibited; however, select willow cuttings and emergent plant division are permissible.</p> <p>e. Prior to commencement of grading, the applicant shall file a performance security with the County to complete restoration and maintain plantings for a five (5) year period.</p>	
<p><b>ARCS Impact B-5</b> The proposed Agricultural Residential Cluster Subdivision would impact San Luis Obispo Mariposa Lily, and may impact San Luis Obispo County morning glory, which are Special-Status Plant Species. This would be a Class II, <i>significant but mitigable</i> impact.</p>	<p><b>ARCS B-5(a) Follow-Up Special-Status Plant Surveys.</b> Follow-up special-status plant surveys for San Luis Obispo mariposa lily and San Luis Obispo County morning glory shall be performed in the spring prior to commencement of ground disturbance. The survey for San Luis Obispo mariposa lily shall be required only on potential impact areas (i.e., Lots 2 through 19, Lots 43 through 49, Lots 51 through 66, and the portion of Roads A and B) containing San Luis Obispo mariposa lily that are delineated on Figure 4.3-2. The applicant shall submit to the County an updated San Luis Obispo mariposa lily population survey report of the Agricultural Residential Cluster Subdivision site conducted by a County approved botanist.</p> <p>The San Luis Obispo County morning glory has not previously been observed in the Agricultural Residential Subdivision area, but it is known to occur adjacent to the site southeast of Yerba Buena Creek in the Miller Flats area. Since suitable habitat exists, surveys shall be conducted prior to grading to determine whether this species exists in the project area.</p> <p>The purpose of the follow-up special-status plant surveys is to provide accurate baseline information for the preparation of the San Luis Obispo mariposa lily and San Luis Obispo County morning glory mitigation and monitoring plan for the areas proposed for construction. The follow-up will ensure a current and accurate assessment of the numbers of individuals within the Agricultural Residential Cluster</p>	<p>The implementation of the above mitigation measures would reduce impacts to a less than significant level.</p>



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	<p>Subdivision site that will be impacted by development. The updated survey shall quantify the total number of individuals within each lot and road segment proposed for development. Areas occupied by these species shall be flagged (and/or identified using a Global Positioning System) for future bulb and plant salvage and seed collection efforts.</p> <p><b>ARCS B-5(b) San Luis Obispo Mariposa Lily and San Luis Obispo County Morning Glory Monitoring Plan.</b> Prior to the issuance of any grading permits, a mitigation and monitoring plan that addresses impacts to the San Luis Obispo mariposa lily and San Luis Obispo County morning glory (if present) shall be prepared and approved by the County and CDFG. The detailed mitigation and monitoring plan shall be developed by a County-approved qualified biologist to protect and enhance the remaining occurrences of these species within the Agricultural Residential Cluster Subdivision site and describe a collection and restoration plan to mitigate for impacted areas. The mitigation and monitoring plan shall at a minimum to include the following:</p> <ul style="list-style-type: none"> <li>• A worker education program that shall include identification of special-status plant species and their habitat, the limits of construction, efforts required to reduce impacts to these species, and a fact sheet summarizing this information;</li> <li>• Description of a collection plan to ensure that all San Luis Obispo mariposa lily bulbs and seeds from San Luis Obispo County morning glory plants located within 25 feet of the proposed lots and roads will be removed by a qualified biologist during the appropriate season prior to clearing and grading activities associated with lot development and road construction;</li> <li>• Description of proposed propagation techniques using collected material;</li> <li>• Specific areas proposed for revegetation and rationale for why these sites are suitable;</li> <li>• Specific habitat management and protection concepts to be used to ensure long-term maintenance and protection of the San Luis Obispo mariposa lily and San Luis Obispo County morning glory such as annual population census surveys and habitat assessments; establishment of monitoring reference sites; fencing of species preserves and signage to identify the environmentally sensitive areas; a seasonally-timed weed abatement program; and seasonally-timed plant/seed/bulb collection, propagation, and reintroduction of San Luis Obispo mariposa lily and San Luis Obispo County morning glory into specified receiver sites;</li> <li>• Success criteria based on the goals and measurable objectives to ensure a</li> </ul>	



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	<p>viable San Luis Obispo mariposa lily and San Luis Obispo County morning glory populations on the Agricultural Residential Cluster Subdivision site in perpetuity;</p> <ul style="list-style-type: none"> <li>• An adaptive management program to address both foreseen and unforeseen circumstances relating to the preservation and mitigation programs;</li> <li>• Remedial measures to address negative impacts to San Luis Obispo mariposa lily and San Luis Obispo County morning glory and their habitat that may occur during construction activities, as well as post-construction when dwellings are occupied;</li> <li>• An education program to inform residents of the presence of San Luis Obispo mariposa lily, San Luis Obispo County morning glory, and other sensitive biological resources on-site, and to provide methods that residents can employ to reduce impacts to species occurrences in protected open space areas;</li> <li>• Reporting requirements to track success or failure of the mitigation program and to ensure consistent data collection and reporting methods used by monitoring personnel; and,</li> <li>• Maintenance and cost estimates.</li> </ul> <p>The mitigation ratio (habitat area created to habitat area impacted) will be 2:1 for special-status plant species' habitat impacted by development of the Agricultural Residential Cluster Subdivision. Mitigation for the San Luis Obispo morning glory may also occur in mitigation area designated for the Valley Needlegrass Grassland as this is the preferred habitat for this species [please refer to Agricultural Residential Cluster Subdivision measure B-2(a)].</p> <p><b>ARCS B-5(c) Protective Fencing.</b> A qualified biologist shall oversee the installation of temporary fencing around habitat containing the San Luis Obispo mariposa lily and/or San Luis Obispo County morning glory occurrences, prior to any construction activities in the vicinity. Protective fencing shall remain in place throughout construction activities.</p>	
<p><b>ARCS Impact B-6</b> The proposed Agricultural Residential Cluster Subdivision could result in a direct take of the federally threatened Vernal Pool Fairy Shrimp through grading activities for the proposed development, and sediment runoff into</p>	<p>The following mitigation measures are required to conclusively determine the presence or absence of VPFS within the on-site seasonal pools and reduce impacts to VPFS to a less than significant level, if present:</p> <p><b>ARCS B-6(a) VPFS Presence/Absence Determination.</b> Prior to issuance of Grading Permits, a USFWS protocol wet season survey shall be conducted prior to 2010/2011 by a qualified and federally permitted biologist to complete protocol survey requirements to conclusively determine the presence or absence of VPFS within the Agricultural</p>	<p>Implementation of the above mitigation measures in concert with Agricultural Residential Cluster Subdivision measures B-4(a) (Wetland and Riparian Protection), B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation</p>



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<p>seasonal pools. This potential impact is Class II, <i>Significant but mitigable</i>.</p>	<p>Residential Cluster Subdivision site. The wet season survey shall include surveys of SP 1, 2, 3, 4, 5, 6, and 7 per the USFWS (1996) guidelines. A report consistent with current federal reporting guidelines shall be prepared to document the methods and results of surveys. Should the presence of VPFS or additional special-status wildlife species be determined, a map identifying locations in which these species were found shall be prepared and included in the report.</p> <p>If the surveys produce a negative finding for the presence of VPFS, then no further mitigation would be required. If VPFS are identified within SP 1, 2, 3, 4, 5, 6, or 7, then Agricultural Residential Cluster Subdivision measure B-6(b) would be required.</p> <p><b>ARCS B-6(b) Mitigation for VPFS.</b> This measure shall only apply if VPFS are identified during USFWS protocol surveys.</p> <p>The applicant shall implement measures that minimize the Agricultural Residential Cluster Subdivision adverse effects on VPFS. Subject to concurrence by and coordination with USFWS, required measures may include the following:</p> <ul style="list-style-type: none"> <li>• Avoidance of occupied habitats and a three hundred-foot setback from occupied habitats; and</li> <li>• Where avoidance is not possible, compensatory mitigation for impacts to occupied habitats at a 3:1 ratio, and impacts to potentially suitable habitats in which VPFS were not found at a 2:1 ratio.</li> </ul> <p>A USFWS permitted biologist familiar with VPFS habitat “creation” techniques shall review VPFS compensatory mitigation areas. Enhancement of the on-site vernal pool/wetland habitat that is undisturbed by Agricultural Residential Cluster Subdivision may also be a part of the mitigation program for any impacted VPFS habitats. Upon approval from the USFWS, an appropriate salvage and relocation methodology will be selected that will include the following:</p> <ul style="list-style-type: none"> <li>• Shrimp cysts shall be collected during the dry season from the existing habitat and placed into storage;</li> <li>• Topsoil shall also be removed and stored under conditions suitable to retain cysts, and used as a top dressing for created vernal pools as proposed in the VPFS mitigation plan;</li> <li>• If topsoil is not used, preserved cysts would be added to the recreated vernal pool/wetlands in December or January, after sufficient pooling has occurred.</li> </ul>	<p>Measures) and B-9(b) (Southwestern Pond Turtle Avoidance, Capture and Relocation) would reduce impacts to VPFS to a less than significant level. Therefore, the impact to VPFS is Class II, <i>significant but mitigable</i>.</p>



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<p><b>ARCS Impact B-7</b> The proposed Agricultural Residential Cluster Subdivision could result in a direct take of the federally threatened South/Central California Coast Steelhead and/or the loss of Federally designated Steelhead Critical Habitat through grading activities for the proposed development, and sedimentation of occupied creeks. This potential impact is Class II, <i>significant but mitigable</i>.</p>	<p><b>ARCS B-7(a) South/Central California Coast Steelhead (Steelhead) Mitigation, Minimization and Protection Plan.</b> Steelhead have been identified on-site and setbacks from their identified habitat shall be implemented to avoid or minimize impacts to this federally listed species and its habitat. Prior to development, a Steelhead Protection Plan shall be prepared by a qualified Steelhead biologist to protect Steelhead within the on-site portions of Trout and Tostada Creeks. The plan shall include, but not be limited to the following:</p> <ul style="list-style-type: none"> <li>• A 200 foot permanent buffer from the top of bank of Trout and Tostada Creeks and 50 foot buffer or minimum setback from ephemeral drainages that are tributaries to Trout Creek shall be established and maintained in perpetuity. In the short term, this buffer will ensure construction activities do not increase the erosion potential in the area or facilitate construction related sediment from entering the creek. The buffer shall be demarcated with highly visible construction fencing for the benefit of contractors and equipment operators. In the long term, this buffer will minimize impacts to riparian habitats that are critical for Steelhead, and reduce the amount of sediment and pollutant runoff that would enter these waterways. Roadways, grading, landscaping, structures and other types of disturbance shall be prohibited within these buffer areas, with the exception of road crossings, as detailed below.</li> <li>• Road crossings of Trout and Tostada Creeks are allowable (if permitted by the appropriate agencies) if the following measures are implemented. The crossings must be designed following the NMFS Southwest Region’s (2001) Guidelines for Salmonid Passage at Stream Crossings [<a href="http://swr.nmfs.noaa.gov/hcd/MNFSSCG.PDF">http://swr.nmfs.noaa.gov/hcd/MNFSSCG.PDF</a>]. Clear-span structures are recommended. Areas of temporary disturbance resulting from the construction or improvements to road crossings shall be restored using native vegetation at a minimum of 2:1 (area restored:area temporarily impacted). However, agency permitting for impacts to riparian and/or wetland resources may require a higher ratio. Additional details required for riparian restoration are contained within measure B-4(a).</li> <li>• The applicant shall prepare and submit for approval to the County a sediment and erosion control plan that specifically seeks to protect waters and riparian woodland resources adjacent to construction site. Erosion control measures shall be implemented to prevent runoff into Trout and Tostada Creeks, ephemeral drainages, and wetlands. Silt fencing, straw bales, and/or sand bags shall be used in conjunction with other methods to prevent erosion and sedimentation of the stream channel. The plan shall</li> </ul>	<p>Implementation of the above mitigation measures in concert with Agricultural Residential Cluster Subdivision measures B-4(a) (Wetland and Riparian Protection) and B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation Measures) and those resulting from compliance with the FESA would reduce impacts to <del>SS</del> Steelhead to a less than significant level. Therefore, the impact to Steelhead is Class II, <i>significant but mitigable</i>.</p>



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	<p>specify locations and types of erosion and sediment control structures and materials that would be used on-site during construction activities. The plan shall also describe how any and all pollutants originating from construction equipment would be collected and disposed.</p> <ul style="list-style-type: none"> <li>• During construction activities, washing of concrete, paint, or equipment shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Washing will not be allowed in locations where the tainted water could affect sensitive biological resources.</li> </ul> <p>The applicant shall coordinate with the NOAA National Marine Fisheries Service and ACOE, and shall demonstrate compliance with Section 7 (federal nexus) and/or Section 10 (no federal nexus) of the federal Endangered Species Act (FESA), as applicable. This consultation may necessitate the issuance of a NMFS Biological Opinion and/or the preparation of a Habitat Conservation Plan for Steelhead and their habitat. The applicant shall also coordinate with CDFG and other resource agencies, as applicable. The applicant shall implement all measures prescribed by these agencies.</p>	
<p><b>ARCS Impact B-8</b> The proposed Agricultural Residential Cluster Subdivision would result in take of the federally threatened California red-legged frog through grading activities for the proposed development, and would fragment the amount of available habitat potentially used for movement and dispersal. This potential impact is Class II, <i>Significant but mitigable</i>.</p>	<p>If feasible, the applicant should avoid known CRLF breeding sites and potential movement corridors. The proposed project design would not avoid impacts to CRLF and its habitat. If avoidance cannot be achieved, the following mitigation measure is required to reduce direct and indirect impacts on the CRLF:</p> <p><b>ARCS B-8(a) California Red-legged Frog Avoidance, Minimization, and Mitigation Measures.</b> Subject to concurrence by and coordination with the USFWS, required measures shall include the following:</p> <ul style="list-style-type: none"> <li>• At least 45 days prior to the onset of activities, the applicant shall submit the name(s) and credentials of biologists who would conduct activities specified in the following measures. No project activities shall begin until proponents have received written approval from the USFWS that the biologist(s) is qualified to conduct the work.</li> <li>• A USFWS-approved biologist shall survey the work site and suitable habitat within 330 feet of work sites two weeks before the onset of activities. If CRLF, tadpoles, or eggs are found, relocations shall be conducted only if authorized by the USFWS. If USFWS approves moving animals, the approved biologist shall be allowed sufficient time to move CRLF from the work site before work activities begin. Only USFWS-approved biologists shall participate in activities associated with the capture, handling, and</li> </ul>	<p>Implementation of the above mitigation measure and those required as a result of FESA compliance would reduce impacts to the CRLF to a less than significant level. Therefore, the impact to CRLF is Class II, <i>significant but mitigable</i>.</p>





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	<p>monitoring of CRLF. All conditions specified by the USFWS exemption or authorization shall be implemented regarding relocation of this species.</p> <ul style="list-style-type: none"> <li>• If CRLF are found during the preconstruction surveys within 330 feet of any work area, and for any areas already known to be occupied by CRLF, work within 330 foot of these habitats must be limited to the period between April 30 to July 30 or the work area must be surrounded by exclusionary fencing to reduce impacts to frogs that are in upland areas during the rainy season or juvenile dispersal. The exclusionary fencing shall be at least three feet high and keyed into the ground, made of solid mesh (such as silt fence; orange construction fence is not suitable) and shall be maintained throughout the construction period. This fencing can also function for erosion and sedimentation control. An approved biologist must survey the project limits for CRLF each morning prior to the start of work. Any CRLF found within the work area shall be relocated, if authorized by the USFWS. If relocations are not authorized by the USFWS, the fence shall be modified to allow the frog to pass through to suitable habitat, and work shall not commence until it has left.</li> <li>• Before any construction activities begin on the Agricultural Residential Cluster Subdivision, a USFWS-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the CRLF and its habitat, the importance of the CRLF and its habitat, the general measures that are being implemented to conserve the CRLF as they relate to the project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.</li> <li>• A USFWS-approved biologist shall be present at the work site until such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance have been completed. After this time, the contractor or permittee shall designate a person to monitor the on-site compliance with all minimization measures. The USFWS approved biologist shall ensure that this individual receives training outlined above and in the identification of CRLF. The monitor and the USFWS-approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by USFWS during review of the proposed action. If work is stopped, USFWS, and the ACOE as applicable, shall be notified</li> </ul>	



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	<p>immediately by the USFWS-approved biologist or on-site biological monitor.</p> <ul style="list-style-type: none"> <li>• During project activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from the work areas.</li> <li>• All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 100 feet from any riparian habitat or water body. The permittee, and ACOE as applicable, shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the permittee shall prepare and comply with a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.</li> <li>• A USFWS-approved biologist shall ensure that the spread or introduction of invasive non-native plant and animal species, especially bullfrogs shall be avoided to the maximum extent possible. Invasive exotic plants and animals in the development shall be removed and destroyed.</li> <li>• Agricultural Residential Cluster Subdivision riparian and wetland areas shall be revegetated with an appropriate assemblage of native riparian wetland and upland vegetation suitable for the area. A species list and restoration and monitoring plan shall be included with the project proposal for review and approval by USFWS, and the ACOE as applicable. Such a plan must include, but not be limited to: location of the restoration, species to be used, restoration techniques, time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.</li> <li>• Stream contours shall be returned to their original condition at the end of project activities, unless consultation with USFWS has determined that it is not beneficial to the species or feasible.</li> <li>• The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary for development. Routes and boundaries shall be clearly demarcated, and these areas shall be outside of riparian and wetland areas. Where impacts</li> </ul>	



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<p>occur in these staging areas and access routes, restoration shall occur as identified in the above measures.</p> <ul style="list-style-type: none"> <li>• A 200 foot permanent buffer (from the edge of the high water line for ponds, or from the top of bank on either side of creeks) shall be established and maintained in perpetuity around water bodies with confirmed occurrences of CRLF. This includes the lengths of Trout, Tostada, and Yerba Buena Creeks; an upstream pool in Taco Creek; and any stock ponds that may contain CRLF. In the short term, this buffer will ensure construction activities do not increase the erosion potential in the area or facilitate construction related sediment from entering the creeks. The buffer shall be demarcated with highly visible construction fencing for the benefit of contractors and equipment operators. In the long term, this buffer will minimize impacts to riparian and emergent wetland habitats that are critical for upland habitat use by CRLF, and reduce the amount of sediment and pollutant runoff that would enter these waterways. Roadways, grading, landscaping, structures and other types of disturbance shall be prohibited within these buffer areas. Road crossings of these streams are allowable (if permitted by the appropriate agencies) following the measures listed above. Permanent buffer areas shall be demarcated with a type of fencing that would prohibit vehicular and livestock access, discourage use by humans, but allow access by wildlife. An example of fencing that could meet these requirements is welded pipe fence such as the type that exists at the entrance of the Agricultural Residential Cluster Subdivision.</li> <li>• Areas of temporary disturbance resulting from the construction or improvements to road crossings shall be restored using native vegetation at a minimum of 2:1 (area restored to area temporarily impacted). However, agency permitting for impacts to riparian and/or wetland resources may require a higher ratio. Additional details required for the riparian restoration plan are contained within measure B-4(a).</li> <li>• Restrictions on the use of pesticides near water bodies with confirmed occurrences of CRLF.</li> </ul>	
<b>ARCS Impact B-9</b> The proposed Agricultural Residential Cluster Subdivision would directly and indirectly reduce the populations and available habitat	<b>ARCS B-9(a) Legless and Horned Lizard Capture and Relocation.</b> Immediately prior to the initiation of construction in the developable area, capture and relocation efforts shall be conducted for the silvery legless lizard and coast horned lizard. Designated areas in permanent open space shall be identified within the Agricultural	The implementation of the above mitigation measures would reduce impacts to wildlife in general to a less than significant level.



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<p>for wildlife in general, including special-status wildlife species. Because of the size of the site, degree of habitat diversity, and known or potential presence of a number of special-status wildlife species on-site, the loss of wildlife habitat is a Class II, <i>significant but mitigable</i> impact.</p>	<p>Residential Cluster Subdivision site for release of captured legless lizards and coast horned lizards.</p> <p>Surveys shall be conducted by a County approved biologist, and shall include the following minimum requirements:</p> <ul style="list-style-type: none"> <li>• Raking of leaf litter and sand under shrubs within suitable habitat in the area to be disturbed to a minimum depth of eight inches for the silvery legless lizard.</li> <li>• In addition to raking, “coverboards” shall be used to capture silvery legless lizards and coast horned lizards. Coverboards can consist of untreated lumber, sheet metal, corrugated steel, or other flat material used to survey for reptiles and amphibians. Coverboards shall be placed flat on the ground and checked regularly in the survey areas. Coverboards shall be placed in the survey area a minimum of two weeks, but preferably at least four weeks, before surveys begin and will be checked once a week during raking surveys. Captured lizards will be placed immediately into containers containing sand or moist paper towels and released in designated release areas no more than three hours after capture.</li> <li>• During all grading activities, a qualified biologist shall be on-site to recover any silvery legless lizards that may be excavated/unearthed with native material. The unearthed lizards shall be immediately relocated and released to the designated release area.</li> </ul> <p><b>ARCS B-9(b) Southwestern Pond Turtle Avoidance, Capture and Relocation.</b> A County approved biologist shall conduct spring surveys for this species before the onset of construction activities. The survey area shall include ponds located within the Agricultural Residential Cluster Subdivision site with ponded water as well as on-site drainage corridors. If any southwestern pond turtles are found within 1,000 feet of construction activities such as lot grading or road construction, the approved biologist shall contact CDFG to determine if moving any individuals is appropriate. If CDFG approves moving animals, the biologist shall be allowed sufficient time to move the animals from the work site before work activities begin. If CDFG does not recommend moving the animals, a 1,000 foot buffer from the pond, seasonal pool, in stream pools, and /or nesting site shall be implemented. No grading or other construction activities shall occur within the set buffer. Only the approved biologist shall participate in activities associated with the capture and handling of turtles.</p>	



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	<p>Agricultural Residential Cluster Subdivision measures B-4(a), B-6(b), and B-8(a) will also benefit this species. B-4(a) will reduce direct impacts (development), restore impacted areas, and reduce potential indirect impacts (sedimentation and concrete/oil runoff) into wetlands and riparian habitat used for breeding and foraging by the southwestern pond turtle. B-6(b) will provide protection to seasonal pool/wetland habitat that are occupied by the federally threatened VPFS and that may also be used by the SWPT and B-8(a) will provide federal protection to riparian and seasonal pool/wetland habitat that are occupied by the federally-threatened CRLF and that may also be used by the SWPT.</p> <p><b>ARCS B-9(c) Pre-Construction Bird Survey. Pre-construction Bird Survey.</b> To avoid impacts to nesting special-status bird species, namely the state Fully Protected white-tailed kite and golden eagle, the federally-threatened and Fully Protected bald eagle, other special-status bird species listed in Table 4.3-4, and all birds protected under the Migratory Bird Treaty Act, the initial ground-disturbing activities and tree removal shall be limited to the time period between September 1 and February 15. If initial site disturbance, grading, and tree removal cannot be conducted during this time period, a pre-construction survey for active nests within the limits of grading shall be conducted by a qualified biologist at the site two weeks prior to any construction activities. All potential nest locations shall be searched by the biologist including, but not limited to grassland, chaparral, central coastal scrub, and oak woodlands. If active nests are located, all construction work must be conducted outside a buffer zone from the nests to be determined by a qualified biologist. No direct disturbance to nests shall occur until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed and young have fledged the nest prior to the start of construction in the buffer zone. Surveys following the <i>Protocol for Evaluating Bald Eagle Habitat and Populations in California Bald Eagle</i> (Jackson and Jennings, 2004) are also required.</p> <p><b>ARCS B-9(d) American Badger Avoidance.</b> The mitigation measures below are recommended to determine whether badgers are present in the area prior to development and to prevent American badgers from becoming trapped in burrows during construction activities.</p> <ul style="list-style-type: none"> <li>• A pre-construction survey for active American badger dens shall be conducted within one month of initial ground disturbance activities by a County qualified biologist. To avoid the potential direct take of adults and nursing young, no grading shall occur within 50 feet of an active badger den as determined by a County-approved biologist between March 1 and June 30.</li> </ul>	



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	<p>Construction activities during July 1 through March 1 shall comply with the following measures to avoid direct take of adult and weaned juvenile badgers:</p> <ul style="list-style-type: none"> <li>• A County-approved biologist shall conduct a biological survey of the entire development area prior to the start of ground clearing or grading activity. The survey shall cover the entire area proposed for development. Surveys shall focus on both old and new den sites. If dens are too long to see the end, a fiber optic scope (or other acceptable method such as den characteristics) shall be used to assess the presence of badgers. If no fiber optic scope is available, occupation of the potential dens by badgers can be ascertained by dusting the den openings with a fine layer of dust for three successive nights and looking for footprints or other evidence of occupation. Inactive dens shall be excavated by hand with a shovel to prevent badgers from re-using them during construction.</li> <li>• If American badger dens are found, the qualified biologist shall establish and clearly mark an appropriate buffer zone to protect the den. No grading or construction activities shall occur within the buffer zone until the biologist can safely close the badger den and has removed the buffer zone markings.</li> </ul> <p><b>ARCS B-9(e) Native Landscaping.</b> All landscaped plants for the project shall be on the County's approved plant list. To ensure that project landscaping does not introduce invasive non-native plant species into the vicinity of the site, the final landscaping plan shall be reviewed and approved by a County approved biologist and County Environmental and Resource Management Division prior to implementation. All invasive plant species shall be removed from the landscaping plan.</p> <p><b>ARCS B-9(f) Pet Brochure.</b> The applicant shall prepare a brochure that informs prospective homebuyers about the impacts associated with non-native animals, especially cats and dogs, and other non-native animals to the project site. Similarly, the brochure shall inform potential homebuyers of the potential for coyotes to prey on domestic animals.</p> <p><b>ARCS B-9(g) Night Lighting Standards.</b> Night lighting of public areas shall be kept to the minimum necessary for safety purposes. Exterior lighting within 100 feet of open space shall be shielded and aimed as needed to avoid spillover into open space areas. Decorative lighting shall be low intensity and be less than 25 watts.</p>	



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	<b>ARCS B-9(h) Minimize Road Widths.</b> Roadway widths adjacent to open space/agricultural areas shall be reduced to the minimum width possible, while maintaining Fire Department Requirements for emergency access, with slower speed limits introduced. Posted speed limits should be 25 mph or less.	
<b>CULTURAL RESOURCES</b>		
<b>ARCS Impact CR-3</b> Construction of the Agricultural Residential Cluster Subdivision could disturb previously unidentified buried archeological deposits. This is considered a Class II, <i>significant but mitigable</i> impact.	<p><b>ARCS CR-3(a) Buried Site Testing at Isolate Locations.</b> Isolated artifacts shall be tested by a qualified archaeologist to determine whether or not isolated artifacts within or adjacent to the Agricultural Residential Cluster Subdivision represent more substantial buried components. Such testing shall involve hand excavation of shovel probes and/or other sampling units. The type and distribution of sampling units shall be determined by a qualified professional archaeologist, who will carry out the isolate testing in the presence of a Native American monitor. If isolate testing reveals the presence of a buried site, then site boundary definition and avoidance, or mitigative data recovery, shall be carried out in accordance with Agricultural Residential Cluster Subdivision measures CR-2(a) or CR-2(b) above.</p> <p><b>ARCS CR-3(b) Archaeological Resource Construction Monitoring.</b> An archaeological resource monitoring plan prepared by a qualified archaeologist shall be submitted for review by the County Environmental Coordinator. The plan shall include a list of personnel involved in monitoring activities, and descriptions of monitoring methods, resources expected to be encountered, circumstances that would result in halting work, procedures for halting work, and procedures for monitoring reporting.</p> <p>At the commencement of Agricultural Residential Cluster Subdivision construction, an archaeologist and a Native American representative shall conduct an orientation for construction workers to describe site avoidance requirements, the possibility of exposing unexpected archaeological resources, and the steps to be taken if such a find is encountered.</p> <p>A qualified archaeologist and Native American representative shall monitor all earth moving activities within native soil. If multiple pieces of heavy equipment are in use simultaneously at diverse locations during construction, each location may be monitored individually. In the event that archaeological remains are encountered during construction, all work in the vicinity of the find will be halted until such time as the find is evaluated by a qualified archaeologist and appropriate mitigation, if necessary, is implemented.</p>	With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.
<b>Impact CR-4</b> There is the potential that Agricultural	<b>ARCS CR-4(a) Treatment of Human Remains.</b> In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated	With implementation of the above mitigation measure,



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<p>Residential Cluster Subdivision construction will disturb previously unidentified human remains. This is considered a Class II, <i>significant but mitigable</i> impact.</p>	<p>cemetery, the following steps will be taken:</p> <ol style="list-style-type: none"> <li>I. State Health and Safety Code Section 7050.5 requires that there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until: <ul style="list-style-type: none"> <li>• The County Coroner is contacted to determine that no investigation of the cause of death is required, and</li> <li>• If the coroner determines the remains to be Native American, the coroner has 24 hours to notify the Native American Heritage Commission. The Native American Heritage Commission shall identify the person or persons it believes to be most likely descended from the deceased Native American. The most likely descendent may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public resources Code Section 5097.98.</li> </ul> </li> <li>II. If the Native American Heritage Commission is unable to identify a most likely descendent; or if the most likely descendent fails to make a recommendation within 24 hours after being notified by the commission; or if the landowner or his authorized representative rejects the recommendation of the descendent, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner, then the landowner or his authorized representatives shall reinter the Native American human remains and associated grave items with appropriate dignity on the property in a location not subject to further subsurface disturbance. However, any such activity shall be supervised by a Chumash representative if a most likely descendent is either not identified or fails to respond to notification.</li> </ol>	<p>impacts would be reduced to a less than significant level.</p>
<p><b>ARCS Impact CR-5</b>  Implementation of the Agricultural Residential Cluster Subdivision could result in indirect impacts to identified or unidentified archaeological and historical resources. This is considered a Class II, <i>significant but mitigable</i> impact.</p>	<p><b>ARCS CR-5(a) Prohibition of Archaeological Site Tampering.</b> Off-road vehicle use, unauthorized collecting of artifacts, and other activities that could destroy or damage archaeological or historical sites shall be prohibited and shall be punishable by fine. The applicant shall prepare a brochure for all homebuyers and other occupants describing the cultural sensitivity of the area and explaining the prohibitions. Informational material shall be general in content and shall not include any information that could lead to the identification or location of sensitive cultural resources. Homebuyers and other occupants shall acknowledge receipt and understanding of such prohibitions in writing.</p>	<p>With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.</p>





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	<p><b>ARCS CR-5(b) Periodic Monitoring of Archaeological Site Condition.</b> To ensure that prohibitions on site tampering and vandalism are effective, the applicant shall fund an annual inspection of cultural resources within or adjacent to the Agricultural Residential Cluster Subdivision, during which the condition of the sites shall be assessed and any degradation of integrity from vandalism, erosion, or other factors shall be identified. A qualified professional archaeologist and/or a Native American representative trained in site assessment shall carry out the annual site inspections and prepare a brief report for the County, with recommendations for addressing any apparent site degradation. The applicant shall also develop a list of threatened and sensitive cultural resources sites on other lands within the Agricultural Residential Cluster Subdivision area, and shall retain a qualified archaeologist to inspect and report to the County Environmental Coordinator on the condition of those sites annually.</p>	
<p><b>ARCS Impact CR-6</b> Agricultural Residential Cluster Subdivision facilities and infrastructure could impact fossil-bearing strata and could damage or destroy significant fossil materials. This is considered a Class II, <i>significant but mitigable</i> impact.</p>	<p><b>ARCS CR-6(a) Preparation of a Paleontological Resource Monitoring Plan.</b> Prior to issuance of grading permits, the applicant shall retain a qualified accredited paleontologist to prepare a Paleontological Resource Monitoring Plan based on the specific construction plans. The monitoring plan shall detail the procedures for monitoring construction in areas of high or unknown sensitivity, collecting fossil remains and relevant geographic and stratigraphic data, stabilizing and preserving recovered specimens, and cataloguing and curating the collection (see Agricultural Residential Cluster Subdivision measure P-1(b and c) below). The monitoring plan shall include provisions for collecting a representative sample of invertebrates from the identified site at the Agricultural Residential Cluster Subdivision site prior to construction, documenting the site according to the standards developed by the National Research Council (1987), and assessing the potential of this site to contain significant vertebrate remains.</p> <p><b>ARCS CR-6(b) Paleontological Monitoring.</b> A qualified paleontological monitor shall observe any initial excavation, grading, or other ground disturbance which extends below the upper soil layers in <i>in situ</i> sedimentary rock where paleontological sensitivity is high or unknown. Any excavation into <i>in situ</i> older Quaternary Alluvium, Paso Robles, Monterey, Santa Margarita, Vaqueros, Atascadero, or Toro formations should be monitored. The areas covered by late Quaternary strata should be monitored if excavation is undertaken below the uppermost few feet of sediment, because these strata have yielded vertebrate remains elsewhere in San Luis Obispo County. Shallow excavations in the Quaternary deposits are unlikely to yield significant fossils and do not need monitoring. Paleontologists who monitor excavations must be qualified and experienced in salvaging fossils and authorized to temporarily divert equipment while removing fossils. They must be properly equipped</p>	<p>With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.</p>



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	<p>with tools and supplies to allow for rapid removal and preparation of specimens, and trained in safe practices when working around construction equipment. If multiple pieces of heavy equipment are in use simultaneously at diverse locations during construction, each location may be monitored individually.</p> <p><b>ARCS CR-6(c) Treatment of Paleontological Remains Discovered During Monitoring.</b> If paleontological resources are found during excavations or other ground disturbance, work shall cease temporarily in the immediate area of the discovery. Ground disturbance may be redirected to another area so that the significance of the fossil find may be assessed. If an accredited paleontologist is not already on site, a vertebrate paleontologist with regional experience will be contacted to inspect the excavation, assess the significance of the fossil find, recover any exposed fossils of significance, and recommend additional mitigation measures, if necessary.</p> <p>A standard sample (3–12 cubic meters) of matrix from each site will be taken for identification of microvertebrates (rodents, birds, rabbits), especially when the potential for microvertebrates is high. The monitors also will determine whether the fossils are part of an archaeological deposit. If the fossils are found with cultural material, the site then will be considered an archaeological discovery and treated according to the procedures specified in Agricultural Residential Cluster Subdivision measure CR-3(b).</p> <p>Significant fossils found during construction shall be preserved by prompt removal whenever feasible. Due to the potential for rapid deterioration of exposed surface fossils, preservation by avoidance is not an appropriate measure. When a significant fossil cannot be removed immediately, stabilization is needed to prevent further deterioration prior to removal. The fossil location must be stabilized under the direction of a professional paleontologist.</p> <p>At the time of collecting, each specimen or group of specimens will be clearly located and plotted on a USGS topographical quadrangle map. Field methods, other excavation activities, and working conditions during monitoring of the paleontological resources will be recorded in a field notebook or on a paleontological resources record or worksheet such as those developed by the National Research Council (1987).</p> <p>Recovered specimens will be stabilized and prepared for identification. Sedimentary matrix with microfossils will be screen washed and sorted to identify the contained fossils. Removal of excess matrix during preparation reduces long-term storage</p>	



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	<p>requirements. Competent qualified specialists will classify individual specimens to the lowest identifiable taxon, typically to genus, species, and element. Batch identification and batch numbering (e.g., “mammal, 25 specimens”) should be avoided.</p> <p>Paleontological specimens will be cataloged according to current professional standards, and a complete list of collected specimens must be prepared. A complete set of field notes, geologic maps, and stratigraphic sections must accompany the fossil collections.</p> <p>All fossil remains recovered during construction and operation must be curated by a recognized, nonprofit paleontological specimen repository with a permanent curator, such as a museum or university. Specimens must be stored in a fashion that allows researchers to retrieve specific individual specimens in the future. In addition to the LACM and UCMP, qualified research facilities include California State Polytechnic University, San Luis Obispo; the Santa Barbara Museum of Natural History; or Santa Barbara City College.</p> <p>The project paleontologist will complete a final report summarizing findings, describing important fossil localities (vertebrate, megainvertebrate, or plant) discovered in the project area, and explaining any mitigation measures taken. The report will include a summary of the field and laboratory methods, site geology and stratigraphy, an itemized inventory of recovered specimens, faunal lists, and site records. The report also should discuss the importance of the recovered fossil materials. The reports will be prepared by a professional paleontologist and distributed to the appropriate agencies, museums, colleges, or universities.</p>	
<b>DRAINAGE, EROSION AND SEDIMENTATION</b>		
<p><b>ARCS Impact D-2</b> The Agricultural Residential Cluster Subdivision would introduce paved and roofed areas and thus has the potential to result in increased peak storm water discharges and volumes of runoff. Impacts are Class II, <i>significant but mitigable</i>.</p>	<p><b>ARCS G-2(b) Grading and Erosion Control Plan.</b> A grading and erosion control plan that minimizes erosion, sedimentation and unstable slopes shall be prepared and implemented by the applicant or representative thereof, prior to issuance of tract-wide Grading Permits. It must include the following:</p> <ul style="list-style-type: none"> <li>a. Methods such as retention basins, drainage diversion structures, spot grading, silt fencing/coordinated sediment trapping, straw bales, and sand bags shall be used to minimize erosion on slopes and siltation into Yerba Buena, Santa Margarita and Trout Creeks (including the unnamed tributary to Trout Creek) during grading and construction activities.</li> <li>b. Grading shall be prohibited within 100 feet of Trout Creek and within 50-feet of the unnamed tributary to Trout Creek, wetlands, and waters of the U.S.</li> </ul>	<p>With implementation of the required measures, the Agricultural Residential Cluster Subdivision would result in less than significant impacts related to peak storm water discharges and volumes of runoff.</p>



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	<p>[refer to Agricultural Residential Cluster Subdivision measure B-4(a) (Wetland and Riparian Protection) in Section 4.3, <i>Biological Resources</i>].</p> <ul style="list-style-type: none"> <li>c. Graded areas shall be revegetated within 4 weeks of grading activities with deep-rooted, native, drought-tolerant species to minimize slope failure and erosion potential. If determined necessary by Planning and Building, irrigation shall be provided. Geotextile binding fabrics shall be used if necessary to hold slope soils until vegetation is established.</li> <li>d. Temporary storage of construction equipment and equipment washing areas shall be limited to a minimum of 100 feet from Trout Creek and 50-feet from the unnamed tributary to Trout Creek, wetlands, and waters of the U.S.</li> <li>e. After construction of tract improvements, exposed areas shall be stabilized to prevent wind and water erosion, using methods approved by the Planning and Building Department Grading Division and the Air Pollution Control District (APCD). These methods may include the importation of topsoil to be spread on the ground surface in areas having soils that can be transported by the wind and/or the mixing of the highly erosive sand with finer-grained materials (silt or clay) in sufficient quantities to prevent its ability to be transported by wind. The topsoil or silt/clay mixture is to be used to stabilize the existing soil to prevent its ability to be transported by wind. At a minimum, six inches of topsoil or silt/clay/sand mixture is to be used to stabilize the wind-erodable soils.</li> <li>f. Landscaped areas adjacent to structures shall be graded so that drainage is away from structures.</li> <li>g. Irrigation shall be controlled so that overwatering does not occur. An irrigation schedule shall be reviewed and approved by Planning and Building prior to issuance of grading permits.</li> <li>h. Grading on slopes steeper than 5:1 shall be designed to minimize surface water runoff.</li> <li>i. Fills placed on slopes steeper than 5:1 shall be properly benched prior to placement of fill.</li> <li>j. Brow ditches and/or berms shall be constructed and maintained above all cut and fill slopes, respectively.</li> <li>k. Cut and fill benches shall be constructed at regular intervals.</li> <li>l. Retaining walls shall be installed to stabilize slopes where there is a 10-foot or greater difference in elevation between buildable lots.</li> <li>m. The applicant shall limit excavation and grading to the dry season of the year (typically April 15 to November 1, allowing for variations in weather) unless a Planning and Building Department approved erosion control plan is in place and all measures therein are in effect.</li> <li>n. The applicant shall post a bond with the County and hire a Planning and</li> </ul>	



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	<p>Building -qualified geologist or soils engineer prior to issuance of grading permits for grading, and to ensure that erosion is controlled and mitigation measures are properly implemented.</p> <p><b>ARCS D-2(a) Yerba Buena Drainage System.</b> The proposed detention structure for the portion of the Agricultural Residential Cluster Subdivision site draining to Yerba Buena creek shall be designed to comply with County criteria (reduction of the 50 year, 10 hour post-development peak flow to 2 year, 10 hour pre-development conditions). A Drainage Study shall be prepared by a qualified hydrologist to identify detention volumes and release rates for the proposed facilities. The study shall also address flow routing and relative times of concentration in the watershed at the detention facility compared with the existing channel. The detention facility shall be located within an Agricultural Conservation Easement, in an area that does not contain oak trees, special status species or habitat, identified cultural resources, or prime agricultural soils.</p> <p>The design of all facilities must be reviewed and approved by County Public Works staff.</p> <p><b>ARCS D-2(b) Trout Creek Drainage System.</b> Prior to approval of a Land Use Permit, the applicant shall design a detention structure for the portion of the Agricultural Residential Cluster Subdivision site that drains to the unnamed tributary to Trout Creek. This detention structure shall be designed to comply with County criteria (reduction of the 50 year, 10 hour post-development peak flow to 2 year, 10 hour pre-development conditions), as well as reduce the 100-year 10-hour post-development runoff to 100 year 10 hour predevelopment conditions. A Drainage Study shall be prepared to identify detention volumes and release rates for the required facilities. The study should also address flow routing and relative times of concentration in the watershed at the detention facility compared with existing channels. The detention facility shall be located within an Agricultural Conservation Easement, in an area that does not contain oak trees, special status species or habitat, identified cultural resources, or prime agricultural soils.</p> <p><b>ARCS D-2(c) LID-Integrated Management Practices.</b> Low Impact Development (LID) design technologies shall be employed by individual lot developers to the maximum extent practicable. LID is an alternative site design strategy that uses natural and engineered infiltration and storage techniques to control storm water runoff where it is generated to reduce downstream impacts. The following LID practices shall be implemented, as feasible, to re-establish pre-development runoff</p>	



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<p>conditions:</p> <ol style="list-style-type: none"> <li>1. Bioretention cells;</li> <li>2. Tree boxes to capture and infiltrate street runoff;</li> <li>3. Vegetated swales, buffers and strips;</li> <li>4. Roof leader flows directed to planter boxes and other vegetated areas;</li> <li>5. Permeable pavement;</li> <li>6. Impervious surface reduction and disconnection;</li> <li>7. Soil amendments to increase infiltration rates; and</li> <li>8. Rain gardens, rain barrels, and cisterns.</li> </ol> <p>Only natural fiber, biodegradable materials shall be used.</p> <p>Since LID is intended to mimic the pre-development regime through both volume and peak runoff rate controls, the flow frequency and duration for the post-development conditions should be identical (to the greatest degree possible) to those for the pre-development conditions.</p>	
<p><b>ARCS Impact D-4</b> Due to the intensification of uses proposed on the Agricultural Residential Cluster Subdivision site, there is the potential for storm water transport of pollutants, bacteria, and sediment into downstream facilities. Impacts are Class II, <i>significant but mitigable</i>.</p>	<p>The following measure is recommended in addition to Agricultural Residential Cluster Subdivision measures D-2(a) (Yerba Buena Drainage System), D-2(b) (Trout Creek Drainage System), D-2(c) (LID-Integrated Management Practices) and G-2(b) (Grading and Erosion Control Plan) (in Section 4.6, <i>Geologic Stability</i>), which would ensure permanent sedimentation/detention basins are installed and control erosion, thereby enabling sediment to settle out of site runoff.</p> <p><b>ARCS D-4(a) Pollutant Removal Techniques.</b> In addition to LID-integrated management practices required by Agricultural Residential Cluster Subdivision measure D-2(c), the applicant shall integrate into the Agricultural Residential Cluster Subdivision design other available technologies and techniques to remove pollutants from site runoff prior to entering the drainage courses. Such techniques shall include reduced slope grading, drainage through vegetative zones (e.g., bio-swale) and other options to intercept pollutants being conveyed toward drainage paths. Technological solutions such as gravelly filter blankets or particulate filters (e.g. Fossil Filters) should also be installed as pollutant-removal solutions. Only natural fiber, biodegradable materials shall be used.</p>	<p>Implementation of the above mitigation measures would reduce the potential for storm water transport of pollutants, bacteria, and sediment into downstream facilities. Therefore, water quality impacts would be reduced to less than significant levels.</p>



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

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<b>GEOLOGIC STABILITY</b>		
<p><b>ARCS Impact G-1</b> Due to the presence of active and potentially active faults in the vicinity of the proposed Agricultural Residential Cluster Subdivision, the site and surrounding area is subject to strong ground shaking. Ground shaking has the potential to cause fill material to settle, destabilize slopes, and cause physical damage to structures, property, utilities and road access. This is a Class II, <i>significant but mitigable</i> impact.</p>	<p><b>ARCS G-1(a) UBC Compliance.</b> Above-ground structures shall be designed and built according to the latest UBC Seismic Zone 4 standards.</p>	<p>Through Code-conformance and proper engineering design and construction as monitored by Planning and Building, ground shaking hazards would be less than significant.</p>
<p><b>ARCS Impact G-2</b> Soils on the Agricultural Residential Cluster Subdivision site have the potential to present soil-related hazards (expansive soils, erosive soils, settlement) to structures, utilities, and roadways on the Agricultural Residential Cluster Subdivision site. This is a Class II, <i>significant but mitigable</i> impact.</p>	<p><b>ARCS G-2(a) Soils/Foundation Report.</b> Upon implementation of the proposed Agricultural Residential Cluster Subdivision, individual property developers proposing development within the areas identified as having a high shrink-swell potential, high to very high erosion hazard and/or potential for settlement shall submit a soils/foundation report as part of the application for any proposed Building Permit(s).</p> <p>To reduce the potential for foundation cracking, one or more of the following shall be implemented and/or as recommended by a qualified engineer:</p> <ol style="list-style-type: none"> <li>1. Use continuous deep footings (i.e., embedment depth of 3 feet or more) and concrete slabs on grade with increased steel reinforcement together with a pre-wetting and long-term moisture control program within the active zone.</li> <li>2. Removal and recompaction of loose soils.</li> <li>3. Removal of the highly expansive material and replacement with non-expansive compacted import fill material.</li> <li>4. The use of specifically designed drilled pier and grade beam system incorporating a structural concrete slab on grade supported approximately 6 inches above the expansive soils.</li> <li>5. Chemical treatment with hydrated lime to reduce the expansion characteristics of the soils.</li> <li>6. Where necessary, construction on transitional lots shall include over excavation to expose firm sub-grade, use of post tension slabs in future structures, or other geologically acceptable method.</li> </ol>	<p>Properly designed and constructed foundations and implementation of a grading and erosion control plan would adequately mitigate the potential for structural problems caused by soil-related hazards, thereby reducing impacts to a less than significant level.</p>



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	<p><b>ARCS G-2(b) Grading and Erosion Control Plan.</b> A grading and erosion control plan that minimizes erosion, sedimentation and unstable slopes shall be prepared and implemented by the applicant or representative thereof, prior to issuance of tract-wide Grading Permits. It must include the following:</p> <ol style="list-style-type: none"> <li>1. Methods such as retention basins, drainage diversion structures, spot grading, silt fencing/coordinated sediment trapping, straw bales, and sand bags shall be used to minimize erosion on slopes and siltation into Yerba Buena, Santa Margarita and Trout Creeks (including the unnamed tributary to Trout Creek) during grading and construction activities.</li> <li>2. Grading shall be prohibited within 100 feet of Trout Creek and within 50-feet of the unnamed tributary to Trout Creek, wetlands, and waters of the U.S. [refer to Agricultural Residential Cluster Subdivision measure B-4(a) (Wetland and Riparian Protection) in Section 4.3, <i>Biological Resources</i>].</li> <li>3. Graded areas shall be revegetated within 4 weeks of grading activities with deep-rooted, native, drought-tolerant species to minimize slope failure and erosion potential. If determined necessary by Planning and Building, irrigation shall be provided. Geotextile binding fabrics shall be used if necessary to hold slope soils until vegetation is established.</li> <li>4. Temporary storage of construction equipment and equipment washing areas shall be limited to a minimum of 100 feet from Trout Creek and 50-feet from the unnamed tributary to Trout Creek, wetlands, and waters of the U.S.</li> <li>5. After construction of tract improvements, exposed areas shall be stabilized to prevent wind and water erosion, using methods approved by the Planning and Building Department Grading Division and the Air Pollution Control District (APCD). These methods may include the importation of topsoil to be spread on the ground surface in areas having soils that can be transported by the wind and/or the mixing of the highly erosive sand with finer-grained materials (silt or clay) in sufficient quantities to prevent its ability to be transported by wind. The topsoil or silt/clay mixture is to be used to stabilize the existing soil to prevent its ability to be transported by wind. At a minimum, six inches of topsoil or silt/clay/sand mixture is to be used to stabilize the wind-erodable soils.</li> <li>6. Landscaped areas adjacent to structures shall be graded so that drainage is away from structures.</li> <li>7. Irrigation shall be controlled so that overwatering does not occur. An irrigation schedule shall be reviewed and approved by Planning and Building prior to issuance of grading permits.</li> <li>8. Grading on slopes steeper than 5:1 shall be designed to minimize surface water runoff.</li> </ol>	





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	9. Fills placed on slopes steeper than 5:1 shall be properly benched prior to placement of fill. 10. Brow ditches and/or berms shall be constructed and maintained above all cut and fill slopes, respectively. 11. Cut and fill benches shall be constructed at regular intervals. 12. Retaining walls shall be installed to stabilize slopes where there is a 10-foot or greater difference in elevation between buildable lots. 13. The applicant shall limit excavation and grading to the dry season of the year (typically April 15 to November 1, allowing for variations in weather) unless a Planning and Building Department approved erosion control plan is in place and all measures therein are in effect. 14. The applicant shall post a bond with the County and hire a Planning and Building -qualified geologist or soils engineer prior to issuance of grading permits, and to ensure that erosion is controlled and mitigation measures are properly implemented.	
<b>ARCS Impact G-3</b> The Agricultural Residential Cluster Subdivision area contains several steep slopes and is subject to moderate landslide potential. Landsliding has the potential to damage and destroy structures, roadways and other improvements as well as to alter or block drainage channels, causing further damage and erosion. Soil slumping can damage or destroy structures and lead to erosion problems. These are Class II, <i>significant but mitigable</i> impacts.	<b>ARCS G-3(a) Agricultural Residential Cluster Subdivision Lot Geotechnical Investigations and Practices.</b> Each Agricultural Residential Cluster Subdivision lot shall be inspected to ensure a low risk of landslides or soil slumping. Geotechnical engineering measures, such as shoring soils of any landslide areas shall be required to ensure that the slope will not be destabilized during the grading activity. Remedial measures during grading may include the removal of the slump or debris slide from the top to the toe of slope.  In accordance with the applicable building codes, Agricultural Residential Cluster Subdivision lot investigations shall be performed prior to construction in areas determined to have a moderate or higher landslide hazard (as seen in Figure 4.6-5). Investigations and practices shall include the following: <ul style="list-style-type: none"> <li>a) Prior to issuance of any building permits, a qualified geotechnical engineer and/or engineering geologist shall prepare thorough Agricultural Residential Cluster Subdivision lot geologic/geotechnical studies, and a slope stability analysis which shall incorporate lot-specific recommendations. The slope stability analysis shall at a minimum meet the requirements of CDMG 1997 (Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117). In addition, the stability analysis shall meet the requirements of the County Planning and Building Department.</li> <li>b) During grading, engineering geologists and geotechnical engineers shall confirm preliminary findings reported in the preliminary studies.</li> </ul>	Implementation of the above mitigation measure would reduce impacts from potential landsliding and debris flows to less than significant levels.



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	<p>c) All applicable recommendations of final geologic and geotechnical investigations prepared for the Agricultural Residential Cluster Subdivision shall be implemented. These recommendations may include: avoidance of or setbacks from historic landslide deposits or areas susceptible to a potential for landslides; the restriction of grading in areas with landslide hazards; drainage improvements to ensure potential landslide areas do not become saturated; excavating standard keyways and benches in a stair-step configuration; water addition or drying-out as needed to bring soils to an acceptable moisture content; limitations on cut and fill slope gradients; and/or removal and backfilling or potential landslide areas.</p>	
<p><b>ARCS Impact G-4</b> Seismic activity could produce sufficient ground shaking which may result in liquefaction of soils near on-site streams. Agricultural Residential Cluster Subdivision lots located in these areas could be subject to high liquefaction hazards. This is a Class II, <i>significant but mitigable</i>, impact.</p>	<p><b>ARCS G-4(a) Reduction of Liquefaction Potential.</b> Appropriate techniques to minimize liquefaction potential shall be prescribed by an engineering geologist and implemented by the applicant prior to issuance of Building Permits. Suitable measures to reduce liquefaction impacts shall include one or more of the following as recommended by a qualified engineer: specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the ground characteristics. All on-site structures shall comply with applicable methods of the Uniform Building Code [refer to Agricultural Residential Cluster Subdivision measure G-1(a) (UBC Compliance)].</p>	<p>Implementation of the above mitigation measure would reduce impacts from potential liquefaction to a less than significant level.</p>
<p><b>ARCS Impact G-5</b> The surface materials in the central portion of the Agricultural Residential Cluster Subdivision site allow for percolation of groundwater and may result in seepage into building foundations. This is a Class II, <i>significant but mitigable</i>, impact.</p>	<p><b>ARCS G-5(a) Subdrains.</b> An engineering geologist or a soils engineer shall observe construction activities to review the potential for subsurface water on Lots 17, 24 through 26, 29, 30, 40, 58, 68, 72 through 84, 88, 91 through 97, and 101 through 115. As determined necessary by a qualified engineer, subdrains shall be installed within foundations, soft soils, or roadways, to alleviate ponding of water.</p>	<p>Implementation of the above mitigation measure would reduce impacts from subsurface water to a less than significant level.</p>
<b>LAND USE</b>		
<p><b>ARCS Impact LU-1</b> Construction activity associated with the Agricultural Residential Cluster Subdivision would create temporary noise, air quality, and visual impacts due to the use of</p>	<p>No mitigation measures are required beyond those identified in Sections 4.8, <i>Noise</i>, 4.2, <i>Air Quality</i>, and 4.13, <i>Visual Resources</i>.</p>	<p>Temporary land use compatibility conflicts related to construction activity would be less than significant.</p>



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<p>construction equipment and generation of fugitive dust and debris. These effects could cause nuisances at adjacent properties and disrupt agricultural activity. However, these impacts would be temporary in nature and are Class II, <i>significant but mitigable</i>.</p>		
<b>NOISE</b>		
<p><b>ARCS Impact N-1</b> Construction of the Agricultural Residential Cluster Subdivision would generate nuisance noise levels at the nearest sensitive receptors. Later phases of construction would also expose occupants of previous phases of subdivision development to nuisance noise levels. This is a Class II, <i>significant but mitigable</i> impact.</p>	<p><b>ARCS N-1(a) Construction Hours.</b> Hours of construction noise which will cross a property line shall be limited to the hours between 7 a.m. and 7 p.m. on weekdays and 8 a.m. to 5 p.m. on weekends.</p> <p><b>ARCS N-1(b) Construction Noise Attenuation.</b> For all construction activity on the Agricultural Residential Cluster Subdivision site, additional noise attenuation techniques shall be employed as needed to ensure that noise remains within levels allowed by the County of San Luis Obispo noise standards. The following measures shall be incorporated into contract specifications to reduce the impact of construction noise.</p> <ul style="list-style-type: none"> <li>• All construction equipment shall have properly maintained sound-control devices. No equipment shall have an unmuffled exhaust.</li> <li>• Contractors shall implement appropriate additional noise attenuation techniques including, but not limited to, sitting the stationary construction equipment away from residential areas to the extent possible, and notifying adjacent residents in advance of construction work.</li> </ul> <p><b>ARCS N-1(c) Construction Equipment.</b> Stationary construction equipment that generates noise that exceeds 60 dBA CNEL at the boundaries of adjacent residential properties shall be baffled. All construction equipment powered by internal combustion engines shall be properly muffled and maintained. Unnecessary idling of internal combustion engines shall be prohibited. Whenever feasible, electrical power shall be used to run air compressors and similar power tools.</p>	<p>Implementation of the above mitigation measure would reduce construction noise impacts to a less than significant level.</p>
<b>PUBLIC SAFETY</b>		
<p><b>ARCS Impact S-3</b> Two water storage tanks are proposed to be constructed to serve the Agricultural Residential Cluster</p>	<p>Agricultural Residential Cluster Subdivision measure VR-1(d) (Bury Water Tanks) in Section 4.12, <i>Visual Resources</i>, calls for the proposed water tanks to be placed below grade to reduce their visual profile. This measure would incrementally reduce hazards associated with potential water tank failure. The following additional</p>	<p>With implementation of the above measures, impacts related to potential water tank failure hazards would be less than</p>



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Subdivision. The potential public safety impact associated with failure of the water storage tanks is Class II, <i>significant but mitigable</i> .	mitigation measure is required:  <b>ARCS S-3(a) Property Protection.</b> Properties located adjacent to the tank area shall be protected in the event of tank failure. This protection shall include a berm or diversionary structure that can withstand the force of water flowing against it, as determined by a qualified engineer. Future property owners of lots 76 through 79, 61 and 68 shall be informed of the potential risk of property damage and a notice shall be recorded on the property Title describing the risk of tank failure.	significant.
<b>ARCS Impact S-4</b> The Agricultural Residential Cluster Subdivision includes land uses that may involve the use, transport, or storage of limited quantities of hazardous chemicals. Residential land uses would not be expected to use chemicals in quantities that would pose a significant health risk if properly used. However, the potential public safety impact associated with the use, transport and/or storage of water tank treatment chemicals would be a Class II, <i>significant but mitigable</i> impact.	<b>ARCS S-4(a) Chemical Storage.</b> All chemicals are to be stored in a locked and labeled enclosure. The enclosure shall be properly placarded in accordance to County of San Luis Obispo Fire Department requirements. Emergency telephone numbers shall be properly displayed in and near the chemical storage areas. Material Safety Data Sheets shall be kept within the enclosure in a location accessible to all who handle the chemicals. All chemicals shall be used in a manner consistent with their purpose. Personnel who handle chemicals shall be trained in their proper use, storage, and disposal.	With implementation of the above measure, impacts related to chemical storage would be less than significant.
<b>ARCS Impact S-6.</b> Large-scale grading and excavation operations during Agricultural Residential Cluster Subdivision development could expose construction workers and other individuals to valley fever. Impacts are Class II, <i>significant but mitigable</i> .	The following measures would minimize dust generation, thereby minimizing exposure to valley fever, should it be present.  <b>ARCS AQ-2(b) Dust Control.</b> The following measures shall be implemented to reduce PM <sub>10</sub> emissions during Agricultural Residential Cluster Subdivision construction: <ul style="list-style-type: none"> <li>• Reduce the amount of the disturbed area where possible;</li> <li>• Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Water shall be applied as soon as possible whenever wind speeds exceed 15 miles per hour. Reclaimed (nonpotable) water should be used whenever possible;</li> <li>• All dirt-stock-pile areas shall be sprayed daily as needed;</li> <li>• Permanent dust control measures shall be identified in the approved project revegetation and landscape plans and implemented as soon as possible</li> </ul>	With implementation of the above measures, impacts related to valley fever would be less than significant.



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	<p>following completion of any soil disturbing activities;</p> <ul style="list-style-type: none"> <li>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;</li> <li>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 the APCD;</li> <li>All roadways, driveways, sidewalks, etc., to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used;</li> <li>Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;</li> <li>All trucks hauling dirt, sand, soil or other loose materials shall be covered or shall maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;</li> <li>Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site; and</li> <li>Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible.</li> </ul> <p>The above measures shall be shown on development plans.</p> <p><b>ARCS AQ-2(d) Dust Control Monitor.</b> The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering as necessary to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress.</p> <p><b>ARCS AQ-2(e) Active Grading Areas.</b> Prior to commencement of tract improvements, a Construction Management Plan shall be submitted for county approval that shows how the project will not exceed continuous working of more than four acres at any given time (according to the APCD, any project with a grading area greater than 4 acres of continuously worked area will exceed the 2.5 ton PM<sub>10</sub> quarterly threshold). The Dust Control Monitor shall verify in the field during tract improvements that the Construction Management Plan is being followed.</p>	
<b>PUBLIC SERVICES</b>		
<b>ARCS Impact PS-2</b> The Agricultural Residential Cluster	<b>ARCS PS-2(a) Defensible Space Features.</b> The applicant shall implement defensible space features, including security lighting, in common areas, subject to the	Implementation of the above mitigation measure would reduce



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Subdivision lacks sufficient defensible space features that could result in impacts related to public safety at the site. Such safety concerns would be a Class II, <i>significant but mitigable</i> impact.	review and approval of the Sheriff's Department. In addition, individual lot developers shall incorporate structural defensible space features, including burglary-resistant hardware, into individual building plans.	impacts to a less than significant level.
<b>ARCS Impact PS-3</b> The Agricultural Residential Cluster Subdivision would increase the number of residents served by the CDF/County Fire Department and is located within a high fire hazard area. The Agricultural Residential Cluster Subdivision may substantially affect the personnel, equipment or organization of the Fire Department which could impede emergency access to the proposed residences. This would be a Class II, <i>significant but mitigable</i> , impact.	<p>The CDF/San Luis Obispo County Fire Department estimates that the Agricultural Residential Cluster Subdivision would represent an incremental contribution to the need for an additional fire station in the vicinity of the community of Santa Margarita. Construction of an additional fire station involves land acquisition, building construction and furnishings, as well as being equipped with a new engine and other required vehicles. An additional two professional fire fighters would also be required to staff this facility at all times in order to maintain the County's service standard (Robert Lewin, Fire Marshall, Personal Communication, June 29, 2006).</p> <p>In accordance with CDF/San Luis Obispo County Fire Department recommendations, the following mitigation measures are required:</p> <p><b>ARCS PS-3(a) Fire Station.</b> The applicant shall provide for the construction of a new CDF/San Luis Obispo County Fire Station to be located near the Agricultural Residential Cluster Subdivision site either through the dedication of land or through the payment of in lieu fees, as determined in consultation with the Public Works Department and CDF/San Luis Obispo County Fire Department.</p> <p><b>ARCS PS-3(b) On-Site Fire Protection.</b> Road widths and circulation, as well as the placement of fire hydrants and installation of automatic sprinkler systems, shall be designed with the guidance of the Fire Department. A road system that allows unhindered Fire Department access and maneuvering during emergencies shall be provided. Specifically, the following measures are required:</p> <ul style="list-style-type: none"> <li>• Agricultural Residential Cluster Subdivision roads must be an all weather surface at least 20 feet in width, unobstructed by parking. Cul-de-sacs and turnouts must be to Fire Department standards. As the on-site roads are proposed to be a private system, there must be on-going, legally binding provisions in effect to maintain the roads to Fire Department approval.</li> <li>• Road grades on all roads shall not exceed 16%, per the Uniform Fire Code.</li> <li>• House numbers and street signs shall be lighted to County standards so that emergency vehicles including police and ambulances can locate residences</li> </ul>	With implementation of the above measures, impacts on fire protection services would be less than significant. Since the location of the fire station has not been determined, impacts associated with implementation of the fire station would be too speculative to evaluate at this time. Environmental impacts associated with construction of a future fire station would be evaluated in a separate environmental document prepared pursuant to the California Environmental Quality Act (CEQA).



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	<p>in the event of any emergency.</p> <ul style="list-style-type: none"> <li>All fire apparatus access roads and driveways shall be designed and maintained to support the imposed loads of 20 tons at 25 mph, and shall be provided with a surface so as to provide all-weather driving capabilities and maintain 90% compaction.</li> </ul> <p><b>ARCS PS-3(c) Fire/Vegetation Management Plan.</b> The applicant shall prepare and submit a Fire/Vegetation Management Plan to the Fire Department that will meet the following requirements:</p> <ul style="list-style-type: none"> <li>The plan must set forth requirements to assure ongoing protection of all structures and roads, both prior to and after lot sales.</li> <li>The plan shall require 100 feet of clearance from chaparral brush to structures throughout the development, and 30 feet of clearance from grasslands to structures throughout the development.</li> <li>Vegetation within the first 30 feet of all structures must be strictly irrigated and controlled, with specific shrub species eliminated. No conifer (except Monterey pine, single specimen), eucalyptus, juniper, cypress, pampas grass, acacia, or palm trees shall be allowed within the 100-foot zone. Coastal live oak (<i>Quercus</i> sp.), California sycamore, Toyon and shrubs/trees approved by the County Fire Department will be acceptable within the 100-foot zone as well as the 30-foot zone.</li> <li>The plan shall outline vegetation management standards within the 30-foot buffer zone, such as: <ul style="list-style-type: none"> <li>Grasses and groundcovers shall be maintained at no more than 18 inches in height on slopes that require erosion control measures. Grasses shall be mowed elsewhere.</li> <li>Trees must be limbed up to one third of their height to a maximum of 10 feet.</li> <li>Flammable native shrubs shall not be planted or allowed to grow in continuous masses. Small clusters will be allowed as long as the minimum space between clusters is observed.</li> </ul> </li> <li>The Fire/Vegetation Management Plan must clearly state exactly what management practices must be accomplished, date of annual compliance, and responsibility for cost of compliance.</li> <li>The plan must also include a Wildland Emergency Response check list (approved by County Fire Department) to be made available to all residents.</li> </ul>	



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p><b>ARCS PS-3(d) Structural Safeguards.</b> Upon implementation of the Agricultural Residential Cluster Subdivision, individual property developers shall provide the following structural safeguards:</p> <ul style="list-style-type: none"> <li>• <i>Class A Roofs.</i> All Agricultural Residential Cluster Subdivision structures shall have non-wood Class A roofs, with the ends of tile blocked, spark arresters visible from the street, proper vent screens, and non-combustible gutters and down spouts. No combustible paper in or on attic insulation shall be allowed.</li> <li>• <i>Design of Accessory Features.</i> Decks, gazebos, patio covers, and fences, must not overhang slopes and must be of one-hour fire retardant construction. Front doors shall be solid core, minimally 1 ¾ inch thick. Garage doors shall be noncombustible.</li> <li>• <i>Power Lines.</i> All new power lines shall be installed underground in order to prevent fires caused by arcing wires.</li> <li>• <i>Fire Walls.</i> Structures along the perimeter or exposed to internal open space areas shall have one hour rated exterior fire walls, with exteriors walls being more than 2 inches thick, and must not contain vinyl or plastic window frames or rain gutters or down spouts.</li> </ul>	
<p><b>ARCS Impact PS-5</b> The proposed Agricultural Residential Cluster Subdivision would generate approximately 112 tons of solid waste per year. The solid waste disposal services and landfill that would serve the Agricultural Residential Cluster Subdivision have adequate capacity to accommodate the waste generated by the Agricultural Residential Cluster Subdivision. However, the Agricultural Residential Cluster Subdivision would result in the use of part of the limited remaining capacity of the landfill. Therefore, solid waste generation would be a Class II,</p>	<p><b>ARCS PS-5(a) Construction Solid Waste Minimization.</b> During the construction phases of the Agricultural Residential Cluster Subdivision, the following mitigation measures shall be implemented to reduce solid waste generation to the maximum extent feasible:</p> <ul style="list-style-type: none"> <li>• Prior to construction, the contractor shall arrange for construction recycling service with a waste collection provider. Roll-off bins for the collection of recoverable construction materials shall be located on-site. The applicant, or authorized agent thereof, shall arrange for pick-up of recycled materials with a waste collection provider or shall transport recycled materials to the appropriate service center. Wood, concrete, drywall, metal, cardboard, asphalt, soil, and land clearing debris may all be recycled.</li> <li>• The contractor shall designate a person to monitor recycling efforts and collect receipts for roll-off bins and/or construction waste recycling. All subcontractors shall be informed of the recycling plan, including which materials are to be source-separated and placed in proper bins.</li> <li>• The contractor shall use recycled materials in construction wherever feasible.</li> <li>• The above construction waste recycling measures shall be incorporated into</li> </ul>	<p>With implementation of the above measures, impacts related to solid waste generation would be less than significant.</p>





**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<i>significant but mitigable</i> impact.	<p>the construction specifications for the contractor.</p> <p><b>ARCS PS-5(b) Recycling Plan.</b> A long term plan for recycling shall be developed by the applicant with specific collection goals for each recyclable material category and a method to track quantities of materials. The goal shall be a 50% waste stream diversion. The applicants shall provide this plan prior to final occupancy. The plan shall include, at a minimum upon concurrence of the Public Works Department, the following items:</p> <ul style="list-style-type: none"> <li>• Description of all activities which shall reduce solid waste generation by a minimum of 50%;</li> <li>• Methodology for monitoring activities for program effectiveness/efficiency;</li> <li>• Compilation and provision of quarterly diversion updates/reports to the County 30 days after the end of each calendar quarter listing the amount of wastes disposed and recycled by tons;</li> <li>• Listing of solid waste/recycling/service providers utilized to provide recycling/composting/waste reduction programs; and</li> <li>• Annual evaluation of program submitted to the Public Works Department.</li> </ul>	
<b>TRANSPORTATION AND CIRCULATION</b>		
<p><b>ARCS Impact T-2</b> The internal roadway system proposed for the Agricultural Residential Cluster Subdivision homes would provide adequate circulation. However, site access to the Agricultural Residential Cluster Subdivision could result in an inadequate stopping sight distance. Class II, <i>significant but mitigable</i>, impacts would result.</p>	<p><b>ARCS T-2(a) West Driveway Relocation.</b> The proposed west driveway shall be relocated at least 590 feet to the east to eliminate stopping site distance impacts associated with the West Pozo Road crest located west of the driveway. The relocated driveway will be in close proximity to the driveway for the cemetery located on the north side of Pozo Road.</p> <p>The design of the driveways shall follow recommended guidelines as stated in the Caltrans Highway Design Manual.</p>	<p>Implementation of the above mitigation measure would increase stopping site distance from the proposed west driveway, resulting in less than significant site access impacts. Similar to the implementation of the west driveway in its proposed location, the relocated west driveway would result in construction impacts, tree removal impacts, and aesthetics impacts, as discussed in other impact sections of this EIR.</p>
<p><b>ARCS Impact T-4</b> The addition of traffic generated by the Agricultural Residential Cluster Subdivision may result in conflicts with pedestrians and bicyclists, as well as increase</p>	<p>Implementation of Agricultural Residential Cluster Subdivision mitigation measure T-1(a), which requires widening of West Pozo Road (SR 58) along the Agricultural Residential Cluster Subdivision site's frontage to accommodate County-planned Class II bicycle lanes or shoulders, would reduce potential automobile-bicycle conflict impacts to a less than significant level. The following mitigation measures are required to reduce potential automobile-pedestrian conflicts:</p>	<p>With implementation of the above mitigation measures, impacts related to automobile-bicycle and automobile-pedestrian conflicts would be reduced to a less than significant</p>



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<p>demand for transit services. Although impacts on transit services would be less than significant, impacts related to pedestrian movement and bicycle conflicts are Class II, <i>significant but mitigable</i>.</p>	<p><b>ARCS T-4(a) El Camino Real/Encina Avenue In-Pavement Flashing Lights.</b> Pedestrian in-pavement flashing lights shall be installed on the eastbound and westbound approaches to the intersection of El Camino Real and Encina Avenue to warn drivers of the presence of pedestrians crossing at the intersection. The precise location for beacon installation shall be determined in consultation with Caltrans under the encroachment permit process, and shall include any required ramps or other Americans with Disabilities Act (ADA) upgrades. The applicant shall fund and install the in-pavement flashing lights on El Camino Real.</p> <p>The design of the pedestrian in-pavement flashing lights shall be consistent with the <i>Santa Margarita Design Plan</i>, adopted October 9, 2001, which recommended pedestrian improvements along El Camino Real in downtown Santa Margarita. Because El Camino Real (SR 58) is a state-maintained roadway, this measure would require Caltrans approval and an encroachment permit.</p> <p><b>ARCS T-4(b) Pedestrian Pathway.</b> The gate to the proposed pedestrian pathway between the subdivision and community shall be removed from site plans, and be open for public use. No-climb fencing shall be installed for the length of the trail. An entity, comprised of homeowners, shall be formed to maintain the pathway. The trail shall also permit bicycle transportation.</p>	<p>level.</p> <p>Implementation of required pedestrian improvements would not result in significant environmental impacts since improvements would occur within existing disturbed rights-of-way. It should be noted that impacts associated with implementation of required transportation improvements (e.g., construction impacts) are discussed in other impact sections of this EIR.</p>
<b>WATER AND WASTEWATER</b>		
<p><b>ARCS Impact W-2</b> Agricultural Residential Cluster Subdivision soils provide sufficient percolation to support effluent disposal fields. However, percolation tests have not been completed for all proposed lots. Improper disposal field design could result in health hazards or potential ground and surface water contamination. Therefore, the Agricultural Residential Cluster Subdivision would result in Class II, significant but mitigable impacts related to wastewater disposal.</p>	<p><b>ARCS W-2(a) Septic Tank Maintenance Plan and Monitoring.</b> The applicant shall prepare a Septic Tank Maintenance Plan. The Plan shall require a minimum tank cleaning frequency of once every five years, delineate proposed groundwater monitoring locations (up gradient and down gradient of the proposed Agricultural Residential Cluster Subdivision), and recommended frequency of collection and analysis. The applicant shall install groundwater monitoring wells, which shall be sited and designed by a qualified hydrogeologist. At a minimum, three groundwater monitoring wells shall be located up gradient of the Agricultural Residential Cluster Subdivision and three shall be located downgradient.</p> <p><b>ARCS W-2(b) Septic Tank and Leachfield Site Plans.</b> The applicant shall develop and submit septic tank and leachfield site plans for each proposed lot, as well as percolation tests and borings in accordance with County leachfield design/construction requirements. The applicant shall demonstrate sufficient leachfield percolation for each proposed residential unit and lot, in accordance with County standards.</p>	<p>With implementation of the above measures, impacts related to wastewater disposal would be less than significant.</p>



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<p><b>ARCS Impact W-3</b> Wastewater discharge systems can degrade groundwater quality if wastes are put into the discharge systems that are harmful to groundwater quality. Impacts are Class II, significant but mitigable.</p>	<p><b>ARCS W-3(a) Water Softeners.</b> Agricultural Residential Cluster Subdivision residents shall be prohibited from installing water softeners which require on-site regeneration or are self-regenerating. Off-site regenerated water softeners shall be allowed if they are regenerated outside the Agricultural Residential Cluster Subdivision site.</p> <p><b>ARCS W-3(b) Pollutant Input Minimization.</b> The Santa Margarita Ranch Mutual Water Company shall annually include a written statement with resident water bills that describes methods to prevent degradation of water quality in septic systems. The flyer shall state that chemicals, paints, solvents, pesticides, herbicides, or other household hazardous wastes shall not enter drains.</p>	<p>With implementation of the above measures, impacts related to water quality from septic systems would be less than significant.</p>



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS III IMPACTS: LESS THAN SIGNIFICANT</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<b>BIOLOGICAL RESOURCES</b>		
<b>ARCS Impact B-1</b> The proposed Agricultural Residential Cluster Subdivision would result in the conversion of the common habitat types California Annual Grassland, Central (Lucian) Coastal Scrub, and Chamise Chaparral to residential uses and associated improvements. This is a Class III, <i>less than significant</i> impact.	No mitigation is required to address the loss of these common habitat types. However, California annual grassland within the Agricultural Residential Cluster Subdivision supports foraging habitat for special-status wildlife species including the golden eagle, white-tailed kite, loggerhead shrike, and pallid bat and potential foraging habitat for merlin, bald eagle, and ferruginous hawk. It also potentially provides nesting habitat for the horned lark and den habitat for the American badger. California red-legged frog (CRLF) may also use these habitats for dispersal during the rain season. In addition, these habitats could potentially support special-status reptile species including the silvery legless lizard and coast horned lizard. Therefore, impacts to these habitat types would represent impacts to special status wildlife species. Agricultural Residential Cluster Subdivision measures B-8(a) (FESA Consultation), B-9(a) (Legless and Horned Lizard Capture and Relocation), B-9(c) (Pre-Construction Bird Survey) and B-9(d) (Badger Avoidance) would mitigate for special-status species that may use California annual grassland, central (Lucian) coastal scrub, and chamise chaparral habitats should they occur on-site. No special-status plant species were observed within these habitats.	Impacts would be less than significant. Implementation of the mitigation measures referenced above would reduce impacts to special-status species that use or may use these habitats to a less than significant level.
<b>AIR QUALITY</b>		
<b>ARCS Impact AQ-3</b> The Agricultural Residential Cluster Subdivision involves development of private septic systems, which have the potential to generate odor nuisance effects. These impacts are Class III, <i>less than significant</i> .	No mitigation is required.	Impacts would be less than significant.
<b>DRAINAGE, EROSION AND SEDIMENTATION</b>		
<b>ARCS Impact D-1</b> During construction, disrupted soil may be subject to erosion, sedimentation, and pollutant discharges. This is a Class III, <i>less than significant</i> impact.	Compliance with the National Pollutant Discharge Elimination System (NPDES) program and compliance with county grading and storm water ordinances would ensure less than significant impacts.	Impacts would be less than significant.
<b>ARCS Impact D-3</b> Portions of the Agricultural Residential Cluster Subdivision are located in a 100-year flood zone. However, no habitable structures	No mitigation measures are required.  Refer to ARCS Impact D-2 for a discussion of potential downstream flooding impacts caused by Agricultural Residential Cluster Subdivision development and required mitigation.	Impacts related to exposure of people to flood hazards would be less than significant.



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS III IMPACTS: LESS THAN SIGNIFICANT</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
would be located in these areas. Impacts related to flood hazard exposure are Class III, <i>less than significant</i> .		
<b>NOISE</b>		
<b>ARCS Impact N-3</b> The Agricultural Residential Cluster Subdivision would not place sensitive receptors in areas exposed to nuisance noise levels. Class III, <i>less than significant</i> , impacts would result.	No mitigation is required.	Impacts would be less than significant.
<b>ARCS Impact N-4</b> The Agricultural Residential Cluster Subdivision will likely be exposed to noise generated by aircraft flying overhead. Although these events could produce periodic noise levels greater than 60 dBA, the 24-hour CNEL noise levels at the proposed residential properties would not exceed the County CNEL threshold of 60 dBA. This is a Class III, <i>less than significant</i> impact.	Because the Agricultural Residential Cluster Subdivision would not expose future residents to aircraft noise that exceeds 60 dBA CNEL, mitigation is not required.	Impacts are less than significant without mitigation.
<b>ARCS Impact N-5</b> The Agricultural Residential Cluster Subdivision would place additional sensitive receptors in the vicinity of the Union Pacific Railroad (UPRR), exposing future residents to periodic nuisance noise levels. However, the 24-hour CNEL noise levels at the proposed residential properties would not exceed the County threshold of 60 dBA CNEL. This is a Class III, <i>less than significant</i> impact.	Because the Agricultural Residential Cluster Subdivision would not expose future residents to railroad noise that exceeds 60 dBA CNEL, mitigation is not required.	Impacts are less than significant without mitigation.



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS III IMPACTS: LESS THAN SIGNIFICANT</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<b>PUBLIC SAFETY</b>		
<b>ARCS Impact S-1</b> Due to the presence of current and historic agricultural practices on the Agricultural Residential Cluster Subdivision site, on-site soils may contain contaminants that could pose a risk to health. However, site disturbance would not occur in an area of historical croplands. Impacts would be Class III, <i>less than significant</i> .	No mitigation is required.	Impacts would be less than significant.
<b>ARCS Impact S-2</b> Highway and railway accidents that involve hazardous materials could potentially create a public safety hazard by exposing people to contaminants. Due to the distance between transportation corridors and proposed development, as well as regulations already in place, impacts would be Class III, <i>less than significant</i> .	No mitigation is required.	Compliance with applicable federal, state and local laws will ensure less than significant impacts.
<b>ARCS Impact S-5</b> The proposed Agricultural Residential Cluster Subdivision is located 1.3 miles southeast of a private air strip. Aircraft overflight areas present a potential for aircraft accidents that could result in personal injury or property damage. These impacts would be considered Class III, <i>less than significant</i> .	Beyond compliance with applicable FAA policies and regulations, no mitigation measures are required.	Impacts would be less than significant.
<b>PUBLIC SERVICES</b>		
<b>ARCS Impact PS-1</b> The Agricultural Residential Cluster Subdivision would increase the population by approximately 302	Beyond the required fees described in the impact statement, no additional mitigation measures are required.	Impacts would be less than significant.



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS III IMPACTS: LESS THAN SIGNIFICANT</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<p>residents. This may incrementally increase demands on the San Luis Obispo County Sheriff's Department. However, upon payment of public facility fees as a condition of project approval, the Agricultural Residential Cluster Subdivision would not substantially affect the personnel, equipment or organization of the Sheriff's Department. This is a Class III, <i>less than significant</i> impact.</p>		
<p><b>ARCS Impact PS-4</b> The Agricultural Residential Cluster Subdivision would generate an estimated total of 48 elementary, junior high and high school students. Students generated by the Agricultural Residential Cluster Subdivision would not increase students at Santa Margarita Elementary School, Atascadero Junior High School, or Atascadero High School beyond the designated capacity. Impact to schools is Class III, <i>less than significant</i>.</p>	<p>The applicable State-mandated school impact fees would be collected at the time of building permit issuance. No mitigation beyond this standard requirement is required.</p>	<p>Impacts would be less than significant.</p>
<p><b>ARCS Impact PS-6.</b> The Santa Margarita Library is undersized to serve the increase in population associated with Agricultural Residential Cluster Subdivision buildout. Payment of required library fees as a condition of approval would ensure Class III, <i>less than significant</i>, impacts to the community library.</p>	<p>Beyond the required fees described in the impact statement, no additional mitigation measures are required.</p>	<p>Impacts would be less than significant.</p>



**Table ES-3. Summary of Agricultural Residential Cluster Subdivision Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS III IMPACTS: LESS THAN SIGNIFICANT</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<b>RECREATION</b>		
<b>ARCS Impact R-1</b> The proposed implementation of 112 single-family housing units in the Agricultural Residential Cluster Subdivision would generate demand for parkland. The applicant would be required to pay parkland in-lieu fees in the amount established by County Ordinance. With payment of these fees, the applicant would offset the additional demand for parkland. Impacts would be Class III, <i>less than significant</i> .	No mitigation measures are required.	Impacts would be less than significant. Refer to Section 4.12, <i>Transportation and Circulation</i> , Agricultural Residential Cluster Subdivision Impact T-4 for a discussion of pedestrian access impacts related to the proposed private pedestrian pathway between the subdivision and existing community.
<b>TRANSPORTATION AND CIRCULATION</b>		
<b>ARCS Impact T-3</b> Development of the proposed residential units may generate parking demands in excess of the proposed parking supply. This would generate a Class III, <i>less than significant</i> , impact.	No mitigation is required.	With implementation of parking spaces in accordance with County standards, parking impacts would be less than significant.
<b>WATER AND WASTEWATER</b>		
<b>ARCS Impact W-4</b> Implementation of the Agricultural Residential Cluster Subdivision would result in septage load that cannot be managed by existing local facilities. This will result in Class III, <i>less than significant</i> impacts.	No mitigation measures are required.	Impacts would be less than significant.





**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS I IMPACTS: SIGNIFICANT AND UNAVOIDABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<b>AGRICULTURAL RESOURCES</b>		
<p><b>FDP Impact AG-1</b> Development in accordance with the Future Development Program could permanently convert existing grazing lands and 758 acres containing prime soils to non-agricultural uses. Impacts related to agricultural conversion would be Class I, <i>significant and unavoidable</i>.</p>	<p><b>FDP AG-1(a) Avoidance of Agricultural Areas.</b> Relocate and/or reduce the size of conceptual future development as land uses are finalized for each area to avoid prime soils areas, incorporate required buffers from existing and potential future agricultural operations, reduce land use incompatibilities, and reduce the fragmentation of existing and potential future agricultural production areas. This could include the relocation of potential future winery and ranch headquarter uses within the Agricultural Conservation Easements, and the relocation of potential future urban uses envisioned for location southwest and east of the community of Santa Margarita (refer to Figure 4.1-1).</p> <p><b>FDP AG-1(b) Future Agricultural Conservation Easements.</b> Agricultural conservation easement(s) shall be established for all agricultural areas of the entire Ranch, including both rangeland and cropland, which are outside of the area anticipated to be converted to future development. These easements will protect the remaining rangeland from further fragmentation. The easements shall be in perpetuity, shall preserve agricultural uses, and shall be held by an independent third party that is knowledgeable regarding working landscape agricultural conservation easements. Future applicants shall provide an endowment for the funding of future monitoring requirements of the easements. These easements shall be in lieu of suggested 40-year Land Conservation Act contracts since these contracts do not provide for the preservation of agricultural land in perpetuity. Permitted uses retained in the agricultural conservation easement (retained rights) may include those allowable uses listed in Section 2.4.2 of the EIR Project Description provided that those allowable uses are acceptable to the easement holder and do not compromise, and are not inconsistent with, the stated purposes of the agricultural conservation easements to preserve agricultural land and to provide habitat conservation.</p>	<p>With implementation of required mitigation measures, impacts related to agricultural conversion would be reduced to the extent feasible. However, no feasible measures are available that would fully mitigate impacts related to the conversion of prime soils areas and fragmentation of agricultural areas without substantial limitations to the location and extent of future conceptual development envisioned for the Future Development Program. Therefore, impacts would remain Class I, <i>significant and unavoidable</i>.</p>
<p><b>FDP Impact AG-2</b> The Future Development Program would create conflicts between proposed urban uses and existing and future agricultural uses. Potential land use conflicts are a Class I, <i>significant and unavoidable</i>, impact.</p>	<p><b>ARCS AG-2(a) Disclosure of Potential Nuisance.</b> In accordance with the County Right to Farm Ordinance (No. 2050), upon the transfer of real property on the Agricultural Residential Cluster Subdivision site, the transferor shall deliver to the prospective transferee a written disclosure statement that shall make all prospective homeowners in the proposed Agricultural Residential Cluster Subdivision aware that although potential impacts or discomforts between agricultural and non-agricultural uses may be lessened by proper maintenance, some level of incompatibility between the two uses would remain. This notification shall include disclosure of potential nuisances associated with on-site agricultural uses, including the frequency, type, and technique for pesticide spraying, frequency of noise-making bird control devices, dust, and any other vineyard practices that may present potential health and safety effects. In addition, the notification shall identify that adjoining agricultural land is permanently</p>	<p>With implementation of required mitigation measures, land use compatibility impacts between agricultural and urban land uses would be reduced to the extent feasible. However, no feasible measures are available that would fully mitigate impacts related to land use compatibility without substantial limitations to the location and extent of future conceptual development</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS I IMPACTS: SIGNIFICANT AND UNAVOIDABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>protected for agricultural uses, and that future agricultural uses may vary from current uses and might include processing facilities, nighttime operation, wind machines, odor, dust, noise, legal chemical applications, use and creation of compost, and/or changes in irrigation patterns and water use. The establishment of new agricultural uses, if established in accordance with standard agricultural practices, will not be considered a nuisance from the time of establishment.</p> <p>Future Development Program measures AG-1(a) (Avoidance of Agricultural Areas) and AG-1(b) (Future Agricultural Conservation Easements) would also reduce impacts related to land use conflicts. The following additional mitigation measure is also required to reduce conflicts:</p> <p><b>FDP AG-2(a) Future Trail Locations.</b> Future trails shall be installed in locations that will minimize cattle and foot traffic interaction and not adversely impact the ranch livestock operation, per County policy.</p>	<p>envisioned for the Future Development Program. Therefore, impacts would remain Class I, <i>significant and unavoidable</i>.</p>
<b>AIR QUALITY</b>		
<p><b>FDP Impact AQ-2</b> Many of the Future Development Program conceptual land uses are inconsistent with the land use designations and population assumptions of the San Luis Obispo County General Plan. In addition, Future Development Program implementation would result in a substantial increase in vehicle miles traveled. Therefore, the Future Development Program is inconsistent with the 2001 Clean Air Plan (CAP). This is a Class I, <i>significant and unavoidable</i> impact.</p>	<p><b>ARCS AQ-1(d) Telecommuting.</b> All new homes shall be constructed with internal wiring/cabling that allows telecommuting, teleconferencing, and telelearning to occur simultaneously in at least three locations in each home. This control measure seeks to reduce emissions by promoting telecommuting for any employee whose job can accommodate working from home.</p> <p><b>FDP AQ-2(a) Trip Reduction Measures.</b> To reduce overall trip generation and associated air contaminant emissions, future commercial tenants will be required to establish and maintain employee trip reduction programs that should include, but are not limited to, the following elements:</p> <ul style="list-style-type: none"> <li>• Install bicycle racks and/or bicycle lockers at a ratio of 1 bicycle parking space for every 10 car parking spaces for customers and employees, or at a ratio otherwise acceptable the SLOAPCD to be determined prior to occupancy clearance;</li> <li>• Post carpool, vanpool and transit information in employee break/lunch areas;</li> <li>• Employ or appoint an Employee Transportation Coordinator;</li> <li>• Implement a Transportation Choices Program. Project applicants should work with the Transportation Choices Coalition partners for free consulting services on how to start and maintain a program. Contact SLO Regional Rideshare at 541-2277;</li> <li>• Provide for shuttle/mini bus service;</li> <li>• Provide incentives to employees to carpool/vanpool, take public</li> </ul>	<p>Implementation of the above mitigation measures would reduce impacts. However, due to population projection inconsistencies and because no mitigation measures are feasible to sufficiently reduce vehicle miles traveled, impacts related to consistency with the CAP would remain Class I, <i>significant and unavoidable</i>.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS I IMPACTS: SIGNIFICANT AND UNAVOIDABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>transportation, telecommute, walk, bike, etc.;</p> <ul style="list-style-type: none"> <li>• Implement compressed work schedules;</li> <li>• Implement telecommuting program;</li> <li>• Implement a lunchtime shuttle to reduce single occupant vehicle trips;</li> <li>• Include teleconferencing capabilities, such as web cams or satellite linkage, which will allow employees to attend meetings remotely without requiring them to travel out of the area;</li> <li>• Provide on-site eating, refrigeration and food vending facilities to reduce employee lunchtime trips;</li> <li>• Provide preferential carpool and vanpool parking spaces; and</li> <li>• Provide shower and locker facilities to encourage employees to bike and/or walk to work (typically one shower and three lockers per every 25 employees).</li> <li>• Provide off-site improvements to offset contaminant emissions, including: retrofitting existing homes and businesses with energy-efficient devices, replacing transit or school buses, contributing to alternative fueling infrastructure, and/or improving park and ride lots.</li> </ul> <p>The specific components of a trip reduction program that will be required for a particular commercial development will be at the discretion of the Planning and Building Department, based on the recommendations of the APCD.</p>	
<b>BIOLOGICAL RESOURCES</b>		
<p><b>FDP Impact B-2</b> Implementation of the Future Development Program would result in the conversion of oak woodland habitat and the removal of and/or impacts to an unknown number of native coast live oak, blue oak, and valley oak trees. This is a Class I, <i>significant and unavoidable</i> impact.</p>	<p>The following mitigation measures would apply to all Future Development Program land uses:</p> <p><b>ARCS B-2(a) Native Perennial Grassland Restoration Plan.</b> The applicant shall contract with a qualified biologist to develop a Native Perennial Grassland Restoration Plan. The Plan would consist of enhancing the remaining Native Perennial grassland habitat found on-site or creating Native Perennial Grassland habitat within areas presently vegetated by California annual grassland. Specifically, the area of restoration should include at least 69 acres (2:1 ratio) with at least 10% cover by purple needlegrass, deergrass, or California oatgrass, and should include open areas within blue oak woodland and coast live oak woodland. In addition, native forbs shall be established in the restoration areas representing the species composition and relative cover that is present in the areas to be lost. Other areas consisting of California Annual Grassland such as between Lots 88 and 108 are also suitable for enhancement. In such areas, grassland management strategies such as seasonal mowing shall be employed, which will allow for a higher likelihood that perennial grasses could compete with the annual grasses found within these areas.</p>	<p>In the short-term, impacts to oak trees and oak woodland habitats cannot be mitigated because of the length of time required for replacement trees to reach maturity and for the conservation areas to have a similar habitat values as those that are removed and/or impacted. Therefore, impacts will remain Class I, <i>significant and unavoidable</i>.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS I IMPACTS: SIGNIFICANT AND UNAVOIDABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>The following measures shall be implemented.</p> <ol style="list-style-type: none"> <li>1. A county-approved botanist/biologist shall develop a Plan that provides specific measures to enhance and maintain the remaining on-site occurrences of Native Perennial Grassland. This Plan shall be focused on adaptive management principles, and shall identify detailed enhancement areas and strategies based on the parameters outlined below, with timing and monitoring long-term requirements. The Plan shall:               <ol style="list-style-type: none"> <li>a. Provide an up-to-date inventory of on-site occurrences of Native Perennial Grassland habitat;</li> <li>b. Define attainable and measurable goals and objectives to achieve through implementation of the Plan;</li> <li>c. Provide site selection and justification;</li> <li>d. Detail restoration work plan including methodologies, restoration schedule, plant materials (seed), and implementation strategies.</li> <li>e. Provide a detailed maintenance plan to include mowing to provide a sufficient disturbance regime to keep non-native plant species from further reducing the extent of this habitat type on the property over time. This approach would also have the residual benefit of providing wildland fire protection. Enhancement and maintenance options shall employ recent techniques and effective strategies for increasing the overall area of Native Perennial Grassland on-site and shall include but not be limited to reseeding disturbed areas with an appropriate native plant palette;</li> <li>f. Define performance standards. Within the agriculture residential cluster subdivision project area, the restored area should include at least 69 acres (2:1 ratio) with at least 10% cover by native perennial grasses; and,</li> <li>g. Provide a monitoring plan to include methods and analysis of results. Also, include goal success or failure and an adaptive management plan and suggestions for failed restoration efforts.</li> </ol> </li> </ol> <p><b>ARCS B-3(a) Oak Tree Inventory, Avoidance, and Protection Plan.</b> The applicant shall prepare an Oak Tree Inventory, Avoidance and Protection Plan as outlined herein. The plan shall be reviewed by the County approved arborist prior to approval of grading permits, and shall include the following items:</p>	



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	<ol style="list-style-type: none"> <li>1. <u>Comprehensive Oak Tree Inventory</u>. This shall include the following information:                             <ol style="list-style-type: none"> <li>a) An inventory of all trees at least 5 inches in diameter at breast height within 50 feet of all proposed Agriculture Residential Cluster Subdivision impact areas. All inventoried trees shall be shown on maps. The species, diameter at breast height, location, and condition of these trees shall be documented in data tables.</li> <li>b) Identification of trees which will be retained, removed, or impacted. This information shall be shown on maps and cross-referenced to data tables described in Item (a).</li> <li>c) The location of proposed structures, utilities, driveways, septic tanks, leach fields, grading, retaining walls, outbuildings, and impervious surfaces shall be shown on maps. The applicant shall clearly delineate the building sites/building control lines containing these features on the project plans. In addition, the plans shall include any fenced areas for livestock or pets and clearance areas prescribed by CalFire.</li> <li>d) A landscaping plan that describes the size and species of all trees, shrubs, and lawns proposed to be planted in the project area, including the limits of irrigated areas.</li> <li>e) Revised drainage patterns that are within 100 feet upslope of any existing oak trees to remain. All reasonable efforts shall be made to maintain historic drainage patterns and flow volumes to these trees. If not feasible, the drainage plan shall clearly show which trees would be receiving more or less drainage.</li> </ol> </li> <li>2. <u>Oak Tree Avoidance Measures</u>. Grading and development within proposed lots shall avoid the removal of oak trees to the maximum extent possible. Such activities must minimize potential disturbance to oaks and their associated root zones to the maximum extent possible, with final site plans requiring concurrence from County staff to ensure compliance with this provision.</li> <li>3. <u>Oak Tree Protection Guidelines</u>. Tree protection guidelines and a root protection zone shall be established and implemented for each tree to be retained that occurs within 50 feet of impact areas. The following guidelines shall be included:</li> </ol>	



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	<p>a) A qualified arborist shall determine the critical root zone for each retained tree on a case-by-case basis, based upon tree species, age, and size. This area will vary from 1.0 to 1.5 times its diameter at breast height [as specified in Harris, Clark and Matheny (2004) Arboriculture]. At a minimum, the critical root zone shall be the distance from the trunk to the drip line of the tree.</p> <p>b) All oak trees to remain within 50 feet of impact areas (construction or grading) shall be marked for protection and the root zone fenced prior to any grading. Grading, utility trenching, compaction of soil, or placement of fill shall be avoided within these fenced areas. If grading in the root zone cannot be avoided, retaining walls shall be constructed to minimize cut and fill impacts. The project arborist must approve any work within the root protection zone.</p> <p>c) Care shall be taken to avoid surface roots within the top 18 inches of soil. If any roots must be removed or exposed, they shall be cleanly cut and not left exposed above ground surface.</p> <p>d) Unless previously approved by the County, the following activities shall be prohibited within the root zone of remaining oak trees: year-round irrigation (no summer watering, unless "establishing" a new tree or native compatible plant for up to 3 years); grading (includes cutting and filling of material); compaction (e.g., regular use of vehicles); placement of impermeable surfaces (e.g., pavement); or disturbance of soil that impacts roots (e.g., tilling).</p> <p>e) Trimming oak branches shall be minimized, especially for larger lower branches, and the amount done in one season shall be limited to 10 to 30% of the canopy to reduce stress/shock. If trimming is necessary, the applicant shall either use a qualified arborist or utilize accepted arborist's techniques.</p> <p><b>ARCS B-3(b) Oak Tree Replacement, Monitoring, and Conservation.</b> Of those trees identified under Agricultural Residential Cluster Subdivision measure B-3(a) as being removed or impacted, 50% shall be replaced per County and Kuehl Bill standards. A conservation easement or monetary contribution to the Oak Woodlands Conservation Fund shall be used for the remaining mitigation.</p> <p>1. <u>Replacement.</u> The County approved arborist shall provide or approve an oak tree replacement plan at a minimum 4:1 ratio for oak trees removed and a</p>	



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	<p>minimum replacement ratio of 2:1 for oak trees impacted (i.e., disturbance within the root zone area).</p> <p>a) Replacement plantings shall be from regionally- or locally-collected seed stock grown in vertical tubes or deep one-gallon tree pots. Four-foot diameter shelters shall be placed over each oak tree to protect it from deer and other herbivores, and shall consist of 54" tall welded wire cattle panels (or equivalent material) and be staked using T-posts. Wire mesh baskets, at least two-foot diameter and 2-feet deep, shall be used below ground. Planting during the warmest, driest months (June through September) shall be avoided. The plan shall provide a species-specific planting schedule. If planting occurs outside this time period, a landscape and irrigation plan shall be submitted prior to permit issuance and implemented after approved by the County. Average tree densities shall be no greater than one tree every twenty feet and shall average no more than four planted per 2,000 square feet. Trees shall be planted in random and clustered patterns to create a natural appearance. Replacement trees shall be planted in a natural setting on the north side of and at the canopy/dripline edge of existing mature native oak trees; on north-facing slopes; within drainage swales (except when riparian habitat present); where topsoil is present; and away from continuously wet areas (e.g., lawns, leach lines, etc). Replanting areas shall be either in native topsoil or areas where native topsoil has been reapplied. A seasonally timed maintenance program, which includes regular weeding (hand removal at a minimum of once early fall and once early spring within at least a three-foot radius from the tree or installation of a staked "weed mat" or weed-free mulch) and a temporary watering program, shall be developed for all oak tree planting areas on the Agricultural Residential Cluster Subdivision. A qualified arborist/botanist shall be retained to monitor the acquisition, installation, and maintenance of all oak trees to be replaced within the Agricultural Residential Cluster Subdivision. Replacement trees shall be monitored and maintained by a qualified arborist/botanist for at least seven years or until the trees have successfully established as determined by the County's Environmental Coordinator. Annual monitoring reports will be prepared by a qualified arborist/botanist and submitted to the County by October 15 each year. Annual monitoring reports will include specifics discussed below.</p> <p>b) The restored area shall be at a minimum equal in size to the area of oak woodlands lost or disturbed.</p>	



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	<p>c) An approved arborist shall submit to the County an initial post-planting letter report, and thereafter annual monitoring reports shall be submitted. All trees planted as mitigation shall have an 80% survival rate after seven years. If any trees planted as mitigation do not survive at seven years from the time of planting, they will be replaced as soon as possible as determined by the arborist/botanist.</p> <p>d) A cost estimate for the planting plan, installation of new trees, and maintenance of new trees for a period of seven years shall be prepared by a qualified individual and approved by the County. Prior to site grading/issuance of construction permits, a performance bond, equal to the cost of the estimate, shall be posted by the applicant. The replacement mitigation trees shall also have an overall survival rate of 80% after seven years from date of planting.</p> <p>2. <u>Maintenance</u>. Unless previously approved by the County, the following activities are not allowed within the root zone of newly planted oak trees:</p> <p>a) Year-round irrigation (no summer watering, unless 'establishing' a new tree or native compatible plant for up to 3 years);</p> <p>b) Grading (includes cutting and filling of material);</p> <p>c) Compaction (e.g., regular use of vehicles);</p> <p>d) Placement of impermeable surfaces (e.g., pavement); or</p> <p>e) Disturbance of soil that impacts roots (e.g., tilling).</p> <p>Trimming oak branches shall be minimized, especially for larger lower branches, and the amount done in one season shall be limited to 10 to 30% of the canopy to reduce stress/shock. If trimming is necessary, the applicant shall either use a qualified arborist or utilize accepted arborist's techniques.</p> <p>3. <u>Conservation Easements and/or Contribution to the Oak Woodlands Conservation Fund</u>. Replanting detailed above can account for up to 50% of the mitigation requirement. The remaining mitigation shall be in accordance with the County's Oak Woodland Mitigation Plan. Per the County's draft Plan, the mitigation shall be a minimum of a 2,000 square foot conservation easement per tree removed (based upon an average 50 foot diameter canopy). The oak conservation area shall be designated on-site and be managed by a third party.</p>	





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	No additional mitigation is required.	
<b>CULTURAL RESOURCES</b>		
<p><b>FDP Impact CR-1</b> Future development in accordance with the Future Development Program could adversely impact the Santa Margarita Ranch Rural Historic District and could adversely impact traditional Native American values. This is considered a Class I, <i>significant and unavoidable</i> impact.</p>	<p><b>ARCS CR-1(a) Avoidance.</b> The preferred mitigation measure is avoidance of the impacts described above. If avoidance cannot be achieved, other forms of mitigation, such as graphic documentation (photographs, drawings, etc.) and archaeological data recovery, will lessen the impacts but will not mitigate the loss of integrity to a less than significant level.</p> <p><b>ARCS CR-1(b) Cultural Design Guidelines.</b> The Architecture and Landscape Guidelines (refer to ARCS VR-1(b) below) shall incorporate the design principles, plans, and massing of historic ranch structures, such as sandstone or adobe construction, one-story height, gable roofs, shiplap siding, and natural landscaping. The County will have final approval over the project design elements, based in part on consultation with a qualified historian.</p> <p><b>ARCS VR-1(b) Architectural and Landscape Guidelines.</b> The applicant shall develop and implement Architectural and Landscape Guidelines that include the components listed below. The Guidelines shall include clear criteria and requirements to guide the design, layout, and landscaping of individual residential lots. All future development shall comply with the Guidelines. Enforcement of compliance with the Guidelines shall be the responsibility of the Planning and Building Department.</p> <p><b>Tract landscaping.</b> Landscaping guidelines shall describe the following elements:</p> <ul style="list-style-type: none"> <li>▪ Landscaping shall emulate and be compatible with the surrounding natural environment; only natural fiber, biodegradable materials shall be used;</li> <li>▪ Fuel management techniques shall be used, including, but not limited to, fire resistive landscaping, defensible space features, and strictly controlled vegetation within defensible space;</li> <li>▪ Fire-resistant vegetation shall be used in tract landscaping.</li> </ul> <p><b>Individual House Landscaping.</b> Landscaping Plans for individual houses shall be prepared by a qualified Landscape Architect, and shall be designed to screen and blend the proposed development into the surrounding area while preserving identified viewsheds. Individual lot landscaping plans shall incorporate plants consistent with the San Luis Obispo County Approved Plant List. Only natural fiber, biodegradable materials shall be used.</p> <p><b>Roofing and Feature Color and Material.</b> Development plans shall include earth-</p>	<p>Although impacts would be reduced through the above mitigation measures, no mitigation is available to avoid significantly impacting the integrity of the design, setting, materials, feeling, and association of this important character-defining area, or its Native American values. Impacts would remain <i>significant and unavoidable</i>.</p>



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	<p>tone colors on structure roofing and other on-site features to lessen potential visual contrast between the structures and the hilly terrain that constitutes the visual backdrop of the area. Natural building materials and colors compatible with surrounding terrain (earthtones and non-reflective paints) shall be used on exterior surfaces of all structures, including fences.</p> <p><b>Avoidance of Visual Prominence.</b> To avoid the visual prominence of structures located at Lots 1 through 4, 6 through 11, 14, 30, 52, 90, 92 through 95, 97 through 99, 101, 104 through 106, and 112, no structure shall exceed a height of 22 feet, except for ancillary features such as antennas or other elements determined to be compatible by Planning and Building.</p> <p><b>Understory and Retaining Wall Treatment.</b> Understories and retaining walls higher than six (6) feet shall be in tones compatible with surrounding terrain using textured materials or construction methods which create a textured effect.</p> <p><b>ARCS CR-1(c) Viewshed Preservation.</b> Because the native flora of the ranch is a key character defining feature of the historic landscape and a critical element of the historic viewshed, non-agricultural open space should be left in natural grasses, with native trees and other flora.</p> <p>It should be noted that ARCS VR-1(a) (below), which prohibits structural silhouetting on ridgelines, would also reduce this impact.</p> <p><b>ARCS VR-1(a) Prohibition of Structural Silhouetting.</b> Future development located on ridgelines shall be relocated, building heights shall be limited, and vegetative screening shall be provided such that the structures do not silhouette against the sky when viewed from off-site viewpoints.</p> <p><b>ARCS CR-1(d) Preservation of Key Landscape Elements.</b> New roads on the ranch shall follow the natural topography to the extent possible, without substantial cuts or fills; the roads shall be as narrow as allowed by County requirements, with no verges. Signage must be subdued, and not mar or interfere with the views. Historic types of fencing shall be used.</p> <p>To facilitate preservation of these landscape elements, historic roads and other landscape remnants shall be recorded and mapped in greater detail. In particular, a survey of El Camino Real shall be carried out by a qualified professional using the location on the 1858 and 1889 maps as a guide. Any remnants or other physical</p>	



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	<p>evidence of these roads shall be thoroughly documented, and no development of any kind shall be located in the path of El Camino Real or other historical transportation elements.</p> <p>The current local historic place names indicate the history of the ranch and the people who impacted the landscape. These names shall be retained and incorporated into any development. New place names shall reflect the historical usage.</p> <p><b>ARCS CR-1(e) Nomination to the National Register of Historic Places.</b> The Santa Margarita Ranch <b>Rural Historic District</b> shall be nominated to the National Register of Historic Places. At a minimum, the NRHP nomination shall include the following elements:</p> <ul style="list-style-type: none"> <li>• documentation of all extant historical buildings and structures in the ranch headquarters area to the level of the Historic American Building Survey (HABS), particularly including measured drawings and large format photographs of the interior and exterior of the main asistencia building, ranch house, Wells Fargo building, and associated structures and features;</li> <li>• reconstruction of the asistencia layout and the placement of buildings, structures, walls, and other features utilizing historical photographs, artwork, and other documentary evidence; and preparation of an ethnographic history of the ranch.</li> </ul>	
<p><b>FDP Impact CR-2</b> Future development in accordance with the Future Development Program could adversely impact identified and previously unidentified archeological deposits. These resources contribute to the significance of the Santa Margarita Ranch Rural Historic District and are eligible for the California Register of Historic Resources (CRHR) under multiple significance criteria. Recovery of the important information in these sites through excavation would lessen the impacts. However,</p>	<p><b>ARCS CR-2(a) Avoidance.</b> As feasible, all cultural sites shall be avoided during development. To ensure avoidance, the boundaries of all sites within or adjacent to Future Development Program land uses shall be defined through a program of systematic subsurface boundary testing using shovel probes, surface test units, and other appropriate sampling units. The type and distribution of sampling units shall be determined by a qualified professional archaeologist, who will carry out the boundary testing in the presence of a Native American monitor. After site boundaries are defined, an exclusion zone shall be placed around each site. An exclusion zone is a fenced area where construction equipment and personnel are not permitted. The exclusion zone fencing shall be installed (and later removed) under the direction of a qualified archaeologist and shall be placed five meters beyond the defined site boundary to avoid inadvertent damage to sites during installation. If multiple pieces of heavy equipment are in use simultaneously at diverse locations during construction, each location may be monitored individually. If avoidance cannot be achieved, other forms of mitigation, such as data recovery, will lessen the impacts but will not mitigate the loss of integrity to a less than significant level.</p>	<p>Although impacts would be reduced through the above mitigation measures, no mitigation is available to avoid significantly impacting identified and previously unidentified cultural resources. Impacts would remain <i>significant and unavoidable</i>.</p>



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<p>damage to or destruction of the important associations of these sites, and disruption of their setting and feeling, is a Class I, <i>significant and unavoidable</i> impact.</p>	<p><b>ARCS CR-2(b) Mitigative Data Recovery Excavation.</b> If avoidance of an archaeological site(s) is not possible, data recovery excavation shall be completed prior to issuance of grading permits. A data recovery plan shall be submitted by a qualified archaeologist for review by the County Environmental Coordinator. Data recovery shall be funded by future applicants, shall be performed by a County-qualified archaeologist, and shall be carried out in accordance with a research design consistent with the requirements of the California Office of Historic Preservation Planning Bulletin 5, <i>Guidelines for Archaeological Research Design</i>. At a minimum, data recovery shall include:</p> <ul style="list-style-type: none"> <li>• Mapping of site boundaries and the distribution of surface remains;</li> <li>• Surface collection of artifacts;</li> <li>• Excavation of a sample of the cultural deposit to characterize the nature of the site and retrieve a representative sample of artifacts and other remains within the proposed impact area;</li> <li>• Monitoring of excavations at Native American sites by a tribal representative;</li> <li>• Technical studies and analysis of the recovered sample, including radiocarbon dating, typological and technical analysis of tools and debris, identification and analysis of preserved faunal and floral remains, and other studies appropriate to the research questions outlined in the research design;</li> <li>• Cataloguing and curation of all artifacts and records detailing the results of the investigations at a county approved curation facility;</li> <li>• Submission of a final technical report detailing the results of the investigations;</li> <li>• Preparation of an interpretive report suitable for distribution to the general public.</li> </ul> <p><b>ARCS CR-3(a) Buried Site Testing at Isolate Locations.</b> Isolated artifacts shall be tested by a qualified archaeologist to determine whether or not isolated artifacts within or adjacent to Future Development Program land uses represent more substantial buried components. Such testing shall involve hand excavation of shovel probes and/or other sampling units. The type and distribution of sampling units shall be determined by a qualified professional archaeologist, who will carry out the isolate testing in the presence of a Native American monitor. If isolate testing reveals the presence of a buried site, then site boundary definition and avoidance, or mitigative data recovery, shall be carried out in accordance with ARCS CR-2(a) or CR-2(b) above.</p>	



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	<p><b>ARCS CR-3(b) Archaeological Resource Construction Monitoring.</b> An archaeological resource monitoring plan prepared by a qualified archaeologist shall be submitted for review by the County Environmental Coordinator. The plan shall include a list of personnel involved in monitoring activities, and descriptions of monitoring methods, resources expected to be encountered, circumstances that would result in halting work, procedures for halting work, and procedures for monitoring reporting.</p> <p>At the commencement of construction, an archaeologist and a Native American representative shall conduct an orientation for construction workers to describe site avoidance requirements, the possibility of exposing unexpected archaeological resources, and the steps to be taken if such a find is encountered.</p> <p>A qualified archaeologist and Native American representative shall monitor all earth moving activities within native soil. If multiple pieces of heavy equipment are in use simultaneously at diverse locations during construction, each location may be monitored individually.</p> <p>In the event that archaeological remains are encountered during construction, all work in the vicinity of the find will be halted until such time as the find is evaluated by a qualified archaeologist and appropriate mitigation, if necessary, is implemented.</p> <p><b>FDP CR-2(a) Additional Archaeological and Historical Surveys.</b> Additional archaeological and historical surveys shall be carried out on unsurveyed portions of the ranch subject to development. Any documented cultural resources on the ranch shall be avoided and protected during development. If resource avoidance is not feasible, then additional archival research and data recovery excavation shall be carried out [refer to ARCS CR-2(b) (above)].</p>	
<b>NOISE</b>		
<p><b>FDP Impact N-2</b> Long-term traffic generated by the Future Development Program would incrementally increase noise levels at existing receptors located adjacent to roadways in the Santa Margarita Ranch vicinity. The effect of this noise on off-site sensitive receptors in the area is a Class I, <i>significant and</i></p>	<p>Although structural measures such as solid berms (e.g., sound walls), solid core doors, and/or double paned windows could reduce noise levels at existing receptors in the Santa Margarita Ranch vicinity, the implementation of structural measures would be infeasible due to physical, economic, or other constraints, and would rely upon the cooperation of off-site property owners, which cannot be assured. Therefore, no feasible measures are available that would mitigate impacts to existing sensitive receptors.</p>	<p>Impacts would remain Class I, <i>significant and unavoidable.</i></p>



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<i>unavoidable, impact.</i>		
<b>TRANSPORTATION AND CIRCULATION</b>		
<p><b>FDP Impact T-1</b> The Future Development Program would result in the addition of 8,137 average daily weekday trips (655 AM peak-hour and 818 PM peak-hour trips) to the study-area roadways and intersections. This would cause two local roadway segments, four U.S. 101 mainline segments, all four U.S. 101/SR 58 interchange ramps, and four intersections to operate at unacceptable levels of service during peak hours. Implementation of mitigation measures would partially reduce impacts. However, due to uncertainty regarding Caltrans approval of facilities within State jurisdiction and uncertainty regarding the timing of the improvements, impacts would be Class I, <i>significant and unavoidable</i>.</p>	<p>Due to existing deficiencies, the following measures would apply to all Future Development Program land uses:</p> <p><b>ARCS T-1(a) SR 58 South of J Street.</b> To mitigate the project's impacts to the two 90-degree curves on SR 58 near J Street, the following improvements are required:</p> <ol style="list-style-type: none"> <li>1. Widen both sides of SR 58 (from El Camino Real to the Agricultural Residential Cluster Subdivision eastern site access) to provide four foot shoulders and/or bike lanes in accordance with County standards.</li> <li>2. Install radar feedback signs and advisory speeds on each approach to the 90-degree on SR 58 near J Street.</li> </ol> <p>As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and associated approval from Caltrans would be required if the cost of the improvements exceeds three million dollars.</p> <p><b>ARCS T-1(b) U.S. 101 Northbound Off-Ramp to SR 58.</b> The applicant shall lengthen the deceleration length from 140 feet to 250 feet from the US 101 mainline to the northbound off-ramp to mitigate the Agricultural Residential Cluster Subdivision's impact to the ramp junction.</p> <p>In addition, the applicant shall reconstruct the area where the northbound U.S. 101 off-ramp merges with eastbound SR 58 to provide 400 feet of merging distance to meet Caltrans' current design standards. Since the park-and-ride facility is located adjacent to the northbound off-ramp, reconfiguration of the parking lot and access to a nearby frontage road is required. The applicant shall include designs for the revised park and ride and frontage road access in the permit with Caltrans. A field assessment indicates that the merge area could be lengthened by physically separating the park and ride lot from the roadway, which would improve the existing condition and reduce the impact.</p> <p>As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.</p>	<p>If the construction and occupation of any conceptual future land use occurs prior to completion of the above improvements, existing deficiencies and associated impacts would remain. Although mitigation measures outlined above would reduce impacts to ramp junctions and study intersections (and therefore to two segments of El Camino Real) to the extent possible, due to the uncertainty regarding Caltrans approval of improvements within their jurisdiction and the lack of a future signal at the Estrada Avenue/H Street intersection, it cannot be assured that these improvements would be feasibly constructed prior to occupation of the first Future Development Program land use. As a result, impacts would remain significant and unavoidable. Impacts related to study area U.S. 101 segments would be Class I, <i>significant and unavoidable</i>.</p> <p>Implementation of many transportation improvements required as mitigation (e.g., signalization) would not result in significant environmental impacts related to site disturbance since improvements would occur within existing disturbed rights-of-way. It should be noted that impacts</p>



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	<p><b>ARCS T-1(c) U.S. 101 Southbound Off-Ramp to SR 58.</b> The project applicant shall extend the deceleration length from 250 to 550 feet for the southbound off-ramp to provide acceptable freeway ramp diverge operations under Cumulative Plus Agricultural Residential Cluster Subdivision conditions.</p> <p>As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.</p> <p><b>ARCS T-1(d) El Camino Real/Estrada Avenue Redesign.</b> With the addition of Agricultural Residential Cluster Subdivision traffic, the project applicant shall construct the following improvements:</p> <ol style="list-style-type: none"> <li>1. Widen Estrada Avenue, between El Camino Real and the railroad tracks, to provide a dedicated northbound right-turn lane.</li> <li>2. Widen El Camino Real to provide a separate left-turn lane for westbound El Camino Real traffic to turn onto southbound Estrada Avenue.</li> <li>3. Reduce the superelevation of the El Camino Real curve at Estrada Avenue</li> <li>4. Prior to implementation of Future Development Program measure T-1(d), traffic signal installation and rail pre-emption, advance limit lines for northbound Estrada traffic shall be provided immediately south of the rail tracks, and a Manual on Uniform Traffic Control Devices (2003 Edition) R8-10 sign which states "Stop Here When Flashing" shall be provided to minimize the potential for vehicles to stop directly on the railroad tracks.</li> </ol> <p>According to San Luis Obispo County Public Works staff, extension of an existing culvert is required as part of this improvement. The applicant shall secure any regulatory permits for the necessary construction of intersection improvements to meet Caltrans standards.</p> <p>As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.</p> <p><b>ARCS T-1(e) Estrada Avenue/H Street Warning Beacon.</b> A pedestrian-activated advanced warning beacon shall be installed on the northbound approach to the intersection of Estrada Avenue and H Street, before the crest on Estrada Avenue, to</p>	<p>associated with implementation of required transportation improvements (e.g., construction impacts, aesthetic impacts) are discussed in other impact sections of this EIR to the extent possible. However, since the final designs of required transportation improvements have not been determined, precise environmental impacts associated with future improvements would be too speculative to address at this time. Environmental impacts associated with required transportation improvements would be evaluated at a project level of detail in separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA), including as part of the Specific Plan or individual development review process, as applicable, for future development on the property.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<p>warn drivers of the presence of pedestrians crossing at the intersection. A pedestrian-activated beacon shall also be installed for southbound Estrada Avenue traffic. The precise location for beacon installation shall be determined in consultation with Caltrans under the encroachment permit process, and shall include any required ramps or other Americans with Disabilities Act (ADA) upgrades. The applicant shall fund and install both advanced warning beacons.</p> <p>The <i>Santa Margarita Design Plan</i>, adopted October 9, 2001, recommended the following long-term improvements to Estrada Avenue between H Street and I Street:</p> <ul style="list-style-type: none"> <li>• Improve sight distance by eliminating the hill/crest</li> <li>• Add curbs and textured crossings at Estrada Avenue/H Street</li> <li>• Provide bike lanes on Estrada Avenue</li> </ul> <p>These improvements represent alternative mitigation measures for this intersection. However, eliminating the crest would require extensive earthwork and roadbed reconstruction. Depending on the final design of the long-term improvements, the flashing beacons could be integrated into the plan.</p> <p>As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.</p> <p>In addition, because the addition of Future Development Program traffic would cause two local roadway segments, four U.S. 101 mainline segments, all four U.S. 101/SR 58 interchange ramps, and four intersections to operate at unacceptable levels of service during peak hours, additional mitigation is required.</p> <p><i>Roadway Segments.</i> Although Future Development Program traffic is estimated to have a significant impact on two segments of El Camino Real (between Wilhelmina Avenue and Maud Avenue and between Pinal Avenue and Estrada Avenue), Future Development Program measures T-1(a) (El Camino Real/Estrada Avenue Signalization) and T-1(b) (El Camino Real/Wilhelmina Avenue Signalization) would provide acceptable intersection operations. These two segments are projected to operate at LOS E or F under <i>Cumulative + Future Development Program</i> conditions. East of Murphy Avenue to Pinal Avenue, SR 58 widens to include a center two-way turn lane with left-turn lanes at intersections. The wider section of SR 58 provides additional roadway capacity by allowing vehicles to move out of the</p>	





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	<p>through lanes and wait in the center of the roadway to turn left. In addition, mitigation is required to address safety impacts associated with the 90-degree curves on SR 58 near J Street.</p> <p><i>U.S. 101 Segments.</i> Additional capacity to U.S. 101 is required to provide acceptable operations (i.e., to reduce the density to better than the LOS C/D threshold) on the study area U.S. 101 segments (U.S. 101 northbound south of SR 58, U.S. 101 northbound north of SR 58, U.S. 101 southbound south of SR 58, and U.S. 101 southbound north of SR 58). The widening of U.S. 101 from four to six lanes from the Cuesta Grade north to Atascadero is identified as a planned improvement in the <i>2005 Regional Transportation Plan</i> but is not currently funded. In addition, Caltrans (rather than the County) must approve improvements within their jurisdiction. Therefore, no mitigation is available to adequately reduce impacts to U.S. 101 in the study area, and impacts are significant and unavoidable.</p> <p><i>U.S. 101 Ramps.</i> All four ramps at the US 101/SR 58 interchange are projected to operate at unacceptable levels, LOS D, under Cumulative No Project Conditions. The addition of Future Development Program traffic will contribute to existing operational issues at the interchange, which would be considered a potentially significant impact. Due to existing deficiencies, Agricultural Residential Cluster Subdivision measures T-1(b) (U.S. 101 Southbound Off-Ramp to SR 58) and T-1(c) (U.S. 101 Northbound Off-Ramp to SR 58), would apply to all Future Development Program land uses. In accordance with these mitigation measures, the applicant is required to contribute toward preparation of a Project Study Report (PSR) to identify appropriate interchange improvements to correct operational deficiencies and evaluate alternative configurations. The PSR will identify an interchange design to provide improved operations for all ramps. In addition, due to additional demand from the Future Development Program, additional mitigation is required.</p> <p><i>Intersections.</i> Future Development Program measures T-1(d) (El Camino Real/Estrada Avenue Signalization), T-1(e) (El Camino Real/Wilhelmina Avenue Signalization), T-1(f) (SR 58 Improvements Between Wilhelmina Avenue and Pinal Avenue) and T-1(g) (Future Development Impact Fee) are required to reduce impacts related to study area intersections.</p> <p>The following mitigation measures are required:</p> <p><b>FDP T-1(a) SR 58 South of J Street.</b> To mitigate the Future Development Program's impacts to the two 90-degree curves on SR 58 near J Street, realignment of SR 58 along</p>	



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	<p>a tangent south of J Street to the Agricultural Residential Cluster Subdivision development is required. The realignment would make the SR 58/J Street junction into more of a typical intersection layout.</p> <p>As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.</p> <p><b>FDP T-1(b) U.S. 101 Southbound Off-Ramp to SR 58.</b> Redesign of the southbound off-ramp to accommodate a larger loop radius and higher design speed would be required to meet current Caltrans design standards with Future Development Program. The project applicant shall extend the deceleration length from 550 feet [as required by Agricultural Residential Cluster Subdivision measure T-1(c)] to 650 feet for the southbound off-ramp to provide acceptable freeway ramp diverge operations under Cumulative Plus Agricultural Residential Cluster Subdivision Plus Future Development Program conditions. A Caltrans encroachment permit and/or PSR would be required to select an appropriate design, depending on the cost of improvements.</p> <p><b>FDP T-1(c) U.S. 101 Southbound On-Ramp from SR 58.</b> Redesign of the US 101 southbound on-ramp to accommodate an acceleration lane for westbound SR 58 traffic. The applicant is required to contribute toward preparation of a Caltrans encroachment permit and/or Project Study Report (PSR) to identify appropriate interchange improvements to correct operational deficiencies and evaluate alternative configurations.</p> <p><b>FDP T-1(d) El Camino Real/Estrada Avenue Signalization.</b> A traffic signal at the intersection of El Camino Real and Estrada Avenue shall be installed. in concurrence with Agricultural Residential Cluster Subdivision measure T-1(d) (El Camino Real/Estrada Avenue Redesign). Extension of the existing culvert will be required as stated previously in Agricultural Residential Cluster Subdivision measure T-1(d). Caltrans shall make the final determination on the need for a signal at this location since SR 58 is a state-maintained roadway. Future signalization of this intersection shall include rail pre-emption to allow northbound vehicles to clear the tracks when a train approaches the crossing.</p> <p>Signalization of this intersection would result in LOS B operations under <i>Cumulative + Future Development Program</i> conditions. This improvement would also eliminate the</p>	



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	<p>sight-distance impediment for left-turn vehicles by requiring El Camino Real traffic to stop.</p> <p>It should be noted that a westbound left-turn lane from El Camino Real to Estrada Avenue is warranted under both Cumulative project scenarios (refer to Appendix J for technical calculations). According to County of San Luis Obispo staff, sufficient right-of-way is provided to accommodate turn lanes. The design of the left-turn lanes needs to consider the following adjacent physical constraints: railroad tracks south of the intersection, a creek west of the intersection, a house northwest of the intersection, and a utility box southeast of the intersection.</p> <p><b>FDP T-1(e) El Camino Real/Wilhelmina Avenue Signalization.</b> A traffic signal shall be installed at the intersection of El Camino Real and Wilhelmina Avenue. Caltrans shall make the final determination on the need for a signal at this location.</p> <p>Signalization at this intersection would result in acceptable LOS B operations (or better) under <i>Cumulative + Future Development Program</i> conditions.</p> <p><b>FDP T-1(f) SR 58 Improvements Between Wilhelmina Avenue and Pinal Avenue.</b> Improvements on SR 58 between Wilhelmina Avenue to Pinal Avenue shall be constructed, consistent with the <i>Santa Margarita Design Plan</i>, which calls for a three lane section (one lane in each direction with a center two-way left-turn lane or median island) between Wilhelmina Avenue and Encina Avenue. Implementation of these improvements would mitigate roadway segment impacts to Encina Avenue.</p> <p><b>FDP T-1(g) Future Development Impact Fee.</b> As part of the future Specific Plan, a finance district shall be created to implement improvements identified under Future Development Program measures T-1(a) through T-1(f). The finance district may consist of an area wide fee where projects that are located within the Specific Plan Area will be required to pay impact fees or require the applicant to “front” the cost of the improvements and be reimbursed as land uses are developed. Supplemental studies would be required to determine the cost of the required improvements and the appropriate impact fee.</p> <p>Because a Specific Plan is only required before an application is approved for a subdivision other than a Cluster development, future development could occur in accordance with the Future Development Program prior to preparation of a Specific Plan. Should this occur, the applicant shall fund the creation of a traffic model for the area. The traffic model shall be prepared by a qualified consultant and shall provide a</p>	



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	nexus for determining the proportional share of mitigation for projects in the area. In concert with the traffic model, a funding mechanism shall be created to facilitate reimbursement of the cost of the required improvements and for model creation.	
<b>FDP Impact T-2</b> The Future Development Program may result in inadequate site access and/or internal circulation conflicts. This would generate a Class I, <i>significant and unavoidable</i> , impact.	<p>All new roadways will be required to meet County standards related to roadway cross sections. In addition, the following mitigation measures are required:</p> <p><b>FDP T-2(a) Site-Specific Access Analysis.</b> As part of the Specific Plan for future development on the property (or within individual development plans as applicable), a detailed analysis of access points to Future Development Program land uses and possible impacts to area intersections shall be conducted. This analysis shall recommend mitigation, as necessary, to ensure adequate site access. At a minimum, the site-specific access analysis shall consider the following measures:</p> <ul style="list-style-type: none"> <li>• Requiring that access to the livestock sales yard and Oakenshaw Retreat Center be provided via a new roadway connection to SR 58, rather than the U.S. 101 frontage road;</li> <li>• Requiring that additional access be provided to the residential and commercial areas located south and east of Santa Margarita. These access points should minimize intrusion into the existing residential neighborhoods. Potential access could be provided via new roadways extending east to SR 58 that are located south of the Santa Margarita downtown area;</li> <li>• Requiring that access to proposed land uses that require railroad crossings be located at existing railroad crossings, that existing railroad crossings, such as private crossings, be closed to offset rail crossing impacts, that fencing be installed along the portions of the railroad corridor adjacent to the property, and/or that railroad crossing facilities be upgraded. If new public or private crossings are proposed, the project applicant must coordinate and receive approval from Union Pacific Rail and the California Public Utilities Commission (PUC) when Future Development Program plans are developed; and</li> <li>• Where possible, requiring that access to SR 58 and El Camino Real be consolidated with existing access points.</li> </ul> <p><b>FDP T-2(b) Shoulder Widths.</b> Adequate shoulder width or parallel paths shall be provided along all future roadways to safely accommodate bicyclists and pedestrians.</p> <p><b>FDP T-2(c) Driveways.</b> Future Development Program driveways shall intersect with roadways at points that provide adequate sight distance for all movements, and all intersections shall be spaced a minimum of 150 feet apart.</p>	<p>Implementation of the above mitigation measures would reduce impacts to the extent possible. However, because of the uncertainty of timing of the proposed improvements, and uncertainty regarding Caltrans approval of improvements within their jurisdiction, impacts would remain significant and unavoidable.</p> <p>Since the revised locations of future access roads, including secondary access, have not been determined, precise environmental impacts associated with future access road locations would be too speculative to address at this time. Environmental impacts associated with traffic and access road construction would be evaluated in separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA), including as part of the Specific Plan or individual development review process, as applicable, for future development on the property.</p>



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<b>VISUAL RESOURCES</b>		
<p><b>FDP Impact VR-1</b> Development in accordance with the Future Development Program would unavoidably alter the existing rural visual character of the area, introduce new development along viewing corridors, and introduce new light and glare generators into the area. Potential impacts to visual resources are Class I, <i>significant and unavoidable</i>.</p>	<p>Visual impacts would be reduced to some extent through compliance with Salinas River Area Plan and San Luis Obispo County Land Use Ordinance requirements. For example, in accordance with LUO Section 22.104.040.A.1, future residential development in the Santa Margarita Ranch area would be clustered in compliance with Section 22.22.150 (Agricultural Lands Clustering) and would be required to reconfigure and/or relocate existing parcels with minimal or no visual impact on Santa Margarita and Highway 101, thereby reducing viewing corridor impacts to some extent. All future development would additionally be required to comply with exterior lighting requirements, height limits, and setback requirements of the San Luis Obispo County General Plan. Nonetheless, additional mitigation measures are required.</p> <p>The following mitigation measures would apply to all Future Development Program land uses:</p> <p><b>ARCS VR-1(a) Prohibition of Structural Silhouetting.</b> Proposed lots located on on-site ridgelines shall be relocated, building heights shall be limited, and vegetative screening shall be provided such that the residential units do not silhouette against the sky when viewed from off-site viewpoints. If structural setbacks are implemented, structures shall be setback as follows: units on Lots 50 through 54 shall be setback to the west from the top of the bluff a sufficient vertical distance to preclude silhouetting of units on the top of on-site bluffs. This could also require the relocation of Lots 47 and 55.</p> <p><b>ARCS VR-1(b) Architectural and Landscape Guidelines.</b> The applicant shall develop and implement Architectural and Landscape Guidelines that include the components listed below. The Guidelines shall include clear criteria and requirements to guide the design, layout, and landscaping of individual residential lots. All future development shall comply with the Guidelines. Enforcement of compliance with the Guidelines shall be the responsibility of the Planning and Building Department.</p> <p><b>Tract landscaping.</b> Landscaping guidelines shall describe the following elements:</p> <ul style="list-style-type: none"> <li>▪ Landscaping shall emulate and be compatible with the surrounding natural environment; only natural fiber, biodegradable materials shall be used;</li> <li>▪ Fuel management techniques shall be used, including, but not limited to, fire resistive landscaping, defensible space features, and strictly controlled vegetation within defensible space;</li> <li>▪ Fire-resistant vegetation shall be used in tract landscaping.</li> </ul>	<p>With implementation of the above mitigation measures, impacts would be reduced to the extent feasible. However, due to the extent of the Future Development Program and the amount of visual conversion of the existing rural nature of the Santa Margarita Ranch, impacts would remain <i>significant and unavoidable</i>.</p>



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	<p><b>Individual House Landscaping.</b> Landscaping Plans for individual houses shall be prepared by a qualified Landscape Architect, and shall be designed to screen and blend the proposed development into the surrounding area while preserving identified viewsheds. Individual lot landscaping plans shall incorporate plants consistent with the San Luis Obispo County Approved Plant List. Only natural fiber, biodegradable materials shall be used.</p> <p><b>Roofing and Feature Color and Material.</b> Development plans shall include earth-tone colors on structure roofing and other on-site features to lessen potential visual contrast between the structures and the hilly terrain that constitutes the visual backdrop of the area. Natural building materials and colors compatible with surrounding terrain (earthtones and non-reflective paints) shall be used on exterior surfaces of all structures, including fences.</p> <p><b>Avoidance of Visual Prominence.</b> To avoid the visual prominence of structures located at Lots 1 through 4, 6 through 11, 14, 30, 52, 90, 92 through 95, 97 through 99, 101, 104 through 106, and 112, no structure shall exceed a height of 22 feet, except for ancillary features such as antennas or other elements determined to be compatible by Planning and Building.</p> <p><b>Understory and Retaining Wall Treatment.</b> Understories and retaining walls higher than six (6) feet shall be in tones compatible with surrounding terrain using textured materials or construction methods which create a textured effect.</p> <p><b>ARCS VR-1(c) Oak Tree Avoidance.</b> The removal of oak trees shall be avoided where feasible. New roads shall be designed around existing trees by using modified street design, off-street parking, bulb-outs, or split lanes. Home sites should be located where oak trees are less dense on the lot. For additional oak tree impact mitigation, refer to Section 4.3, <i>Biological Resources</i>.</p> <p><b>ARCS VR-1(d) Bury Water Tanks.</b> The water tanks shall be placed below grade to reduce their visual profile. The tanks shall be placed at a depth such that the tanks do not silhouette against the sky. If burying water tanks is infeasible, natural building materials and colors compatible with surrounding terrain (earthtones and non-reflective paints) shall be used on exterior surfaces.</p> <p><b>ARCS VR-1(e) Lighting.</b> New lighting shall be oriented away from sensitive uses, and should be hooded, shielded, and located to direct light pools downward and</p>	



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	<p>prevent glare. The following standards shall also be implemented:</p> <ul style="list-style-type: none"> <li>• All exterior lighting shall be designed as part of the overall architectural concept. Fixtures, standards and all exposed accessories shall be harmonious with the building design, the lighting design and hardware of the public spaces, and the overall visual environment of the County.</li> <li>• Lighting shall be used for safety and security to illuminate building entrances, parking and loading areas, and pedestrian walkways.</li> <li>• Light fixtures with exposed light bulbs shall generally be avoided.</li> <li>• All light fixtures shall be shielded to confine the spread of light within the Agricultural Residential Cluster Subdivision boundaries.</li> </ul> <p><b>ARCS VR-1(f) Street Light Limitations.</b> Streetlights shall be pedestrian in scale, not to exceed a height of 10 feet, and shall be architecturally compatible with surrounding development. Streetlights, where they are included, shall be primarily for pedestrian safety (at roadway intersections only), and shall not provide widespread illumination.</p> <p><b>ARCS VR-1(g) Clear Excess Debris.</b> Upon completion of each phase of development, the developer shall clear the project site of all excess construction debris.</p> <p><b>ARCS VR-1(h) Grading.</b> Grading should preserve hillsides and natural topography to the maximum extent feasible. Grading transitions should be gentle rather than abrupt.</p> <p><b>ARCS VR-1(i) Accessory Structures/Infrastructure.</b> New roads shall be blended into the landscape and follow existing topography and vegetation patterns. Cut and fill slopes shall be contoured to conform to the prevailing adjacent landforms and landscapes and drainage swales should be used rather than curbs. Utility service for new development shall be underground.</p> <p>The following additional mitigation measures are also required to further reduce aesthetic impacts:</p> <p><b>FDP VR-1(a) Residential Siting and Design Standards.</b> Residential site locations shall be chosen to minimize aesthetic impacts. Considerations shall include, but not be limited to, the following:</p>	



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	<ul style="list-style-type: none"> <li>• Home sites shall be clustered in accordance with San Luis Obispo County LUO Section 22.104.040.A.1 and Section 22.22.150 (Agricultural Lands Clustering).</li> <li>• No building envelopes shall be located where they would create a skyline silhouette.</li> <li>• Lots shall be screened from roads to minimize impacts to visual corridors.</li> </ul> <p>Residential design shall blend new residences and associated improvements into the natural landscapes. This may include, but not be limited to, the following architectural considerations:</p> <ul style="list-style-type: none"> <li>• All buildings and associated improvements conform to existing topography.</li> <li>• For lots located on slopes, stepped foundations shall be used.</li> <li>• The height and scale of new development shall be compatible with that of surrounding development and/or surrounding natural environment. Residences located beneath the tree canopy shall not penetrate the canopy. Residences located in open space must visually relate to some other larger vertical element in the landscape, such as mature oak trees.</li> <li>• Building materials shall blend with the surrounding environment in terms of color, texture, non-reflectivity and scale.</li> <li>• Residences shall be designed to maximize the use of energy efficient climate control systems such as passive solar gain for heating and natural ventilation for cooling.</li> <li>• Extensive paved areas for long-term external storage of vehicles shall not be permitted.</li> <li>• Landscaping material standards shall be implemented to promote the use of native vegetation. Landscaping shall blend into the natural environment and screen the residence from view where feasible.</li> <li>• Walls and fences shall be designed in a style, materials and color to complement the buildings to which they are attached.</li> <li>• Attached multi-family development shall incorporate the following elements:                         <ul style="list-style-type: none"> <li>▪ Units that resemble large single family dwellings</li> <li>▪ Varied front setbacks within the same structure</li> <li>▪ Staggered unit plans</li> <li>▪ Use of reverse building plans to add variety</li> <li>▪ Maximum of two adjacent units with identical exterior wall and roof lines</li> <li>▪ A variety of orientations to avoid monotony</li> <li>▪ The units shall be clustered on the site.</li> </ul> </li> </ul>	





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	<ul style="list-style-type: none"> <li>The design of residential buildings shall include articulation to give them richness and scale. Long uninterrupted exterior walls shall be avoided. For dwellings with sloped roofs, both vertical and horizontal articulation is encouraged.</li> </ul> <p><b>FDP VR-1(b) Commercial Siting and Design Standards.</b> Potential commercial development under the Future Development Program includes a restaurant, café, hotel, bed &amp; breakfast, golf clubhouse and pro shop, and gift shops. Specific site locations for these developments shall be chosen to minimize aesthetic impacts. Considerations shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>Buildings shall be designed and placed at locations that will reduce their visibility from Highway 101, El Camino Real, State Route 58, West Pozo Road, and the community of Santa Margarita.</li> <li>No building envelopes shall be located where they would create a skyline silhouette.</li> <li>No development on slopes of 30 percent or greater.</li> </ul> <p>Commercial design shall blend new structures and associated improvements into the natural landscapes. This may include, but not be limited to, the following architectural considerations:</p> <ul style="list-style-type: none"> <li>Structures shall be visually broken up by creating horizontal emphasis through the use of trim or other elements, adding awnings, eaves or other ornamentation, by using a combination of complimentary colors, and through the use of landscaping.</li> <li>All areas to be utilized for storage, refuse, or loading shall be screened from view of access streets, roadways, or adjacent residences with berms, landscaping, low garden walls, fencing, or a combination of these features.</li> <li>Parking lot areas shall be landscaped using an orchard design with a minimum of one tree per three spaces planted at the rear of the parking space. In order to provide visual relief, glare reduction, and shade, large-canopy trees are recommended, with the requirement that a minimum of 50% of the trees used are of a species found in the project vicinity (i.e. <i>Quercus agrifolia</i>, <i>Quercus lobata</i>, and <i>Platanus racemosa</i>) to create a transition with the native vegetation along throughout the Santa Margarita Ranch.</li> <li>Buildings shall be designed to fit in with the landscape by utilizing alternative foundation systems such as split level, post and beam, etc., and use exterior</li> </ul>	



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	<p>materials and colors that blend with the surroundings.</p> <p><b>FDP VR-1(c) Golf Course Siting and Design Standards.</b> Future applicants shall be encouraged to design the golf course according to the philosophy of 'Natural Course Design.' Considerations shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• The course shall be planned around natural features, including topography, trees, vegetation, and streams. The existing contour of the land shall suggest the placement of holes and flow of the course.</li> <li>• Turf shall be limited to approximately 25% of the course in order to retain natural aesthetic of the area as well as to conserve water resources.</li> <li>• Siting and design considerations for the club house, pro shop, and/or other appurtenant facilities shall be similar to the Commercial Siting and Design Standards noted in mitigation measure AES(FDP)-1(b).</li> </ul> <p><b>FDP VR-1(d) Hillside.</b> Protect hillside as a visual amenity by implementing design standards and grading requirements that call for:</p> <ul style="list-style-type: none"> <li>• Decreasing density as slope increases;</li> <li>• Limiting the amount of grading;</li> <li>• Providing substantial amounts of landscaping;</li> <li>• Incorporating architectural treatment that enhances the form of the hillside rather than conflicting with it;</li> <li>• Limiting the number of building sites that may be placed on prominent ridgelines;</li> <li>• Ensuring sensitive design of development on steep slopes, and on the crest of major ridgelines. Considerations for development on steep slopes shall include the following: <ul style="list-style-type: none"> <li>▪ Avoid slope stability hazards by restricting development from slopes of 30 percent or greater.</li> <li>▪ Site-specific visual assessments (with and without the project) to thoroughly evaluate the visual effects of development proposals on slopes of 30 percent or greater.</li> <li>▪ For new development located on ridges and hills consider providing a substantial building setback from the edge of the downhill slope and/or screening landscaping, where the slope exceeds 15 percent.</li> </ul> </li> </ul>	
<b>WATER AND WASTEWATER</b>		
<b>FDP Impact W-1</b> The Future Development Program would	The following mitigation measures would apply to all Future Development Program land uses:	Implementation of the required measures would reduce the



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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<p>increase the use of water from area aquifer units, including the Paso Robles and Santa Margarita Formations, by 926 acre-feet per year (afy). This net consumptive use may contribute to overdraft of the aquifer system. Groundwater use associated with the Future Development Program is a Class I, <i>significant and unavoidable</i>, impact.</p>	<p><b>ARCS W-1(a) Groundwater and Surface Water Monitoring Programs.</b> A comprehensive groundwater monitoring program shall be established by the applicant in consultation with the County Public Works Department, Planning and Building Department, and the Regional Water Quality Control Board (RWQCB) to collect annual well production data, semiannual groundwater level data from all available wells, and semi-annual (dry and wet weather) water quality testing of key constituents of potential concern (i.e., nitrate). The applicant shall provide additional facilities as necessary to monitor the anticipated impacts on groundwater resources for each phase of Agricultural Residential Cluster development. Up gradient and down gradient monitoring locations shall be established.</p> <p>A comprehensive stream flow monitoring program shall also be established and funded by the applicant in consultation with the County Public Works Department, Planning and Building Department, and RWQCB. The monitoring program shall include new monitoring stations on Trout Creek and Rinconada Creek.</p> <p>Monitoring data shall be provided by the applicant annually to County Public Works, Planning and Building, and RWQCB. Remedial action shall be developed based on the significance of the adverse conditions documented by the groundwater and surface water monitoring programs and subsequently implemented. Remedial action may include water rationing, including the prohibition of later phases of development until adequate water supply is demonstrated, and/or the importation of additional water supply [refer to Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply)].</p> <p><b>ARCS W-1(b) Water Conservation Measures.</b> The applicant shall implement water conservation measures, including, but not limited to:</p> <ul style="list-style-type: none"> <li>• Using available and proven technologies and equipment that provide adequate performance with a substantial water savings. This may include the installation of high efficiency washing machines and ultra-low flush toilets and/or the use of micro sprinklers or drip tape for domestic and agricultural irrigation, installation of hot water pipe circulating systems or “point-of-use” water heaters. Installation of these water conservation measures shall be included in CC&amp;Rs for residential lots and monitored by a homeowners association or similar entity;</li> <li>• Implementing tiered commodity rates for water sales that increase with higher water usage to financially encourage each resident to conserve water;</li> <li>• Establishing low water use landscaping on all common landscaped areas</li> </ul>	<p>overall water system demand. However, additional water supply would still be required. Additional water may be available for the Future Development Program land uses through the State Water Project and/or the Nacimiento Water Project, as outlined in ARCS W-1(c). However, due to uncertainty regarding timing and availability of these sources, additional water supply cannot be assured at this time. Impacts would remain significant and unavoidable. Refer to the <i>Residual Impacts</i> discussion under Agricultural Residential Cluster Subdivision W-1, which also applies to the Future Development Program.</p>



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	<p>greater than 0.1 acres, including low water use irrigation methods such as drip irrigation;</p> <ul style="list-style-type: none"> <li>• Limiting total residential irrigated landscape areas to 1,500 square feet and limiting turf (lawn) areas to no more than 20% of residential irrigated landscape areas (or 300 square feet at maximum); and</li> <li>• Providing and updating an educational brochure regarding water conservation.</li> </ul> <p><b>ARCS W-1(c) Imported Water Supply.</b> The applicant shall acquire imported water supply to serve the Agricultural Residential Cluster Subdivision. Potential sources include State Water and/or the Nacimiento Water Project.</p> <p>Water supply would need to be acquired prior to issuance of grading permits for individual Future Development Program land use components, and would be coordinated through the required Specific Plan. The Specific Plan will also be required to include a comprehensive water supply analysis pursuant to California Senate Bill (SB) 610 [Water Code §10910(g)(3), Water Supply Assessments] and California Senate Bill (SB) 221 [Government Code §66473.7(b)(2), Written Verifications of Water Supply]. The following additional mitigation measure is required.</p> <p><b>FDP W-1(a) Reclaimed Water.</b> Reclaimed water from the envisioned Future Development Program municipally operated sanitary sewer and treatment plant shall, to the extent feasible, be collected and applied for irrigation or turf/landscape areas, including the envisioned golf course [refer to Future Development Program measure W-2(b) (Wastewater Master Plan) for specifics concerning implementation of the wastewater treatment facility]. A qualified professional shall prepare a reclaimed water use plan that outlines the preferred locations of landscaping for such irrigation, with an evaluation of the expense and maintenance hours required for operating and monitoring the irrigation facilities, subject to County approval. The plan shall also evaluate the feasibility of recharging groundwater with treated effluent, including the identification of recharge sites, and analysis of the assimilative capacity of the groundwater for constituents of concern. Water Reclamation Requirements will be required for all recycled water uses.</p>	



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<b>AIR QUALITY</b>		
<p><b>FDP Impact AQ-1</b> The Future Development Program involves development of equestrian facilities, a livestock sales yard, nine wineries, and private septic systems. All of these uses have the potential to generate odor nuisance effects. These impacts are Class II, <i>significant but mitigable</i>.</p>	<p>The following mitigation is required:</p> <p><b>FDP AQ-1(a) Odor Abatement Plan.</b> Future applicants for wineries shall develop and implement an Odor Abatement Plan (OAP). The OAP shall include the following:</p> <ul style="list-style-type: none"> <li>• Name and telephone number of contact person(s) responsible for logging and responding to winery odor complaints;</li> <li>• Policy and procedure describing the actions to be taken when an odor complaint is received, including the training provided to the responsible party on how to respond to an odor complaint;</li> <li>• Description of potential odor sources (i.e. fermentation and aging processes and the resultant ethanol emissions);</li> <li>• Description of potential methods for reducing odors, including minimizing potential add-on air pollution control equipment; and</li> <li>• Contingency measures to curtail emissions in the event of a continuous public nuisance.</li> </ul>	<p>With implementation of the above measure, the Future Development Program would have less than significant odor nuisance impacts.</p>
<p><b>FDP Impact AQ-3</b> Buildout of envisioned Future Development Program land uses would result in construction-related emissions. These emissions may result in short-term adverse impacts to local air quality. However, such emissions would be temporary and would be mitigated on a specific development basis. Construction air quality impacts are therefore considered Class II, <i>significant but mitigable</i>.</p>	<p>The following mitigation measures would apply to all Future Development Program land uses:</p> <p><b>ARCS AQ-2(a) Construction Equipment Controls.</b> Upon application for grading permits, the applicant shall submit grading plans, the proposed rate of material movement and a construction equipment schedule to the APCD. In addition, the applicant shall implement the following measures to mitigate equipment emissions:</p> <ul style="list-style-type: none"> <li>• All construction equipment and portable engines shall be properly maintained and tuned according to manufacturer's specifications;</li> <li>• All off-road and portable diesel powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB-certified motor vehicle diesel fuel;</li> <li>• The applicant shall maximize to the extent feasible, the use of diesel construction equipment meeting the California Air Resources Board's 1996 (or newer) certification standard for off-road heavy-duty diesel engines.</li> <li>• All on and off-road diesel equipment shall not be allowed to idle for more than 5 minutes. Signs shall be posted in the designated queuing areas to remind drivers and operators of the 5 minute idling limit;</li> <li>• The applicant shall electrify equipment where feasible;</li> <li>• The applicant shall substitute gasoline-powered for diesel-powered</li> </ul>	<p>With implementation of the above mitigation measures, construction air quality impacts would be reduced to a less than significant level.</p>



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	<p>equipment where feasible;</p> <ul style="list-style-type: none"> <li>• The applicant shall use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, where feasible; and</li> <li>• The applicant shall apply Best Available Control Technology (CBACT) as determined by the APCD.</li> </ul> <p><b>ARCS AQ-2(b) Dust Control.</b> The following measures shall be implemented to reduce PM<sub>10</sub> emissions during Agricultural Residential Cluster Subdivision construction:</p> <ul style="list-style-type: none"> <li>• Reduce the amount of the disturbed area where possible;</li> <li>• Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Water shall be applied as soon as possible whenever wind speeds exceed 15 miles per hour. Reclaimed (nonpotable) water should be used whenever possible;</li> <li>• All dirt-stock-pile areas shall be sprayed daily as needed;</li> <li>• Permanent dust control measures shall be identified in the approved project revegetation and landscape plans and implemented as soon as possible following completion of any soil disturbing activities;</li> <li>• 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;</li> <li>• 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 the APCD;</li> <li>• All roadways, driveways, sidewalks, etc., to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used;</li> <li>• Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;</li> <li>• All trucks hauling dirt, sand, soil or other loose materials shall be covered or shall maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;</li> <li>• Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site; and</li> <li>• Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible.</li> </ul>	



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	<p>The above measures shall be shown on development plans.</p> <p><b>ARCS AQ-2(c) Cover Stockpiled Soils.</b> If importation, exportation, or stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting material shall be tarped from the point of origin.</p> <p><b>ARCS AQ-2(d) Dust Control Monitor.</b> The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering as necessary to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress.</p> <p><b>ARCS AQ-2(e) Active Grading Areas.</b> Prior to commencement of tract improvements, a Construction Management Plan shall be submitted for county approval that shows how the project will not exceed continuous working of more than four acres at any given time (according to the APCD, any project with a grading area greater than 4 acres of continuously worked area will exceed the 2.5 ton PM<sub>10</sub> quarterly threshold). The Dust Control Monitor shall verify in the field during tract improvements that the Construction Management Plan is being followed.</p> <p><b>ARCS AQ-2(f) Naturally Occurring Asbestos.</b> Prior to grading on the Agricultural Residential Cluster Subdivision site, the applicant shall ensure that a geologic evaluation is conducted to determine if naturally occurring asbestos is present within the areas that will be disturbed. At a minimum, the geologic evaluation must include:</p> <ol style="list-style-type: none"> <li>1. A general description of the property and the proposed use;</li> <li>2. A detailed site characterization which may include:               <ol style="list-style-type: none"> <li>a. A physical site inspection;</li> <li>b. Offsite geologic evaluation of adjacent property;</li> <li>c. Evaluation of existing geological maps and studies of the site and surrounding area;</li> <li>d. Development of geologic maps of the site and vicinity;</li> <li>e. Identification and description of geologic units, rock and soil types, and features that could be related to the presence of ultramafic rocks, serpentine, or asbestos mineralization; and</li> <li>f. A subsurface investigation to evaluate the nature and extent of geologic materials in the subsurface where vertical excavation is planned; methods of subsurface investigation may include, but are not limited to borings, test pits,</li> </ol> </li> </ol>	



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	<p>trenching, and geophysical surveys;</p> <ol style="list-style-type: none"> <li>3. A classification of rock types found must conform to the nomenclature based on the International Union of Geological Science system;</li> <li>4. A description of the sampling procedures used;</li> <li>5. A description of the analytical procedures used, which may include mineralogical analyses, petrographic analyses, chemical analyses, or analyses for asbestos content;</li> <li>6. An archive of collected rock samples for third party examination; and</li> <li>7. A geologic evaluation report documenting observations, methods, data, and findings; the format and content of the report should follow the Guidelines for Engineering Geologic Reports issued by the State Board of Registration for Geologists and Geophysicists.</li> </ol> <p>If naturally occurring asbestos is not present, an exemption request must be filed with the APCD. If naturally occurring asbestos is found, the applicant must comply with all requirements outlined in the State ARB's Asbestos Air Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations. These requirements may include but are not limited to: 1) an Asbestos Dust Mitigation Plan which must be approved by APCD before construction begins, and 2) an Asbestos Health and Safety Program.</p> <p>The Asbestos Dust Mitigation Plan must specify dust mitigation practices which are sufficient to ensure that no equipment or operation emits dust that is visible crossing the property line, and must include one or more provisions addressing: track-out prevention and control measures; adequately watering or covering with tarps active storage piles; and controlling for disturbed surface areas and storage piles that will remain inactive for more than seven (7) days.</p> <p>An Asbestos Health and Safety Program would be required if <del>substantial</del> grading were to occur in serpentine or ultramafic rock deposits with <del>high</del> such concentrations of asbestos present that there is potential to exceed the Cal OSHA asbestos permissible exposure limit (PEL: 0.1 fiber/cc). If required, the Asbestos Health and Safety Program shall be designed by a certified asbestos consultant to ensure the personal protection of workers. The Asbestos Health and Safety Program will include, but will not be limited to, an air monitoring plan approved by the APCD to include: air monitoring in the worker breathing zone, the use of respirators, and/or decontamination.</p>	





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<b>BIOLOGICAL RESOURCES</b>		
<p><b>FDP Impact B-1</b>                      Implementation of Future Development Program land uses would result in the conversion of California Annual Grassland habitat to urban uses. This is a Class II, <i>significant but mitigable</i>, impact.</p>	<p>The following mitigation measures would apply to all Future Development Program land uses:</p> <p><b>ARCS B-2(a) Native Perennial Grassland Restoration Plan</b> (<i>see mitigation for FDP Impact B-2</i>)</p> <p><b>ARCS B-8(a) California Red-legged Frog Avoidance, Minimization, and Mitigation Measures.</b> Subject to concurrence by and coordination with the USFWS, required measures shall include the following:</p> <ul style="list-style-type: none"> <li>• At least 45 days prior to the onset of activities, the applicant shall submit the name(s) and credentials of biologists who would conduct activities specified in the following measures. No project activities shall begin until proponents have received written approval from the USFWS that the biologist(s) is qualified to conduct the work.</li> <li>• A USFWS-approved biologist shall survey the work site and suitable habitat within 330 feet of work sites two weeks before the onset of activities. If CRLF, tadpoles, or eggs are found, relocations shall be conducted only if authorized by the USFWS. If USFWS approves moving animals, the approved biologist shall be allowed sufficient time to move CRLF from the work site before work activities begin. Only USFWS-approved biologists shall participate in activities associated with the capture, handling, and monitoring of CRLF. All conditions specified by the USFWS exemption or authorization shall be implemented regarding relocation of this species.</li> <li>• If CRLF are found during the preconstruction surveys within 330 feet of any work area, and for any areas already known to be occupied by CRLF, work within 330 foot of these habitats must be limited to the period between April 30 to July 30 or the work area must be surrounded by exclusionary fencing to reduce impacts to frogs that are in upland areas during the rainy season or juvenile dispersal. The exclusionary fencing shall be at least three feet high and keyed into the ground, made of solid mesh (such as silt fence; orange construction fence is not suitable) and shall be maintained throughout the construction period. This fencing can also function for erosion and sedimentation control. An approved biologist must survey the project limits for CRLF each morning prior to the start of work. Any CRLF found within the work area shall be relocated, if authorized by the USFWS.</li> </ul>	<p>Implementation of the mitigation measures listed above would reduce impacts to California Annual Grassland habitat and special-status species that may use these habitats to a less than significant level.</p>



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	<p>If relocations are not authorized by the USFWS, the fence shall be modified to allow the frog to pass through to suitable habitat, and work shall not commence until it has left.</p> <ul style="list-style-type: none"> <li>• Before any construction activities begin on the Agricultural Residential Cluster Subdivision, a USFWS-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the CRLF and its habitat, the importance of the CRLF and its habitat, the general measures that are being implemented to conserve the CRLF as they relate to the project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.</li> <li>• A USFWS-approved biologist shall be present at the work site until such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance have been completed. After this time, the contractor or permittee shall designate a person to monitor the on-site compliance with all minimization measures. The USFWS approved biologist shall ensure that this individual receives training outlined above and in the identification of CRLF. The monitor and the USFWS-approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by USFWS during review of the proposed action. If work is stopped, USFWS, and the ACOE as applicable, shall be notified immediately by the USFWS-approved biologist or on-site biological monitor.</li> <li>• During project activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from the work areas.</li> <li>• All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 100 feet from any riparian habitat or water body. The permittee, and ACOE as applicable, shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the permittee shall prepare and comply with a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take</li> </ul>	



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	<p>should a spill occur.</p> <ul style="list-style-type: none"> <li>• A USFWS-approved biologist shall ensure that the spread or introduction of invasive non-native plant and animal species, especially bullfrogs shall be avoided to the maximum extent possible. Invasive exotic plants and animals in the development shall be removed and destroyed.</li> <li>• Agricultural Residential Cluster Subdivision riparian and wetland areas shall be revegetated with an appropriate assemblage of native riparian wetland and upland vegetation suitable for the area. A species list and restoration and monitoring plan shall be included with the project proposal for review and approval by USFWS, and the ACOE as applicable. Such a plan must include, but not be limited to: location of the restoration, species to be used, restoration techniques, time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.</li> <li>• Stream contours shall be returned to their original condition at the end of project activities, unless consultation with USFWS has determined that it is not beneficial to the species or feasible.</li> <li>• The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary for development. Routes and boundaries shall be clearly demarcated, and these areas shall be outside of riparian and wetland areas. Where impacts occur in these staging areas and access routes, restoration shall occur as identified in the above measures.</li> <li>• A 200 foot permanent buffer (from the edge of the high water line for ponds, or from the top of bank on either side of creeks) shall be established and maintained in perpetuity around water bodies with confirmed occurrences of CRLF. This includes the lengths of Trout, Tostada, and Yerba Buena Creeks; an upstream pool in Taco Creek; and any stock ponds that may contain CRLF. In the short term, this buffer will ensure construction activities do not increase the erosion potential in the area or facilitate construction related sediment from entering the creeks. The buffer shall be demarcated with highly visible construction fencing for the benefit of contractors and equipment operators. In the long term, this buffer will minimize impacts to riparian and emergent wetland habitats that are critical</li> </ul>	



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	<p>for upland habitat use by CRLF, and reduce the amount of sediment and pollutant runoff that would enter these waterways. Roadways, grading, landscaping, structures and other types of disturbance shall be prohibited within these buffer areas. Road crossings of these streams are allowable (if permitted by the appropriate agencies) following the measures listed above. Permanent buffer areas shall be demarcated with a type of fencing that would prohibit vehicular and livestock access, discourage use by humans, but allow access by wildlife. An example of fencing that could meet these requirements is welded pipe fence such as the type that exists at the entrance of the Agricultural Residential Cluster Subdivision.</p> <ul style="list-style-type: none"> <li>• Areas of temporary disturbance resulting from the construction or improvements to road crossings shall be restored using native vegetation at a minimum of 2:1 (area restored to area temporarily impacted). However, agency permitting for impacts to riparian and/or wetland resources may require a higher ratio. Additional details required for the riparian restoration plan are contained within measure B-4(a).</li> <li>• Restrictions on the use of pesticides near water bodies with confirmed occurrences of CRLF.</li> </ul> <p><b>ARCS B-9(c) Pre-construction Bird Survey.</b> To avoid impacts to nesting special-status bird species, namely the state Fully Protected white-tailed kite and golden eagle, the federally-threatened and Fully Protected bald eagle, other special-status bird species listed in Table 4.3-4, and all birds protected under the Migratory Bird Treaty Act, the initial ground-disturbing activities and tree removal shall be limited to the time period between September 1 and February 15. If initial site disturbance, grading, and tree removal cannot be conducted during this time period, a pre-construction survey for active nests within the limits of grading shall be conducted by a qualified biologist at the site two weeks prior to any construction activities. All potential nest locations shall be searched by the biologist including, but not limited to grassland, chaparral, central coastal scrub, and oak woodlands. If active nests are located, all construction work must be conducted outside a buffer zone from the nests to be determined by a qualified biologist. No direct disturbance to nests shall occur until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed and young have fledged the nest prior to the start of construction in the buffer zone. Surveys following the <i>Protocol for Evaluating Bald Eagle Habitat and Populations in California Bald Eagle</i> (Jackson and Jennings, 2004) are also required.</p>	



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	<p><b>ARCS B-9(d) American Badger Avoidance.</b> The mitigation measures below are recommended to determine whether badgers are present in the area prior to development and to prevent American badgers from becoming trapped in burrows during construction activities.</p> <ul style="list-style-type: none"> <li>• A pre-construction survey for active American badger dens shall be conducted within one month of initial ground disturbance activities by a County qualified biologist. To avoid the potential direct take of adults and nursing young, no grading shall occur within 50 feet of an active badger den as determined by a County-approved biologist between March 1 and June 30.</li> </ul> <p>Construction activities during July 1 through March 1 shall comply with the following measures to avoid direct take of adult and weaned juvenile badgers:</p> <ul style="list-style-type: none"> <li>• A County-approved biologist shall conduct a biological survey of the entire development area prior to the start of ground clearing or grading activity. The survey shall cover the entire area proposed for development. Surveys shall focus on both old and new den sites. If dens are too long to see the end, a fiber optic scope (or other acceptable method such as den characteristics) shall be used to assess the presence of badgers. If no fiber optic scope is available, occupation of the potential dens by badgers can be ascertained by dusting the den openings with a fine layer of dust for three successive nights and looking for footprints or other evidence of occupation. Inactive dens shall be excavated by hand with a shovel to prevent badgers from re-using them during construction.</li> <li>• If American badger dens are found, the qualified biologist shall establish and clearly mark an appropriate buffer zone to protect the den. No grading or construction activities shall occur within the buffer zone until the biologist can safely close the badger den and has removed the buffer zone markings.</li> </ul> <p>Future Development Program measures B-5(a) (Seasonally-Timed Rare Plant Surveys) and B-6(a) (VPFS Presence/Absence Determination) reduce impacts. No additional mitigation is required.</p>	



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<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
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<p><b>FDP Impact B-3</b> Implementation of the Future Development Program would result in the conversion of Native Perennial Grasslands, including Valley Needlegrass Grassland, which is a CDFG Sensitive Natural Community. This would be a Class II, <i>significant but mitigable</i>, impact.</p>	<p>The following measure would apply to all Future Development Program land uses:</p> <p><b>ARCS B-2(a) Native Perennial Grassland Restoration Plan.</b> The applicant shall contract with a qualified biologist to develop a Native Perennial Grassland Restoration Plan. The Plan would consist of enhancing the remaining Native Perennial grassland habitat found on-site or creating Native Perennial Grassland habitat within areas presently vegetated by California annual grassland. Specifically, the area of restoration should include at least 69 acres (2:1 ratio) with at least 10% cover by purple needlegrass, deergrass, or California oatgrass, and should include open areas within blue oak woodland and coast live oak woodland. In addition, native forbs shall be established in the restoration areas representing the species composition and relative cover that is present in the areas to be lost. Other areas consisting of California Annual Grassland such as between Lots 88 and 108 are also suitable for enhancement. In such areas, grassland management strategies such as seasonal mowing shall be employed, which will allow for a higher likelihood that perennial grasses could compete with the annual grasses found within these areas. The following measures shall be implemented.</p> <ol style="list-style-type: none"> <li>1. A county-approved botanist/biologist shall develop a Plan that provides specific measures to enhance and maintain the remaining on-site occurrences of Native Perennial Grassland. This Plan shall be focused on adaptive management principles, and shall identify detailed enhancement areas and strategies based on the parameters outlined below, with timing and monitoring long-term requirements. The Plan shall:             <ol style="list-style-type: none"> <li>a. Provide an up-to-date inventory of on-site occurrences of Native Perennial Grassland habitat;</li> <li>b. Define attainable and measurable goals and objectives to achieve through implementation of the Plan;</li> <li>c. Provide site selection and justification;</li> <li>d. Detail restoration work plan including methodologies, restoration schedule, plant materials (seed), and implementation strategies.</li> <li>e. Provide a detailed maintenance plan to include mowing to provide a sufficient disturbance regime to keep non-native plant species from further reducing the extent of this habitat type on the property over time. This approach would also have the residual benefit of providing wildland fire protection. Enhancement and maintenance options shall employ recent</li> </ol> </li> </ol>	<p>The implementation of the above mitigation measure would reduce impacts to Native Perennial Grassland habitat to a less than significant level.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>techniques and effective strategies for increasing the overall area of Native Perennial Grassland on-site and shall include but not be limited to reseeded disturbed areas with an appropriate native plant palette;</p> <p>f. Define performance standards. Within the agriculture residential cluster subdivision project area, the restored area should include at least 69 acres (2:1 ratio) with at least 10% cover by native perennial grasses; and,</p> <p>g. Provide a monitoring plan to include methods and analysis of results. Also, include goal success or failure and an adaptive management plan and suggestions for failed restoration efforts.</p>	
<p><b>FDP Impact B-4</b>                      Implementation of the Future Development Program would impact wetland and waters of the U.S. regulated by the U.S. Army Corps of Engineers (ACOE) and Regional Water Quality Control Board (RWQCB) and riparian areas regulated by the California Department of Fish and Game (CDFG). This is a Class II, <i>significant but mitigable</i> impact.</p>	<p>The following mitigation measure would apply to all Future Development Program land uses:</p> <p><b>ARCS B-4(a) Wetland and Riparian Protection.</b> Implementation of the following measures is required to mitigate the loss of riparian/wetland habitat:</p> <ol style="list-style-type: none"> <li>1. Building envelopes shall be located so that all riparian and wetland habitat is buffered from development (including grading) by a minimum 200 foot setback from Trout, Yerba Buena and Tostada Creeks, or any other habitats found to support CRLF or Steelhead. Other wetlands and waters of the U.S. or state shall have a minimum setback of 100 feet. If seasonal pools contain VPFS, a minimum 300 foot setback shall be required. Setback requirements may be increased by the Corps, RWQCB, CDFG, NMFS and/or USFWS.</li> <li>2. The wetland and riparian habitat area buffer zones for preserved wetland and riparian areas shall be shown on all grading plans and shall be demarcated with highly visible construction fencing to ensure that these areas are not impacted during construction-related activities.</li> <li>3. Erosion control measures including, but not limited to straw wattles, silt fences, and fiber mats shall be implemented at the limits of grading to reduce sediments from entering the wetland and riparian habitat area buffer zones.</li> <li>4. Outlet structures shall minimize disturbance to the natural drainage and avoid use of hard bank structures. Where erosion of outlet structures is a concern and bank stabilization must be utilized, bioengineering techniques (e.g., fiber mats and rolls, willow wattling, and natural anchors) shall be used for bank retaining walls. If concrete must be used, then prefabricated crib wall construction shall be used rather than pouring concrete. Rock grouting shall only be used if no other feasible alternative is available as determined by Planning and Building.</li> <li>5. Disturbance to drainage bottoms due to the installation of any drain or outlet</li> </ol>	<p>Implementation of required mitigation measures would reduce impacts to a less than significant level. In addition, obtaining all the required ACOE, CDFG, and RWQCB permits for impacts within jurisdictional areas and implementation of the required fuel modification zone restrictions would result in a net-loss of functions and values to riparian/wetland habitats on-site.</p>



**Table ES-4. Summary of Future Development Program  
 Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>structures shall be minimized to the greatest extent possible and shall be permitted by all appropriate regulatory agencies as described in 8 below.</p> <p>6. A grease trap and/or silt basin shall be installed in all drop inlets closest to the creek to prevent oil, silt and other debris from entering the creek. Such traps/basins shall be maintained and cleaned out every spring and fall to prevent overflow situations and potential mosquito habitats from forming;</p> <p>If impacts to wetland and/or riparian habitat are not fully avoided, the following shall be implemented.</p> <p>7. Future applicants shall obtain a permit from the ACOE pursuant to Section 404 of the Clean Water Act, a water quality certification from the RWQCB pursuant to Section 401 of the Clean Water Act, and a Streambed Alteration Agreement from the CDFG pursuant to Section 1600 et seq. of the California Fish and Game Code for any grading or fill activity within drainages and wetlands.</p> <p>For development of Roads C, D, and H, which are proposed to cross Tostada Creek, the applicant shall consult with the ACOE and CDFG in designing creek crossings. Where appropriate, and if there is concurrence with ACOE and CDFG, pre-engineered bridge structures are recommended to minimize disturbance within the western portion of Tostada Creek.</p> <p>It is recommended that future applicants contact these agencies prior to final plan submittal in order to incorporate any additional requirements into the project design. As part of the permitting process, applicants will be required to provide a compensatory habitat mitigation and monitoring program for impacts to jurisdictional areas. The plan shall be written and implemented by a qualified biologist, and shall at a minimum include the following components:</p> <ul style="list-style-type: none"> <li>a. Mitigation plantings for the loss of existing wetland and riparian habitat shall be located in drainages that are to be modified or preserved to the fullest extent feasible. The mitigation program must provide a minimum 2:1 ratio of habitat values and functions to that impacted. However, agency permitting may require a higher ratio.</li> <li>b. As part of the plan, future applicants shall include a mitigation-phasing section to ensure that all restoration plantings are in place with sufficient irrigation prior to final inspection.</li> <li>c. Restoration/revegetation activities shall use native riparian and wetland species from locally collected stock.</li> <li>d. Removal of native species in creeks/drainages shall be prohibited; however,</li> </ul>	





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 Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<p>select willow cuttings and emergent plant division are permissible.</p> <ul style="list-style-type: none"> <li>e. Prior to commencement of grading, future applicants shall file a performance security with the County to complete restoration and maintain plantings for a five (5) year period.</li> <li>f. Outlet structures shall minimize disturbance to the natural drainage and avoid use of hard bank structures. Where erosion of outlet structures is a concern and bank stabilization must be utilized, bioengineering techniques (e.g., fiber mats and rolls, willow wattling, and natural anchors) shall be used for bank retaining walls. If concrete must be used, then prefabricated crib wall construction shall be used rather than pouring concrete. Rock grouting shall only be used if no other feasible alternative is available as determined by Planning and Building.</li> <li>g. The drainage bottoms shall not be disturbed or altered by installation of any drain or outlet structure.</li> <li>h. A grease trap and/or silt basin shall be installed in all drop inlets closest to creeks to prevent oil, silt and other debris from entering the creek. Such traps/basins shall be maintained and cleaned out every spring and fall to prevent overflow situations and potential mosquito habitats from forming; and</li> <li>i. Construction envelopes shall be restricted to avoid impacts to native vegetation and sensitive habitats. Envelope boundaries shall be staked in the field. Construction envelopes shall be shown on all grading and building plans.</li> </ul> <p>Because these habitat types support special status animal species, impacts to this habitat type would require the following mitigation:</p> <p><b>ARCS B-6(a) VPFS Presence/Absence Determination.</b> Prior to issuance of Grading Permits, a USFWS protocol wet season survey shall be conducted prior to 2010/2011 by a qualified and federally permitted biologist to complete protocol survey requirements to conclusively determine the presence or absence of VPFS within the Agricultural Residential Cluster Subdivision site. The wet season survey shall include surveys of SP 1, 2, 3, 4, 5, 6, and 7 per the USFWS (1996) guidelines. A report consistent with current federal reporting guidelines shall be prepared to document the methods and results of surveys. Should the presence of VPFS or additional special-status wildlife species be determined, a map identifying locations in which these species were found shall be prepared and included in the report.</p> <p>If the surveys produce a negative finding for the presence of VPFS, then no further mitigation would be required. If VPFS are identified within SP 1, 2, 3, 4, 5, 6, or 7,</p>	



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<p>then Agricultural Residential Cluster Subdivision measure B-6(b) would be required.</p> <p><b>ARCS B-6(b) Mitigation for VPFS.</b> This measure shall only apply if VPFS are identified during USFWS protocol surveys.</p> <p>The applicant shall implement measures that minimize the Agricultural Residential Cluster Subdivision adverse effects on VPFS. Subject to concurrence by and coordination with USFWS, required measures may include the following:</p> <ul style="list-style-type: none"> <li>• Avoidance of occupied habitats and a three hundred-foot setback from occupied habitats; and</li> <li>• Where avoidance is not possible, compensatory mitigation for impacts to occupied habitats at a 3:1 ratio, and impacts to potentially suitable habitats in which VPFS were not found at a 2:1 ratio.</li> </ul> <p>A USFWS permitted biologist familiar with VPFS habitat “creation” techniques shall review VPFS mitigation areas. Enhancement of vernal pool/wetland habitat that is undisturbed by Future Development Program construction may also be a part of the mitigation program for any impacted VPFS habitats. Upon approval from the USFWS, an appropriate salvage and relocation methodology will be selected that will include the following:</p> <ul style="list-style-type: none"> <li>• Shrimp cysts shall be collected during the dry season from the existing habitat and placed into storage;</li> <li>• Topsoil shall also be removed and stored under conditions suitable to retain cysts, and used as a top dressing for created vernal pools as proposed in the VPFS mitigation plan;</li> <li>• If topsoil is not used, preserved cysts would be added to the recreated vernal pool/wetlands in December or January, after sufficient pooling has occurred.</li> </ul> <p><b>ARCS B-7(a) South/Central California Coast Steelhead (Steelhead) Mitigation, Minimization and Protection Plan.</b> Steelhead have been identified on-site and setbacks from their identified habitat shall be implemented to avoid or minimize impacts to this federally listed species and its habitat. Prior to development, a Steelhead Protection Plan shall be prepared by a qualified Steelhead biologist to protect Steelhead within the on-site portions of Trout and Tostada Creeks. The plan shall include, but not be limited to the following:</p>	



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	<ul style="list-style-type: none"> <li>• A 200 foot permanent buffer from the top of bank of Trout and Tostada Creeks and 50 foot buffer or minimum setback from ephemeral drainages that are tributaries to Trout Creek shall be established and maintained in perpetuity. In the short term, this buffer will ensure construction activities do not increase the erosion potential in the area or facilitate construction related sediment from entering the creek. The buffer shall be demarcated with highly visible construction fencing for the benefit of contractors and equipment operators. In the long term, this buffer will minimize impacts to riparian habitats that are critical for Steelhead, and reduce the amount of sediment and pollutant runoff that would enter these waterways. Roadways, grading, landscaping, structures and other types of disturbance shall be prohibited within these buffer areas, with the exception of road crossings, as detailed below.</li> <li>• Road crossings of Trout and Tostada Creeks are allowable (if permitted by the appropriate agencies) if the following measures are implemented. The crossings must be designed following the NMFS Southwest Region's (2001) Guidelines for Salmonid Passage at Stream Crossings [<a href="http://swr.nmfs.noaa.gov/hcd/MNFSSCG.PDF">http://swr.nmfs.noaa.gov/hcd/MNFSSCG.PDF</a>]. Clear-span structures are recommended. Areas of temporary disturbance resulting from the construction or improvements to road crossings shall be restored using native vegetation at a minimum of 2:1 (area restored:area temporarily impacted). However, agency permitting for impacts to riparian and/or wetland resources may require a higher ratio. Additional details required for riparian restoration are contained within measure B-4(a).</li> <li>• The applicant shall prepare and submit for approval to the County a sediment and erosion control plan that specifically seeks to protect waters and riparian woodland resources adjacent to construction site. Erosion control measures shall be implemented to prevent runoff into Trout and Tostada Creeks, ephemeral drainages, and wetlands. Silt fencing, straw bales, and/or sand bags shall be used in conjunction with other methods to prevent erosion and sedimentation of the stream channel. The plan shall specify locations and types of erosion and sediment control structures and materials that would be used on-site during construction activities. The plan shall also describe how any and all pollutants originating from construction equipment would be collected and disposed.</li> <li>• During construction activities, washing of concrete, paint, or equipment shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Washing will not be allowed in locations where the tainted water could affect sensitive biological resources.</li> </ul>	



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	<p>The applicant shall coordinate with the NOAA National Marine Fisheries Service and ACOE, and shall demonstrate compliance with Section 7 (federal nexus) and/or Section 10 (no federal nexus) of the federal Endangered Species Act (FESA), as applicable. This consultation may necessitate the issuance of a NMFS Biological Opinion and/or the preparation of a Habitat Conservation Plan for Steelhead and their habitat. The applicant shall also coordinate with CDFG and other resource agencies, as applicable. The applicant shall implement all measures prescribed by these agencies.</p> <p><b>ARCS B-8(a) California Red-legged Frog Avoidance, Minimization, and Mitigation Measures.</b> (see mitigation for FDP Impact B-1)</p> <p><b>ARCS B-9(b) Southwestern Pond Turtle Avoidance, Capture and Relocation.</b> A County approved biologist shall conduct spring surveys for this species before the onset of construction activities. The survey area shall include ponds with ponded water as well as on-site drainage corridors. If any southwestern pond turtles are found within 1,000 feet of construction activities such as lot grading or road construction, the approved biologist shall contact CDFG to determine if moving any individuals is appropriate. If CDFG approves moving animals, the biologist shall be allowed sufficient time to move the animals from the work site before work activities begin. If CDFG does not recommend moving the animals, a 1,000 foot buffer from the pond, seasonal pool, in stream pools, and /or nesting site shall be implemented. No grading or other construction activities shall occur within the set buffer. Only the approved biologist shall participate in activities associated with the capture and handling of turtles. Agricultural Residential Cluster Subdivision measures B-4(a), B-6(b), and B-8(a) will also benefit this species. B-4(a) will reduce direct impacts (development), restore impacted areas, and reduce potential indirect impacts (sedimentation and concrete/oil runoff) into wetlands and riparian habitat used for breeding and foraging by the southwestern pond turtle. B-6(b) will provide protection to seasonal pool/wetland habitat that are occupied by the federally-threatened VPFS and that may also be used by the SWPT and B-8(a) will provide federal protection to riparian and seasonal pool/wetland habitat that are occupied by the federally-threatened CRLF and that may also be used by the SWPT.</p> <p>The following additional mitigation measure is required:</p> <p><b>FDP B-4(a) Avoidance of Jurisdictional Wetlands and Waters of the U.S.</b> Future Development Program disturbance areas, including structures and grading, shall be</p>	



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	setback a minimum of 200 feet from Yerba Buena, Taco, Trout, and Santa Margarita Creeks. Wetlands, including seasonal pools, or waters of the U.S. or state shall be avoided with a minimum setback of 100 feet, or as otherwise determined by ACOE, RWQCB, NMFS and/or USFWS. Habitats occupied by VPFS require a minimum 300-foot setback, and those occupied by CRLF or Steelhead require a 200-foot setback.	
<p><b>FDP Impact B-5</b>                      Implementation of the Future Development Program would impact San Luis Obispo Owl's Clover, San Luis Obispo County Morning Glory, Santa Lucia manzanita and potentially other Special-Status Plant Species, occurring within the Future Development Program conceptual land use areas. This would be a Class II, <i>significant but mitigable</i> impact.</p>	<p>The following mitigation measures would apply to all Future Development Program land uses.</p> <p><b>ARCS B-5(a) Follow-Up Special-Status Plant Surveys.</b> Follow-up special-status plant surveys for San Luis Obispo mariposa lily and San Luis Obispo County morning glory shall be performed in the spring prior to commencement of ground disturbance. The survey for San Luis Obispo mariposa lily shall be required only on potential impact areas (i.e., Lots 2 through 19, Lots 43 through 49, Lots 51 through 66, and the portion of Roads A and B) containing San Luis Obispo mariposa lily that are delineated on Figure 4.3-2. The applicant shall submit to the County an updated San Luis Obispo mariposa lily population survey report of the Agricultural Residential Cluster Subdivision site conducted by a County approved botanist.</p> <p>The San Luis Obispo County morning glory has not previously been observed in the Agricultural Residential Subdivision area, but it is known to occur adjacent to the site southeast of Yerba Buena Creek in the Miller Flats area. Since suitable habitat exists, surveys shall be conducted prior to grading to determine whether this species exists in the project area.</p> <p>The purpose of the follow-up special-status plant surveys is to provide accurate baseline information for the preparation of the San Luis Obispo mariposa lily and San Luis Obispo County morning glory mitigation and monitoring plan for the areas proposed for construction. The follow-up will ensure a current and accurate assessment of the numbers of individuals within the Agricultural Residential Cluster Subdivision site that will be impacted by development. The updated survey shall quantify the total number of individuals within each lot and road segment proposed for development. Areas occupied by these species shall be flagged (and/or identified using a Global Positioning System) for future bulb and plant salvage and seed collection efforts.</p> <p><b>ARCS B-5(b) San Luis Obispo Mariposa Lily and San Luis Obispo County Morning Glory Monitoring Plan.</b> Prior to the issuance of any grading permits, a mitigation and monitoring plan that addresses impacts to the San Luis Obispo</p>	<p>The implementation of the above mitigation measures would reduce impacts to a less than significant level.</p>



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	<p>mariposa lily and San Luis Obispo County morning glory (if present) shall be prepared and approved by the County and CDFG. The detailed mitigation and monitoring plan shall be developed by a County-approved qualified biologist to protect and enhance the remaining occurrences of these species within the Agricultural Residential Cluster Subdivision site and describe a collection and restoration plan to mitigate for impacted areas. The mitigation and monitoring plan shall at a minimum to include the following:</p> <ul style="list-style-type: none"> <li>• A worker education program that shall include identification of special-status plant species and their habitat, the limits of construction, efforts required to reduce impacts to these species, and a fact sheet summarizing this information;</li> <li>• Description of a collection plan to ensure that all San Luis Obispo mariposa lily bulbs and seeds from San Luis Obispo County morning glory plants located within 25 feet of the proposed lots and roads will be removed by a qualified biologist during the appropriate season prior to clearing and grading activities associated with lot development and road construction;</li> <li>• Description of proposed propagation techniques using collected material;</li> <li>• Specific areas proposed for revegetation and rationale for why these sites are suitable;</li> <li>• Specific habitat management and protection concepts to be used to ensure long-term maintenance and protection of the San Luis Obispo mariposa lily and San Luis Obispo County morning glory such as annual population census surveys and habitat assessments; establishment of monitoring reference sites; fencing of species preserves and signage to identify the environmentally sensitive areas; a seasonally-timed weed abatement program; and seasonally-timed plant/seed/bulb collection, propagation, and reintroduction of San Luis Obispo mariposa lily and San Luis Obispo County morning glory into specified receiver sites;</li> <li>• Success criteria based on the goals and measurable objectives to ensure a viable San Luis Obispo mariposa lily and San Luis Obispo County morning glory populations on the Agricultural Residential Cluster Subdivision site in perpetuity;</li> <li>• An adaptive management program to address both foreseen and unforeseen circumstances relating to the preservation and mitigation programs;</li> <li>• Remedial measures to address negative impacts to San Luis Obispo mariposa lily and San Luis Obispo County morning glory and their habitat that may occur during construction activities, as well as post-construction when dwellings are occupied;</li> </ul>	



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	<ul style="list-style-type: none"> <li>• An education program to inform residents of the presence of San Luis Obispo mariposa lily, San Luis Obispo County morning glory, and other sensitive biological resources on-site, and to provide methods that residents can employ to reduce impacts to species occurrences in protected open space areas;</li> <li>• Reporting requirements to track success or failure of the mitigation program and to ensure consistent data collection and reporting methods used by monitoring personnel; and,</li> <li>• Maintenance and cost estimates.</li> </ul> <p>The mitigation ratio (habitat area created to habitat area impacted) will be 2:1 for special-status plant species' habitat impacted by development of the Agricultural Residential Cluster Subdivision. Mitigation for the San Luis Obispo morning glory may also occur in mitigation area designated for the Valley Needlegrass Grassland as this is the preferred habitat for this species [please refer to Agricultural Residential Cluster Subdivision measure B-2(a)].</p> <p><b>ARCS B-5(c) Protective Fencing.</b> A qualified biologist shall oversee the installation of temporary fencing around habitat containing the San Luis Obispo mariposa lily and/or San Luis Obispo County morning glory occurrences prior to any construction activities in the vicinity. Protective fencing shall remain in place throughout construction activities.</p> <p>The following additional mitigation measures are required:</p> <p><b>FDP B-5(a) Seasonally-Timed Rare Plant Surveys.</b> Prior to development of Future Development Program land use components, seasonally-timed directed floral surveys shall be completed by a County-approved qualified biologist/botanist during the appropriate season to determine the presence or absence of the species listed in Table 4.3-3. This list of plant species shall be augmented by a qualified biologist in consultation with relevant regulatory agencies and a recent California Natural Diversity Database (CNDDB) search. Surveys shall be floristic in nature (i.e., all plant species observed shall be recorded), and shall be conducted in accordance with the CDFG <i>Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities</i> (revised May 8, 2000), and USFWS <i>Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants</i> (USFWS, 2000).</p> <p>Multiple focused field surveys may be required to capture the flowering period of the</p>	



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	<p>target species. The location and extent of any rare plant occurrences observed in development areas shall be documented in a report and accurately mapped onto site-specific topographic maps and aerial photographs. If special-status plants are identified, the applicant for the future project shall submit written proof that the County and CDFG have been contacted. The report shall include estimates of the plant populations and the percentage of the total population that will be lost as a result of development.</p> <p><b>FDP B-5(b) Special-Status Plant Species Mitigation and Monitoring Plan.</b> If special status plant species are identified during surveys required in Future Development Program measure B-5(a), a mitigation and monitoring plan that addresses impacts to all special-status plant species, including the San Luis Obispo owl's clover, San Luis Obispo County morning glory, San Luis Obispo mariposa lily, San Lucia manzanita, Catalina mariposa lily, Michael's rein orchid, San Luis Obispo County lupine, and caper-fruited tropidocarpum shall be prepared by a County-approved biologist/botanist and reviewed by the County and CDFG. The detailed mitigation and monitoring plan shall be developed to protect and enhance the remaining occurrences of these species and to increase the overall numbers of special-status plants located within the Future Program Development area. Please refer to the Agricultural Residential Cluster Subdivision measure B-5(b) (San Luis Obispo Mariposa Lily and San Luis Obispo County Morning Glory Mitigation and Monitoring Plan) above for the minimum requirements of the special-status plant species mitigation and monitoring plan.</p>	
<p><b>FDP Impact B-6</b>                      Implementation of the Future Development Program could result in a direct take of the federally threatened Vernal Pool Fairy Shrimp (VPFS). This potential impact is Class II, <i>significant but mitigable</i>.</p>	<p>The following mitigation measures would apply to all Future Development Program land uses.</p> <p><b>ARCS B-6(a) VPFS Presence/Absence Determination</b> (<i>see mitigation for FDP Impact B-4</i>)</p> <p><b>ARCS B-6(b) Mitigation for VPFS.</b> (<i>see mitigation for FDP Impact B-4</i>)</p> <p>The following additional mitigation measure is required:</p> <p><b>FDP B-6(a) VPFS Presence/Absence Determination.</b> Prior to issuance of Grading Permits, USFWS (1996) protocol surveys shall be conducted by a County-approved qualified biologist who possesses a federal 10(A)(1)(a) handling permit for VPFS to determine the presence or absence of VPFS within all potentially suitable habitat areas within the Future Development Program land use areas. A report consistent with current federal reporting guidelines shall be prepared to document the methods, surveyed pool</p>	<p>Implementation of the above mitigation measures in concert with Agricultural Residential Cluster Subdivision measures B-4(a) (Wetland and Riparian Protection), B-6(a) (VPFS Presence/Absence Determination), B-6(b) (Mitigation for VPFS) and B-9(b) (Southwestern Pond Turtle Avoidance, Capture and Relocation) would reduce impacts to VPFS to a less than significant level. Therefore, the impact to VPFS is Class II, <i>significant but mitigable</i>.</p>





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<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>locations, and results of surveys. Should the presence of VPFS or additional special-status wildlife species be determined, a map identifying locations in which these species were found shall be included in the report.</p> <p>If the surveys produce a negative finding for the presence of VPFS, the results of the survey shall be submitted to the USFWS and the applicant shall request a letter of concurrence that the project is unlikely to result in the take of VPFS. The USFWS shall determine if additional surveys or information is required. Once a letter of concurrence is obtained from the USFWS, no further mitigation would be required. If VPFS are identified, then Agricultural Residential Cluster Subdivision measure B-6(b) (Mitigation for VPFS) would be required.</p>	
<p><b>FDP Impact B-7</b>                      Implementation of the Future Development Program could result in direct and/or indirect take of the federally threatened South/Central California Coast Steelhead and/or the loss of federally designated Steelhead Critical Habitat through grading activities and/or sedimentation of occupied creeks. This potential impact is Class II, <i>significant but mitigable</i>.</p>	<p>The following mitigation measure would apply to all Future Development Program land uses:</p> <p><b>ARCS B-7(a) South/Central California Coast Steelhead (Steelhead) Mitigation, Minimization and Protection Plan.</b> (see mitigation for FDP Impact B-4)</p> <p>No additional mitigation is required.</p>	<p>Implementation of the above mitigation measure in concert with Agricultural Residential Cluster Subdivision measures B-4(a) (Wetland and Riparian Protection) and B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation Measures) would reduce impacts to Steelhead to a less than significant level.</p>
<p><b>FDP Impact B-8</b> Implementation of the Future Development Program would result in a direct take of the Federally Threatened California red-legged frog (CRLF) through grading activities for the envisioned land use components, and would fragment the amount of available habitat potentially used for movement and dispersal. This potential impact is Class II, <i>significant but mitigable</i>.</p>	<p>The following mitigation measure would apply to all Future Development Program land uses:</p> <p><b>ARCS B-8(a) California Red-legged Frog Avoidance, Minimization, and Mitigation Measures.</b> (see mitigation for FDP Impact B-1)</p> <p>No additional mitigation is required.</p>	<p>Implementation of the above mitigation measure and those required as a result of FESA compliance would reduce impacts to the CRLF to a less than significant level. Therefore, the impact to CRLF is Class II, <i>significant but mitigable</i>.</p>
<p><b>FDP Impact B-9</b>                      Implementation of the Future</p>	<p>The following mitigation measure would apply to all Future Development Program land uses:</p>	<p>The implementation of the above mitigation measures would</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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<p>Development Program would reduce the populations and available habitat for wildlife in general, including special-status wildlife species. Because of the size of the site, degree of habitat diversity, and known and/or potential presence of a number of special-status wildlife species on-site, the loss of wildlife habitat is a Class II, <i>significant but mitigable</i> impact.</p>	<p><b>ARCS B-9(a) Legless and Horned Lizard Capture and Relocation.</b> Immediately prior to the initiation of construction in the developable area, capture and relocation efforts shall be conducted for the silvery legless lizard and coast horned lizard. Designated areas in permanent open space shall be identified within the Agricultural Residential Cluster Subdivision site for release of captured legless lizards and coast horned lizards.</p> <p>Surveys shall be conducted by a County approved biologist, and shall include the following minimum requirements:</p> <ul style="list-style-type: none"> <li>• Raking of leaf litter and sand under shrubs within suitable habitat in the area to be disturbed to a minimum depth of eight inches for the silvery legless lizard.</li> <li>• In addition to raking, “coverboards” shall be used to capture silvery legless lizards and coast horned lizards. Coverboards can consist of untreated lumber, sheet metal, corrugated steel, or other flat material used to survey for reptiles and amphibians. Coverboards shall be placed flat on the ground and checked regularly in the survey areas. Coverboards shall be placed in the survey area a minimum of two weeks, but preferably at least four weeks, before surveys begin and will be checked once a week during raking surveys. Captured lizards will be placed immediately into containers containing sand or moist paper towels and released in designated release areas no more than three hours after capture.</li> <li>• During all grading activities, a qualified biologist shall be on-site to recover any silvery legless lizards that may be excavated/unearthed with native material. The unearthed lizards shall be immediately relocated and released to the designated release area.</li> </ul> <p><b>ARCS B-9(b) Southwestern Pond Turtle Avoidance, Capture and Relocation.</b> A County approved biologist shall conduct spring surveys for this species before the onset of construction activities. The survey area shall include ponds located within the Agricultural Residential Cluster Subdivision site with ponded water as well as on-site drainage corridors. If any southwestern pond turtles are found within 1,000 feet of construction activities such as lot grading or road construction, the approved biologist shall contact CDFG to determine if moving any individuals is appropriate. If</p>	<p>reduce impacts to a less than significant level.</p>



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	<p>CDFG approves moving animals, the biologist shall be allowed sufficient time to move the animals from the work site before work activities begin. If CDFG does not recommend moving the animals, a 1,000 foot buffer from the pond, seasonal pool, in stream pools, and /or nesting site shall be implemented. No grading or other construction activities shall occur within the set buffer. Only the approved biologist shall participate in activities associated with the capture and handling of turtles. Agricultural Residential Cluster Subdivision measures B-4(a), B-6(b), and B-8(a) will also benefit this species. B-4(a) will reduce direct impacts (development), restore impacted areas, and reduce potential indirect impacts (sedimentation and concrete/oil runoff) into wetlands and riparian habitat used for breeding and foraging by the southwestern pond turtle. B-6(b) will provide protection to seasonal pool/wetland habitat that are occupied by the federally threatened VPFS and that may also be used by the SWPT and B-8(a) will provide federal protection to riparian and seasonal pool/wetland habitat that are occupied by the federally-threatened CRLF and that may also be used by the SWPT.</p> <p><b>ARCS B-9(c) Pre-Construction Bird Survey. Pre-construction Bird Survey.</b> To avoid impacts to nesting special-status bird species, namely the state Fully Protected white-tailed kite and golden eagle, the federally-threatened and Fully Protected bald eagle, other special-status bird species listed in Table 4.3-4, and all birds protected under the Migratory Bird Treaty Act, the initial ground-disturbing activities and tree removal shall be limited to the time period between September 1 and February 15. If initial site disturbance, grading, and tree removal cannot be conducted during this time period, a pre-construction survey for active nests within the limits of grading shall be conducted by a qualified biologist at the site two weeks prior to any construction activities. All potential nest locations shall be searched by the biologist including, but not limited to grassland, chaparral, central coastal scrub, and oak woodlands. If active nests are located, all construction work must be conducted outside a buffer zone from the nests to be determined by a qualified biologist. No direct disturbance to nests shall occur until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed and young have fledged the nest prior to the start of construction in the buffer zone. Surveys following the <i>Protocol for Evaluating Bald Eagle Habitat and Populations in California Bald Eagle</i> (Jackson and Jennings, 2004) are also required.</p> <p><b>ARCS B-9(d) American Badger Avoidance.</b> The mitigation measures below are recommended to determine whether badgers are present in the area prior to development and to prevent American badgers from becoming trapped in burrows during construction activities.</p>	



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	<ul style="list-style-type: none"> <li>A pre-construction survey for active American badger dens shall be conducted within one month of initial ground disturbance activities by a County qualified biologist. To avoid the potential direct take of adults and nursing young, no grading shall occur within 50 feet of an active badger den as determined by a County-approved biologist between March 1 and June 30.</li> </ul> <p>Construction activities during July 1 through March 1 shall comply with the following measures to avoid direct take of adult and weaned juvenile badgers:</p> <ul style="list-style-type: none"> <li>A County-approved biologist shall conduct a biological survey of the entire development area prior to the start of ground clearing or grading activity. The survey shall cover the entire area proposed for development. Surveys shall focus on both old and new den sites. If dens are too long to see the end, a fiber optic scope (or other acceptable method such as den characteristics) shall be used to assess the presence of badgers. If no fiber optic scope is available, occupation of the potential dens by badgers can be ascertained by dusting the den openings with a fine layer of dust for three successive nights and looking for footprints or other evidence of occupation. Inactive dens shall be excavated by hand with a shovel to prevent badgers from re-using them during construction.</li> <li>If American badger dens are found, the qualified biologist shall establish and clearly mark an appropriate buffer zone to protect the den. No grading or construction activities shall occur within the buffer zone until the biologist can safely close the badger den and has removed the buffer zone markings.</li> </ul> <p><b>ARCS B-9(e) Native Landscaping.</b> All landscaped plants for the project shall be on the County's approved plant list. To ensure that project landscaping does not introduce invasive non-native plant species into the vicinity of the site, the final landscaping plan shall be reviewed and approved by a County approved biologist and County Environmental and Resource Management Division prior to implementation. All invasive plant species shall be removed from the landscaping plan.</p> <p><b>ARCS B-9(f) Pet Brochure.</b> The applicant shall prepare a brochure that informs prospective homebuyers about the impacts associated with non-native animals, especially cats and dogs, and other non-native animals to the project site. Similarly,</p>	



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	<p>the brochure shall inform potential homebuyers of the potential for coyotes to prey on domestic animals.</p> <p><b>ARCS B-9(g) Night Lighting Standards.</b> Night lighting of public areas shall be kept to the minimum necessary for safety purposes. Exterior lighting within 100 feet of open space shall be shielded and aimed as needed to avoid spillover into open space areas. Decorative lighting shall be low intensity and be less than 25 watts.</p> <p><b>ARCS B-9(h) Minimize Road Widths.</b> Roadway widths adjacent to open space/agricultural areas shall be reduced to the minimum width possible, while maintaining Fire Department Requirements for emergency access, with slower speed limits introduced. Posted speed limits should be 25 mph or less.</p>	
<b>CULTURAL RESOURCES</b>		
<p><b>FDP Impact CR-3</b> Future development in accordance with the Future Development Program could adversely impact historical buildings and structures on the ranch. This is considered a Class II, <i>significant but mitigable</i> impact.</p>	<p><b>FDP CR-3(a) Prohibition of Demolition of Buildings and Structures.</b> Demolition of buildings, structures, and other elements of the built environment that date from the period of significance of the historic district (as described in the Cultural Landscape Report contained in Appendix E) shall not be permitted.</p> <p><b>FDP CR-3(b) Restoration, Stabilization, Repair, and Reconstruction.</b> Any stabilization, restoration, repair, or reconstruction of historic buildings and structures within the district, and particularly at the ranch headquarters, shall follow the <i>Secretary of Interior's Standards and Guidelines for the Treatment of Historic Properties</i>. Roof and floor tiles, mortar, and adobe bricks from the asistencia, ranch house, and previously demolished structures should be analyzed and compared with Mission San Luis Obispo de Tolosa and other mission architecture.</p> <p><b>FDP CR-3(c) Resource Conservation.</b> The drawings in the bunkhouse room at the ranch shall be documented and preserved not only for their value as folk art but also for their information on ranch history. A conservator should be consulted to ascertain the best method of preservation for the drawings. The results of the consultation shall be submitted to the County Environmental Coordinator. Documentation should include 8 by 10 inch large format photographs.</p> <p>The adobe core of the main ranch house at the headquarters shall be stabilized and preserved. A conservator with expertise in adobe preservation should be consulted to ascertain the best method of preservation. The results of the consultation shall be submitted to the County Environmental Coordinator.</p> <p><b>FDP CR-3(d) Additional Archaeological and Historical Survey.</b> A thorough</p>	<p>With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.</p>



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	archaeological and historical survey shall be carried out at the ranch headquarters area, with particular attention to documentation and mapping of surface-visible prehistoric and historical features.	
<b>FDP Impact CR-4</b> Future development in accordance with the Future Development Program could adversely impact previously identified or unidentified human remains. This is considered a Class II, <i>significant but mitigable</i> impact.	<p>The following mitigation measure would apply to all Future Development Program land uses.</p> <p><b>ARCS CR-4(a) Treatment of Human Remains.</b> In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps will be taken:</p> <ol style="list-style-type: none"> <li>1. State Health and Safety Code Section 7050.5 requires that there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:               <ol style="list-style-type: none"> <li>A. The County Coroner is contacted to determine that no investigation of the cause of death is required, and</li> <li>B. If the coroner determines the remains to be Native American, the coroner has 24 hours to notify the Native American Heritage Commission. The Native American Heritage Commission shall identify the person or persons it believes to be most likely descended from the deceased Native American. The most likely descendent may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public resources Code Section 5097.98.</li> </ol> </li> <li>2. If the Native American Heritage Commission is unable to identify a most likely descendent; or if the most likely descendent fails to make a recommendation within 24 hours after being notified by the commission; or if the landowner or his authorized representative rejects the recommendation of the descendent, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner, then the landowner or his authorized representatives shall reinter the Native American human remains and associated grave items with appropriate dignity on the property in a location not subject to further subsurface disturbance. However, any such activity shall be supervised by a Chumash representative if a most likely descendent is either not identified or fails to respond to notification.</li> </ol> <p>No additional mitigation is necessary.</p>	With implementation of the above mitigation measure, impacts would be reduced to a less than significant level.



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<p><b>FDP Impact CR-5</b> Future development in accordance with the Future Development Program could result in indirect impacts to identified or unidentified cultural resources. This is considered a Class II, <i>significant but mitigable</i> impact.</p>	<p>The following mitigation measures would apply to all Future Development Program land uses.</p> <p><b>ARCS CR-5(a) Prohibition of Archaeological Site Tampering.</b> Off-road vehicle use, unauthorized collecting of artifacts and other activities that could destroy or damage archaeological or historical sites shall be prohibited and shall be punishable by fine. Future applicants shall prepare a brochure for all homebuyers and other occupants describing the cultural sensitivity of the area and explaining the prohibitions. Informational material shall be general in content and shall not include any information that could lead to the identification or location of sensitive cultural resources. Homebuyers and other occupants shall acknowledge receipt and understanding of such prohibitions in writing.</p> <p><b>ARCS CR-5(b) Periodic Monitoring of Archaeological Site Condition.</b> To ensure that prohibitions on site tampering and vandalism are effective, future applicants shall fund an annual inspection of cultural resources within or adjacent to Future Development Program land uses, during which the condition of the sites shall be assessed and any degradation of integrity from vandalism, erosion, or other factors shall be identified. A qualified professional archaeologist and/or a Native American representative trained in site assessment shall carry out the annual site inspections and prepare a brief report for the County, with recommendations for addressing any apparent site degradation. Future applicants shall also develop a list of threatened and sensitive cultural resources sites on other lands within the Agricultural Residential Cluster Subdivision area, and shall retain a qualified archaeologist to inspect and report to the County Environmental Coordinator on the condition of those sites annually.</p> <p>No additional mitigation is necessary.</p>	<p>With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.</p>
<p><b>FDP Impact CR-6</b> Implementation of the Future Development Program could impact fossil-bearing strata and could damage or destroy significant fossil materials. This is considered a Class II, <i>significant but mitigable</i> impact</p>	<p>The following mitigation measures would apply to all Future Development Program land uses and would reduce potential impacts on paleontological resources to less than significant levels.</p> <p><b>ARCS CR-6(a) Preparation of a Paleontological Resource Monitoring Plan.</b> Prior to issuance of grading permits, future applicants shall retain a qualified accredited paleontologist to prepare a Paleontological Resource Monitoring Plan based on the specific construction plans. The monitoring plan shall detail the procedures for monitoring construction in areas of high or unknown sensitivity, collecting fossil remains and relevant geographic and stratigraphic data, stabilizing and preserving recovered specimens, and cataloguing and curating the collection (see ARCS P-1(b and c) below). The monitoring plan shall include provisions for collecting a representative sample of invertebrates prior to construction, documenting</p>	<p>With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.</p>



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	<p>the site according to the standards developed by the National Research Council (1987), and assessing the potential of this site to contain significant vertebrate remains.</p> <p><b>ARCS CR-6(b) Paleontological Monitoring.</b> A qualified paleontological monitor shall observe any initial excavation, grading, or other ground disturbance which extends below the upper soil layers in <i>in situ</i> sedimentary rock where paleontological sensitivity is high or unknown. Any excavation into <i>in situ</i> older Quaternary Alluvium, Paso Robles, Monterey, Santa Margarita, Vaqueros, Atascadero, or Toro formations should be monitored. The areas covered by late Quaternary strata should be monitored if excavation is undertaken below the uppermost few feet of sediment, because these strata have yielded vertebrate remains elsewhere in San Luis Obispo County. Shallow excavations in the Quaternary deposits are unlikely to yield significant fossils and do not need monitoring. Paleontologists who monitor excavations must be qualified and experienced in salvaging fossils and authorized to temporarily divert equipment while removing fossils. They must be properly equipped with tools and supplies to allow for rapid removal and preparation of specimens, and trained in safe practices when working around construction equipment. If multiple pieces of heavy equipment are in use simultaneously at diverse locations during construction, each location may be monitored individually.</p> <p><b>ARCS CR-6(c) Treatment of Paleontological Remains Discovered During Monitoring.</b> If paleontological resources are found during excavations or other ground disturbance, work shall cease temporarily in the immediate area of the discovery. Ground disturbance may be redirected to another area so that the significance of the fossil find may be assessed. If an accredited paleontologist is not already on site, a vertebrate paleontologist with regional experience will be contacted to inspect the excavation, assess the significance of the fossil find, recover any exposed fossils of significance, and recommend additional mitigation measures, if necessary.</p> <p>A standard sample (3–12 cubic meters) of matrix from each site will be taken for identification of microvertebrates (rodents, birds, rabbits), especially when the potential for microvertebrates is high. The monitors also will determine whether the fossils are part of an archaeological deposit. If the fossils are found with cultural material, the site then will be considered an archaeological discovery and treated according to the procedures specified in ARCS CR-3(b).</p> <p>Significant fossils found during construction shall be preserved by prompt removal</p>	





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	<p>whenever feasible. Due to the potential for rapid deterioration of exposed surface fossils, preservation by avoidance is not an appropriate measure. When a significant fossil cannot be removed immediately, stabilization is needed to prevent further deterioration prior to removal. The fossil location must be stabilized under the direction of a professional paleontologist.</p> <p>At the time of collecting, each specimen or group of specimens will be clearly located and plotted on a USGS topographical quadrangle map. Field methods, other excavation activities, and working conditions during monitoring of the paleontological resources will be recorded in a field notebook or on a paleontological resources record or worksheet such as those developed by the National Research Council (1987).</p> <p>Recovered specimens will be stabilized and prepared for identification. Sedimentary matrix with microfossils will be screen washed and sorted to identify the contained fossils. Removal of excess matrix during preparation reduces long-term storage requirements. Competent qualified specialists will classify individual specimens to the lowest identifiable taxon, typically to genus, species, and element. Batch identification and batch numbering (e.g., "mammal, 25 specimens") should be avoided.</p> <p>Paleontological specimens will be cataloged according to current professional standards, and a complete list of collected specimens must be prepared. A complete set of field notes, geologic maps, and stratigraphic sections must accompany the fossil collections.</p> <p>All fossil remains recovered during construction and operation must be curated by a recognized, nonprofit paleontological specimen repository with a permanent curator, such as a museum or university. Specimens must be stored in a fashion that allows researchers to retrieve specific individual specimens in the future. In addition to the LACM and UCMP, qualified research facilities include California State Polytechnic University, San Luis Obispo; the Santa Barbara Museum of Natural History; or Santa Barbara City College.</p> <p>The project paleontologist will complete a final report summarizing findings, describing important fossil localities (vertebrate, megainvertebrate, or plant) discovered in the project area, and explaining any mitigation measures taken. The report will include a summary of the field and laboratory methods, site geology and stratigraphy, an itemized inventory of recovered specimens, faunal lists, and site records. The report also should discuss the importance of the recovered fossil</p>	



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	materials. The reports will be prepared by a professional paleontologist and distributed to the appropriate agencies, museums, colleges, or universities.	
<b>DRAINAGE, EROSION AND SEDIMENTATION</b>		
<p><b>FDP Impact D-2</b> The Future Development Program would introduce paved and roofed areas and thus has the potential to result in increased peak storm water discharges and volumes of runoff. Impacts are Class II, <i>significant but mitigable</i>.</p>	<p>The following mitigation measures would apply to all Future Development Program land uses.</p> <p><b>ARCS D-2(c) LID-Integrated Management Practices.</b> Low Impact Development (LID) design technologies shall be employed by individual lot developers to the maximum extent practicable. LID is an alternative site design strategy that uses natural and engineered infiltration and storage techniques to control storm water runoff where it is generated to reduce downstream impacts. The following LID practices shall be implemented, as feasible, to re-establish pre-development runoff conditions:</p> <ol style="list-style-type: none"> <li>1. Bioretention cells;</li> <li>2. Tree boxes to capture and infiltrate street runoff;</li> <li>3. Vegetated swales, buffers and strips;</li> <li>4. Roof leader flows directed to planter boxes and other vegetated areas;</li> <li>5. Permeable pavement;</li> <li>6. Impervious surface reduction and disconnection;</li> <li>7. Soil amendments to increase infiltration rates; and</li> <li>8. Rain gardens, rain barrels, and cisterns.</li> </ol> <p>Only natural fiber, biodegradable materials shall be used.</p> <p>Since LID is intended to mimic the pre-development regime through both volume and peak runoff rate controls, the flow frequency and duration for the post-development conditions should be identical (to the greatest degree possible) to those for the pre-development conditions.</p> <p><b>ARCS G-2(b) Grading and Erosion Control Plan.</b> A grading and erosion control plan that minimizes erosion, sedimentation and unstable slopes shall be prepared and implemented by future applicants or representatives thereof, prior to issuance of tract-wide Grading Permits. It must include the following:</p> <ol style="list-style-type: none"> <li>a. Methods such as retention basins, drainage diversion structures, spot grading, silt fencing/coordinated sediment trapping, straw bales, and sand bags shall be used to minimize erosion on slopes and siltation into nearby creeks during grading and construction activities.</li> </ol>	<p>With implementation of the above-referenced mitigation measures, the Future Development Program would result in less than significant impacts related to peak storm water discharges and volumes of runoff.</p>



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	<ul style="list-style-type: none"> <li>b. Grading shall be prohibited within 100 feet of creeks and within 50-foot drainages, wetlands, and waters of the U.S. [refer to ARCS B-4(a) (Wetland and Riparian Protection) in Section 4.3, <i>Biological Resources</i>].</li> <li>c. Graded areas shall be revegetated within 4 weeks of grading activities with deep-rooted, native, drought-tolerant species to minimize slope failure and erosion potential. If determined necessary by Planning and Building, irrigation shall be provided. Geotextile binding fabrics shall be used if necessary to hold slope soils until vegetation is established.</li> <li>d. Temporary storage of construction equipment and equipment washing areas shall be limited to a minimum of 100 feet from creeks and 50-feet from drainages, wetlands, and waters of the U.S.</li> <li>e. After construction of tract improvements, exposed areas shall be stabilized to prevent wind and water erosion, using methods approved by the Planning and Building Department Grading Division and the Air Pollution Control District (APCD). These methods may include the importation of topsoil to be spread on the ground surface in areas having soils that can be transported by the wind and/or the mixing of the highly erosive sand with finer-grained materials (silt or clay) in sufficient quantities to prevent its ability to be transported by wind. The topsoil or silt/clay mixture is to be used to stabilize the existing soil to prevent its ability to be transported by wind. At a minimum, six inches of topsoil or silt/clay/sand mixture is to be used to stabilize the wind-erodable soils.</li> <li>f. Landscaped areas adjacent to structures shall be graded so that drainage is away from structures.</li> <li>g. Irrigation shall be controlled so that overwatering does not occur. An irrigation schedule shall be reviewed and approved by Planning and Building prior to issuance of grading permits.</li> <li>h. Grading on slopes steeper than 5:1 shall be designed to minimize surface water runoff.</li> <li>i. Fills placed on slopes steeper than 5:1 shall be properly benched prior to placement of fill.</li> <li>j. Brow ditches and/or berms shall be constructed and maintained above all cut and fill slopes, respectively.</li> <li>k. Cut and fill benches shall be constructed at regular intervals.</li> <li>l. Retaining walls shall be installed to stabilize slopes where there is a 10-foot or greater difference in elevation between buildable lots.</li> <li>m. Future applicants shall limit excavation and grading to the dry season of the year (typically April 15 to November 1, allowing for variations in weather) unless a Planning and Building Department approved erosion control plan is in place and all measures therein are in effect.</li> </ul>	



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<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>Future applicants shall post a bond with the County and hire a Planning and Building -qualified geologist or soils engineer prior to issuance of grading permits, and to ensure that erosion is controlled and mitigation measures are properly implemented.</p> <p>The following mitigation is also required:</p> <p><b>FDP D-2(a) Community Drainage Master Plan.</b> A Community Drainage Master Plan shall be created as part of the required Specific Plan for future development subsequent to the Agricultural Residential Cluster Subdivision. The Master Plan shall address potential improvements (including size and location of local and regional storm water facilities) to address water quality, flooding potential, and erosion control throughout the Ranch property. The Plan shall present a phased implementation strategy to address project-by-project impacts as Future Development Program buildout occurs. Mitigation shall include implementation of drainage basins, channels, or other improvements recommended in the Plan, in accordance with County standards. The Plan shall consider using golf course features as drainage features, including bioswales/filtration areas and detention basins. The Plan shall define a financing mechanism for implementation and annual reporting. The Plan shall supplement the <i>Santa Margarita Drainage and Flood Control Study</i> (County of San Luis Obispo Public Works Department, February 2004), as applicable.</p>	
<p><b>FDP Impact D-3</b> Portions of the Future Development Program are located within a 100-year flood zone associated with Trout Creek, the unnamed tributary to Trout Creek, Yerba Buena Creek, Santa Margarita Creek and/or Rinconada Creek. Impacts related to flood hazard exposure to future uses in this area are Class II, <i>significant but mitigable</i>.</p>	<p><b>FDP D-3(a) Avoidance of Flood Hazards.</b> Preferred locations for Future Development Program components shall be in areas outside of the 100-year flood zones for Trout Creek, the unnamed tributary to Trout Creek, Yerba Buena Creek, Santa Margarita Creek and Rinconada Creek. This may require restricted building envelopes for the following Future Development Program land uses: a Bed and Breakfast, café, amphitheater and winery near the existing Ranch headquarters location; a residential village, guest ranch, lodge and restaurant, winery, and golf course southwest of the community of Santa Margarita; and a Ranch headquarter and two wineries located in the northeast corner of the Ranch property. If future development is proposed in flood zone areas, Future Development Program measures D-3(b) (Base Flood Elevation), D-3(c) (Prohibition of Floodwater Displacement) and D-3(d) [Conditional Letter of Map Revision (CLOMR)] shall apply.</p> <p><b>FDP D-3(b) Base Flood Elevation.</b> The ground floor elevation of all Future Development Program structures within flood zones shall be constructed at least one foot above the Base Flood Elevation (BFE).</p> <p><b>FDP D-3(c) Prohibition of Floodwater Displacement.</b> Prior to issuance of grading</p>	<p>Implementation of the above mitigation, in conjunction with County standards and practices, would reduce potential flooding impacts to less than significant levels.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>permits, applicants within flood areas shall submit plans to the Planning and Building Department and Public Works Department that identify an overland escape route for runoff to ensure that the placement of fill to raise building pads out of the floodplain will not divert runoff onto adjacent properties.</p> <p><b>FDP D-3(d) Conditional Letter of Map Revision (CLOMR).</b> Without obtaining a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA), development within the 100-year flood plain would not be guaranteed to comply with the National Floodplain Insurance Program (NFIP) requirement that a parcel of land or proposed structure that is to be elevated by fill would not be inundated by the base flood. Prior to approval of grading permits, applicants shall obtain a CLOMR from FEMA.</p> <p>The CLOMR request shall include detailed flood hazard analyses prepared by a qualified professional engineer, consistent with FEMA requirements. The applicant shall comply with all conditions and requirements of the CLOMR.</p>	
<p><b>FDP Impact D-4</b> Due to the intensification of uses proposed as part of the Future Development Program, there is the potential for storm water transport of pollutants, bacteria, and sediment into downstream facilities. Impacts are Class II, <i>significant but mitigable</i>.</p>	<p>The following mitigation measure would apply to all Future Development Program land uses:</p> <p><b>ARCS D-4(a) Pollutant Removal Techniques.</b> In addition to LID-integrated management practices required by Agricultural Residential Cluster Subdivision measure D-2(c), the applicant shall integrate into Future Development Program design other available technologies and techniques to remove pollutants from site runoff prior to entering the drainage courses. Such techniques shall include reduced slope grading, drainage through vegetative zones (e.g., bio-swale) and other options to intercept pollutants being conveyed toward drainage paths. Technological solutions such as gravelly filter blankets or particulate filters (e.g. Fossil Filters) should also be installed as pollutant-removal solutions. Only natural fiber, biodegradable materials shall be used.</p> <p>The following additional mitigation measure is also required to reduce impacts related to sediment in downstream facilities.</p> <p><b>ARCS G-2(b) Grading and Erosion Control Plan</b> (<i>see mitigation for FDP Impact D-2</i>)</p> <p>The following additional mitigation measure is also required to reduce water quality impacts:</p>	<p>Implementation of the required mitigation measures would reduce the potential for storm water transport of pollutants, bacteria, and sediment into downstream facilities. Therefore, water quality impacts would be reduced to less than significant levels.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
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	<p><b>FDP D-4(a) Integrated Pest Management Plan.</b> Prior to issuance of grading permits, an Integrated Pest Management Plan shall be prepared for ongoing operations at the golf course. The Integrated Pest Management Plan should include, but not necessarily be limited to, the following:</p> <ul style="list-style-type: none"> <li>• Use of biological, physical, and cultural controls rather than chemical controls.</li> <li>• Use of insect-resistant cultivars.</li> <li>• Mechanical weed control to be used wherever and whenever possible as the first choice.</li> <li>• Establishment of thresholds for the use of fertilizers.</li> <li>• Determination of the probable cause of an insect/disease problem and correction as necessary (i.e.: soil nutrient problems, irrigation, water quality, plant type, etc.) prior to chemical use.</li> <li>• Development of thresholds to determine when pesticide use is necessary. Pesticides are to be used only when necessary to cure a problem and in positively identified pre-emergent situations and not as a preventative measure or as a regular, periodic application.</li> <li>• Fumigation activities to be limited to greens only.</li> <li>• Use of chemical forms that are the least toxic to non-target organisms (such as the use of a sodium salt if 2,4-D herbicide is used).</li> <li>• Preferentially, the IPM should not permit the use of 2,4-D at the site and similar toxic chemicals that have a high potential for leaching from the site.</li> <li>• Chemical controls should preferentially begin with the use of dehydrating dusts (silica gels, diatomaceous earth), insecticidal soaps, boric acid powder, horticultural oils, and pyrethrin-based insecticides.</li> <li>• Late evening application of pesticides.</li> <li>• Use of slow release fertilizers.</li> </ul> <p>Participation in the Audubon Cooperative Sanctuary Program (ACSP) could also help mitigate storm water runoff impacts from the golf course, although this is not required.</p>	
<b>GEOLOGIC STABILITY</b>		
<p><b>FDP Impact G-1</b> Due to the presence of active faults in the vicinity of the property and the active Rinconada and Nacimiento Faults located on the Ranch property, the Future Development Program is subject</p>	<p>The following mitigation measure would apply to all above-ground structures:</p> <p><b>ARCS G-1(a) UBC Compliance.</b> Above-ground structures shall be designed and built according to the latest UBC Seismic Zone 4 standards.</p> <p>The following additional mitigation measures are also required to reduce surface rupture hazards:</p>	<p>Through Code-conformance, implementation of setbacks, and proper engineering design and construction, ground shaking and surface rupture hazards would be less than significant.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
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to strong ground shaking and fault rupture hazards. This is a Class II, <i>significant but mitigable</i> impact.	<p><b>FDP G-1(a) Fault Location Investigations.</b> Prior to site plan approval for any land use located near a mapped fault trace, a subsurface geologic or geotechnical investigation shall be conducted by a qualified engineer in the area proposed for development. As part of the investigation, a special fault investigation shall be initiated in accordance with the State Alquist-Priolo Special Studies Zone Guidelines, to determine and/or confirm exact locations of the Rinconada or Nacimiento Faults.</p> <p><b>FDP G-1(b) Building Envelope Setbacks.</b> Based on the results of the special fault investigation, all habitable structures and utilities shall be located at least 50 feet from the Rinconada or Nacimiento Fault trace.</p>	
<b>FDP Impact G-2</b> Soils within the Ranch property have the potential to present soil-related hazards (expansive soils, erosive soils, settlement) to Future Development Program structures, utilities, and roadways. This is a Class II, <i>significant but mitigable</i> impact.	<p><b>FDP G-2(a) Avoidance of Soil Hazards.</b> Preferred locations for Future Development Program components shall be in areas of low to moderate soil-related hazards. This may require restricted building envelopes for all Future Development Program land uses except the winery located adjacent to the southeast edge of the community of Santa Margarita and the park and community pool, worship centers, and work force housing envisioned east of the community of Santa Margarita. If future development is proposed in areas containing expansive soils, a high or very high erosion hazard, and/or potential for settlement, the following mitigation measures shall apply:</p> <p><b>ARCS G-2(a) Soils/Foundation Report.</b> Individual property developers proposing development within the areas identified as having a high shrink-swell potential, high to very high erosion hazard and/or potential for settlement shall submit a soils/foundation report as part of the application for any proposed Building Permit(s). To reduce the potential for foundation cracking, one or more of the following shall be implemented and/or as recommended by a qualified engineer:</p> <ol style="list-style-type: none"> <li>1. Use continuous deep footings (i.e., embedment depth of 3 feet or more) and concrete slabs on grade with increased steel reinforcement together with a pre-wetting and long-term moisture control program within the active zone.</li> <li>2. Removal and recompaction of loose soils.</li> <li>3. Removal of the highly expansive material and replacement with non-expansive compacted import fill material.</li> <li>4. The use of specifically designed drilled pier and grade beam system incorporating a structural concrete slab on grade supported approximately 6 inches above the expansive soils.</li> <li>5. Chemical treatment with hydrated lime to reduce the expansion characteristics of the soils.</li> </ol>	Avoidance of soil-related hazards would ensure less than significant impacts. Should avoidance be infeasible, properly designed and constructed foundations and implementation of a grading and erosion control plan would adequately mitigate the potential for structural problems caused by soil-related hazards, thereby reducing impacts to a less than significant level.



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<p>6. Where necessary, construction on transitional lots shall include over excavation to expose firm sub-grade, use of post tension slabs in future structures, or other geologically acceptable method.</p> <p><b>ARCS G-2(b) Grading and Erosion Control Plan</b> (see mitigation for FDP Impact D-2)</p>	
<p><b>FDP Impact G-3</b> The Ranch property contains many steep slopes and is subject to moderate to high landslide potential. Landsliding has the potential to damage and destroy structures, roadways and other improvements, as well as to alter or block drainage channels, causing further damage and erosion. Soil slumping can damage or destroy structures and lead to erosion problems. This is a Class II, <i>significant but mitigable</i> impact.</p>	<p><b>FDP G-3(a) Avoidance of Landslide Hazards.</b> Preferred locations for Future Development Program land uses shall be in areas of low landslide potential. If development is proposed in areas with moderate or high landslide potential, the following mitigation measure shall apply:</p> <p><b>ARCS G-3(a) Geotechnical Investigations and Practices.</b> Each project site pursuant to the Future Development Program shall be inspected to ensure a low risk of landslides or soil slumping. Geotechnical engineering measures, such as shoring soils of any landslide areas shall be required to ensure that the slope will not be destabilized during the grading activity. Remedial measures during grading may include the removal of the slump or debris slide from the top to the toe of slope.</p> <p>In accordance with the applicable building codes, investigations shall be performed prior to construction in areas determined to have a moderate or higher landslide hazard (as seen in Figure 4.6-5). Investigations and practices shall include the following:</p> <ul style="list-style-type: none"> <li>a) Prior to issuance of any building permits, a qualified geotechnical engineer and/or engineering geologist shall prepare thorough geologic/geotechnical studies, and a slope stability analysis which shall incorporate lot-specific recommendations. The slope stability analysis shall at a minimum meet the requirements of CDMG 1997 (Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117). In addition, the stability analysis shall meet the requirements of the County Planning and Building Department.</li> <li>b) During grading, engineering geologists and geotechnical engineers shall confirm preliminary findings reported in the preliminary studies.</li> </ul> <p>All applicable recommendations of final geologic and geotechnical investigations prepared for Future Development Program land uses shall be implemented. These recommendations may include: avoidance of or setbacks from historic landslide</p>	<p>With implementation of the above measure, impacts from potential slope stability hazards would be less than significant.</p>





**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
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	deposits or areas susceptible to a potential for landslides; the restriction of grading in areas with landslide hazards; drainage improvements to ensure potential landslide areas do not become saturated; excavating standard keyways and benches in a stair-step configuration; water addition or drying-out as needed to bring soils to an acceptable moisture content; limitations on cut and fill slope gradients; and/or removal and backfilling or potential landslide areas.	
<b>FDP Impact G-4</b> Seismic activity could produce sufficient ground shaking which may result in liquefaction of soils near streams on the Ranch property. Future development located in these areas could be subject to high liquefaction hazards. This is a Class II, <i>significant but mitigable</i> , impact.	<p><b>FDP G-4(a) Avoidance of Liquefaction Hazards.</b> Preferred locations for Future Development Program land uses shall be in areas of low liquefaction potential. Should development be proposed within this area, the following mitigation measure shall apply:</p> <p><b>ARCS G-4(a) Reduction of Liquefaction Potential.</b> Appropriate techniques to minimize liquefaction potential shall be prescribed by an engineering geologist and implemented by the applicant prior to issuance of Building Permits. Suitable measures to reduce liquefaction impacts shall include one or more of the following as recommended by a qualified engineer: specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the ground characteristics. All structures shall comply with applicable methods of the Uniform Building Code [refer to ARCS G-1(a) (UBC Compliance)].</p>	With implementation of the above measure, impacts from potential liquefaction would be less than significant.
<b>FDP Impact G-5</b> Future Development Program land uses could be located on surface materials which allow for percolation of groundwater, resulting in seepage into building foundations. This is a Class II, <i>significant but mitigable</i> , impact.	<p>The following mitigation measure would apply to all future land uses:</p> <p><b>ARCS G-5(a) Subdrains.</b> An engineering geologist or a soils engineer shall observe construction activities to review the potential for subsurface water. As determined necessary by a qualified engineer, subdrains shall be installed within foundations, soft soils, or roadways, to alleviate ponding of water.</p> <p>No additional mitigation is required.</p>	With implementation of the required measure, impacts related to subsurface water would be less than significant.
<b>LAND USE</b>		
<b>FDP Impact LU-1</b> Construction activity associated with the Future Development Program would create temporary noise, air quality, and visual resource impacts due to the use of construction equipment and generation of fugitive dust. These effects could cause	No mitigation measures are required beyond those identified in Sections 4.8, <i>Noise</i> , 4.2, <i>Air Quality</i> , and 4.13, <i>Visual Resources</i> .	Temporary land use compatibility conflicts related to construction activity would be less than significant.



**Executive Summary**

**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<p>nuisances at adjacent properties and disrupt agricultural activity. However, these impacts would be temporary in nature and are Class II, <i>significant but mitigable</i>.</p>		
<p><b>FDP Impact LU-2</b> Buildout of the Future Development Program would result in a new concentration of population and the loss of a substantial area of open land. However, the Future Development Program incorporates requirements for agricultural preservation, residential development, and non-residential land uses as outlined in the San Luis Obispo County Land Use Ordinance Salinas River Rural Area Standards. Future Development Program land uses have therefore been anticipated in the County General Plan. Impacts would be Class III, <i>less than significant</i>.</p>	<p>No mitigation measures are required.</p>	<p>Impacts are less than significant.</p>
<b>NOISE</b>		
<p><b>FDP Impact N-1</b> Construction of the Future Development Program land uses could generate nuisance noise levels at the nearest sensitive receptors. Later phases of construction would also expose occupants of previous phases of Future Development Program implementation to nuisance noise levels. This is a Class II, <i>significant but mitigable</i> impact.</p>	<p>The following mitigation measures would apply to all construction of Future Development Program land uses within 1,600 feet of a sensitive receptor:</p> <p><b>ARCS N-1(a) Construction Hours.</b> Hours of construction noise which will cross a property line shall be limited to the hours between 7 a.m. and 7 p.m. on weekdays and 8 a.m. to 5 p.m. on weekends.</p> <p><b>ARCS N-1(b) Construction Noise Attenuation.</b> For all Future Development Program construction activity, additional noise attenuation techniques shall be employed as needed to ensure that noise remains within levels allowed by the County of San Luis Obispo noise standards. The following measures shall be incorporated into contract specifications to reduce the impact of construction noise.</p>	<p>With implementation of recommended mitigation measures, construction noise impacts would be less than significant.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<ul style="list-style-type: none"> <li>All construction equipment shall have properly maintained sound-control devices. No equipment shall have an unmuffled exhaust.</li> <li>Contractors shall implement appropriate additional noise attenuation techniques including, but not limited to, siting the stationary construction equipment away from residential areas to the extent possible, and notifying adjacent residents in advance of construction work.</li> </ul> <p><b>ARCS N-1(c) Construction Equipment.</b> Stationary construction equipment that generates noise that exceeds 60 dBA CNEL at the boundaries of adjacent residential properties shall be baffled. All construction equipment powered by internal combustion engines shall be properly muffled and maintained. Unnecessary idling of internal combustion engines shall be prohibited. Whenever feasible, electrical power shall be used to run air compressors and similar power tools.</p> <p>No additional mitigation measures are required.</p>	
<p><b>FDP Impact N-3</b> The Future Development Program would place sensitive receptors in areas exposed to nuisance noise levels. This is a Class II, <i>significant but mitigable</i>, impact.</p>	<p><b>FDP N-3(a) Avoidance of Roadway Noise Nuisance.</b> Preferred locations for Future Development Program components shall be in areas outside of projected 60 dBA noise contours. If future development is proposed in areas within the 60 dBA CNEL noise contour for area roadways, Future Development Program measure N-3(b) (Reduction of Nuisance Noise) shall apply.</p> <p><b>FDP N-3(b) Reduction of Nuisance Noise.</b> For any noise sensitive development proposed within projected 60 dBA noise contours, a site-specific acoustical study shall be conducted. This study shall contain recommendations to mitigate any noise levels that exceed the County’s standard of 60 dBA CNEL. Because no application has been filed subsequent to the Agricultural Residential Cluster Subdivision, the specific attenuation methods cannot be definitively determined. Options could include one or more of the following approaches:</p> <ul style="list-style-type: none"> <li>Construction of a berm or wall;</li> <li>Design of individual homes such that structures block the line-of-sight from useable backyards to the noise source;</li> <li>For homes with backyards not blocked by intervening structures, backyard fencing of sufficient height to block line-of sight to the noise source;</li> <li>Placement of windows and balconies away from the noise source, as applicable;</li> <li>Within residences, bathrooms and kitchens should be located toward the noise source, while bedrooms should be located away from the noise source; or</li> </ul>	<p>Impacts would be less than significant. It should be noted that the construction of sound attenuation devices may create aesthetic impacts that may be undesirable and may affect the rural character of the area. To mitigate this potential secondary impact to the degree feasible, the following measure is recommended:</p> <p><b>FDP N-3(b) Sound Wall Design.</b> Long expanses of walls or fences shall be interrupted with offsets and provided with accents to prevent monotony. Landscape pockets and pedestrian access through walls should be provided. Whenever possible, a combination of elements shall be used, including solid fences, walls, and, landscaped berms.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<ul style="list-style-type: none"> <li>Development should follow normal construction practices and Uniform Building Code requirements. Use of noise reducing building materials, such as double paned windows, shall be used to further reduce indoor noise levels by insulating against outdoor noise sources.</li> </ul>	
<p><b>FDP Impact N-5</b> The Future Development Program would place additional receptors in the vicinity of the Union Pacific Railroad (UPRR), exposing future residents to noise levels exceeding County noise standards. This is a Class II, <i>significant but mitigable</i>, impact.</p>	<p><b>FDP Impact N-5(a) Avoidance of Railroad Noise Nuisance.</b> Preferred locations for noise-sensitive Future Development Program components shall be outside of the 60 dBA CNEL contour line (572 feet from the centerline of the railroad). This may require restricted building envelopes for the residential village, guest ranch, lodge, work force housing, places of worship, and neighborhood park. If future development of noise sensitive uses is proposed in within the 60 dBA CNEL contour, Planning and Building shall ensure that Future Development Program measure N-3(b) (Reduction of Nuisance Noise) is applied.</p>	<p>Avoidance of nuisance noise levels would ensure less than significant impacts. Should avoidance be infeasible, implementation of barrier methods and/or residential building design intended to reduce indoor and outdoor noise levels would mitigate nuisance noise experienced by future sensitive receptors, thereby reducing impacts to less than significant levels.</p>
<b>PUBLIC SAFETY</b>		
<p><b>FDP Impact S-1</b> Development in accordance with the Future Development Program would occur in areas historically used for agricultural production with soils that could contain residual quantities of presently-banned agricultural chemicals. The exposure of future site construction workers and residents to these contaminants is a Class II, <i>significant but mitigable</i> impact.</p>	<p><b>FDP S-1(a) Soil and Groundwater Assessment.</b> Prior to construction of any of the Future Development Program conceptual land use areas historically used for agriculture, a soil and groundwater assessment shall be completed by a registered soils engineer or soils remediation specialist to determine the presence or absence of regulated contaminants within the area of development. This assessment shall target agricultural chemicals that may have been used in the historically farmed portions of the Ranch property and contamination associated with the off-site petroleum pump station and on-site pipelines. If soil or groundwater sampling indicates the presence of any contaminant in quantities not in compliance with applicable laws, the Regional Water Quality Control Board (RWQCB) and Department of Toxic Substances Control (DTSC) shall be contacted by the project applicant to determine any necessary remediation efforts. Soils and/or groundwater shall be remediated in compliance with applicable laws. Site assessments that result in the need for soil excavation are required to include: an assessment of air resource impacts and health impacts associated with excavation activities; identification of any applicable local standards that may be exceeded by the excavation activities, including dust and noise levels; transportation impacts from the removal or remediation activities; and risk of upset management practices shall employed if an accident occurs on or off the site. A copy of applicable remediation certification from RWQCB and/or DTSC, or written confirmation that a certification is not required shall be submitted to Planning and Building prior to issuance of a building permit.</p>	<p>With implementation of the above measures, hazardous materials impacts would be less than significant.</p>



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	<p><b>FDP S-1(b) Potential Discovery of Groundwater.</b> In the event that groundwater is encountered during grading or construction, all grading or construction work in the vicinity of the groundwater will be halted. The groundwater shall be tested for TPH and VOC, and be screened for common industrial groundwater pollutants using EPA testing method 8260b. If one or more pollutants are found in unsafe concentrations, the water shall be treated to a concentration below RWQCB standards, by a County approved registered environmental assessor or environmental engineer in consultation with RWQCB before the water can be released into the watershed. Such testing can occur in advance of grading activities to preclude the possibility of watershed contamination.</p> <p><b>FDP S-1(c) Screening of Imported Fill Material.</b> Prior to issuance of building permits, a soils engineering study and hazardous materials report of all imported fill materials shall be prepared by a qualified professional and submitted to the County Engineer for review. The soils engineer study and hazardous materials report shall demonstrate that all imported fill materials maintain engineering properties that are suitable for site development, and are free from contaminants that exceed threshold health and public safety levels.</p>	
<p><b>FDP Impact S-2</b> Highway and railway accidents pose a direct threat to public safety at crossings and along transportation corridors. Accidents involve hazardous materials could potentially create a public safety hazard by exposing people to contaminants. Due to the potential proximity of transportation corridors to Future Development Program components, this is a Class II, <i>significant but mitigable</i> impact.</p>	<p>Transport of hazardous materials on Highway 101, Highway 58 and the UPRR corridor will be required to comply with all federal, state, and local laws pertaining to the handling of hazardous materials. In addition, the following measure is also required:</p> <p><b>FDP S-2(a) Transportation Corridor Safety Plan.</b> As part of the Specific Plan for future development on the property (or within individual development plans as applicable), a transportation corridor safety plan shall be prepared and shall include a detailed evaluation of safety impacts associated with Future Development Program land uses located in proximity to the UPRR rail line, Highway 101 and SR 58. At a minimum, the Transportation Corridor Safety Plan shall consider the following measures:</p> <ul style="list-style-type: none"> <li>• Required setbacks between transportation corridors (including UPRR, Highway 101 and SR 58) and Future Development Program structures, pathways, and public use areas., in accordance with County, Caltrans, UPRR, and CPUC standards.</li> <li>• Identification of a safe and accessible pedestrian/ bicycle/equestrian crossing where the Future Development Program trail crosses the UPRR. This crossing shall be designed to allow pedestrians, bicyclists, and</li> </ul>	<p>With implementation of the above measure, impacts related to transportation corridor safety would be less than significant.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<p>equestrians to safely travel across the tracks. The crossing shall be reviewed by County Parks and Recreation, UPRR and CPU.</p> <ul style="list-style-type: none"> <li>• Identification of signage that directs people to the pedestrian/bicycle/equestrian railroad crossing in obvious and appropriate locations along the railroad right-of-way near future development.</li> <li>• Fencing and vegetative screening between future development and adjacent railroad tracks. Coordination with the UPRR and the County is required to determine the appropriate height and type of fencing. This fencing can be integrated with barriers that are required to meet noise attenuation standards (See impact N-4 in Section 4.9, <i>Noise</i>).</li> <li>• Location of the trail as far away from the active rail line and highways as possible, and maintenance or creation of a height separation between the trail and transportation corridors.</li> <li>• Identification of emergency response access and practices in the event of a railway or highway accident or hazardous materials release.</li> <li>• Public disclosure of potential hazards to trail users, occupants and residents of Future Development Program land uses.</li> </ul>	
<p><b>FDP Impact S-3</b> The Future Development Program includes land uses that may involve the use, transport, or storage of limited quantities of hazardous chemicals. The potential public safety impact associated with these chemicals would be a Class II, <i>significant but mitigable</i> impact.</p>	<p>The following mitigation measure would apply to the Future Development Program land uses:</p> <p><b>ARCS S-4(a) Chemical Storage.</b> All chemicals are to be stored in a locked and labeled enclosure. The enclosure shall be properly placarded in accordance to County of San Luis Obispo Fire Department requirements. Emergency telephone numbers shall be properly displayed in and near the chemical storage areas. Material Safety Data Sheets shall be kept within the enclosure in a location accessible to all who handle the chemicals. All chemicals shall be used in a manner consistent with their purpose. Personnel who handle chemicals shall be trained in their proper use, storage, and disposal.</p> <p>No additional mitigation is required.</p>	<p>With implementation of the required measure, impacts related to chemical storage would be less than significant.</p>
<p><b>FDP Impact S-4</b> Development may result in traffic safety hazards due to conflicts between proposed uses and existing off-site mining operations and on-site agricultural operations. This is a Class II, <i>significant but mitigable</i>, impact.</p>	<p><b>FDP S-4(a) Farm and Quarry Equipment Pull-Outs.</b> To reduce potential vehicle conflicts, pullouts shall be provided on shared roadways where necessary, as determined by the County Public Works Department. Where pullouts are not feasible, additional shoulder width shall be provided along El Camino Real north of the community of Santa Margarita, SR 58 east of Santa Margarita, and West Pozo Road.</p>	<p>With implementation of the above measure, impacts related to traffic safety conflicts would be less than significant.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<p><b>FDP Impact S-6</b> The Future Development Program envisions a golf course southwest of the community of Santa Margarita, south of El Camino Real. The proximity of existing and future residential and commercial uses to the future golf course could result in hazards related to errant golf balls. This is a Class II, <i>significant but mitigable</i>, impact.</p>	<p><b>FDP S-6(a) Fairway Orientation.</b> The envisioned golf course shall be designed to orient fairways away from existing and future residential lots, resort, and restaurant uses.</p> <p><b>FDP S-6(b) Disclosure of Errant Golf Ball Hazard.</b> Upon the transfer of real property and execution of leases on properties surrounding the potential golf course, the transferor will be required to deliver to the prospective transferee a written disclosure statement that shall make all prospective property owners and renters aware that although potential impacts or discomforts associated with errant golf balls may be lessened by the golf course design, some level of nuisance would remain. This notification will be required to include disclosure of potential property damage and health hazards nuisances associated with errant golf balls.</p>	<p>With implementation of the above measures, impacts related to errant golf balls would be less than significant.</p>
<p><b>FDP Impact S-7.</b> Large-scale grading and excavation operations during construction of Future Development Program land uses could expose construction workers and other individuals to valley fever. Impacts are Class II, <i>significant but mitigable</i>.</p>	<p>The following mitigation measure would apply to the Future Development Program land uses:</p> <p><b>ARCS AQ-2(b) Dust Control.</b> The following measures shall be implemented to reduce PM<sub>10</sub> emissions during future project construction:</p> <ul style="list-style-type: none"> <li>• Reduce the amount of the disturbed area where possible;</li> <li>• Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Water shall be applied as soon as possible whenever wind speeds exceed 15 miles per hour. Reclaimed (nonpotable) water should be used whenever possible;</li> <li>• All dirt-stock-pile areas shall be sprayed daily as needed;</li> <li>• Permanent dust control measures shall be identified in the approved project revegetation and landscape plans and implemented as soon as possible following completion of any soil disturbing activities;</li> <li>• 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;</li> <li>• 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 the APCD;</li> <li>• All roadways, driveways, sidewalks, etc., to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used;</li> <li>• Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;</li> <li>• All trucks hauling dirt, sand, soil or other loose materials shall be covered or shall maintain at least two feet of freeboard (minimum vertical distance</li> </ul>	<p>With implementation of the above measures, impacts related to valley fever would be less than significant.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<p>between top of load and top of trailer) in accordance with CVC Section 23114;</p> <ul style="list-style-type: none"> <li>• Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site; and</li> <li>• Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible.</li> </ul> <p>The above measures shall be shown on development plans.</p> <p><b>ARCS AQ-2(d) Dust Control Monitor.</b> The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering as necessary to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress.</p> <p><b>ARCS AQ-2(e) Active Grading Areas.</b> Prior to commencement of improvements, a Construction Management Plan shall be submitted for county approval that shows how the project will not exceed continuous working of more than four acres at any given time (according to the APCD, any project with a grading area greater than 4 acres of continuously worked area will exceed the 2.5 ton PM<sub>10</sub> quarterly threshold). The Dust Control Monitor shall verify in the field during tract improvements that the Construction Management Plan is being followed.</p> <p>These measures would minimize dust generation, thereby minimizing exposure to valley fever, should it be present.</p>	
<b>PUBLIC SERVICES AND UTILITIES</b>		
<p><b>FDP Impact PS-2</b> The Future Development Program currently lacks sufficient defensible space features that could result in impacts related to public safety. Such safety concerns would be a Class II, <i>significant but mitigable</i> impact.</p>	<p>The following mitigation measure would apply to the Future Development Program land uses:</p> <p><b>ARCS PS-2(a) Defensible Space Features.</b> Future applicants shall implement defensible space features, including security lighting, in common areas, subject to the review and approval of the Sheriff's Department. In addition, future developers shall incorporate structural defensible space features, including burglary-resistant hardware, into individual building plans.</p> <p>No additional mitigation is required.</p>	<p>With implementation of the required measure, impacts would be less than significant.</p>
<p><b>FDP Impact PS-3</b> The Future Development Program would increase the number of residents</p>	<p>ARCS PS-3(a) (Santa Margarita Ranch Fire Station) requires the dedication of land for a new CDF/San Luis Obispo County Fire Station in the Santa Margarita Ranch area. The construction and staffing of a fire station in this area would improve</p>	<p>With implementation of the required measures, impacts related to fire protection services</p>





**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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<p>and occupants served by the CDF/County Fire Department and is located within in a high to very high fire hazard area. The increase may substantially affect the personnel, equipment or organization of the Fire Department which could impede emergency access to the proposed residences. This would be a Class II, <i>significant but mitigable</i>, impact.</p>	<p>response times to Future Development Program land uses to 5 minutes (Robert Lewin, Fire Marshall, Personal Communication, June 29, 2006). However, because this measure requires the dedication of land only, Future Development Program land uses may be constructed prior to construction and operation of the station. Therefore, the introduction of Future Development Program residents and occupants into a high to very high fire hazard area would be a potentially significant impact. Therefore, the following measures would apply to the Future Development Program.</p> <p><b>ARCS PS-3(a) Fire Station.</b> Future applicants shall provide for the construction of a new CDF/San Luis Obispo County Fire Station either through the dedication of land or through the payment of in lieu fees, as determined in consultation with the Public Works Department and CDF/San Luis Obispo County Fire Department.</p> <p><b>ARCS PS-3(b) On-Site Fire Protection.</b> Road widths and circulation, as well as the placement of fire hydrants and installation of automatic sprinkler systems, shall be designed with the guidance of the Fire Department. A road system that allows unhindered Fire Department access and maneuvering during emergencies shall be provided. Specifically, the following measures are required:</p> <ul style="list-style-type: none"> <li>• Roads must be an all weather surface at least 20 feet in width, unobstructed by parking. Cul-de-sacs and turnouts must be to Fire Department standards. As the on-site roads are proposed to be a private system, there must be on-going, legally binding provisions in effect to maintain the roads to Fire Department approval.</li> <li>• Road grades on all roads shall not exceed 16%, per the Uniform Fire Code.</li> <li>• Address numbers and street signs shall be lighted to County standards so that emergency vehicles including police and ambulances can locate residences in the event of any emergency.</li> <li>• All fire apparatus access roads and driveways shall be designed and maintained to support the imposed loads of 20 tons at 25 mph, and shall be provided with a surface so as to provide all-weather driving capabilities and maintain 90% compaction.</li> </ul> <p><b>ARCS PS-3(c) Fire/Vegetation Management Plan.</b> Future applicants shall prepare and submit a Fire/Vegetation Management Plan to the Fire Department that will meet the following requirements:</p> <ul style="list-style-type: none"> <li>• The plan must set forth requirements to assure ongoing protection of all structures and roads, both prior to and after lot sales.</li> </ul>	<p>would be less than significant.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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	<ul style="list-style-type: none"> <li>• The plan shall require 100 feet of clearance from chaparral brush to structures throughout the development, and 30 feet of clearance from grasslands to structures throughout the development.</li> <li>• Vegetation within the first 30 feet of all structures must be strictly irrigated and controlled, with specific shrub species eliminated. No conifer (except Monterey pine, single specimen), eucalyptus, juniper, cypress, pampas grass, acacia, or palm trees shall be allowed within the 100-foot zone. Coastal live oak (<i>Quercus</i> sp.), California sycamore, Toyon and shrubs/trees approved by the County Fire Department will be acceptable within the 100-foot zone as well as the 30-foot zone.</li> <li>• The plan shall outline vegetation management standards within the 30-foot buffer zone, such as:               <ul style="list-style-type: none"> <li>▪ Grasses and groundcovers shall be maintained at no more than 18 inches in height on slopes that require erosion control measures. Grasses shall be mowed elsewhere.</li> <li>▪ Trees must be limbed up to one third of their height to a maximum of 10 feet.</li> <li>▪ Flammable native shrubs shall not be planted or allowed to grow in continuous masses. Small clusters will be allowed as long as the minimum space between clusters is observed.</li> </ul> </li> <li>• The Fire/Vegetation Management Plan must clearly state exactly what management practices must be accomplished, date of annual compliance, and responsibility for cost of compliance.</li> <li>• The plan must also include a Wildland Emergency Response check list (approved by County Fire Department) to be made available to all residents.</li> </ul> <p><b>ARCS PS-3(d) Structural Safeguards.</b> Future applicants shall provide the following structural safeguards:</p> <ul style="list-style-type: none"> <li>• <i>Class A Roofs.</i> All structures shall have non-wood Class A roofs, with the ends of tile blocked, spark arresters visible from the street, proper vent screens, and non-combustible gutters and down spouts. No combustible paper in or on attic insulation shall be allowed.</li> <li>• <i>Design of Accessory Features.</i> Decks, gazebos, patio covers, and fences, must not overhang slopes and must be of one-hour fire retardant construction. Front doors shall be solid core, minimally 1 ¾ inch thick. Garage doors shall be noncombustible.</li> </ul>	



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	<ul style="list-style-type: none"> <li>• <i>Power Lines.</i> All new power lines shall be installed underground in order to prevent fires caused by arcing wires.</li> <li>• <i>Fire Walls.</i> Structures adjacent to open space areas shall have one hour rated exterior fire walls, with exterior walls being more than 2 inches thick, and must not contain vinyl or plastic window frames or rain gutters or down spouts.</li> </ul> <p>No additional mitigation is required.</p>	
<p><b>FDP Impact PS-4</b> The Future Development Program would generate an estimated 224 elementary, middle and high school students. Students generated by the residential components of the Future Development Program would result in overcrowded conditions at Santa Margarita Elementary School. Impacts to this school are Class II, <i>significant but mitigable</i>.</p>	<p>The following additional mitigation measure is also required to reduce impacts to schools:</p> <p><b>FDP PS-4(a) Buildout Date Notification.</b> Any project applicant pursuant to the Future Development Program, subsequent to the Agricultural Residential Cluster Subdivision, shall work cooperatively with the Atascadero Unified School District regarding the timeframe of expected project completion, primarily for the purpose of notifying the district in advance to assist in their long-range planning efforts.</p>	<p>Compliance with applicable conditions of approval and the above mitigation measure would reduce impacts to a less than significant level.</p>
<p><b>FDP Impact PS-5</b> The Future Development Program would generate approximately 1,121.6 tons of solid waste per year, from residential and commercial uses. The solid waste disposal services and landfill that would serve the Future Development Program have adequate capacity to accommodate the waste generated by the Future Development Program. However, the Future Development Program would result in the use of part of the limited remaining capacity of the landfill. Therefore, solid waste generation would be a Class II,</p>	<p>The following mitigation measures would also apply to Future Development Program land uses:</p> <p><b>ARCS PS-5(a) Construction Solid Waste Minimization.</b> During construction, the following mitigation measures shall be implemented to reduce solid waste generation to the maximum extent feasible:</p> <ul style="list-style-type: none"> <li>• Prior to construction, future contractors shall arrange for construction recycling service with a waste collection provider. Roll-off bins for the collection of recoverable construction materials shall be located on-site. Future applicants, or authorized agents thereof, shall arrange for pick-up of recycled materials with a waste collection provider or shall transport recycled materials to the appropriate service center. Wood, concrete, drywall, metal, cardboard, asphalt, soil, and land clearing debris may all be recycled.</li> <li>• Future contractors shall designate a person to monitor recycling efforts and collect receipts for roll-off bins and/or construction waste recycling. All subcontractors shall be informed of the recycling plan, including which</li> </ul>	<p>With implementation of the above measures, impacts related to solid waste generation would be less than significant.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<i>significant but mitigable</i> impact.	<p>materials are to be source-separated and placed in proper bins.</p> <ul style="list-style-type: none"> <li>• Future contractors shall use recycled materials in construction wherever feasible.</li> <li>• The above construction waste recycling measures shall be incorporated into the construction specifications for future contractors.</li> </ul> <p><b>ARCS PS-5(b) Recycling Plan.</b> A long term plan for recycling shall be developed with specific collection goals for each recyclable material category and a method to track quantities of materials. The goal shall be a 50% waste stream diversion. The applicants shall provide this plan prior to final occupancy. The plan shall include, at a minimum upon concurrence of the Public Works Department, the following items:</p> <ul style="list-style-type: none"> <li>• Description of all activities which shall reduce solid waste generation by a minimum of 50%;</li> <li>• Methodology for monitoring activities for program effectiveness/efficiency;</li> <li>• Compilation and provision of quarterly diversion updates/reports to the County 30 days after the end of each calendar quarter listing the amount of wastes disposed and recycled by tons;</li> <li>• Listing of solid waste/recycling/service providers utilized to provide recycling/composting/waste reduction programs; and</li> <li>• Annual evaluation of program submitted to the Public Works Department.</li> </ul> <p>The following additional mitigation measure is also required to reduce impacts related to solid waste generation:</p> <p><b>FDP PS-5(a) Non-Residential Recycling.</b> All Future Development Program commercial development shall include mixed office paper, cardboard, scrap metal, newspaper, glass and plastic bottles, and metal cans (aluminum and steel) recycling receptacles.</p>	
<b>RECREATION</b>		
<b>FDP Impact R-1</b> The implementation of 514 residential	<b>FDP R-1(a) Community Park Implementation Timing.</b> The Specific Plan shall specify that the 5-acre community park and swimming pool shall be constructed prior	Impacts would be less than significant.



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

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<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
units in the Future Development Program would generate demand for parkland. Although the Future Development Program includes the dedication of 5 acres of parkland, including a community swimming pool, Future Development Program residential development that may occur prior to implementation of the parks and recreational facilities could burden existing community recreational facilities. This would be a Class II, <i>significant but mitigable</i> impact.	to residential development pursuant to the Future Development Program.	
<b>FDP Impact R-2</b> The Future Development Program would include a multi-purpose trail. However, the Future Development Program does not provide public trails that would fully implement the Juan Bautista de Anza Historic Trail through the property. This is a Class II, <i>significant but mitigable</i> , impact related to parks and recreation.	<b>FDP R-2(a) Trail Connections.</b> As part of the Specific Plan for future development on the Ranch property and in accordance with the County's adopted Parks and Recreation Element, the applicant shall dedicate right-of-way for the County's implementation of the Juan Bautista de Anza Historic Trail between the eastern terminus of the envisioned Future Development Program trail concept study area and the trail easements in the northern portion of the property, on the Margarita Farms subdivision site, and any other trail alignments identified in the Parks and Recreation Element. The precise trail alignments and features shall be determined in consultation with the County Parks and Recreation Department. The trail shall be implemented in accordance with County standards concurrently with the start of construction.	Impacts related to provision of the trail connection would be beneficial. It should be noted that secondary impacts associated with construction of the trail connection (e.g., biological resources impacts, visual impacts) would vary depending on the ultimate location of the trail alignment. Since the precise location of the trail within the trail concept study area has not been determined, precise environmental impacts associated with the trail would be too speculative to address at this time. Environmental impacts associated with implementation of such improvements would be evaluated in separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA) as part of the



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<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
		Specific Plan or individual development review process, as applicable, for future development on the property.
<b>TRANSPORTATION AND CIRCULATION</b>		
<p><b>FDP Impact T-4</b> The addition of traffic generated by the Future Development Program may result in conflicts with pedestrians and bicyclists, as well as increase demand for transit services. Impacts are Class II, <i>significant but mitigable</i>.</p>	<p><b>FDP T-4(a) Bicycle Facilities.</b> Bike lanes shall be installed in both directions on El Camino Real in downtown Santa Margarita, consistent with the <i>Santa Margarita Design Plan</i>. Because El Camino Real (SR 58) is a state-maintained roadway, this measure would require Caltrans approval.</p> <p><b>FDP T-4(b) Pedestrian Facilities.</b> A center median lane along El Camino Real in downtown Santa Margarita shall be installed, consistent with the <i>Santa Margarita Design Plan</i>. Provision of a center median lane would reduce capacity in the corridor by focusing access to adjacent properties at intersections. Vehicles would still be able to make u-turns to access development. In-pavement lighting at crosswalks shall also be installed, and may be installed on state-maintained roadways. Right-of-way along Future Development Program access roads shall be preserved for the installation of sidewalks. Because El Camino Real (SR 58) is a state-maintained roadway, this measure would require Caltrans approval.</p> <p><b>FDP T-4(c) Transit Facilities.</b> Bus stops shall be installed near Future Development Program land use access points, such as at the El Camino Real/Wilhelmina Avenue intersection, and coordination shall occur during Specific Plan preparation and/or construction of the first Future Development Program component on the Ranch property, whichever comes first, with the San Luis Obispo Regional Transit Authority to adjust the bus schedules to meet increased demand. The number and location of bus stops shall be identified prior to occupancy clearance for the first Future Development Program component on the Ranch property. Because transit facilities may be located on a state-maintained roadway (SR 58), this measure would require Caltrans approval.</p>	<p>With implementation of the above mitigation measure, impacts related to automobile-bicycle conflicts and demand on pedestrian and transit facilities would be reduced to a less than significant level.</p> <p>Implementation of most required pedestrian, bicycle and transit improvements would not result in significant environmental impacts since improvements would occur within existing disturbed rights-of-way. It should be noted that impacts associated with implementation of required transportation improvements (e.g., construction impacts, aesthetic impacts) are discussed in other impact sections of this EIR to the extent possible. However, since the final designs of required transportation improvements have not been determined, precise environmental impacts associated with future improvements would be too speculative to address at this time. Environmental impacts associated with required transportation improvements would be evaluated at a project</p>



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<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
		level of detail in separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA), including as part of the Specific Plan or individual development review process, as applicable, for future development on the property.
<b>WATER AND WASTEWATER</b>		
<p><b>FDP Impact W-2</b> Since the capacity, features, location and timing of the potential future sewage treatment facility envisioned for dedication have not yet been determined, individual future developments could require the use of septic systems prior to treatment plant implementation. Percolation tests have not been completed for any Future Development Program land uses. Therefore, it is not known if area soils would provide sufficient percolation to support effluent disposal fields. Improper disposal field design could result in health hazards or potential ground and surface water contamination. Therefore, the Future Development Program would result in Class II, <i>significant but mitigable</i> impacts related to wastewater disposal.</p>	<p>The following mitigation measures would apply to all Future Development Program land uses constructed prior to implementation of a Wastewater Treatment Plant:</p> <p><b>ARCS W-2(a) Septic Tank Maintenance Plan and Monitoring.</b> Future applicants shall prepare a Septic Tank Maintenance Plan. The Plan shall require a minimum tank cleaning frequency of once every <del>two</del> <b>five</b> years, delineate proposed groundwater monitoring locations, and recommended frequency of collection and analysis. Future applicants shall install groundwater monitoring wells, which shall be sited and designed by a qualified hydrogeologist.</p> <p><b>ARCS W-2(b) Septic Tank and Leachfield Site Plans.</b> Future applicants shall develop and submit septic tank and leachfield site plans for each proposed lot, as well as percolation tests and borings in accordance with County leachfield design/construction requirements. Future applicants shall demonstrate sufficient leachfield percolation for each proposed residential unit and lot, in accordance with County standards.</p> <p>The following additional mitigation measures are required to reduce impacts related to wastewater disposal:</p> <p><b>FDP W-2(a) Groundwater Characterization Study.</b> As part of the Specific Plan for future development on the property (or within individual development plans as applicable), a characterization of existing groundwater and estimate of assimilative capacity of groundwater underneath each Future Development Program development area (or individual septic field locations, as applicable) shall be performed. Characterization would be required prior to any future development projects on the Ranch property subsequent the Agricultural Residential Cluster Subdivision. The Characterization Study shall analyze long-term hydraulic disposal capacity, subsurface soil profiles, groundwater lateral hydraulic gradient and mounding</p>	<p>With implementation of the above measures, impacts related to wastewater disposal would be less than significant.</p>



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<b>CLASS II IMPACTS: SIGNIFICANT BUT MITIGABLE</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
	<p>potential, and assimilative capacity of the site(s) for water quality constituents of concern.</p> <p><b>FDP W-2(b) Wastewater Master Plan.</b> Implementation of the wastewater treatment facility should proceed in advance of the first Future Development Program subdivision proposed subsequent to the Agricultural Residential Cluster Subdivision. A Community Wastewater Collection, Treatment, and Disposal Facility Master Plan shall be created as part of the required Specific Plan for future development subsequent to the Agricultural Residential Cluster Subdivision. The Plan shall be completed after the groundwater characterization study and shall address alternative sites for treatment facilities, process alternatives, and disposal/reuse options for buildout of the property as well as provisions to serve the existing community of Santa Margarita. The Plan shall present a phased implementation strategy to address project-by-project impacts as the Future Development Program is implemented. Objectives shall be developed by the County and Regional Water Quality Control Board prior to acceptance or approval of the Plan. A regional or decentralized wastewater treatment system designed to County and Regional Water Quality Control Board requirements shall be implemented. The Wastewater Master Plan shall specify and require maintenance and best management practices for operation. The Master Plan shall also investigate the feasibility of irrigating Future Development Program landscaping and recharging groundwater with treated effluent from the wastewater treatment facility.</p>	
<p><b>FDP Impact W-3</b> Wastewater discharge systems can degrade groundwater quality if wastes are put into the discharge systems that are harmful to groundwater quality. Impacts are Class II, <i>significant but mitigable</i>.</p>	<p>The following mitigation measures would apply to all Future Development Program land uses:</p> <p><b>ARCS W-3(a) Water Softeners.</b> Future Development Program land uses shall be prohibited from installing water softeners which require on-site regeneration or are self-regenerating. Off-site regenerated water softeners shall be allowed if they are regenerated outside the Santa Margarita Ranch.</p> <p><b>ARCS W-3(b) Pollutant Input Minimization.</b> The Santa Margarita Ranch Mutual Water Company shall annually include a written statement with resident water bills that describes methods to prevent degradation of water quality in septic systems. The flyer shall state that chemicals, paints, solvents, pesticides, herbicides, or other household hazardous wastes shall not enter drains.</p>	<p>With implementation of the required measures, impacts related to water quality would be less than significant.</p>





**Table ES-4. Summary of Future Development Program  
 Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS III IMPACTS: LESS THAN SIGNIFICANT</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<b>DRAINAGE, EROSION AND SEDIMENTATION</b>		
<b>FDP Impact D-1</b> During construction, disrupted soil may be subject to erosion, sedimentation, and pollutant discharges. This is a Class III, <i>less than significant</i> impact.	Compliance with the National Pollutant Discharge Elimination System (NPDES) program and compliance with county grading and storm water ordinances would ensure less than significant impacts.	Impacts would be less than significant.
<b>NOISE</b>		
<b>FDP Impact N-4</b> Receptors included in the Future Development Program would likely be exposed to runway noise generated by aircraft flying overhead. Although these periodic events could produce periodic noise levels greater than 60 dBA, the 24-hour CNEL noise levels at these receptors would not exceed the County CNEL threshold of 60 dBA. This is a Class III, <i>less than significant</i> impact.	Because the Future Development Program would not expose future residents to aircraft noise that exceeds 60 dBA CNEL, mitigation is not required.	Impacts are less than significant without mitigation.
<b>FDP Impact N-6</b> Sensitive receptors included in the Future Development Program would likely be exposed to noise generated by the existing private hobby railroad that operates sporadically in the northern portion of the Ranch. Although these periodic events could produce periodic noise levels greater than 60 dBA, the 24-hour CNEL noise levels at these receptors would not exceed the County CNEL threshold of 60 dBA. This is a Class III, <i>less than significant</i> impact.	Because the Future Development Program would not expose future residents to private railroad noise that exceeds 60 dBA CNEL, mitigation is not required.	Impacts are less than significant without mitigation.



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS III IMPACTS: LESS THAN SIGNIFICANT</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
<p><b>FDP Impact N-7</b> The Future Development Program includes nine wineries that would hold special events throughout the year and an amphitheater. Noise generated during special events and at the amphitheater, including amplified music, would not significantly affect off-site receptors due to the distance between receptors and anticipated noise sources, and existing County special event permitting requirements. This is a Class III, <i>less than significant</i> impact.</p>	<p>Because the Future Development Program would not expose receptors to noise levels that exceed County thresholds, mitigation is not required.</p>	<p>Impacts are less than significant without mitigation.</p>
<b>PUBLIC SAFETY</b>		
<p><b>FDP Impact S-5</b> Future Development Program components would be located in the vicinity of a private air strip. Aircraft overflight areas present a potential for aircraft accidents that could result in personal injury or property damage. With compliance with Federal Aviation Administration (FAA) safety requirements, these impacts would be considered Class III, <i>less than significant</i>.</p>	<p>Beyond compliance with applicable FAA policies and regulations, including FAA notification and review (as applicable), no mitigation measures are required.</p>	<p>Impacts would be less than significant.</p>
<b>PUBLIC SERVICES AND UTILITIES</b>		
<p><b>FDP Impact PS-1</b> The Future Development Program would increase the population by approximately 1,388 residents. This may incrementally increase demands on the San Luis Obispo County Sheriff's Department. However, upon</p>	<p>Beyond the required fees described in the impact statement, no additional mitigation measures are required.</p>	<p>Impacts would be less than significant.</p>



**Table ES-4. Summary of Future Development Program Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS III IMPACTS: LESS THAN SIGNIFICANT</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
payment of public facility fees as a condition of approval of future development, the Future Development Program would not substantially affect the personnel, equipment or organization of the Sheriff's Department. This is a Class III, <i>less than significant</i> impact.		
<b>FDP Impact PS-6.</b> The Santa Margarita Community Library is undersized to serve the increase in population associated with Future Development Program buildout. Payment of required library fees as a condition of approval would ensure Class III, <i>less than significant</i> , impacts to the community library.	Beyond the required fees described in the impact statement, no additional mitigation measures are required.	Impacts would be less than significant.
<b>TRANSPORTATION AND CIRCULATION</b>		
<b>FDP Impact T-3</b> Future Development Program land uses may generate parking demands in excess of future parking supply. However, future applicants would be required to comply with County parking standards, resulting in Class III, <i>less than significant</i> impacts.	No mitigation is required.	With implementation of parking spaces in accordance with County standards, parking impacts would be less than significant.
<b>WATER AND WASTEWATER</b>		
<b>FDP Impact W-5</b> The Future Development Program envisions nine wineries located throughout the Ranch property. Winery wastewater contains fermentation waste products, cleaning chemicals, and raw source water constituents. Improperly designed irrigation	Future Development Program measure W-2(b) (Wastewater Master Plan) would reduce winery wastewater-related impacts to a less than significant level. No further mitigation is required.	With implementation of the required measure, impacts related to winery wastewater would be less than significant.



**Table ES-4. Summary of Future Development Program  
 Environmental Impacts, Mitigation Measures, and Residual Impacts**

<b>CLASS III IMPACTS: LESS THAN SIGNIFICANT</b>		
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Residual Impacts</b>
systems and leach fields could potentially backflow and contaminate groundwater. This is a Class II, <i>significant but mitigable</i> impact.		



## 1.0 INTRODUCTION

This document is an Environmental Impact Report (EIR) for the Santa Margarita Ranch Agricultural Residential Cluster Subdivision Project and Future Development Program. The EIR evaluates an active application for a proposed Agricultural Residential Cluster Subdivision Project (Tentative Tract 2586) on a 3,778-acre portion of the Santa Margarita Ranch in unincorporated San Luis Obispo County, southeast of the community of Santa Margarita. The Agricultural Residential Cluster Subdivision Project would subdivide this portion of the Ranch into 112 residential lots and would place 3,633 acres in agricultural conservation easements (ACEs). The proposed subdivision also includes a 2,417 acre remainder lot that is not proposed for development at this time. The remainder parcel is located north of the proposed Agricultural Residential Cluster Subdivision lots, south of the community of Santa Margarita. In addition, the EIR evaluates a conceptual Future Development Program for buildout of several locations within the remaining portions of the approximately 14,000-acre Ranch property. The Future Development Program includes the future implementation of the balance of the 550 single-family residential units allowable pursuant to the Salinas River Area Plan (approximately 402 residences) and the additional following uses: golf course, club house and pro shop; guest ranch, lodge, and restaurant; 12-room bed and breakfast; cafe; amphitheater; crafts studios, galleries and shops; interpretive center and gift shops; seven wineries with tasting rooms and permitted special events; neighborhood park and swimming pool; three ranch/farm headquarters; one livestock sales yard and café; three places of worship; and a retreat center.

Future Development Program land uses would require several discretionary land use approvals from the County of San Luis Obispo over time, depending on the phasing and grouping of future land uses. The San Luis Obispo County Land Use Ordinance, Section 22.104.040 (Salinas River Rural Area Standards), requires that a Specific Plan be prepared for the Santa Margarita Ranch area before any application is approved for a subdivision other than a Cluster development. Therefore, any Future Development Program land use that includes a subdivision requires the preparation of a Specific Plan for the Santa Margarita Ranch area. A General Plan Amendment would be required to be processed concurrently with the Specific Plan. Future Development Program land uses that do not require a subdivision may nevertheless require a General Plan Amendment, zone change, Minor Use Permit (MUP), and/or Use Permit. Allowed agricultural uses within an Agriculture zone may require only a zoning clearance.

The project's background, as well as the legal basis for preparing an EIR, is described below. Additional detail regarding the project components can be found in Section 2.0, *Project Description*.

### 1.1 PURPOSE AND LEGAL AUTHORITY

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA), and the State CEQA Guidelines. In accordance with Section 15121(a) of the State CEQA Guidelines, the purpose of this EIR is to serve as an informational document that:

*"...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project..."*



The proposed project includes two components: 1) an Agricultural Residential Cluster Project, and 2) a Future Development Program. The applicant is requesting approval of a Vesting Tentative Tract Map and Agricultural Lands Residential Cluster Conditional Use Permit for the proposed Agricultural Residential Cluster component. No entitlements are currently proposed for the Future Development Program component. However, a settlement agreement between the community group Santa Margarita Area Residents Together (SMART), the County and the applicant requires that the applicant submit a Future Development Program for the areas within the original Rancho boundaries at the time of any specific entitlement request. Therefore, this EIR evaluates the requested Tentative Tract Map and Conditional Use Permit for the Agricultural Cluster Subdivision active application, as well as the Future Development Program, for which no application has yet been filed.

This dual purpose of the EIR requires a hybrid approach to its preparation, incorporating both “project” and “program” EIR components, which are explained further below.

For the proposed Agricultural Residential Cluster Subdivision, the EIR will serve as a Project EIR pursuant to Section 15161 of the *CEQA Guidelines*. A Project EIR is appropriate for a specific development project. As stated in the *CEQA Guidelines*:

*“...this type of EIR should focus on the changes in the environment that would result from the development. The EIR shall examine all aspects of the project, including planning, construction and operation.”*

For the Future Development Program, for which no active application has been filed, the EIR will serve as a Program EIR. Although the legally required contents of a Program EIR are the same as those of a Project EIR, Program EIRs are typically more conceptual and may contain a more general discussion of impacts, alternatives, and mitigation measures than a Project EIR. As provided in Section 15168 of the State *CEQA Guidelines*, a Program EIR may be prepared on a series of actions that may be characterized as one large project. Use of a Program EIR provides the County (as Lead Agency) with the opportunity to consider broad policy alternatives and program-wide mitigation measures and provides the County with greater flexibility to address environmental issues and/or cumulative impacts on a comprehensive basis.

Agencies generally prepare Program EIRs for programs or a series of related actions that are linked geographically, are logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program, or are individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways.

In practice, this Program EIR could be utilized as a first tier of environmental review for subsequent activities that include site-specific environmental review of new development projects identified in the Future Development Program. However, if new effects could occur due to project discrepancies when compared to the program, or due to a change in baseline conditions, an EIR or a Negative Declaration would be required for the specific future project. Prior to the issuance of any entitlements for future development on the Ranch, the County must determine either that the Program EIR analysis is sufficiently specific and comprehensive to cover projects proposed on the Ranch property, or require additional environmental review and documentation.



The Future Development Program land uses and locations are conceptual. A range of potential future land uses and corresponding site locations have been identified. However, only generalized Future Development Program land use locations are available at this time, and no site plans or other project-level details have been provided by the applicant. Conceptual plans for Future Development Program uses are considered examples of possible future uses that require future environmental review, including preparation of additional EIRs pursuant to CEQA, if applications for future projects are submitted. This EIR evaluates and mitigates a reasonable worst-case scenario of potential impacts associated with the Future Development Program. The design and planning of specific future development projects and/or infrastructure improvements (e.g., wastewater treatment plant, detention basin, school siting, etc.) on the property is beyond the scope of this EIR. Evaluation of constraints may inform site selection process, but separate infrastructure and services planning will ultimately dictate site selection. Since project-level information and active applications for the Future Development Program components have not been provided, future development in accordance with the program will likely require additional environmental review, pursuant to the requirements of CEQA.

This report is to serve as an informational document for the public and County of San Luis Obispo decision-makers. The process will culminate with Planning Commission and Board of Supervisors hearings to consider certification of a Final EIR and a decision whether to approve the proposed project, possibly with conditions of approval.

## **1.2 SCOPE AND CONTENT**

In accordance with the State CEQA Guidelines, a Notice of Preparation (NOP) was distributed for review by affected agencies and the public. The NOP and responses to the NOP are presented in Appendix A of this report.

This EIR addresses the issues determined to be potentially significant by the responses to the NOP, and scoping discussions among the public, consulting staff, and the County. The issues addressed in this EIR include:

- *Agricultural Resources*
- *Air Quality*
- *Biological Resources*
- *Cultural Resources*
- *Drainage, Erosion, and Sedimentation*
- *Geologic Stability*
- *Land Use*
- *Noise*
- *Public Safety*
- *Public Services and Utilities*
- *Recreation*
- *Traffic*
- *Visual Resources*
- *Water and Wastewater*



This EIR addresses the issues referenced above and identifies potentially significant environmental impacts, including site-specific and cumulative effects of the project in accordance with the provisions set forth in the *CEQA Guidelines*. In addition, the EIR recommends feasible mitigation measures, where possible, that would reduce or eliminate adverse environmental effects.

In preparing the EIR, use was made of pertinent County policies and guidelines, existing EIRs and background documents prepared by the County. A full reference list is contained in Section 7.0, *References and Preparers*, of this EIR.

The Alternatives section of the EIR was prepared in accordance with Section 15126(d) of the *CEQA Guidelines* and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic objectives of the project. In addition, the EIR identifies the "environmentally superior" alternative from the alternatives assessed. The alternatives evaluated include the CEQA-required "No Project" Alternative, a "Revised Cluster Design" Alternative, a "Reduced Project" Alternative, an "Alternative Future Development", an "Alternative Project Location", an "Alternative Location for Livestock Auctions", a "Mitigated Project" Alternative, and three "Reconfigured Project" Alternatives. A revised version of the proposed Agricultural Residential Cluster Subdivision project, an alternative which implements Smart Growth Principles, and a reduced (i.e., fewer number of units) project alternative are also included.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. The *CEQA Guidelines* provide the standard of adequacy on which this document is based. The Guidelines state:

*"An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but, the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure." (Section 15151).*

### **1.3 LEAD, RESPONSIBLE AND TRUSTEE AGENCIES**

The *CEQA Guidelines* define "lead," "responsible" and "trustee" agencies. The County of San Luis Obispo is the lead agency for the project because it has the principal responsibility for approving the project.

A "responsible agency" refers to public agencies other than the "lead agency" that has discretionary approval over the project. A "trustee agency" refers to a state agency having jurisdiction by law over natural resources affected by a project. The California Department of Fish and Game (CDFG) has jurisdiction over biological resources, including drainages that may be impacted by project development. The CDFG is therefore a trustee agency.





## **1.4 AREAS OF CONTROVERSY**

Pursuant to State CEQA Guidelines § 15123(b)(2), this EIR acknowledges the areas of controversy and issues to be resolved which are known to the County of San Luis Obispo or were raised during the scoping process. A Notice of Preparation (NOP) was prepared and circulated for a 30-day public review period that began on November 19, 2004 and ended December 20, 2004. Several comment letters from the public, and comment letters from public agencies (i.e., U.S. Department of Transportation, Federal Aviation Administration; U.S. Department of Agriculture; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; California Highway Patrol; California Department of Conservation; California Department of Forestry/San Luis Obispo County Fire Department; San Luis Obispo County Air Pollution Control District; County of San Luis Obispo Department of Agriculture; County of San Luis Obispo Public Works Department; San Luis Obispo County Parks), were received in response to the NOP. NOP comment letters are included in Appendix A of this EIR.

Primary environmental areas of concern raised by the commenting agencies and public include:

- Aviation hazards
- Impacts and trail connections to Santa Lucia Wilderness
- Water supply, including groundwater impacts
- Water quality
- Fire safety
- Erosion, sedimentation and water supply impacts on Steelhead
- Construction traffic
- Operational traffic
- Traffic and pedestrian safety
- Site access
- Impacts on agricultural production, including existing vineyard operations
- Growth-inducing impacts
- Consistency with Land Use Ordinance requirements
- Air contaminant emissions
- Provision of parks, recreation, and trail facilities
- Drainage and flood hazards
- Winery noise, light, traffic, air quality, and biological impacts
- Impacts from special events
- Visual impacts from lighting

## **1.5 EFFECTS FOUND NOT TO BE SIGNIFICANT**

Based on the scoping process for the proposed project, the County of San Luis Obispo determined that there was no substantial evidence that the project would cause or otherwise result in significant environmental effects in the resource areas discussed below. As indicated in the State CEQA Guidelines, no further environmental review of these issues is necessary for the reasons summarized in the following discussion. The substantiation for determining that these issues would result in no impact, or a less-than-significant impact is described in further detail in Appendix A, NOP, pursuant to § 15128 of the State CEQA Guidelines.



### **Geology and Soils**

- ❖ *Will the Project Be within a California Department of Mines & Geology Earthquake Fault Zone (Formerly Alquist-Priolo)?* The Project and Program sites are not located within a designated Earthquake Fault Zone. Therefore, no impacts would result. However, Project and Program impacts related to fault rupture, groundshaking, and other seismic effects are discussed in Section 4.7, *Geologic Stability*, of this EIR.
- ❖ *Will the Project Preclude the Extraction of Valuable Mineral Resources?* The Project and Program sites do not contain known valuable mineral resources. The proposed project and future development program would not preclude the extraction of mineral resources from off-site extraction facilities. Therefore, no impacts would result.

### **Population/Housing**

- ❖ *Will the Project Displace Existing Housing or People, Requiring Construction of Replacement Housing Elsewhere?* Currently, one single family residence and seven farm support housing units are located within the Ranch. In addition, 35 clustered lots (36 residential units) are currently under construction in the northern portion of the Ranch property as part of the Margarita Farms project. Neither the project nor the future development program would remove existing housing or housing that is under construction. Therefore, no impacts would result.

### **Transportation/Circulation**

- ❖ *Will the Project Result in a Change in Air Traffic Patterns that may Result in Substantial Safety Risks?* The site currently contains a private airstrip that is proposed to remain under the project and future development program. Due to the low vertical profile of proposed project uses and the assumed low vertical profile of future development scenario uses, as well as the proposed and conceptual future locations of these uses, neither the project nor the future development program would affect air traffic patterns associated with the on-site private airstrip or other air traffic, in a manner that could result in substantial safety risks. Therefore, no impacts would result.

### **Land Use**

- ❖ *Will the Project Be Potentially Inconsistent with Any Habitat or Community Conservation Plan?* No Habitat or Community Conservation Plan applies to the project site or future development program site. Therefore, no impacts related to inconsistency with such plans would result.

## **1.6 ENVIRONMENTAL IMPACT REVIEW PROCESS**

The environmental impact review process, as required under CEQA, is outlined below. The steps are presented in sequential order.

- 1. Notice of Preparation (NOP) Distributed.** Immediately after deciding that an EIR is required, the lead agency must file a NOP soliciting input on the EIR scope to "responsible,"



"trustee," and involved federal agencies; to the State Clearinghouse, if one or more state agencies is a responsible or trustee agency; and to parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. A scoping meeting to solicit public input on the issues to be assessed in the EIR is not required, but may be conducted by the lead agency.

2. **Draft Environmental Impact Report (DEIR) Prepared.** The DEIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) alternatives; g) mitigation measures; and h) irreversible changes.
3. **Public Notice and Review.** A lead agency must prepare a Public Notice of Availability of an EIR. The Notice must be placed in the County Clerk's office for 30 days (Public Resources Code Section 21092). The lead agency must send a copy of its Notice to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of DEIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must consult with and request comments on the DEIR from responsible and trustee agencies, and adjacent cities and counties (Public Resources Code Sections 21104 and 21253). The minimum public review period for a DEIR is 30 days. When a DEIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless a shorter period is approved by the Clearinghouse (Public Resources Code 21091). Distribution of the DEIR may be required through the State Clearinghouse (*CEQA Guidelines* Section 15305).
4. **Notice of Completion.** A lead agency must file a Notice of Completion with the State Clearinghouse as soon as it completes a DEIR.
5. **Final EIR (FEIR).** A FEIR must include: a) the DEIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.
6. **Certification of FEIR.** The lead agency shall certify: a) the FEIR has been completed in compliance with CEQA; b) the FEIR was presented to the decision-making body of the lead agency; and c) the decision-making body reviewed and considered the information in the FEIR prior to approving a project (*CEQA Guidelines* Section 15090).
7. **Lead Agency Project Decision.** A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).
8. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction



and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that set forth the specific social, economic or other reasons supporting the agency's decision.

9. **Mitigation Monitoring/Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
  
10. **Notice of Determination.** An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA challenges (Public Resources Code Section 21167[c]).



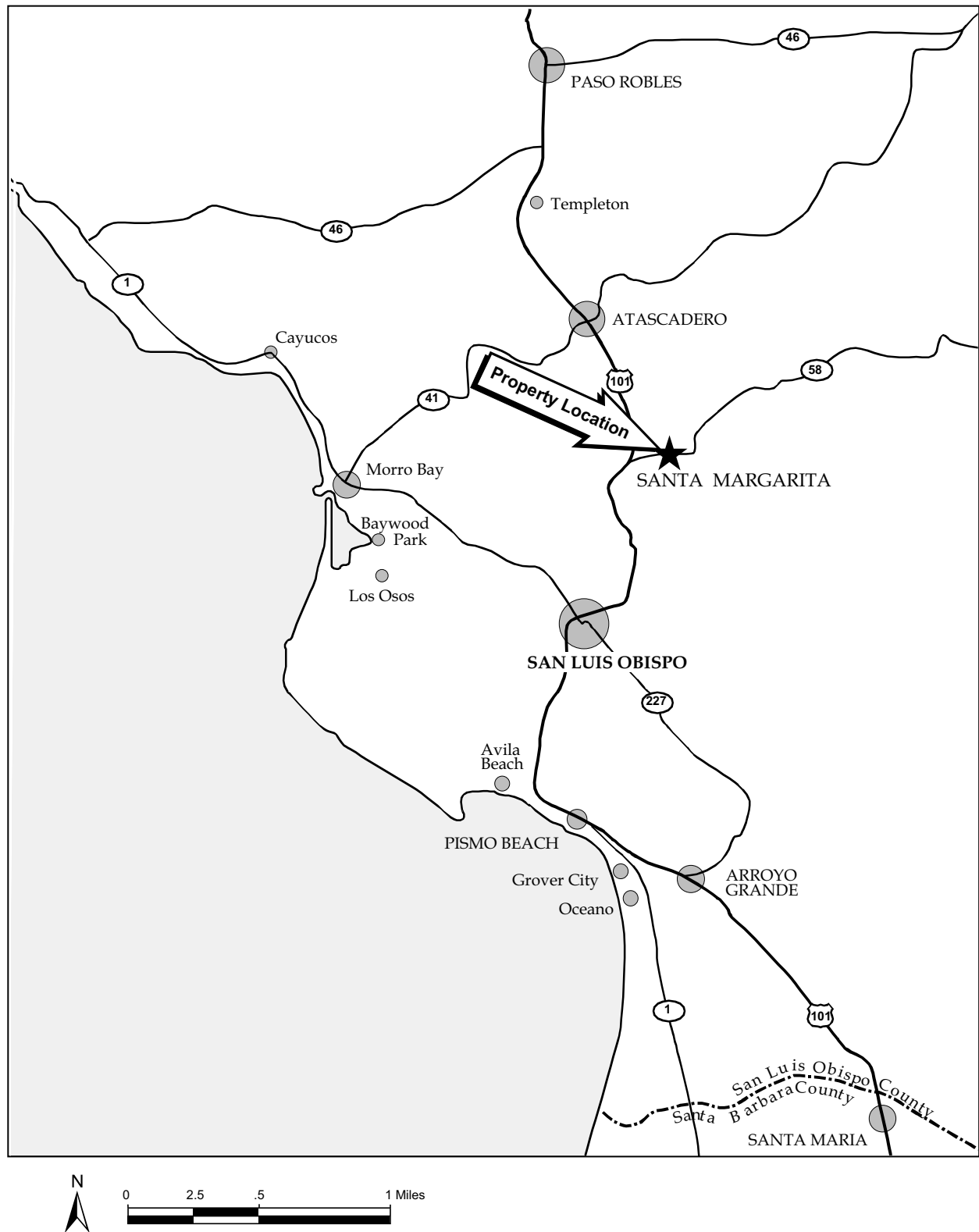
## 2.0 PROJECT DESCRIPTION

*Summary.* The proposed project, known as the Santa Margarita Ranch Agricultural Residential Cluster Subdivision Project and Future Development Program, includes two components: 1) an Agricultural Residential Cluster Subdivision (Tentative Tract 2586), for which an application has been filed with the County, and 2) a Future Development Program, for which no application has been filed. Despite its status, the Future Development Program is evaluated in the EIR because of a settlement agreement between the community group Santa Margarita Area Residents Together (SMART), the County, and the applicant (Santa Margarita Ranch, LLC). This agreement required that the applicant submit a Future Development Program for the Ranch at the time of any specific entitlement request (such as the proposed Tentative Tract Map and Conditional Use Permit). The settlement agreement also required that as part of the CEQA evaluation of the project-specific application, the EIR document examine the long range effects of full buildout of the ranch (Future Development Program) in addition to the near term effects of proposed Cluster development. Therefore, the “project” reviewed by this EIR includes both the Agricultural Residential Cluster and Future Development Program components. For the proposed Agricultural Residential Cluster Subdivision, the EIR will serve as a Project EIR pursuant to Section 15161 of the *CEQA Guidelines*, and evaluate the specific proposed development characteristics. For the Future Development Program, the EIR will serve as a Program EIR at a more conceptual level of detail. Since only generalized Future Development Program land use locations are available at this time, and no site plans or other project-level details have been provided by the applicant, this EIR evaluates and mitigates a reasonable worst-case scenario of potential impacts associated with the Future Development Program. Since project-level information and active applications for the Future Development Program components have not been provided, future development in accordance with the program will require additional environmental review, pursuant to the requirements of CEQA.

The Santa Margarita Ranch property (hereinafter, “the Ranch”) encompasses approximately 14,000 acres and is located immediately east of U.S. Highway 101, and surrounds the community of Santa Margarita. The proposed Agricultural Residential Cluster Subdivision includes 3,778 acres near the middle of the Ranch, southeast of the community of Santa Margarita, while the Future Development Program occurs in various locations throughout the balance of the 14,000-acre property (refer to Figures 2-1 and 2-2; Figure 2-1 shows the regional location of the project site, while Figure 2-2 shows the site within its local context). The proposed subdivision also includes a 2,417 acre remainder lot that is not proposed for development at this time. The remainder parcel is located north of the proposed Agricultural Residential Cluster Subdivision lots, south of the community of Santa Margarita.

The proposed Agricultural Residential Cluster Subdivision site is located southeast of the community of Santa Margarita, west of Pozo Road. The proposed agricultural cluster development includes 111 clustered homesites and one ranch headquarters unit (located on Parcel 42), with development area totaling 163.1 acres, with the remaining 3,633 acres placed in agricultural conservation easements (ACEs). The agricultural cluster subdivision includes transportation infrastructure, water service improvements, underground wire utilities, and on-site septic systems. The proposed residential units would be located throughout a 676.67 acre area in the north-central portion of the site, west of West Pozo Road, to be constructed in three phases, each with independent services, infrastructure, and respective agricultural/conservation dedications.

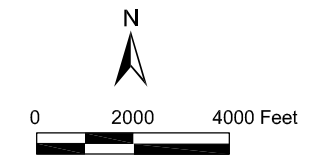
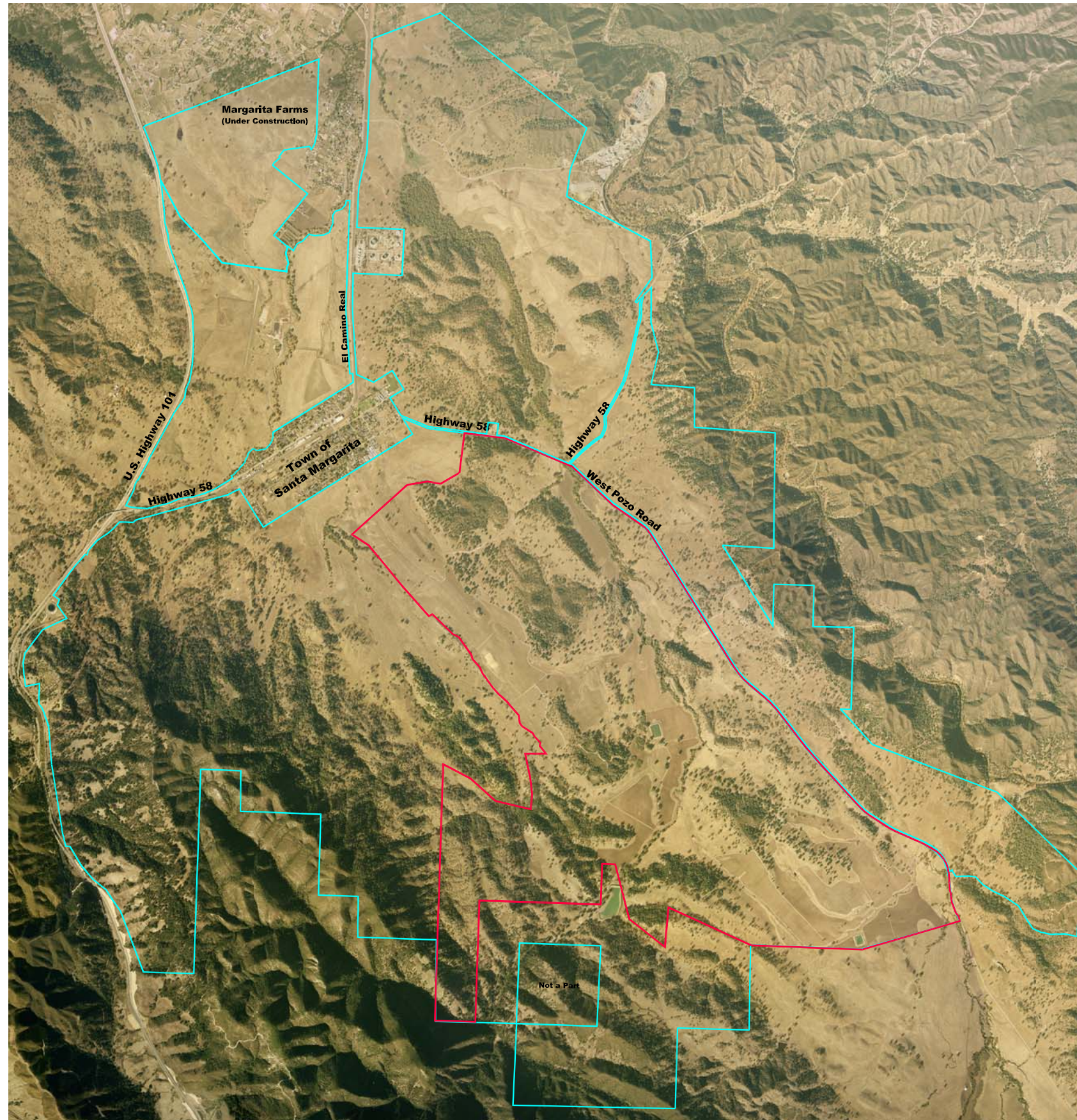




Regional Location

Figure 2-1





- Agricultural Residential Cluster Subdivision Boundary
- Future Development Program Boundary

Proposed Agricultural Residential Cluster Subdivision and Future Development Program Boundaries

Figure 2-2









Proposed lot sizes range from between 1.0 to 2.5 acres and comprise approximately 128 acres, with approximately 16 acres for roadways, driveways and other improvements.

The proposed project development plan is shown on Figure 2-3.

The Future Development Program occurs throughout the portions of the Santa Margarita Ranch property generally outside the boundaries of the Agricultural Residential Cluster Subdivision, east of Highway 101 and surrounding both the community of Santa Margarita and the proposed Agricultural Residential Cluster Subdivision (refer to Figure 2-9). The Future Development Program includes the balance of the 550 single-family residential units allowable pursuant to the Salinas River Area Plan (approximately 402 residences; see Table 2-1) and the additional following uses: private golf course, club house and pro shop; guest ranch, lodge, and restaurant; 12-room bed and breakfast; cafe; amphitheater; crafts studios, galleries and shops; interpretive center and gift shops; nine wineries with tasting rooms and permitted special events; neighborhood park and swimming pool; five ranch/farm headquarters; one livestock sales yard and café; three places of worship; and a retreat center. The Future Development Program contemplates two of the envisioned wineries and two of the anticipated ranch headquarters within the Agricultural Conservation Easements (ACEs) associated with the proposed Agricultural Residential Cluster Subdivision.

The specific characteristics of the project, including the project application, proposed structures, and project objectives, are described below.

**Table 2-1. Summary of Existing, Project, and Program Residential Development Potential**

<b>Residential Development Component</b>	<b>Number of Dwelling Units</b>
<b>Existing Development (Margarita Farms)</b>	<b>36</b>
<b>Proposed Agricultural Residential Cluster Subdivision</b>	
<i>Single-Family Homes</i>	111
<i>Ranch Headquarters Unit</i>	1
Subtotal (Agricultural Residential Cluster Subdivision)	112
<b>Future Development Program</b>	
<i>Market-Rate Single Family Homes</i>	352
<i>Workforce (Affordable) Housing</i>	50
Subtotal (Future Development Program)	402
<b>Subtotal Proposed Project (Cluster plus Program)</b>	<b>514</b>
<b>TOTAL (Existing, plus Cluster, plus Program)</b>	<b>550</b>
<i>Maximum Allowed under Salinas River Rural Area Standards, County Land Use Ordinance Section 22.104.040</i>	550

## 2.1 PROJECT APPLICANT

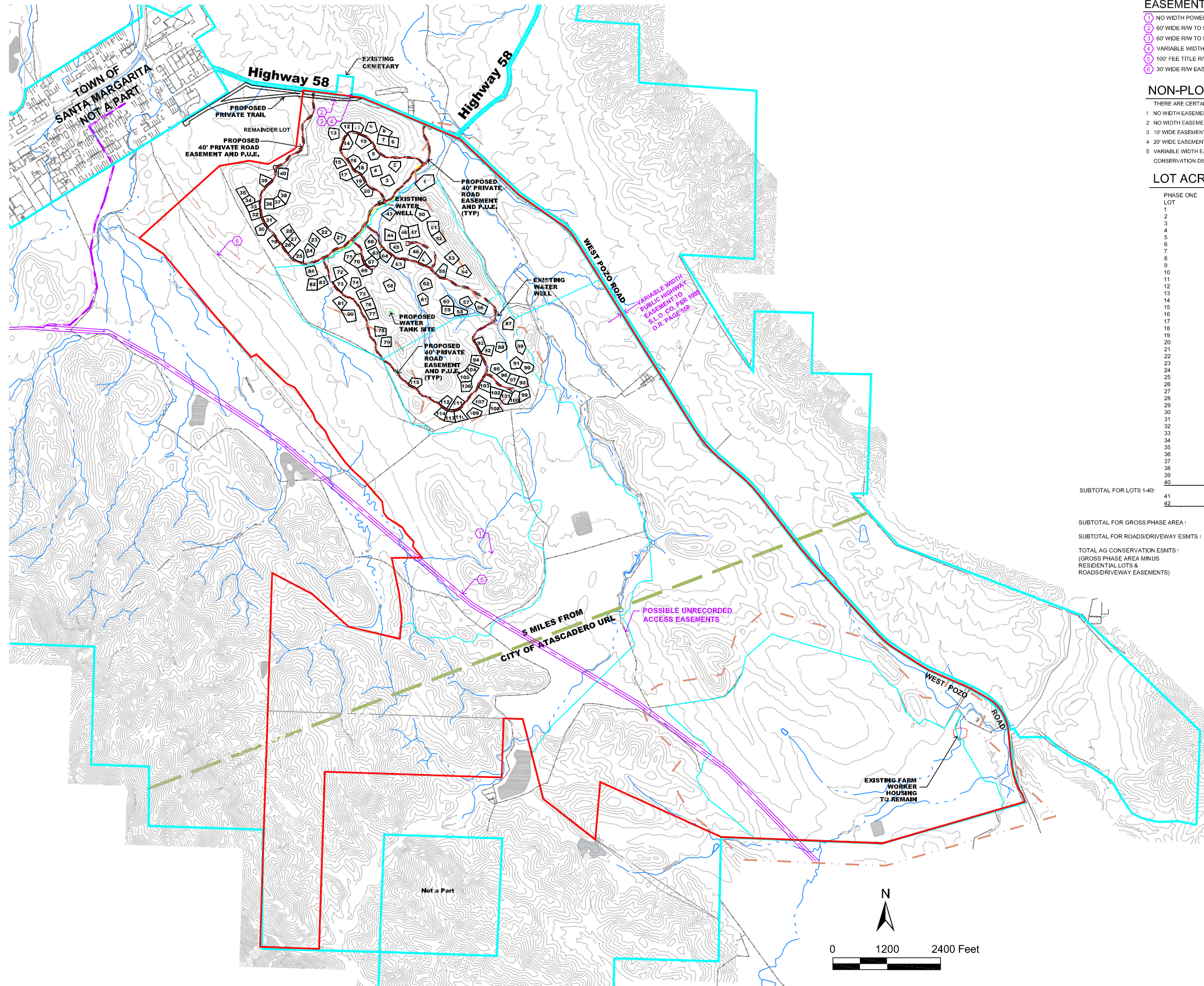
The project applicant for the Santa Margarita Ranch Agricultural Residential Cluster Subdivision Project and Future Development Program is:

Santa Margarita Ranch, LLC  
 5875 Stockdale Road  
 Paso Robles, CA 93446  
 Contact: Karl Wittstrom



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- EASEMENTS**
- 1 NO WIDTH POWER LINE EASEMENT TO PG&E PER 996 O.R. 525
  - 2 60' WIDE RW TO S.L.O. CO. PER 9 DEEDS 303
  - 3 60' WIDE RW TO S.L.O. CO. PER 50 DEEDS 460
  - 4 VARIABLE WIDTH RW TO STATE OF CA. PER 294 O.R. 387
  - 5 100' FEE TITLE RW FOR PIPELINE PURPOSES & APPURTENANT 30' ROAD TO U.S.A. PER 311 O.R. 25 AND 315 O.R. 280.
  - 6 30' WIDE RW EASEMENT TO NICHOLAS WORTH YOUNG AND MIRANDA CARRINGTON YOUNG PER 1531 O.R. 425

- NON-PLOTTABLE EASEMENTS**
- THERE ARE CERTAIN UNPLOTTABLE EASEMENTS AFFECTING THIS PROPERTY AND NOTED AS FOLLOWS:
- 1 NO WIDTH EASEMENT FOR PIPELINES AND TELEPHONE LINES TO STANDARD OIL COMPANY PER 72 DEEDS 470
  - 2 NO WIDTH EASEMENT FOR PIPELINE TO SANTA MARIA GAS COMPANY PER 78 O.R. 334, 214 O.R. 276
  - 3 10' WIDE EASEMENT FOR COMMUNICATION FACILITIES TO PACIFIC TELEPHONE AND TELEGRAPH COMPANY PER 2123 O.R. 535
  - 4 20' WIDE EASEMENT FOR COMMUNICATION FACILITIES TO PACIFIC TELEPHONE AND TELEGRAPH COMPANY PER 524 O.R. 290
  - 5 VARIABLE WIDTH EASEMENT FOR GAUGING STATION TO THE SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT PER 1097 O.R. 450

**LOT ACREAGE**

PHASE ONE		PHASE TWO		PHASE THREE	
LOT	Area	LOTS	Area	LOT	Area
1	2.5 ACRES	43	1.2 ACRES	87	1.3 ACRES
2	1.0 ACRES	44	1.2 ACRES	88	1.0 ACRES
3	1.2 ACRES	45	1.1 ACRES	89	1.1 ACRES
4	1.1 ACRES	46	1.3 ACRES	90	1.2 ACRES
5	1.0 ACRES	47	1.4 ACRES	91	1.2 ACRES
6	1.0 ACRES	48	1.2 ACRES	92	1.1 ACRES
7	1.2 ACRES	49	1.1 ACRES	93	1.0 ACRES
8	1.0 ACRES	50	1.5 ACRES	94	1.0 ACRES
9	1.1 ACRES	51	1.5 ACRES	95	1.1 ACRES
10	1.5 ACRES	52	1.2 ACRES	96	1.0 ACRES
11	1.1 ACRES	53	1.2 ACRES	97	1.1 ACRES
12	1.1 ACRES	54	1.3 ACRES	98	1.2 ACRES
13	1.2 ACRES	55	1.1 ACRES	99	1.1 ACRES
14	1.2 ACRES	56	1.1 ACRES	100	1.2 ACRES
15	1.0 ACRES	57	1.0 ACRES	101	1.3 ACRES
16	1.3 ACRES	58	1.0 ACRES	102	1.3 ACRES
17	1.2 ACRES	59	1.0 ACRES	103	1.0 ACRES
18	1.0 ACRES	60	1.2 ACRES	104	1.0 ACRES
19	1.1 ACRES	61	1.1 ACRES	105	1.3 ACRES
20	1.1 ACRES	62	1.2 ACRES	106	1.1 ACRES
21	1.0 ACRES	63	1.2 ACRES	107	1.3 ACRES
22	1.0 ACRES	64	1.1 ACRES	108	1.2 ACRES
23	1.0 ACRES	65	1.0 ACRES	109	1.2 ACRES
24	1.0 ACRES	66	1.1 ACRES	110	1.1 ACRES
25	1.0 ACRES	67	1.1 ACRES	111	1.2 ACRES
26	1.0 ACRES	68	1.2 ACRES	112	1.1 ACRES
27	1.1 ACRES	69	1.2 ACRES	113	1.1 ACRES
28	1.2 ACRES	70	1.4 ACRES	114	1.1 ACRES
29	1.0 ACRES	71	1.1 ACRES	115	1.1 ACRES
30	1.1 ACRES	72	1.3 ACRES		
31	1.0 ACRES	73	1.3 ACRES	<b>SUBTOTAL FOR LOTS 87-115:</b>	<b>33.1 ACRES</b>
32	1.0 ACRES	74	1.0 ACRES	<b>SUBTOTAL FOR GROSS PHASE AREA:</b>	<b>1024.0 ACRES</b>
33	1.0 ACRES	75	1.1 ACRES	<b>SUBTOTAL FOR ROADS/DRIVEWAY ESMTS:</b>	<b>4.2 ACRES</b>
34	1.0 ACRES	76	1.4 ACRES	<b>TOTAL AG CONSERVATION ESMTS:</b>	<b>1019.8 ACRES</b>
35	1.1 ACRES	77	1.2 ACRES	(GROSS ONE LOT AREA MINUS	
36	1.0 ACRES	78	1.0 ACRES	RESIDENTIAL LOTS &	
37	1.1 ACRES	79	1.0 ACRES	ROADS/DRIVEWAY EASEMENTS)	
38	1.2 ACRES	80	1.5 ACRES		
39	1.0 ACRES	81	1.1 ACRES		
40	1.0 ACRES	82	1.2 ACRES		
		83	1.0 ACRES		
<b>SUBTOTAL FOR LOTS 1-40:</b>	<b>44.5 ACRES</b>	84	1.0 ACRES		
		85	49.8 ACRES		
		86	190.2 ACRES		
<b>SUBTOTAL FOR GROSS PHASE AREA:</b>	<b>1518.1 ACRES</b>	<b>SUBTOTAL FOR GROSS PHASE AREA:</b>	<b>1201.7 ACRES</b>		
<b>SUBTOTAL FOR ROADS/DRIVEWAY ESMTS:</b>	<b>4.0 ACRES</b>	<b>SUBTOTAL FOR ROADS/DRIVEWAY ESMTS:</b>	<b>7.8 ACRES</b>		
<b>TOTAL AG CONSERVATION ESMTS:</b>	<b>1489.4 ACRES</b>	<b>TOTAL AG CONSERVATION ESMTS:</b>	<b>1144.1 ACRES</b>		
(GROSS PHASE AREA MINUS		(GROSS ONE LOT AREA MINUS			
RESIDENTIAL LOTS &		RESIDENTIAL LOTS &			
ROADS/DRIVEWAY EASEMENTS)		ROADS/DRIVEWAY EASEMENTS)			

- LEGEND**
- TENTATIVE TRACT 2586 BOUNDARY
  - PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
  - RANCH PROPERTY BOUNDARY
  - WATERS-OF-THE-US
  - CONTOURS - 20' INTERVAL
  - 500' AG BUFFER

- PROJECT DATA**
1. PROJECT ADDRESS: HIGHWAY 58 & WEST POZO ROAD
  2. ZONING: AGRICULTURE
  3. ASSESSOR'S PARCEL NUMBERS:
    - (1) APN 070-094-001 SANTA MARGARITA RANCH L.L.C.
    - (2) APN 070-095-002 SANTA MARGARITA RANCH L.L.C.
    - (3) APN 070-251-016 MAJOR DOMO L.L.C. / HERTEL GROUP L.L.C.
  4. PLANNING AREAS: SALINAS RIVER
  5. COMBINING DESIGNATIONS: GEOLOGIC STUDY AREA, FLOOD HAZARD
  6. WATER SUPPLY: COMMUNITY WATER SYSTEM
  7. SEWAGE DISPOSAL: INDIVIDUAL SEPTIC
  8. GAS: THE GAS CO.
  9. ELECTRICITY: P.G.E.
  10. TELEPHONE: SBC

**Proposed Agricultural Residential Cluster Subdivision Development Plan**

Source: EDA Design Professionals, June 2006.

Figure 2-3  
 County of San Luis Obispo



## **2.2 PROJECT LOCATION**

The 14,000-acre Santa Margarita Ranch property is located immediately east of U.S. Highway 101, surrounding the unincorporated community of Santa Margarita. Of these 14,000 acres, 3,778 acres are included in an Agricultural Residential Cluster Subdivision, located southeast of the community of Santa Margarita and west of Pozo Road. The Future Development Program occurs throughout the balance of the Ranch property. Because only tentative locations for proposed uses are available, and because an application has not yet been filed, these locations may change. This EIR therefore evaluates a reasonable worst-case scenario relative to the location of future facilities within the tentative use areas.

Santa Margarita Ranch lies at the intersection of three County planning areas. The southwestern corner and the southernmost portions of the Ranch, which include areas within the National Forest Boundary, are located within the Los Padres Planning Area. The southeastern corner of the Ranch is included in the Las Pilitas Planning Area. The remainder of the Ranch is included in the Salinas River Planning Area. The northern and central portions of the Ranch property, including the proposed Agricultural Residential Cluster Subdivision, are located within five miles of the City of Atascadero's Urban Reserve Line.

The entire 14,000-acre Santa Margarita Ranch property is bordered to the north by agriculture, rural lands, residential suburban uses, including those within the Garden Farms community, and commercial retail development. Agriculture, rural lands, single-family residences, agricultural accessory structures, quarries, and portions of the Salinas River border the site to the east. To the south agriculture, recreational, and open space uses exist, as well as trails and the Los Padres National Forest. To the north are agricultural uses, rural lands and residences. The proposed Agricultural Residential Cluster Subdivision area is located near the center of the Ranch, and is bordered by Pozo Road/Highway 58 to the north, Pozo Road to the east, and agricultural uses, vineyards and/or livestock grazing, and dry farming to the south and west.

## **2.3 EXISTING SITE CHARACTERISTICS**

### **2.3.1 Existing Ranch Property Program Site Characteristics**

The entire Santa Margarita Ranch property is approximately 14,000 acres. Of this total, about 10,222 acres are available for development under the Future Development Program, which does not include the 3,778 acres that are part of the Agricultural Residential Cluster Subdivision (see Section 2.3.2). Existing ranch facilities (+/- 50,000 square feet of building coverage), activities and land uses include an equestrian center, private narrow gauge railroad, vineyard(s), private 3,400 foot airstrip, farmland, eight-acre cattle feedlot, agricultural roads, trails, several homes along with agricultural accessory structures, historic structures, water wells, numerous ponds and reservoirs, and various above and underground utilities.

The Ranch property is located in a hilly area with ridges trending north-south and reaching elevations of approximately 1,276 feet above mean sea level (msl) with valleys draining to Trout Creek at an elevation of approximately 1,020 feet above msl. Existing structures located on the Ranch property include 36 recently-completed or under-construction residential units located at the northern end of the Ranch (i.e., the Santa Margarita Farms Subdivision), one single family residence, seven farm support housing units, and six "Mission Era" structures (refer to Section





4.2, *Cultural Resources*, for a discussion of impacts related to historic resources). The existing equestrian center, located at the southern end of the Ranch, maintains a 200-400 seat arena, boarding facilities and stables, and four private cabins. In addition, four stock ponds and four reservoirs are located throughout the Ranch.

The Santa Margarita Farms Subdivision (Tract 1) includes 35 clustered lots (36 residential units) located at the northern end of the Ranch. The lots are currently for sale and construction of houses started in 2004. The applicant is not proposing to modify or remove these existing uses.

### **2.3.2 Existing Agricultural Residential Cluster Subdivision Site Characteristics**

The 3,778-acre portion of the Ranch proposed for Agricultural Residential Cluster development is currently undeveloped hilly terrain located near the center of the Santa Margarita Ranch property. These hills typically rise 100 to 300 feet above the surrounding landscape, decreasing in height from north to south. Land use on the site proposed for Cluster development is limited to ranchlands, without any structures. There are several existing agricultural accessory structures, as well as four licensed stock ponds and four licensed reservoirs, on the portions of the site proposed for agricultural conservation easements. Several private roads and trails are located throughout the area, which provide access for vineyard and ranch operations, grazing, PG&E power lines, and other public utilities located on-site.

The Margarita (Cuesta Ridge) Vineyard currently occupies approximately 1,100 acres of the Agricultural Residential Cluster Subdivision site, including a 974-acre vineyard, two farm support quarters. The remaining portions of the Agricultural Residential Cluster Subdivision site are currently used for cattle grazing on an existing 676 acre grazing unit that supports 85 animal units per year (refer to Section 4.1, *Agricultural Resources*).

Drainage generally flows from south to north via four main drainages in the Santa Margarita Ranch area: Santa Margarita Creek, Yerba Buena Creek, Trout Creek, and Rinconada Creek. Santa Margarita Creek is located on the eastern portion of the site, flowing in a northeasterly direction before being joined by Yerba Buena Creek, flowing from the south-central portion of the site. Approximately 1 mile north of this junction, these drainages enter Trout Creek, which joins the Salinas River approximately 1.25 miles north of the Ranch boundary. The Rinconada Creek is the most southerly drainage, joining the Salinas River at the southeastern corner of the project site.

Table 2-2 summarizes the existing land use and regulatory characteristics of the site.



**Table 2-2. Existing Site Information**

<b>Site Characteristic</b>	<b>Description</b>
<b>Santa Margarita Ranch Property (Program Site)</b>	
Existing General Plan Designation	Agricultural (AG), Rural Residential (RR) (on Margarita Farms)
Combining Designation	Flood Hazard, Geologic Study Area, Historic Site, Sensitive Resource Area,
Site Size	14,000 acres (3,778 acres of which contain the Agricultural Residential Cluster Subdivision area / Tract 2586)
Existing Land Use and Development	Equestrian facility, private air strip, vineyard, irrigated and non-irrigated row crops, grazing land, dry land farming, recreation, special events, single-family residence, farm support quarters, agricultural accessory structures, private cabins, private railroad
Assessor Parcel Number	APNs 070-091-036,037,038; 070-157-005,006; 070-095-001; 070-132-009; 070-094-001; 070-095-002; 070-081-005,006, 007,008,010,011,012,030; 070-241-028,029,031,032,033,034; and 070-251-004,013,014,015,106
Surrounding Land Use/Zoning	<i>North:</i> Agriculture; Rural Lands; Residential Suburban; Commercial Retail/ single-family residences, agriculture accessory structures <i>South:</i> Agriculture; Recreation; Open Space/ undeveloped; trails, Los Padres National Forest <i>East:</i> Agriculture; Rural Lands / scattered single-family residences, agricultural accessory structures; quarries, Salinas River <i>West:</i> Agriculture; Rural Lands / Highway 101; scattered single-family residences, agricultural accessory structures
Access	U.S. Highway 101 and Santa Margarita/Hwy 58 interchange to Pozo Road
Public Services	<i>Water Supply:</i> Santa Margarita Ranch Mutual Water Company (Proposed) <i>Sewage:</i> Private Septic <i>Fire:</i> CDF <i>Police:</i> San Luis Obispo County Sheriff's Department <i>Schools:</i> Atascadero Unified School District <i>Electric:</i> Pacific Gas & Electric Company (PG&E) <i>Gas:</i> The Gas Company <i>Telephone:</i> AT&T
<b>Agricultural Residential Cluster Subdivision (Project Site)</b>	
Existing General Plan Designation	Agricultural (AG)
Combining Designation	Geologic Study Area, Flood Hazard
Site Size	3,778 acres
Existing Land Use and Development	Irrigated and non-irrigated row crops, grazing land, dry land farming, vineyard, agricultural accessory structures
Assessor Parcel Number	APNs 070-094-001, 070-095-002, 070-251-016
Surrounding Land Use/Zoning	<i>North:</i> Agriculture/ livestock grazing, dry farming, Pozo Road/Highway 58, cemetery <i>South:</i> Agriculture/ vineyard, livestock grazing <i>East:</i> Agriculture/ vineyard, livestock grazing, dry farming, Pozo Road <i>West:</i> Agriculture/ vineyard
Access	U.S. Highway 101 and Santa Margarita/Hwy 58 interchange to Pozo Road
Public Services	<i>Water Supply:</i> Santa Margarita Mutual Water Company (Proposed) <i>Sewage:</i> Private Septic <i>Fire:</i> CDF <i>Police:</i> San Luis Obispo County Sheriff's Department <i>Schools:</i> Atascadero Unified School District <i>Electric:</i> Pacific Gas & Electric Company (PG&E) <i>Gas:</i> The Gas Company <i>Telephone:</i> AT&T



## 2.4 PROJECT CHARACTERISTICS

The applicant is requesting approval of a Vesting Tentative Tract Map and Agricultural Lands Residential Cluster Conditional Use Permit for the proposed Agricultural Residential Cluster component. No entitlements are currently proposed for the Future Development Program component. However, a settlement agreement between the community group Santa Margarita Area Residents Together (SMART), the County and the applicant requires that the applicant submit a Future Development Program for the areas within the original Rancho boundaries (9,400 acres) at the time of certain specific entitlement request. The entire 14,000 acres of the Ranch is included in the Future Development Program evaluation. Therefore, this EIR evaluates the requested Tentative Tract Map and Conditional Use Permit for the Agricultural Residential Cluster Subdivision active application, as well as the Future Development Program, for which no application has yet been filed.

The specifics of the Agricultural Residential Cluster Subdivision and Future Development Program are described below and summarized in Table 2-3.

### 2.4.1 Agricultural Residential Cluster Subdivision (Tentative Tract 2586)

The proposed project includes an Agricultural Residential Cluster Subdivision component, which would consist of 111 residential clustered lots, one (1) dwelling unit at the Ranch Headquarters on Parcel 42, and agricultural conservation easements (ACE's).

**a. Residential Cluster.** The applicant submitted a request for a Vesting Tentative Tract Map and Conditional Use Permit to subdivide and develop an agricultural cluster subdivision. The proposed Agricultural Residential Cluster consists of 111 residential parcels (1.0 to 2.5 acres in size), 1 dwelling unit at the Ranch Headquarters on Parcel 42, and permanent agricultural conservation easements (approximately 3,633 acres). The proposed agricultural cluster subdivision density and density calculation are identified on Figure 2-4. The proposed agricultural cluster subdivision development plan is shown on Figure 2-5. Development of the Agricultural Residential Cluster Subdivision would occur in three phases, each including an agricultural conservation easement (ACE) area, as depicted on Figure 2-6. Each phase is described in greater detail in the following paragraphs:

*Phase One (1,518 acres)* - 40 residential cluster lots (44.8 acres); 1 dwelling unit at the Ranch Headquarters on Parcel 42; 40-foot wide private residential access easement (4.0 acres); 40-foot wide private agricultural and residential access easement (8.7 acres), 22-foot wide or less paved road; water service improvements including a water tank with a minimum capacity of 188,000 gallons that would be screened with vegetation or located underground, looped service main, and service lines to residential parcels; underground wire utilities; 41 individual on-site septic systems and leach fields (located on-site or within the ACE by easement(s)); and, an agricultural conservation easement parcel of approximately 1,469 acres (refer to Figure 2-6). Phase One is scheduled for completion in January 2008.

*Phase Two (1,201 acres)* - 42 residential clustered lots (49.8 acres); 40-foot wide private residential access easement and 30-foot wide driveway easements (7.8 acres); 40-foot wide private agricultural and residential access easement (5.9 acres); 18-foot wide or less paved road; water service improvements including a looped service main and service lines to residential parcels;





underground wire utilities; 42 on-site septic systems and leach fields; and an agricultural conservation easement parcel of approximately 1,144 acres. Phase Two is scheduled for completion in January 2009.

**Table 2-3. Summary of Project and Program Components**

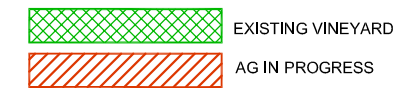
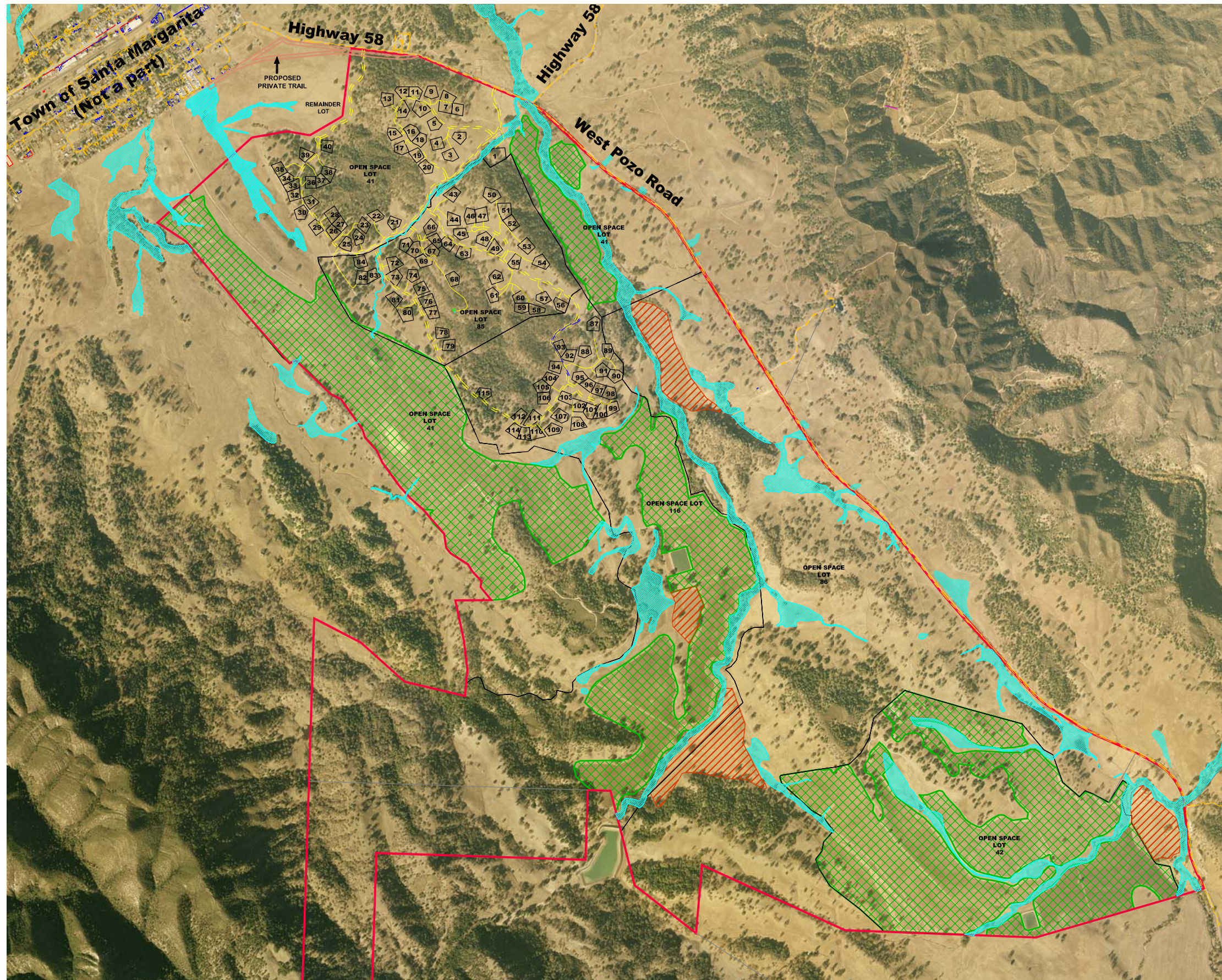
<b>Project Element</b>	<b>Project Characteristics</b>
<b>Agricultural Residential Cluster Tract 2586</b>	
111 residential clustered lots	1.0 to 2.5 acres in size (128 acres)
1 Dwelling Unit at Headquarters Parcel, Parcel 42	
40-foot wide private easements (residential) and 30-foot wide driveway easements	16 acres
40-foot wide private easements (residential and agricultural)	19.1 acres
Paved roads	20 and 18 feet wide
Water and Septic Utilities	Water tank, service main and service lines; water wells. 112 on-site septic systems
Underground and aboveground utilities	State Water, Salinas Water, Pacific Gas and Electric, Southern California Gas Company, Phillips Petroleum, telephone, and cable
Drainage Facilities	Storm Drains and Detention Basins
<b>Future Development Program</b>	
Remainder of the 550 residential units allowable under the Salinas River Area Plan (minus 36 residential units in Tract 1, and 112 units on Tract 2586)	402 residential lots, approximately 400 acres (includes 50 affordable workforce units)
Private golf course, club house, shop	27 to 36 holes / 220 to 280 acres
Guest ranch, lodge, and restaurant	150 to 250 units, 40 tables/200 patrons, 100 acres
Restaurant	40 tables/ 200 patrons
Bed and breakfast	12 rooms
Café	20 tables/ 100 patrons
Amphitheater	200 to 600 seats
Craft studios, galleries, and shops	6,000 square feet
Interpretive center and gift shops	3,000 square feet
Nine wineries, tasting rooms, and special events	8 @ 20,000 to 40,000 square feet each, 1 @ 80,000 square feet / 42 events per year per facility: six events with 1,000 people; six events with 500 people; six events with 300 people; ten events with 200 people, and; fourteen events with 100 people
Five ranch/farm headquarters	2.5 acres each
Livestock sales yard and café	20 acres / one Saturday per month with 80 to 100 people / 75 patrons
Horse ranch	30 (+) horses
Three places of worship	2,000 to 5,000 square feet each
40 Year Williamson Act parcels (various agricultural uses)	3,600 acres
Oakenshaw Retreat Center	16 to 24 units on 30 acres with lodge and residence
Neighborhood parkland and swimming pool	5 acres east of Santa Margarita Community
Dedication of land for future Sewage Treatment Plant	Location to be determined: 10 acres
Dedication of land for expansion of cemetery	5 acres
Public Hiking / Equestrian Trails	Various locations to be determined upon future non-agricultural development
Drainage Facilities	Various Locations, with a community drainage basin upstream of the Community of Santa Margarita
Continuation of Existing Uses Listed in Table 2-2	



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**OPENSACE CALCULATION:**

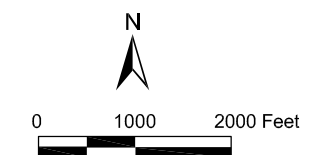
GROSS DEVELOPMENT AREA=	3778 ACRES
OPEN SPACE REQUIRED (95% OF GROSS DEVELOPMENT AREA) =	3589 ACRES
ALLOWABLE DEVELOPMENT AREA=	189 ACRES

**AGRICULTURAL USES:**

IRRIGATED VINEYARD ACREAGE:	GRAZING ACREAGE:
VINEYARD "A"= 52.3 ACRES	OPENSACE: 3589 ACRES
VINEYARD "B"= 327.5 ACRES	VINEYARD -973.9 ACRES
VINEYARD "C"= 205.0 ACRES	TOTAL GRAZING 2615.1 ACRES
VINEYARD "D"= 389.1 ACRES	
TOTAL VINEYARD= 973.9 ACRES	

**DENSITY CALCULATION:**

IRRIGATED VINEYARD (20 ACRE MINIMUM PARCEL SIZE W/ 2 UNITS PER PARCEL):	
TOTAL VINEYARD = 973.9 ACRES / 20 ACRES= 48.69 ACRES	48X2= 96 RESIDENTIAL UNITS
GRAZING (320 ACRE MINIMUM PARCEL SIZE W/ 2 UNITS PER PARCEL):	
TOTAL GRAZING= 2615 ACRES / 320 ACRES=8.17 ACRES	8X2=16 RESIDENTIAL UNITS
TOTAL RESIDENTIAL UNITS:	=112 RESIDENTIAL UNITS



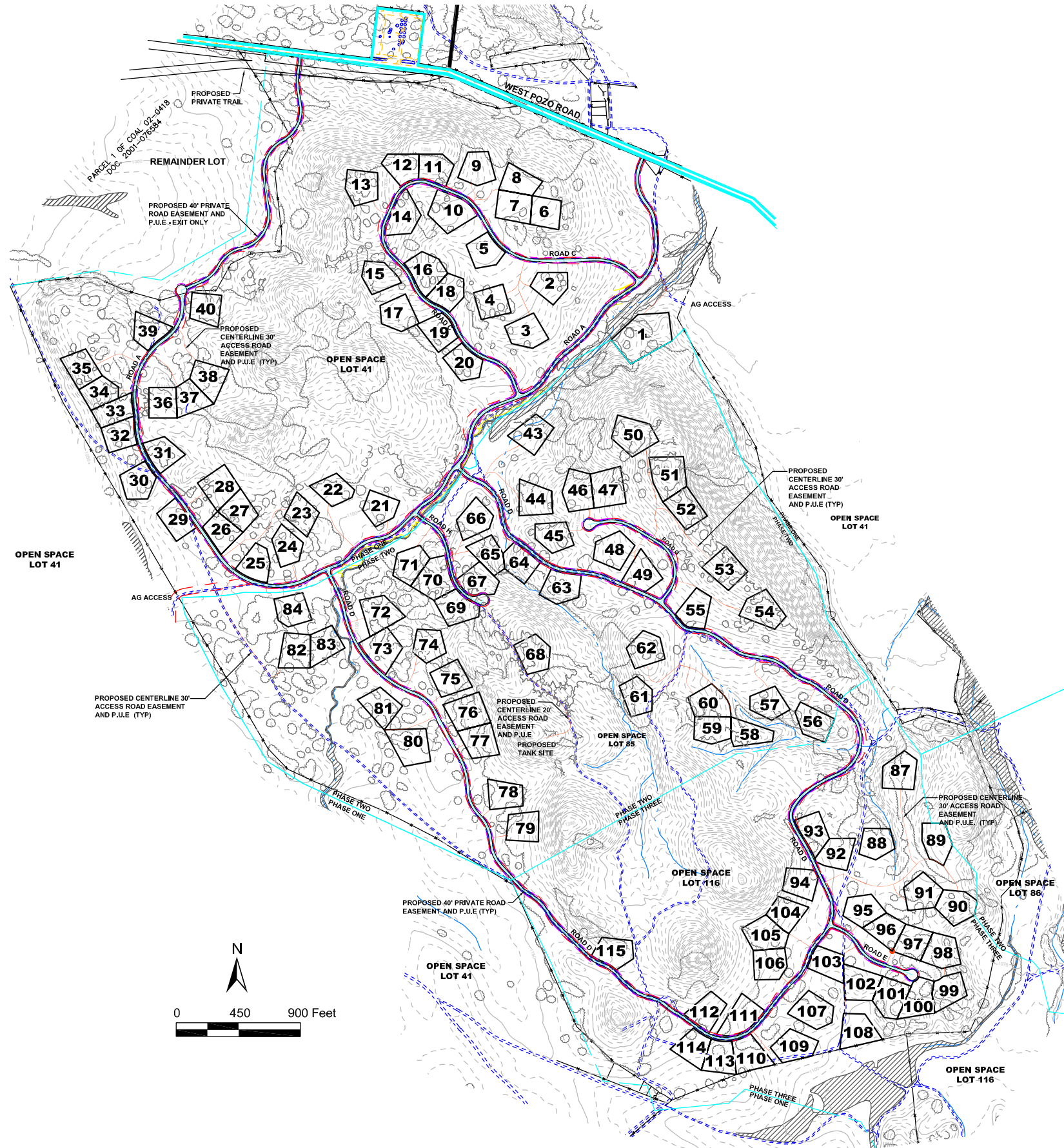
Proposed Agricultural Residential Cluster Subdivision Density Calculation

Source: EDA Design Professionals, June 2006.

Figure 2-4



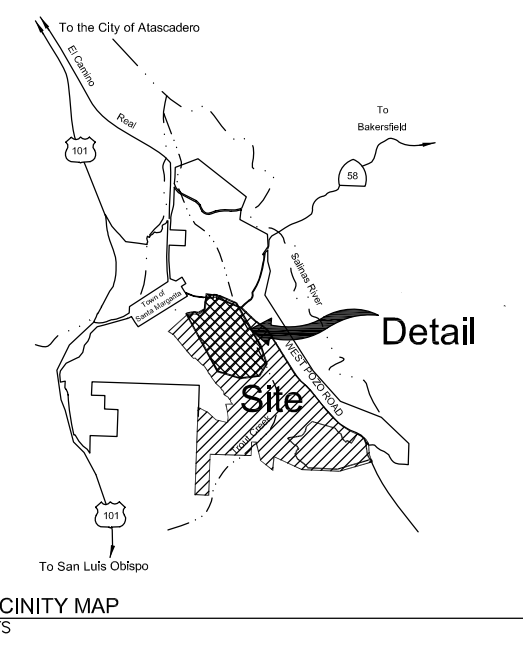




**LEGEND**

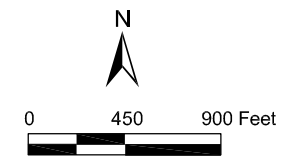
- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- - - - - ASSESSOR PARCEL INFORMATION
- PROPOSED LOT LINE
- = = = = = PROPOSED ACCESS ROADS
- PROPOSED PRIVATE DRIVEWAY
- - - - - 5' CONTOUR INTERVAL
- ▨ ▨ ▨ ▨ ▨ WATERS-OF-THE-US
- - - - - EXISTING DIRT ROAD
- ☁ EXISTING TREE CANOPY
- PRIVATE ROAD AND PUE EASEMENT
- X - X - EXISTING FENCE

NOTE:  
SEE PRELIMINARY GRADING AND DRAINAGE PLANS FOR INDIVIDUAL RESIDENTIAL LOT DIMENSIONS.



**LOT ACREAGE**

PHASE ONE	Area	PHASE TWO	Area	PHASE THREE	Area
LOT 1	2.5 ACRES	LOT 43	1.2 ACRES	LOT 87	1.3 ACRES
2	1.0 ACRES	44	1.2 ACRES	88	1.0 ACRES
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31	1.0 ACRES	73	1.3 ACRES	SUBTOTAL FOR LOTS 87-115:	116 1024.0 ACRES
32	1.0 ACRES	74	1.0 ACRES	SUBTOTAL FOR GROSS PHASE AREA:	1057.1 ACRES
33	1.0 ACRES	75	1.1 ACRES		
34	1.0 ACRES	76	1.4 ACRES	SUBTOTAL FOR ROADS/DRIVEWAY ESMTS:	4.2 ACRES
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36	1.0 ACRES	78	1.0 ACRES	TOTAL AG CONSERVATION ESMTS:	1019.8 ACRES
37	1.1 ACRES	79	1.0 ACRES	(GROSS ONE LOT AREA MINUS	
38	1.2 ACRES	80	1.5 ACRES	RESIDENTIAL LOTS &	
39	1.0 ACRES	81	1.1 ACRES	ROADS/DRIVEWAY EASEMENTS)	
40	1.0 ACRES	82	1.2 ACRES		
SUBTOTAL FOR LOTS 1-40:	44.8 ACRES	83	1.0 ACRES		
	976.9 ACRES	84	1.0 ACRES		
		85	1.90.2 ACRES		
		86	961.7 ACRES		
		87	49.8 ACRES		
SUBTOTAL FOR GROSS PHASE AREA:	1518.1 ACRES	SUBTOTAL FOR GROSS PHASE AREA:	1201.7 ACRES		
SUBTOTAL FOR ROADS/DRIVEWAY ESMTS:	4.0 ACRES	SUBTOTAL FOR ROADS/DRIVEWAY ESMTS:	7.8 ACRES		
TOTAL AG CONSERVATION ESMTS:	1469.4 ACRES	TOTAL AG CONSERVATION ESMTS:	1144.1 ACRES		
(GROSS PHASE AREA MINUS		(GROSS ONE LOT AREA MINUS			
RESIDENTIAL LOTS &		RESIDENTIAL LOTS &			
ROADS/DRIVEWAY EASEMENTS)		ROADS/DRIVEWAY EASEMENTS)			

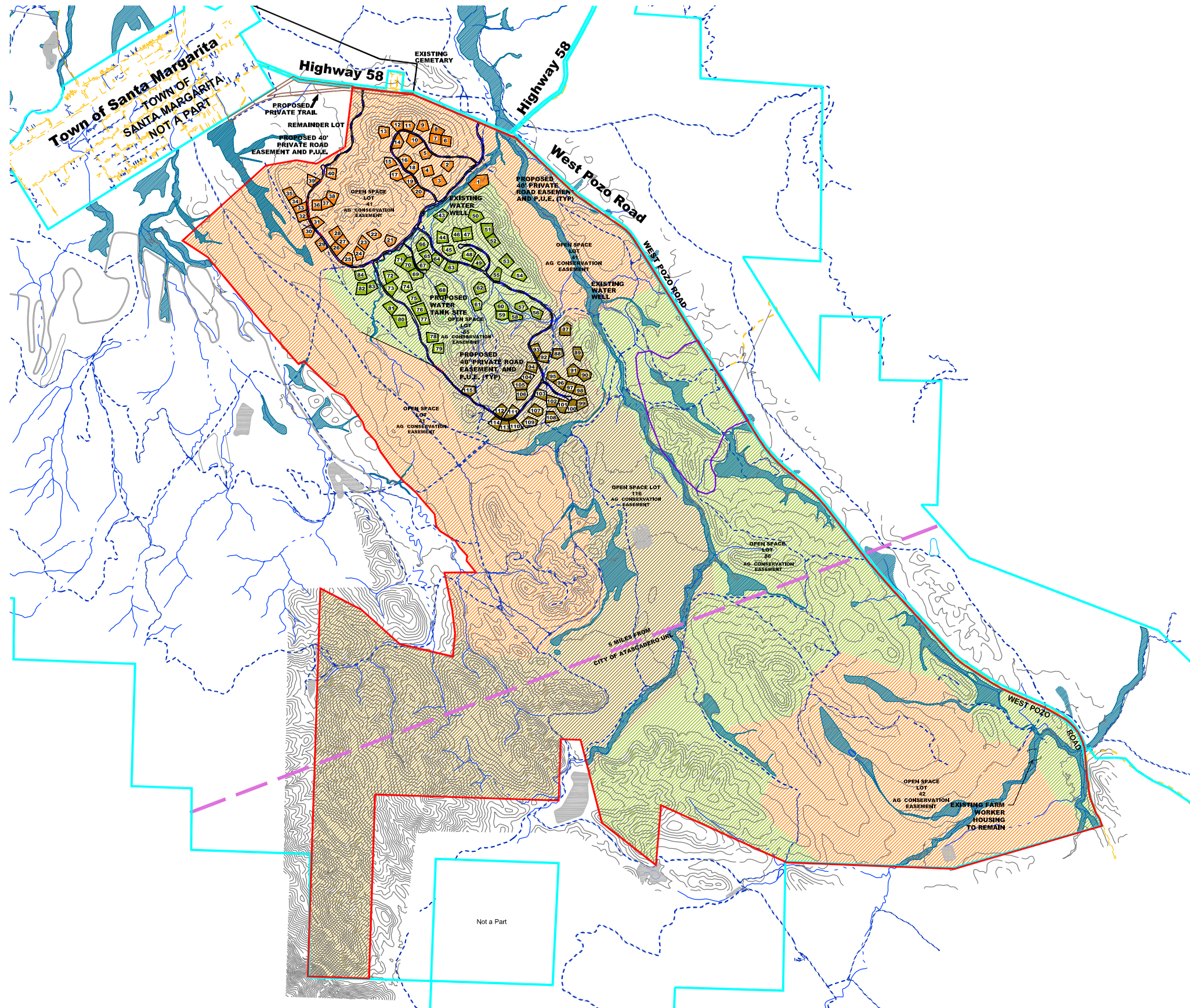


Proposed Agricultural Residential Cluster Subdivision Development Plan (Detail)

Figure 2-5







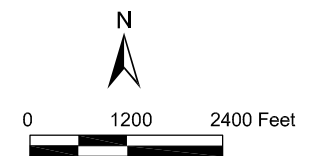
**LEGEND**

- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- WATERS-OF-THE-US
- CONTOURS - 25' INTERVAL

**PHASING LEGEND**

- PHASE ONE DEVELOPED AREA = 44.5 AC (36 LOTS, ROAD, DRIVEWAY EASEMENTS)
- PHASE ONE AG CONSERVATION EASEMENT (1469.4 AC)
- PHASE TWO DEVELOPED AREA = 63.7 AC (47 LOTS, ROAD/ DRIVEWAY EASEMENTS)
- PHASE TWO AG CONSERVATION EASEMENTS (1144.1 AC)
- PHASE THREE DEVELOPED AREA = 36.5 ACRES (28 LOTS, ROAD/ DRIVEWAY EASEMENTS)
- PHASE THREE AG CONSERVATION EASEMENT (1019.8 AC)

NOTE:  
 SEE PRELIMINARY GRADING AND DRAINAGE PLANS FOR INDIVIDUAL RESIDENTIAL LOT DIMENSIONS.

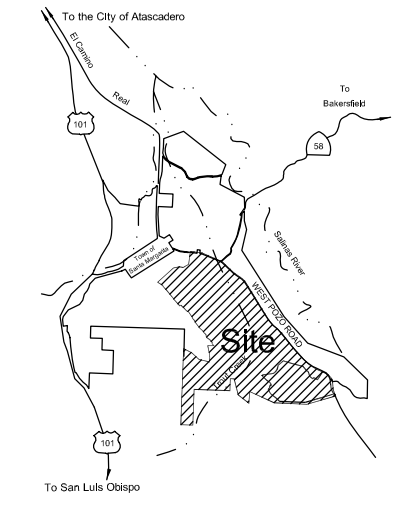
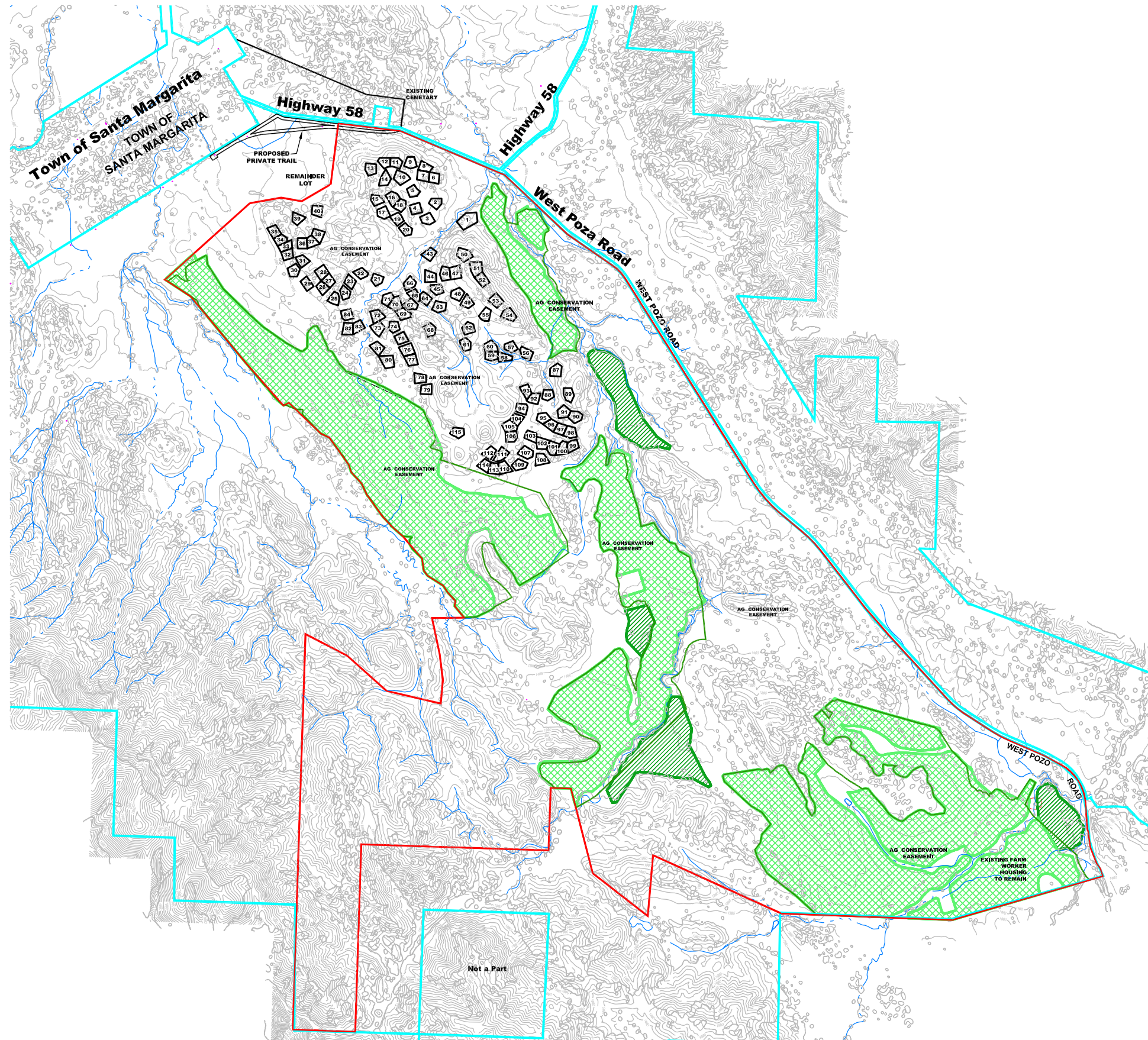


Proposed Agricultural Residential Cluster Subdivision Development Plan Phasing

Figure 2-6







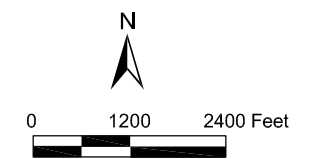
VICINITY MAP  
 NTS

**LEGEND**

- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- ~ WATERS-OF-THE-US
- TREE CANOPY
- CONTOURS - 25' INTERVAL
- EXISTING VINEYARD
- AG IN PROGRESS

**AGRICULTURAL USES:**

IRRIGATED VINEYARD ACREAGE:	GRAZING ACREAGE:
VINEYARD "A"= 52.3 ACRES	OPENSOURCE: 3589 ACRES
VINEYARD "B"= 327.5 ACRES	VINEYARD: 973.9 ACRES
VINEYARD "C"= 205.0 ACRES	TOTAL GRAZING: 2615.1 ACRES
VINEYARD "D"= 389.1 ACRES	
TOTAL VINEYARD= 973.9 ACRES	



**Proposed Agricultural Residential Cluster Subdivision  
 Agricultural Uses**

Source: EDA Design Professionals, June 2006.

Figure 2-7  
 County of San Luis Obispo





*Phase Three (1,057 acres)* - 29 residential clustered lots (33.1 acres), 40-foot wide private residential access easement and 30-foot wide driveway easements (4.2 acres); 40-foot wide private agricultural and residential access easement (4.5 acres); 22-foot wide or less paved road; water service improvements including a looped water main and service lines to residential parcels, underground wire utilities, 29 individual on-site septic systems, and an agricultural conservation easement parcel of approximately 1,019 acres. Phase Three is scheduled for completion in January 2010.

Grading plans for the proposed agricultural cluster subdivision are included in Figures 2-8A through 2-8E.

Covenants, Conditions and Restrictions (CC&Rs) are required for the 111 clustered residential home sites. The applicant does not propose a Homeowners Association, since no areas would be under common ownership.

The existing access road, located approximately 775 feet northwest of the one-mile bridge or the El Camino Real turn-off for Highway 58, provides primary access to the agricultural cluster subdivision site. Phase Two of the development includes the addition of a secondary access point from Highway 58. The internal roadway system consists of looped, two-lane roadways that connect to driveways to individual home sites (refer to Figure 2-5). The applicant does not propose public access through the agricultural cluster subdivision. The cluster residential site will remain fenced with two gated entry points to contain cattle within the site, separate residential uses from vineyards, and provide security.

The San Luis Obispo County Land Use Ordinance, Section 22.104.040 (Salinas River Rural Area Standards), requires that a Specific Plan be prepared for the Santa Margarita Ranch area before any application is approved for a subdivision other than a Cluster development. Since only an agricultural residential cluster subdivision is proposed at this time, a Specific Plan is not required.

**b. Agricultural Conservation Easements.** The project includes 3,633 acres of permanent agricultural conservation easements (ACE's) applied to the areas designated within the proposed tract map. An ACE is a deed restriction landowners voluntarily place on their property to protect resources such as productive agricultural land, ground and surface water, wildlife habitat, historic sites or scenic views. They are used by landowners to authorize a qualified conservation organization or public agency to monitor and enforce the restrictions set forth in the agreement.

The terms of ACE's can be tailored to suit the needs of the landowner and his or her property. While agricultural easements generally restrict all non-agricultural use of the land, continued ranching and farming are permitted, and some limited development may be allowed. For example, an ACE generally permits the construction of new farm buildings and can allow construction of a home for family members or the subdivision of a lot for resale. In addition, ACE's often permit commercial development related to the farm operation. The flexibility of these and other restrictions vary with the characteristics of the agricultural land and the conservation objectives of the easement.



Santa Margarita Ranch Agricultural Residential Cluster Subdivision Project and Future Development Program EIR  
**Section 2.0 Project Description**



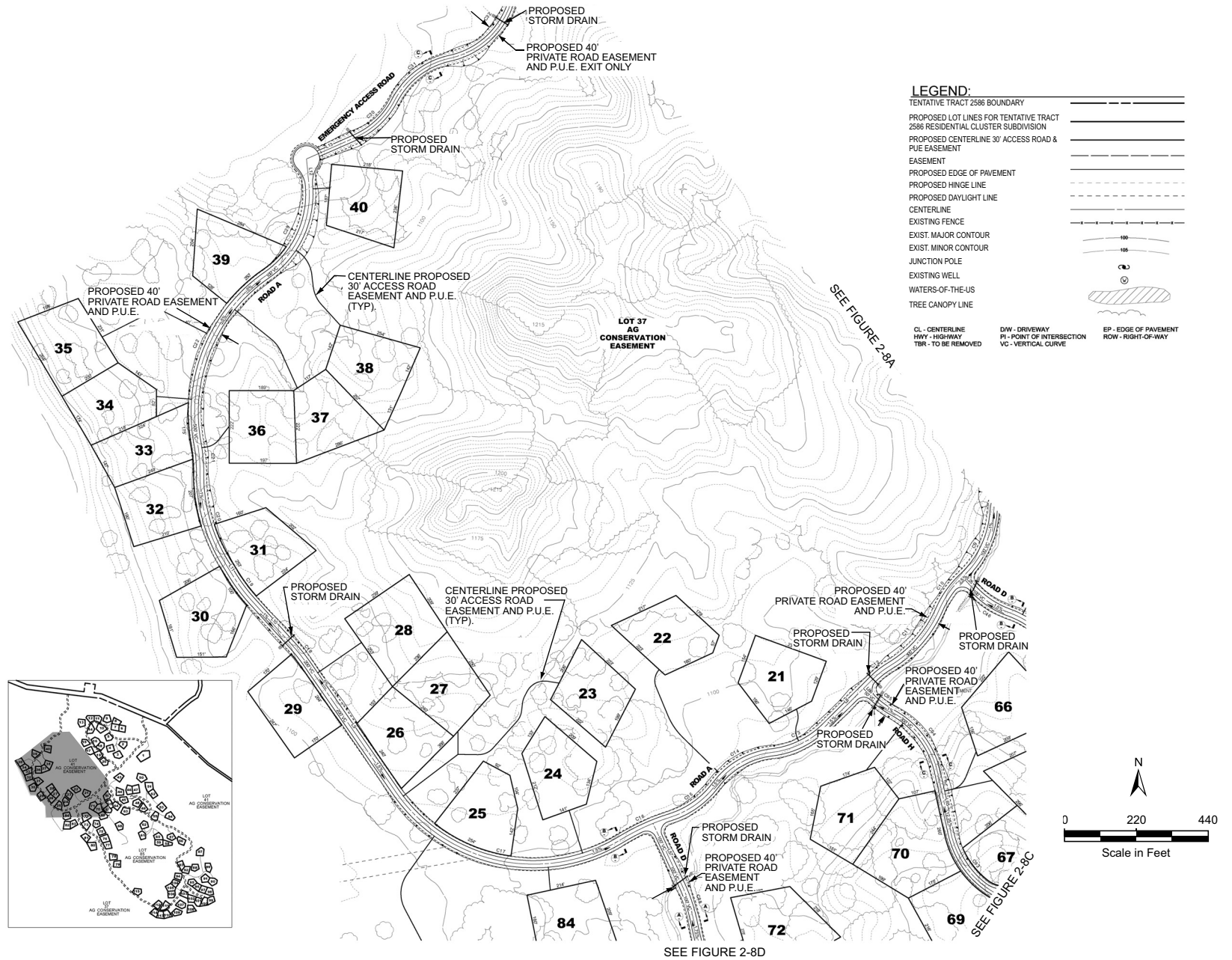
Grading Plan A

Figure 2-8A

Source: EDA Design Professionals, June 2006.

County of San Luis Obispo

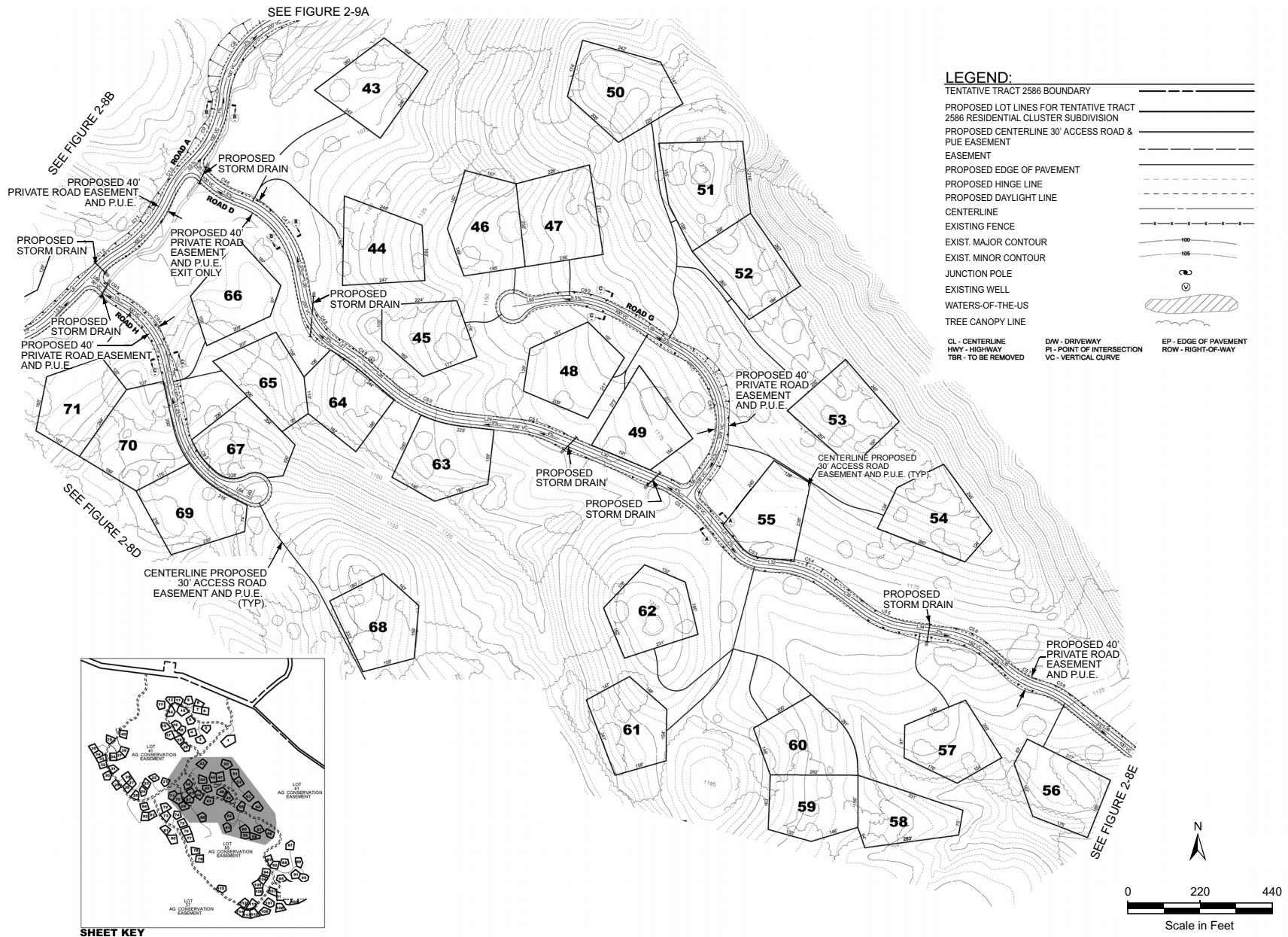
Santa Margarita Ranch Agricultural Residential Cluster Subdivision Project and Future Development Program EIR  
**Section 2.0 Project Description**



Grading Plan B

Figure 2-8B

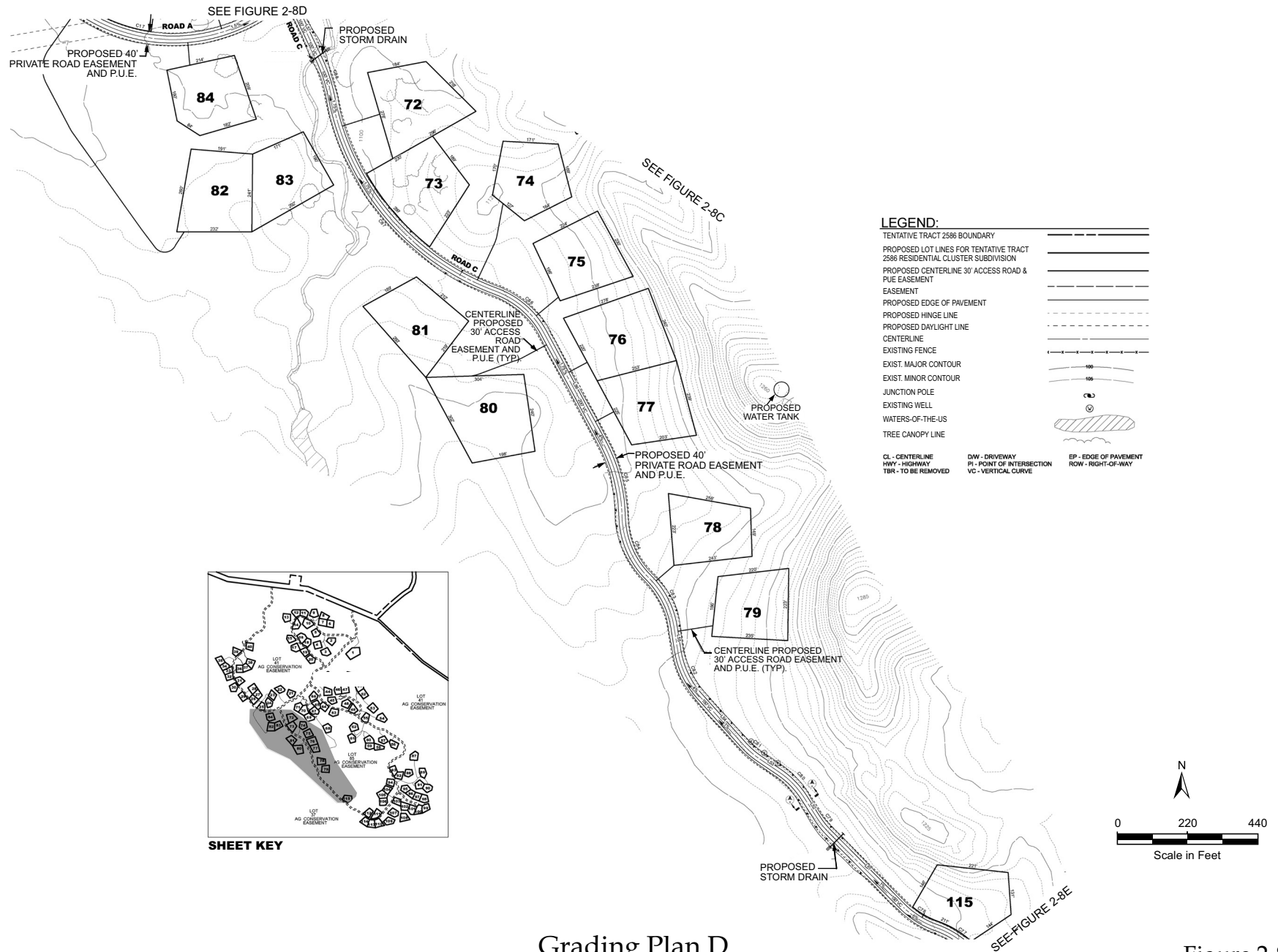
Source: EDA Design Professionals, 2005



Grading Plan C

Figure 2-8C

Source: EDA Design Professionals, 2005



Grading Plan D

Figure 2-8D

Santa Margarita Ranch Agricultural Residential Cluster Subdivision Project and Future Development Program EIR  
**Section 2.0 Project Description**



Grading Plan E

Figure 2-8E



Agricultural conservation easements provide for the protection of agricultural resources and operations, as well as ongoing recreation and natural resource protection activities, while keeping the land in private ownership and on local tax rolls. The applicant proposes an ACE rather than a Williamson Act Contract, which preserves agriculture and open space over a rolling term 10 year contract. Williamson Act parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than potential market value. Although Williamson Act contracts are not permanent, they are generally more restrictive in the types of land uses that may be permitted on a protected parcel, compared to ACE's.

The applicant proposes that the ACE's be included in the Santa Margarita Preserve, a non-profit conservation entity that, in combination with other non-profit agencies such as the California Rangeland Trust, will hold the ACE's and provide funding for operation and management oversight. The applicant proposes that the ACE areas continue to operate as a private ranch in private ownership, and not be subject to CC&Rs that apply to the proposed agricultural cluster subdivision.

**c. Utilities.** The applicant proposes two water storage tanks with a capacity of 188,000 gallons each for location at the top of the hill in the center of the proposed residential cluster. Vegetation or underground placement may provide screening of the water tanks. The Santa Margarita Ranch Mutual Water Company would own and maintain the proposed water tanks and water service infrastructure that serve the clustered residential home sites. SMRMWC would utilize existing on-site wells to meet domestic needs. Individual well yields typically range between 200 and 400 gallons per minute (gpm), with some wells capable of rates of up to 1,000 gpm. The water would be drawn from Paso Robles Formation sand and gravel deposits, an undefined or stratigraphic equivalent to the Paso Robles Formation, and the Santa Margarita Formation aquifer units. Water would be stored in two 188,000 gallon water tanks located at the top of a hill near the center of the Agricultural Residential Cluster Subdivision.

The applicant is proposing individual septic systems for each of the clustered residential home sites. The individual septic systems will be located on the individual lots or on the ACE areas with proper easement provisions.

The applicant proposes storm drains along area roadways to direct drainage from the proposed development to detention features within the ACEs. The detention basins are to have a combined volume of 0.90 acre-feet and possess an orifice and/or weir to control storm water from the detention basin to the Yerba Buena Creek watershed. The proposed volume of 0.90 acre-feet was calculated in a *Preliminary Drainage Report for Santa Margarita Ranch* prepared by Engineering Development Associates (March, 2004). The applicant also proposes bank stabilization along the primary access road (located approximately 775 feet northwest of the one-mile bridge or the El Camino Real turn-off for Highway 58).

The applicant proposes private ownership of all internal roadways. A road maintenance agreement between the clustered residential homeowners, and the agricultural, recreation, and others of the Santa Margarita Ranch shall be made and include shared use and maintenance of roads for access to the clustered residential home sites. A gated, private trail is proposed along West Pozo Road/Highway 58, between Estrada Avenue and the Agricultural Residential Cluster Subdivision access road.



## 2.4.2 Future Development Program Component

A Settlement Agreement between SMART, the County, and the applicant requires that a second component, the Future Development Program, be evaluated in this EIR. The Settlement Agreement specifically states:

*“In the event an EIR is required pursuant to paragraph 5 above, the Ranch Parties agree to prepare a Program EIR that will comprehensively evaluate reasonable development scenarios on all of the Rancho parcels; provided, however, that it is not the intent of the parties that the scope of the EIR include projects which the Ranch parties do not intend to pursue”.*

As a “reasonable development scenario,” the Future Development Program includes realistic potential future uses throughout the balance of the Ranch property. The San Luis Obispo County Land Use Ordinance Salinas River Rural Area Standards outline requirements for agricultural preservation, residential development, and non-residential land uses in the Santa Margarita Ranch area. The Future Development Program incorporates these requirements. The Ranch includes multiple parcels in separate ownerships. Currently, up to two residential units are allowable on each of the existing 30 parcel(s) in accordance with the existing agricultural zoning. Tract 1 currently includes 36 parcels with 36 residential units (the Margarita Farms development).

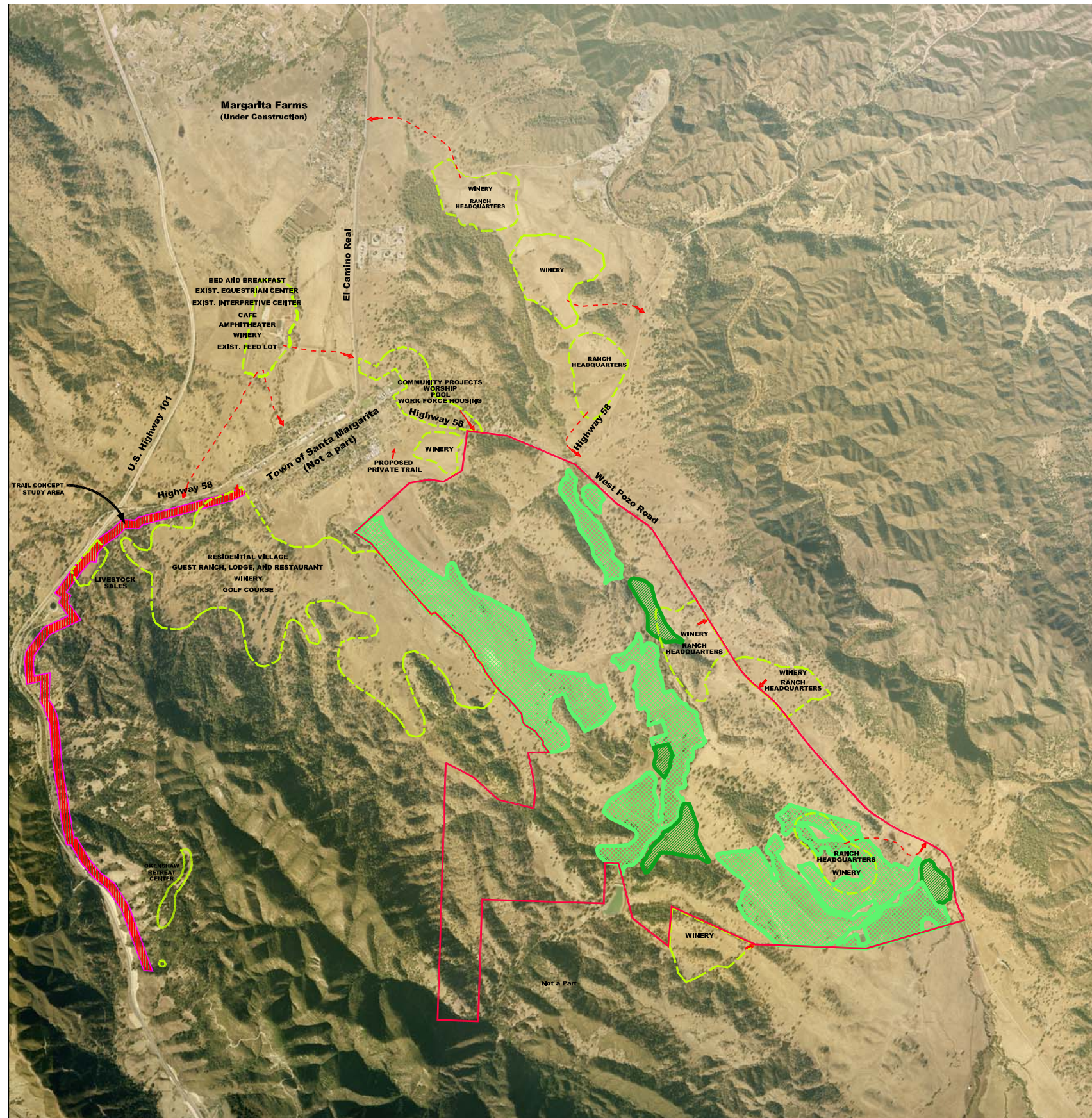
The Future Development Program component includes 402 additional homes (including 50 affordable workforce housing units), a private golf course, a guest ranch, nine wineries, and several other facilities (refer to Table 2-3). The Future Development Program conceptual land uses and locations are depicted on Figure 2-9.

The 402 residential units in the Future Development Program represent the balance of 550 units (including 50 affordable units) allowable under the General Plan for the Santa Margarita Ranch area (refer to Table 2-1). According to the San Luis Obispo County Land Use Ordinance Salinas River Rural Area Standards, residential areas shall be clustered with the first priority to be an extension of the community of Santa Margarita, or within open space surroundings such as adjacent to park land, agriculture or a golf course (Land Use Ordinance Section 22.104.040.A.4.b). Accordingly, the Future Development Program envisions a residential village southwest of the community of Santa Margarita, surrounding a potential private golf course site. Additional housing is envisioned directly east of Santa Margarita near a future park/community pool site.

If an application is made for a Specific Plan and it is adopted, the Land Use Ordinance Salinas River Rural Area Standards [Section 22.104.040(A)(3)(a)] outlines requirements for both permanent and temporary agricultural preservation throughout portions of the Santa Margarita Ranch. Permanent protection of 8,400 acres would be required. Interim protection of 3,600 acres would be accomplished with 40-year term Williamson Act contracts. Of the 8,400 acres required for permanent protection, 3,633-acres are proposed as part of Tract 2586.

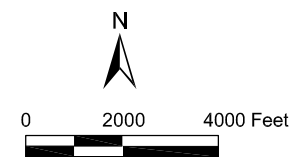






**LEGEND**

- TENTATIVE TRACT 2586 BOUNDARY (3,778 ACRES)
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION (112 ACRES FOR RESIDENTIAL LOTS, 163 ACRES TOTAL DISTURBANCE)
- RANCH PROPERTY BOUNDARY (APPROXIMATELY 14,000 ACRES)
- - - FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS (1,836 ACRES TOTAL)
- EXISTING VINEYARD (973.9 ACRES)
- AG IN PROGRESS (INCLUDED IN EXISTING VINEYARD ACREAGE)
- ROADWAYS
- TRAIL CONCEPT STUDY AREA



Future Development Program  
 Conceptual Land Uses and Locations





The applicant requests the following allowable uses be evaluated for the 3,600 acres of potential 40 year Williamson Act land on the Ranch:

- ranch/farm headquarters;
- bed and breakfast(s);
- residential accessory structures including farm support quarters, caretaker residence, agricultural accessory structures, road-side stands, and/or agricultural processing uses;
- crop production and grazing;
- animal raising and keeping;
- specialized animal facilities (hog ranches, dairies, dairy and beef cattle feedlots, poultry ranches, riding academies, accessory equestrian exhibition facilities and horse ranches, and kennels);
- nursery specialties;
- range land or wildlife preserves;
- waste storage or recharge;
- leachfield or spray disposal area;
- scenic area protection;
- buffers from hazardous area;
- public outdoor recreation uses on non-prime lands;
- communication facilities; rural recreation and camping;
- fisheries and game preserves;
- forestry;
- mining;
- public utility facilities;
- pipelines and transmission lines;
- public safety facilities accessory storage;
- public trails;
- farm equipment and supplies;
- passive recreation;
- temporary events;
- food and kindred products;
- concrete, gypsum, and plaster products;
- paving materials;
- recycling collection stations;
- small scale manufacturing;
- stone and cut stone products;
- home occupation;
- residential care;
- mobile homes;
- single family residences;
- temporary dwellings;
- petroleum extraction;
- water wells and impoundments;
- eating and drinking places;
- temporary offices;
- temporary construction trailer parks;
- accessory storage;
- temporary construction yards;
- airfields and landing strips;
- warehousing, wholesaling, and distribution.

The Future Development Program identifies conceptual locations for the following uses within the Williamson Act agricultural conservation areas: a 12-room bed and breakfast; nine wineries with tasting rooms and special events; five ranch/farm headquarters.

The Future Development Program includes two wineries, two ranch/farm headquarters (each 2.5-acres in size), one primary residence, and several farm support buildings within the Agricultural Conservation Easements (ACEs) associated with the Agricultural Residential Cluster Subdivision. One winery would be located on a five-acre site at the Margarita Vineyard site (previously the Mondavi Vineyard) in the northern portion of Lot 86, approximately 5 miles south of the community of Santa Margarita. A second winery would be located near the center of Lot 42 and include a 20,000 to 40,000 square foot agricultural processing facility with on-site tasting, gift shops, and a bed and breakfast. One ranch/farm headquarters would be located approximately 800 feet east of the Lot 86 (Margarita Vineyard) winery and include farm worker housing on approximately 2.5 acres. A second ranch/farm headquarters would be located approximately 1,200 feet north of the Lot 42 winery and include farm worker housing as well as



one single family residence on approximately 2.5 acres. Although these uses would be located on the Agricultural Residential Cluster Subdivision site, they are not part of the Agricultural Residential Cluster Subdivision project.

The Land Use Ordinance Salinas River Rural Area Standards outline both required and optional non-residential uses on the Santa Margarita Ranch property, to be included in a future Specific Plan. The Future Development Program incorporates all of the allowed and required land uses outlined in the Land Use Ordinance, as well as additional uses. Table 2-4 lists the contemplated uses with corresponding reasonable worst-case buildout characteristics and required County discretionary approvals.

Each of the nine wineries, two (2) of which are within the Tract 2586 boundaries, in the Future Development Program are anticipated to host up to 42 special events per year. The following event sizes are probable: six events accommodating 1,000 people; six events accommodating 500 people; six events accommodating 300 people; 10 events accommodating 200 people; and 14 events accommodating 100 people. Each of the wineries includes a 5-acre processing facility with on-site tasting room, gift shops, and a bed and breakfast. Initial production is estimated to be 5,000 tons, with a maximum production of up to 20,000 tons at each winery.

Land uses required for incorporation into a future Specific Plan, and therefore included as part of the Future Development Program buildout projection, include:

- the dedication of land within Santa Margarita or five (5) acres elsewhere for a community swimming pool and payment of five hundred dollars per approved dwelling unit in contribution for construction funding;
- dedication of land for a potential future sewage treatment facility for the existing community if necessary (up to ten (10) acres);
- the dedication of five (5) acres for an expansion of the cemetery; and the dedication of public hiking/equestrian trails connecting and looping between Santa Margarita, Garden Farms, Los Padres National Forest and the Ranch property boundary.

Land uses that are optional for incorporation into a future Specific Plan, and included as part of the Future Development Program buildout projection, include:

- a golf course and accessory buildings, clubhouse and café; a guest ranch and lodge;
- an equestrian center with horse boarding, outdoor show arena, stables and other animal facilities; public parklands dedication to accommodate passive and active recreation; and
- a public-separated bikeway between Santa Margarita and south Atascadero.

Additional uses not specified in, but allowable by, the Land Use Ordinance, and contemplated in the Future Development Program, include:

- a restaurant at the guest ranch;
- an amphitheater; crafts studios, galleries and shops;
- interpretive center and gift shops; a café at the livestock sales; three places of worship; and
- a retreat center.



**Table 2-4. Future Development Program Components**

Potential Use	Projected Location	Future Buildout	Land Use Approvals Required
347 Single-Family Residential Lots	Southwest of Town surrounding potential Golf Course; east of town near potential park; scattered throughout the Ranch	347 single-family residences on 1-acre lots. Residences would each be 3,500 square feet and two stories in height.	Ag Cluster, Building Permit for Existing Lots, and/or Specific Plan for Subdivision other than Ag Cluster
50 affordable housing units	East of town, north of SR 58/West Pozo Rd.	50 multi-family residential units in one two-story structure	Specific Plan
Private Golf Course with Club House and Shop, and associated ancillary facilities (i.e. maintenance)	Southwest of town, south of SR 58/El Camino Real	36 holes on 280 acres, with 25,000 square foot clubhouse and shop	General Plan Amendment/zone change and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Guest Ranch and Lodge with Restaurant	Southwest of town, south of SR 58/El Camino Real	250 guest units; 24,000 square foot restaurant with capacity for 40 tables/200 patron restaurant	General Plan Amendment/zone change, Use Permit, and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Bed and Breakfast	North of town at existing headquarters' parcel	12,000 square foot of structures with 12 suites	Use Permit and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Café	North of town at existing headquarters' parcel	6,000 square foot café with capacity for 20 tables/200 patrons	General Plan Amendment/zone change, Use Permit, and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Amphitheater	North of town at existing headquarters' parcel	600 seats	General Plan Amendment/zone change, Use Permit, and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Craft studios, galleries and shops	North of town at existing headquarters' parcel and/or on potential winery sites	6,000 square feet total	General Plan Amendment/zone change, Use Permit, and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Interpretive center and gift shops	North of town at existing headquarters' parcel	3,000 square feet total	Specific Plan and/or General Plan Amendment/zone change
Nine Wineries	Within ACE associated with proposed Agricultural Residential Cluster Subdivision (adjacent to West Pozo Road)	8 @ 40,000 square feet each with on-site tasting and 42 permitted events per year (up to 14,200 guests). Each winery would contain a retail component including galleries and gift shops. 1 winery at 80,000 Square Feet	Use Permit and / or Specific Plan if Subdivision other than Ag Cluster is proposed
	Within ACE associated with proposed Agricultural Residential Cluster Subdivision (southern portion)		
	North of town at existing headquarters' parcel		
	Northeast corner of Ranch (northernmost winery)		
	Southeast of northern-most winery		
	Northwest of Cluster subdivision, south of SR 58/West Pozo Road		



**Table 2-4. Future Development Program Components**

Potential Use	Projected Location	Future Buildout	Land Use Approvals Required
	Southwest of town, near potential golf course		
	East side of West Pozo Road, approximately 5.5 miles south of town		
	Southwest of Lot 42 Cluster ACE (southern-most winery)		
Five ranch/farm headquarters	Within ACE associated with proposed Agricultural Residential Cluster Subdivision (adjacent to West Pozo Road)	5,000 square feet residence on 2.5 acre lots each plus, Barns, Shops, etc.	Zoning clearance and / or Specific Plan if Subdivision other than Ag Cluster is proposed
	Within ACE associated with proposed Agricultural Residential Cluster Subdivision (southern portion)		
	On northernmost winery site		
	North side of SR 58, northeastern portion of Ranch property		
	On winery site east of West Pozo Road, approximately 5.5 miles south of town		
Livestock sales yard and café	West of town and potential golf course, near Highway 101	20 acres; one Saturday per month with up to 100 people; 2,250 square foot café with capacity for 75 patrons	Use Permit and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Horse Ranch	North of town at existing headquarters' parcel	40 horses, with stables structures	Minor Use Permit (MUP) and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Three places of worship	East of town, north of SR 58/West Pozo Rd.	20,000 square feet each (includes parking and related infrastructure/ improvements)	Specific Plan or Use Permit
Oakenshaw Retreat Center	Southwestern edge of Ranch property, along Highway 101	12,000 square feet and 24 individual cabins	Use Permit and / or Specific Plan if Subdivision other than Ag Cluster is proposed
Neighborhood park and swimming pool	East of town, north of SR 58/West Pozo Rd.	5 acres, with 1,000 square foot pool house	Specific Plan and/or General Plan Amendment/zone change
Dedication of land for future sewage treatment plant	Location to be determined	10 acres	Acceptance of dedication
Dedication of land for expansion of cemetery	Adjacent to existing cemetery, north of SR 58/West Pozo Rd.	Additional 5 acres of cemetery development	Acceptance of dedication
Public hiking/ equestrian trails	Various locations to be determined upon future non-agricultural development	Hiking/equestrian trails connecting and looping between Santa Margarita, Garden Farms, national forest and the ranch boundary ("De Anza Trail")	N/A





**Table 2-4. Future Development Program Components**

Potential Use	Projected Location	Future Buildout	Land Use Approvals Required
Drainage facilities	Various locations. Community Drainage Basin location to be determined in coordination with Specific Plan.	N/A	N/A

### 2.4.3 Ranch Buildout Characteristics

The Salinas River Area Plan, as part of the San Luis Obispo County General Plan, allows with approval of a specific plan, up to 550 residential units and various mixed land uses on the Ranch property. These uses include (1) a private golf course and accessory buildings, clubhouse and café(s); (2) a guest ranch and lodge; (3) equestrian center(s) with horse boarding, outdoor show arena, stables and other animal facilities; (4) public parklands dedication to accommodate passive and active recreation areas; and (5) dedication of land to facilitate public separated bikeways between Santa Margarita and south Atascadero [Land Use Ordinance Section 22.104.040(4)(c)]. In addition, public improvements and/or land dedication in the Santa Margarita Ranch Area are expected to include the following: a community drainage basin upstream from the community of Santa Margarita; local street and/or creek drainage improvements (e.g., bank stabilization near roadways); dedication of up to ten (10) acres of land for a sewage treatment plant and collection system that would be available to development within the Santa Margarita URL, including future development on the Ranch property; community water well and storage tank sites; possible realignment of Highway 58 diverting traffic around Santa Margarita; El Camino Real street improvements in the communities of Santa Margarita and Garden Farms; and school site dedication(s). These public improvements are not yet designed.

At full buildout of the proposed Agricultural Residential Cluster component of the project, the 3,778-acre site would support 111 single-family clustered residential units and one ranch headquarters unit located on Parcel 42. In all, about 163.1 acres would support residential homes and associated easements.

The remaining portions of the property would support remaining potential development under a Future Development Program, as described in detail in section 2.4.2. The intent of the combined Agricultural Residential Cluster Subdivision and Future Development Program is to not exceed what is allowed as a buildout scenario for a Specific Plan under the Salinas River Area Plan for the property.

Implementation of the proposed Agricultural Residential Cluster Subdivision would result in a total of 112 dwelling units and an associated population increase of 302 persons (based upon a population generation factor of 2.7 persons per unit). This represents an approximate 22.8% increase in the existing population of the Santa Margarita community of approximately 1,325.

In addition to the Agricultural Residential Cluster Subdivision’s 112 units, buildout of the Future Development Program component would result in 402 residential units (the balance of the 550 single-family residential units allowable under the Salinas River Area Plan). Implementation of the Future Development Program would result in a total of 402 dwelling



units and an associated population increase of 1,085 persons. This represents an approximate 73.7% increase in the population of the community of Santa Margarita. At full buildout of both components of the proposed project, represented by the buildout capacity of the Salinas River Area Plan, a total of 550 dwelling units, or 1,485 residents, would be added to the Santa Margarita community. This represents a 112.1% increase in population. However, there is no timetable as to when this might occur, since there is no development application associated with the Future Development Program.

## 2.5 PROJECT OBJECTIVES

The applicant's overall project objective is to construct a residential development that includes up to 112 units in a rural setting. The applicant's objectives for the project include the following:

- Firmly establish continued long-term viability of existing vineyards, cattle grazing activities, and future crop development through creative planning and utilization of the County Agricultural Cluster Ordinance;
- Protect the existing vineyards and agricultural lands for the long term by placing them in ACEs and/or Williamson Act Conservation Contract(s); and
- Create an economically feasible and successful residential cluster project through a three (3) phased development with incremental conservation easement dedications.

The applicant also intends the project to be located close to existing town amenities, thereby allowing easy access to goods and services. Another primary objective is to preserve open space and agricultural resources to the extent possible.

The objectives of the Future Development Program include the following:

- Plan for land uses that will enhance the County and community of Santa Margarita by accommodating the needs of the community, expanding the tax base, and providing jobs and housing;
- Plan for a mix of uses that will relate to each other, to adjacent land uses, and to the rural and semi-rural context of the property;
- Plan for workforce housing toward achieving the County's fair share housing requirements; and
- Plan for recreational amenities of benefit to both the community and the region.

## 2.6 REQUIRED APPROVALS

**a. Agricultural Residential Cluster Subdivision.** Implementation of the proposed Agricultural Residential Cluster Subdivision requires the following discretionary approvals from the County of San Luis Obispo:

- *Vesting Tentative Tract Map #2586 (VTTM) to subdivide the property into 111 residential lots; four (4) ACE parcels with one dwelling unit, and a remainder parcel*
- *Agricultural Lands Residential Cluster Conditional Use Permit*



The Agricultural Residential Cluster Subdivision may also require a Section 1600 permit from the California Department of Fish and Game and a Section 404 permit from the Army Corps of Engineers pursuant to the Clean Water Act. In addition, the U.S. Fish and Wildlife Service and the California Regional Water Quality Control Board may require consultation and approval, depending on the resources impacted.

**b. Future Development Program.** Future Development Program land uses require several discretionary land use approvals from the County of San Luis Obispo over time, depending on the phasing and grouping of future land uses. The San Luis Obispo County Land Use Ordinance, Section 22.104.040 (Salinas River Rural Area Standards), requires preparation of a Specific Plan for the Santa Margarita Ranch area before approval of any application for a subdivision other than an Agricultural Cluster development. Therefore, any Future Development Program land use that includes a subdivision other than an agricultural residential cluster subdivision requires the preparation of a Specific Plan for the Santa Margarita Ranch area. A General Plan Amendment is required concurrently with the Specific Plan. Future Development Program land uses that do not require a subdivision may nevertheless require a General Plan Amendment, zone change, Minor Use Permit (MUP), or Use Permit. Certain uses within the Agriculture land use category may require only a zoning clearance.

As with the Agricultural Residential Cluster Subdivision, the Future Development Program land uses may also require a Section 1600 permit from the California Department of Fish and Game and a Section 404 permit from the Army Corps of Engineers pursuant to the Clean Water Act. In addition, the U.S. Fish and Wildlife Service and the California Regional Water Quality Control Board may require consultation and approval.

## **2.7 PROJECT ALTERNATIVES**

As required by Section 15126(d) of the State CEQA Guidelines, this EIR examines several alternatives to the proposed project. Fourteen alternatives are identified, which examine a range of development intensities and alternate locations for Agricultural Residential Cluster Subdivision and Future Development Program uses and facilities. This EIR examines the following alternatives, which are described more fully in Section 6.0, *Alternatives*:

- **Alternative 1: No Project/No Development.** This option assumes that the Agricultural Residential Cluster Subdivision is not constructed, and that the site remains in its current condition.
- **Alternative 2: No Project/Existing Zoning.** This option assumes that the Agricultural Residential Cluster Subdivision is not constructed, and that the further development of the site continues in accordance with all applicable County policies. This alternative assumes that two residential units would be developed on each of the existing 28 parcels in accordance with existing Agriculture zoning.
- **Alternative 3: Revised Cluster Design.** This alternative involves a reconfiguration of the Agricultural Residential Cluster Subdivision design to mitigate significant impacts identified in Section 4.0 of this EIR.



- **Alternative 4: Revised Cluster Location 1: North of Community.** This alternative assumes that the proposed Agricultural Residential Cluster Subdivision is relocated north of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern.
- **Alternative 5: Revised Cluster Location 2: South of Community.** This alternative assumes that the proposed Agricultural Residential Cluster Subdivision is relocated south of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern.
- **Alternative 6: Revised Cluster Location 3: Southwest of Community.** This alternative assumes that the proposed Agricultural Residential Cluster Subdivision is relocated south of El Camino Real and west of the community of Santa Margarita.
- **Alternative 7: Tighter Cluster Alternative.** This alternative involves a reconfiguration of the Agricultural Residential Cluster Subdivision design to mitigate significant impacts identified in Section 4.0 of this EIR.
- **Alternative 8: Alternative Future Development Program Scenario 1.** This alternative would eliminate Future Development Program land uses envisioned for location in the approximately 2,500 acre northeastern quadrant of the Ranch (north of SR 58 and east of El Camino Real). This would involve the elimination of the following uses: a 5-acre park and community pool, three 20,000 square foot worship centers, and 50 units of work force housing; two wineries; and two Ranch headquarters.
- **Alternative 9: Alternative Future Development Program Scenario 2.** This alternative would eliminate Future Development Program land uses in the most sensitive biological areas. This would involve the elimination of the following uses: a residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery, and 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop.
- **Alternative 10: Alternative Future Development Program Scenario 3.** This alternative would eliminate Future Development Program land uses in the most sensitive cultural resource areas. This would involve the elimination of the following uses: a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater and 40,000 square foot winery on the existing Ranch headquarters parcel; a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop located southwest of the community of Santa Margarita; one Ranch headquarter located northwest of SR 58 (after SR 58 curves northerly); and one winery/Ranch headquarter located in the southern portion of the Ranch property, west of West Pozo Road.
- **Alternative 11: Alternative Location for Livestock Sales.** This alternative would relocate the livestock sales yard. Under this alternative, the livestock sales yard would be located approximately 1,250 feet north of the community of Santa Margarita and 700 feet west of El Camino Real.



- **Alternative 12: Amended Project.** This alternative involves a reconfiguration of the Agricultural Residential Cluster Subdivision design to mitigate significant impacts identified in Section 4.0 of this EIR, particularly related to prime soils, visual prominence, oak trees, and archaeologically-sensitive areas.
- **Alternative 13: Santa Margarita Town Expansion.** This alternative assumes that the proposed Agricultural Residential Cluster Subdivision is relocated southwest of the community of Santa Margarita, arranging lots in a reversed L-shape extending from the southwest corner of the community.
- **Alternative 14: Reduced Project.** This alternative would cluster 40 lots (including 39 residential lots and one open space lot) in the northernmost portion of the Agricultural Residential Cluster Subdivision site.





## **3.0 ENVIRONMENTAL SETTING**

This section provides a brief description of the current environmental conditions in the Santa Margarita Ranch area.

### **3.1 REGIONAL SETTING**

The Santa Margarita Ranch is located in San Luis Obispo County, approximately 10 miles north of the City of San Luis Obispo, and surrounding the community of Santa Margarita. San Luis Obispo County is located in the central coast region of California. The County covers approximately 3,300 square miles, and contains approximately 260,727 residents. The County is topographically diverse, with mountains, rich agricultural valleys, and distinct urban areas, all within close proximity of the Pacific Ocean. The mediterranean climate of the region produces moderate temperatures year round, with rainfall concentrated in the winter months. The region is subject to various natural hazards, including earthquakes, landslides, and wildfires.

### **3.2 AGRICULTURAL RESIDENTIAL CLUSTER SUBDIVISION AND FUTURE DEVELOPMENT PROGRAM SITE SETTING**

The Santa Margarita Ranch property encompasses approximately 14,000 acres and is located immediately east of U.S. Highway 101, and surrounds the community of Santa Margarita. The proposed Agricultural Residential Cluster Subdivision includes 3,778 acres near the middle of the Ranch, southeast of the community of Santa Margarita, while the Future Development Program occurs in various locations throughout the balance of the 14,000-acre property. Surrounding land uses include rural residential development, grazing lands, and lands in agriculture production. The site is bounded by the Santa Lucia Mountains, Highway 101, and agricultural uses to the west and north and by the Salinas River and rural and agricultural lands to the east and south. The Conoco-Phillips Oil Company operates a petroleum pump station located on the east side of El Camino Real, approximately midway between the communities of Santa Margarita and Garden Farms. This facility includes four open top floating tanks and two fixed roof tanks for heavier crude. The site is comprised of 28 assessor parcels. Figure 2-2 (in Section 2.0, *Project Description*) shows the regional location of the Ranch property within its local context.

#### **3.2.1 General Property Characteristics**

The Santa Margarita Ranch has been historically utilized for grazing and crop production since the late 1700's. The Santa Margarita Ranch property consists of varied terrain with the mountainous area on the west side of the Ranch containing the Santa Lucia Mountain ridge and slopes of 50 percent and greater. The predominant interior valleys of the Ranch are sloped at 1 to 9 percent while the Santa Margarita Creek lowlands typically contain slopes less than 5 percent. Elevations across the site range from a high of 1,276 feet along the Santa Lucia ridgeline to 1,020 feet at the north end of the property. At that location, the primary on-site tributary (Trout Creek) drains to the Salinas River, located approximately 1.25 miles north of the Ranch property.



### **3.2.2 Hydrologic Setting**

The Santa Margarita Ranch is located in the Salinas River watershed which empties into the Pacific Ocean at Monterey Bay. Specifically, the Ranch contains a number of smaller internal drainage basins which are west bank tributaries to the Salinas River. Drainage generally flows from south to north via four main drainages: Trout Creek (northeast of Agricultural Residential Cluster Subdivision site); an unnamed tributary to Trout Creek (between Phase 1 and Phase 2 of the Agricultural Residential Cluster Subdivision site); Yerba Buena Creek (southwest of the Agricultural Residential Cluster Subdivision site); and Rinconada Creek (southeast of the Agricultural Residential Cluster Subdivision site). All of these drainages are categorized as Waters of the U.S. and each eventually flow to the Salinas River. From a hydrologic perspective, the water movement potential of the Ranch is quite variable because the Ranch's terrain varies from rugged mountains to rolling hills and flat land. A number of soil types on the Ranch are characterized by medium to very rapid runoff and high to very high erosion potential.

### **3.2.3 Geologic Setting**

San Luis Obispo County occupies an area of complex geology extending from the Pacific Coast on the west to the San Andreas Rift Zone on the east. The Santa Margarita Ranch property lies within the southern Coast Ranges of San Luis Obispo County, in the Coast Range Geomorphic Province. The Ranch comprises a central alluvial valley complex with low lying hills, bordered on the west by the Santa Lucia Range of higher bedrock mountains, and on the east by the Salinas River. Geologic structure, formed by millions of years of folding and faulting, is oriented predominantly in a northwesterly direction; the northwest draining Yerba Buena, Santa Margarita and Trout Creeks follow this trend.

Thirty-four active and potentially active earthquake producing faults lie within 100 miles of the center of the Santa Margarita Ranch property. Individual earthquakes as large as Magnitude 7.9 have occurred within this distance. Fault rupture of the ground surface is possible on any of these faults with a large enough earthquake and secondary effects such as ground settlement, liquefaction and landsliding can occur.

The 14,000-acre Ranch property includes ten geologic units, ranging in age from the Jurassic Franciscan Formation (mélange) through Pliocene Paso Robles Formation (Hart, 1976). On-site units include the Franciscan mélange, granitic rocks, Toro and Atascadero Formations, Simmler and Vaqueros Formations, Monterey and Santa Margarita Formations, Paso Robles Formation, and older and younger alluvium. These units have a wide range of physical properties with older basement rocks found in the higher elevations being generally more resistant to weathering and degradation; they are also more highly fractured, and structurally more complex. The intermediate-aged bedrock units flank the ranges and border the alluvial valleys. These units are softer and weather into smoother low lying hills with fewer fractures and exhibit a gentler folding.

Alluvium occupies the lower portions of the valleys and ranges from older uplifted, dissected river terraces and alluvial fans to the most recent stream deposits in the lower elevation flood plains and active river channels. Structurally simple and relatively undisturbed by faulting, these units are semi-consolidated to loose, and generally comprise mixtures of gravel and sand.





### **3.2.4 Natural and Cultural Resources**

Habitats on the Santa Margarita Ranch are composed of grasslands, coastal scrub, chaparral, oak woodlands, riparian, and emergent wetlands/seasonal pools that occur in a mosaic pattern across the landscape. Perennial and intermittent streams, which support important riparian habitat for resident and migratory wildlife species, occur throughout the region. Vineyards comprise a significant portion of the agricultural landscape within the southern portion of the Ranch property, while dry farmed grains are found in the northern portion of the Ranch property. Cattle ranching occurs over all the on-site habitats with the exception of dry-farmed and vineyard areas.

Archaeological evidence indicates that coastal San Luis Obispo County was occupied as early as 10,000 years ago. The Santa Margarita Ranch lies in an area historically occupied by both Salinans and Obispoño Chumash. Generally, lands from Santa Margarita south and west have been ascribed to the Obispoño, while the Salinans utilized lands along the coast and in the rugged mountains of the interior, and may have occupied the area extending south from Soledad to a point near Atascadero. Historically, there were at least two named native rancherias (villages) on or near the ranch. By the end of the Mission Period in 1834, the native population had been reduced to a small percentage of its former number by maltreatment, disease, and subsequent declining birthrates. Population loss as a result of disease and economic deprivation continued into the next century.

The archaeological sites, historical buildings, and other cultural remains on the ranch have combined with the unique natural environment of the Santa Margarita Valley to produce a distinctive cultural landscape shaped by American Indian, Spanish, Mexican, and Euro-American cultural traditions.

### **3.3 BASELINE SPECIAL EVENTS**

Numerous special events are held at the Ranch property annually. According to data provided by the applicant, 84 special events occurred at the Ranch in a one year period between July 2004 and July 2005. Events at the Ranch ranged from small meetings of 15 people to major events with up to 2,506 attendees and staff. According to data provided by Ranch management, over the year, a total of 22,050 people may have attended or staffed special events at the Ranch. For the purposes of this EIR, the baseline special events for the Ranch property include an annual total of 22,050 people, and a daily peak of 2,506 attendees and staff. A complete list of events with corresponding estimates of attendance and staff is provided in Appendix B.

### **3.4 CUMULATIVE PROJECTS SETTING**

The State CEQA Guidelines require the analysis of the cumulative effects of a project in combination with other foreseeable development in the area. CEQA defines “cumulative impacts” as two or more individual events that, when considered together, are considerable or will compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately, but could have a significant impact when analyzed together.



In accordance with Section 15130 of the State CEQA Guidelines, this EIR uses a summary of growth projections to analyze cumulative impacts. The evaluation of the Future Development Program in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. The cumulative vicinity of the Ranch property includes the communities of Garden Farms and Santa Margarita, and surrounding agricultural lands. Based on a review of vacant lands within the communities of Santa Margarita and Garden Farms, these communities are considered to be currently built out. Additional growth within these communities would be negligible. Therefore, the cumulative scenario evaluated throughout this EIR consists of buildout of the Agricultural Residential Cluster Subdivision in addition to buildout of the Future Development Program. However, it should be noted that certain cumulative issue areas, such as traffic and associated vehicle air contaminant and noise emissions, are more appropriately addressed at a larger, regional level (i.e., outside the vicinity of the property) to account for regional influences on impacts considered in combination with the Agricultural Residential Cluster Subdivision and Future Development Program. For such issue areas, a cumulative growth factor is applied to account for the influence of regional growth.

Cumulative impacts are discussed within each of the specific impact analysis discussions in Section 4.0, *Environmental Impact Analysis*.



## 4.0 ENVIRONMENTAL IMPACT ANALYSIS

This section contains a discussion of the possible environmental effects of the proposed project for the specific issue areas that were identified through the Initial Study process as having the potential to experience significant impacts.

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

The assessment of each issue area begins with an italicized introduction that summarizes the environmental effects considered for that issue area for the Agricultural Residential Cluster Subdivision and Future Development Program. This is followed by the setting and impact analysis. Within the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds”, which are those criteria adopted by the State, County, other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed Agricultural Residential Cluster Subdivision, mitigation measures for significant impacts, and the level of significance after mitigation, followed by a description of each impact of the Future Development Program, mitigation measures for significant Future Development Program impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text, with the discussion of the effect and its significance following. Each bolded impact listing also contains a statement of the significance determination for the environmental impact as follows:

*Class I. Significant and Unavoidable: An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the State CEQA Guidelines.*

*Class II. Significant but Mitigable: An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings to be made under §15091 of the State CEQA Guidelines.*

*Class III. Not Significant: An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.*

*Class IV. Beneficial: An effect that would reduce existing environmental problems or hazards.*

Following each environmental effect discussion is a listing of recommended mitigation measures (if required) and the residual effects or level of significance remaining after the implementation of the measures. In those cases where the mitigation measure for an impact



could have a significant environmental impact in another issue area, this impact is discussed as a residual effect. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other future development in the area.

It should be noted that the environmental impacts of the proposed Agricultural Residential Cluster Subdivision are assessed at a “project” level of detail that corresponds to the level of detail available for the project (e.g., site plans, development plans, application materials, etc.). In contrast, the environmental impacts of the Future Development Program, which is envisioned but has not been formally proposed, are assessed at a “program” level of detail that is more conceptual and general, because the Future Development Program land uses and locations are conceptual. A range of potential future land uses and corresponding site locations have been identified. However, only generalized Future Development Program land use locations are available at this time, and no site plans or other project-level details have been provided by the applicant. Conceptual plans for Future Development Program uses are considered examples of possible future uses that require future environmental review, including preparation of additional EIRs pursuant to CEQA, if applications for future projects are submitted. This EIR evaluates and mitigates a reasonable worst-case scenario of potential impacts associated with the Future Development Program. The design and planning of specific future development projects and/or infrastructure improvements (e.g., wastewater treatment plant, detention basin, school siting, etc.) on the property is beyond the scope of this EIR. Evaluation of constraints may inform site selection process, but separate infrastructure and services planning will ultimately dictate site selection. Since project-level information and active applications for the Future Development Program components have not been provided, future development in accordance with the program will likely require additional environmental review, pursuant to the requirements of CEQA.

Please refer to the Executive Summary for this EIR, which clearly summarizes all impacts and mitigation measures that apply to the project.



## 4.1 AGRICULTURAL RESOURCES

*Agricultural Residential Cluster Subdivision.* The Agricultural Residential Cluster Subdivision would permanently compromise the sustainability of a 676.7-acre grazing unit and would permanently convert 5 21.2 acres of prime soil to non-agricultural uses. Impacts related to agricultural conversion would be Class I, significant and unavoidable. Land use compatibility conflicts may also arise between proposed urban uses and existing and future agricultural uses. Potential land use conflicts are Class I, significant and unavoidable.

*Future Development Program.* Because no active application currently exists for the Future Development Program other than the Agricultural Residential Cluster Subdivision, the assessment of agricultural resources is based on a reasonable worst case scenario with regard to the location of future land uses within anticipated development areas. Buildout of the Future Development Program would result in similar Class I, significant and unavoidable, agricultural conversion impacts as the Agricultural Residential Cluster Subdivision alone. Agricultural land use compatibility impacts associated with the Future Development Program would also be Class I, significant and unavoidable.

### 4.1.1 Setting

**a. Regional Agricultural Resources.** California is the leading state in agricultural production in the United States and San Luis Obispo County consistently ranks within the top 20 counties of the State in overall agricultural productivity.

Agriculture makes a substantial contribution to the county economy and accounts for approximately 80% of the privately-owned land in the county. In 2005, San Luis Obispo County agricultural production totaled \$596,753,000. The top five crops, by value in San Luis Obispo County in 2005 included: wine grapes (\$194,373,000), cattle and calves (\$53,071,000), broccoli (\$50,062,000), vegetable transplants (\$30,178,000), and strawberries (\$29,367,000). The cow-calf industry has been one of the top value crops in the county since 1928, when crop reports were first conducted. The county has become an increasingly important wine-making region, and the trend of the 1990s to convert rangelands to vineyards continues.

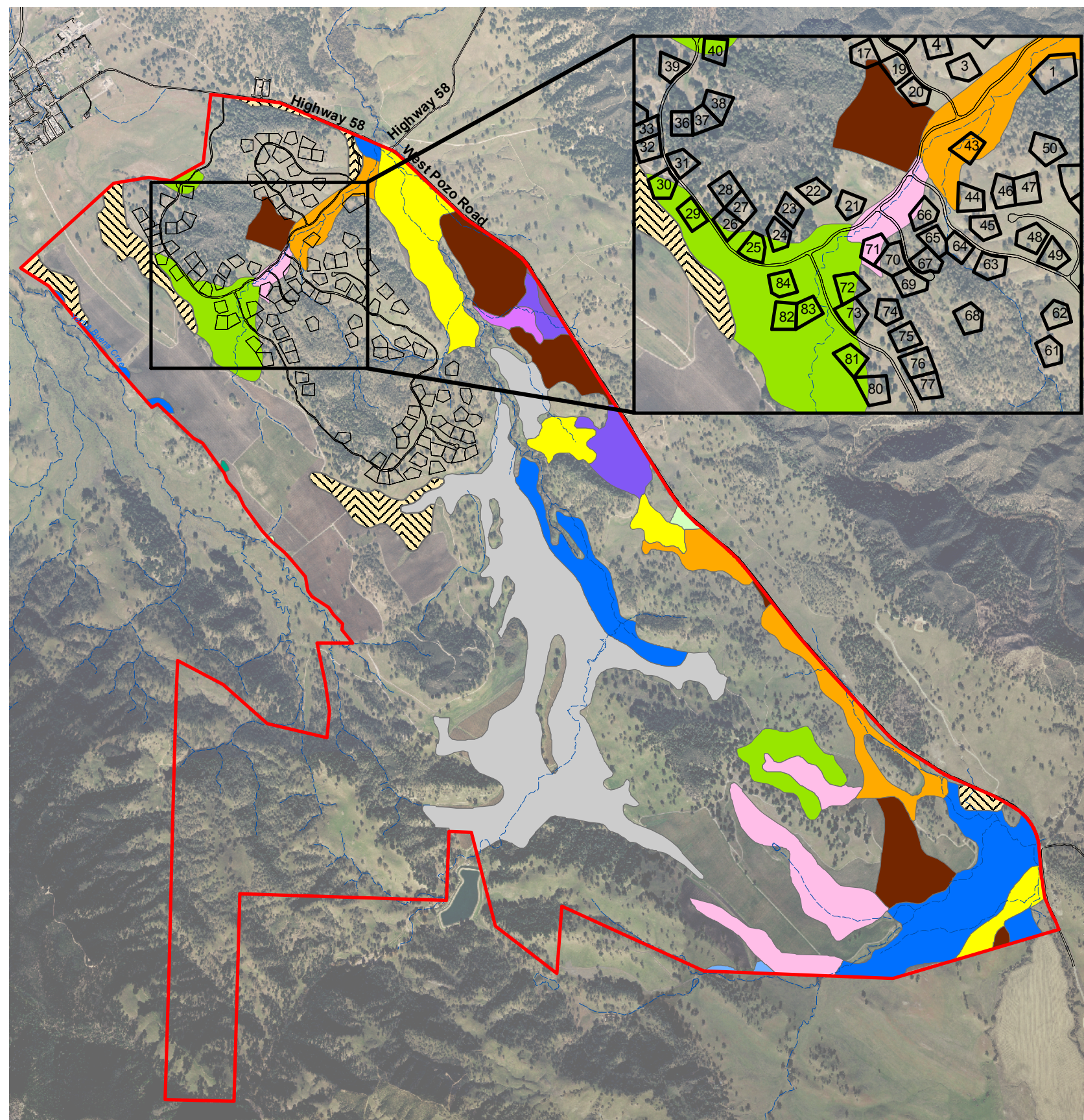
**b. Santa Margarita Ranch Agricultural Resources.** The Santa Margarita Ranch has been historically utilized for grazing and crop production since the late 1700s. Crops such as winegrapes and olives were cultivated in the Ranch Headquarters area (north of the community of Santa Margarita) and herds of horses, cattle and sheep were grazed on the surrounding rangelands. The area has been in continuous agricultural production since the Spanish Period and has been used historically for commercial horse, cattle, and sheep grazing and for the cultivation of commercial dryland hay, dryland grain, Sudan grass, seed, winegrapes, and pasture crops. As noted in the Cultural Landscape Report prepared for the property (refer to Appendix E), many ranching traditions, lifeways, crafts, and social institutions have been carried out continuously on the ranch for well more than a century. Existing agriculture infrastructure includes ranch wells and storage reservoirs. An existing vineyard (the Cuesta Ridge Vineyard) is located in the southern portion of the Ranch, including portions of the Agricultural Residential Cluster Subdivision Agricultural Conservation Easement (ACE) area and occupies approximately 1,100 acres, 974 acres of which are currently planted in vineyards. The remainder of the 14,000 acre Ranch, including the 676.7-acre grazing unit proposed for



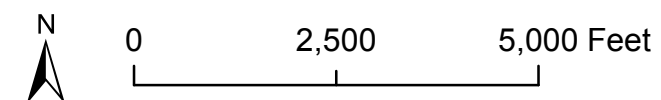
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- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- PRIME AGRICULTURAL SOILS REGARDLESS OF IRRIGATION:**
- 101, ARBUCKLE FINE SANDY LOAM, 2-9
- 102, ARBUCKLE-POSITAS COMPLEX, 9-15
- 116, BOTELLA SANDY LOAM, 2-9
- 139, ELDER LOAM, 2-9
- 148, HANFORD AND GREENFIELD FINE SANDY LOAMS, 2-9
- 191, RYER CLAY LOAM, 2-9
- 208, STILL CLAY LOAM, 0-2
- 209, STILL CLAY LOAM, 2-9
- PRIME AGRICULTURAL SOILS IF IRRIGATED:**
- 130, CLEAR LAKE CLAY, DRAINED
- 133, CROPLEY CLAY, 2-9
- 149, HANFORD AND GREENFIELD GRAVELLY SANDY LOAMS, 0-2
- 150, HANFORD AND GREENFIELD GRAVELLY SANDY LOAMS, 2-9
- 182, OCEANO LOAMY SAND, 2-9
- 207, STILL GRAVELLY LOAM, 0-2

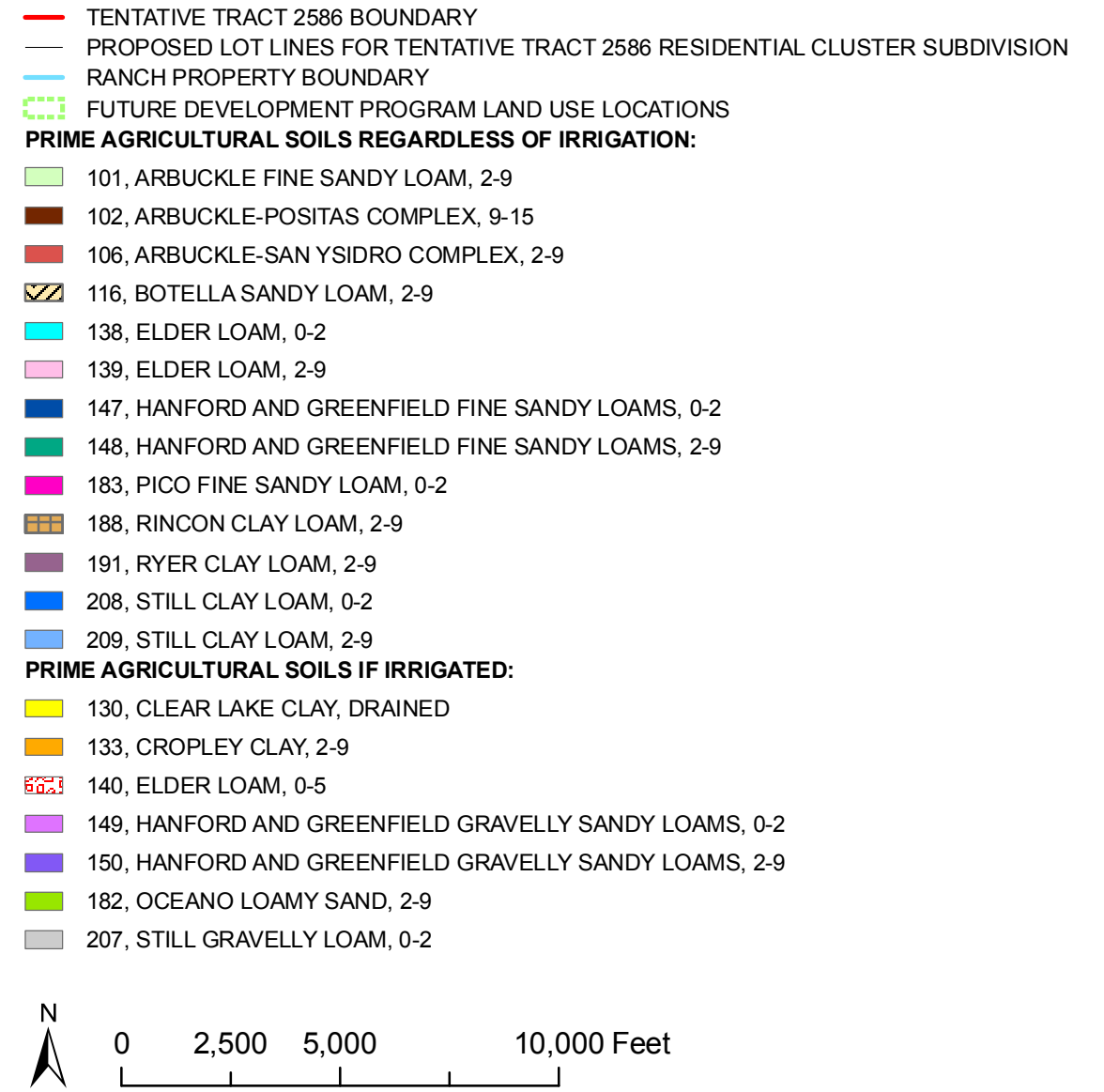
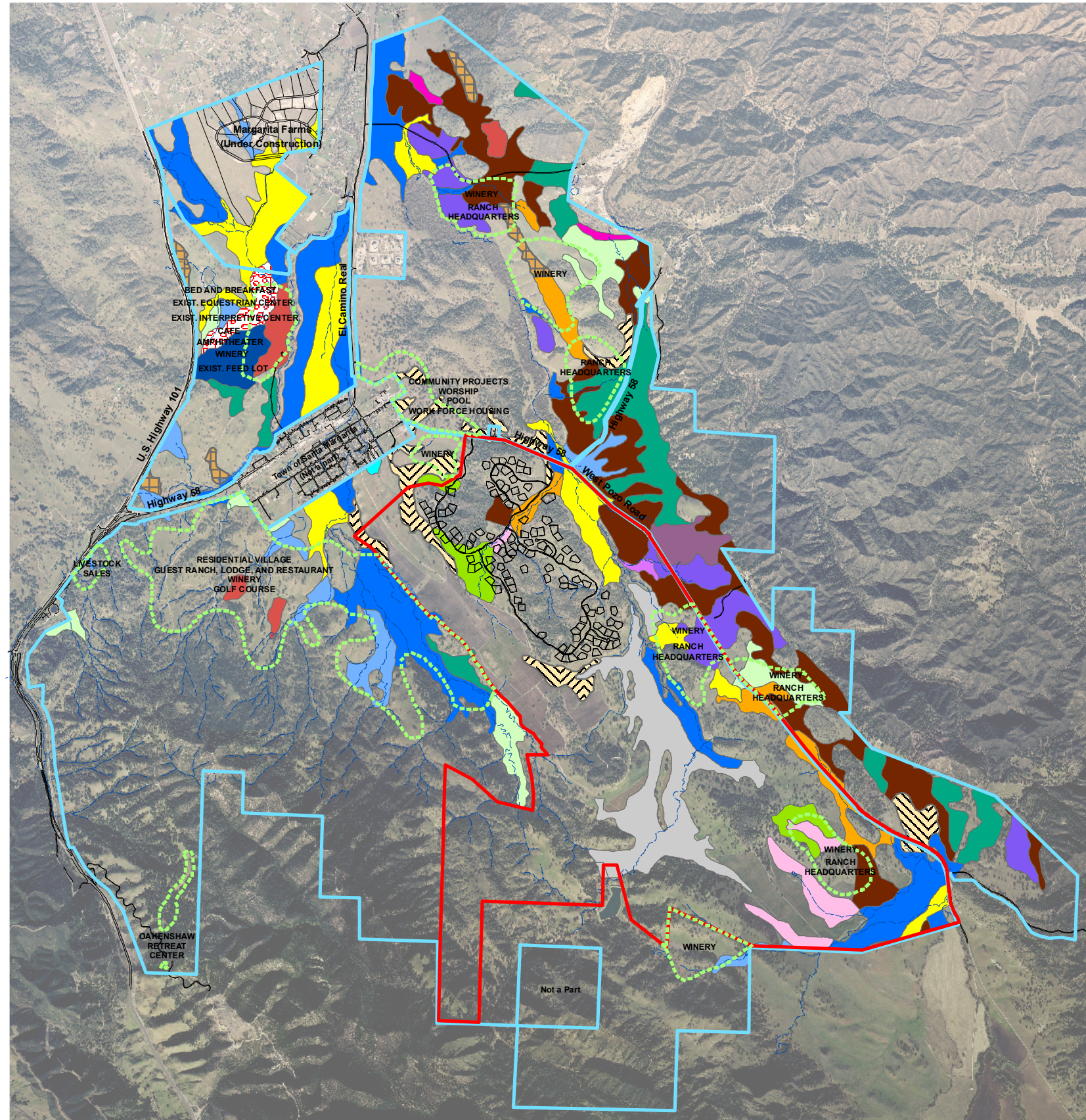


Proposed Agricultural  
 Residential Cluster Subdivision  
 Prime Agricultural Soils









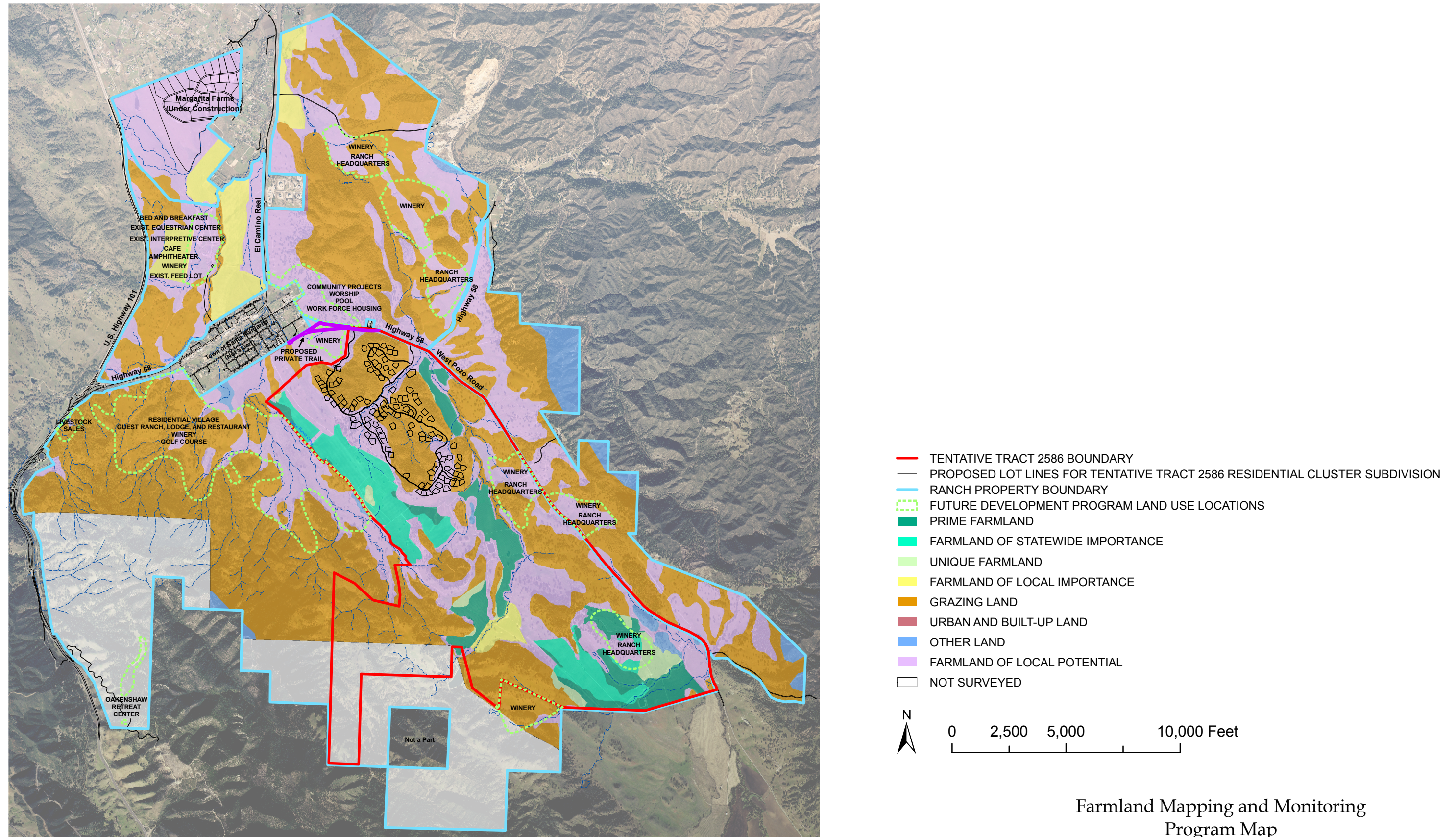
Future Development Program  
 Prime Agricultural Soils

Source: SSURGO, 2004, EDA Design Professionals, June 2006.









Farmland Mapping and Monitoring  
Program Map





Agricultural Residential Cluster Subdivision development, is currently used for cattle grazing. The Santa Margarita Ranch is one of the premier cattle ranches in the area.

*Land Conservation Act.* Preservation of agricultural, recreational and open space lands through agricultural preserve contracts between the County and property owners is a technique encouraged by the State. Agricultural preserve contracts are executed through procedures enabled by the California Land Conservation Act of 1965, also known as the Williamson Act. A contract may be entered into for property with agricultural, recreational and/or open space uses in return for decreased property taxes. The County Agricultural Preserve Rules of Procedure (adopted July 2, 1991 and amended August 14, 2001) require certain minimum parcel sizes and land use restrictions applicable to agricultural preserve lands under their respective contracts. The Rules of Procedure additionally outline agricultural and compatible uses for lands subject to land conservation contracts. Land Conservation Act contracts preserve agriculture and open space over a rolling term 10 year contract.

The inclusion of a parcel in a Williamson Act contract is entirely voluntary, and must have the consent of the property owner. None of the Ranch property is currently under Land Conservation Act (Williamson Act) contract.

*Agricultural Conservation Easements.* An agricultural conservation easement (ACE) is a deed restriction landowners voluntarily place on their property to protect resources such as productive agricultural land, ground and surface water, wildlife habitat, historic sites or scenic views. They are used by landowners to authorize a qualified conservation organization or public agency to monitor and enforce the restrictions set forth in the agreement.

The terms of ACE's can be tailored to suit the needs of the landowner and his or her property. While agricultural easements generally restrict all non-agricultural use of the land, continued ranching and farming are permitted, and some limited development may be allowed. For example, an ACE generally permits the construction of new farm buildings and can allow construction of a home for family members or the subdivision of a lot for resale. In addition, ACE's often permit commercial development related to the farm operation. The flexibility of these and other restrictions vary with the characteristics of the agricultural land and the conservation objectives of the easement. In addition, it should be noted that the San Luis Obispo County Land Use Ordinance (LUO) precludes future subdivision of cluster project sites and restricts allowed uses.

Similar to Land Conservation Act contracts, agricultural conservation easements are designed to keep land available for farming. However, conservation easements are permanent, while Land Conservation Act contracts preserves agriculture and open space over a rolling term 10 year contract. Although Land Conservation Act contracts are not permanent, they are generally more restrictive in the types of land uses that may be permitted on a protected parcel, compared to ACE's. None of the Ranch property is currently under an agricultural conservation easement.

**c. Santa Margarita Ranch Soil Characteristics.** Agricultural classifications of each soil type found within the Santa Margarita Ranch property were analyzed based on their Capability Class, California Revised Storie Index grade and NRCS farmland designation. Capability



Classes provide insight into the suitability of a soil for field crop uses based on factors that include texture, erosion, wetness, permeability, and fertility. As defined in Government Code Section 51201 (California Land Conservation Act of 1965), Capability Class 1 and Class 2 soils qualify as prime soils. The Storie Index is a soil rating based on soil properties that govern a soil's potential for cultivated agriculture in California. The Storie Index assesses the productivity of a soil from the following four characteristics: factor A, degree of soil profile development; factor B, texture of the surface layer; factor C, slope; and factor X, manageable features, including drainage, micro relief, fertility, acidity, erosion, and salt content. As defined in Government Code Section 51201 (California Land Conservation Act of 1965), soils with a Storie Index from 80 to 100 qualify as prime soils. Under the California Revised Storie Index, this translates to Grade 1 (excellent) index rating. The NRCS farmland classification identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. It identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland.

Santa Margarita Ranch soils and their Capability Class, California Revised Storie Index Rating, and NRCS farmland classification are shown in Table 4.1-1. Prime soils are defined as those with a Land Capability Class of 1 or 2, a California Revised Storie Index of Grade One (Excellent), or an NRCS farmland classification of “prime farmland if irrigated.”

**Table 4.1-1 Santa Margarita Ranch Soil Characteristics Map Units and Agricultural Classifications**

Map Unit	Name	Capability Class		CA Revised Storie Index	NRCS Prime Farmland Classification	Prime Soil?
		Irrigated	Non-Irrigated			
101	Arbuckle fine- sandy loam (2 – 9% slopes)	3	4	Grade One – Excellent	Prime Farmland if Irrigated	Yes
102	Arbuckle-Positas complex (9 – 15% slopes)	4	4	Grade One – Excellent	Not Prime Farmland	Yes
103	Arbuckle-Positas complex (15 – 30% slopes)	6	6	Grade Two – Good	Not Prime Farmland	No
104	Arbuckle-Positas complex (30 – 50% slopes)	7	7	Grade Three - Fair	Not Prime Farmland	No
106	Arbuckle-San Ysidro complex (2 – 9% slopes)	3	4	Grade One – Excellent	Farmland of Statewide Importance	Yes
108	Arnold-San Andreas complex (30 – 75% slopes)	7	7	Grade Four – Poor	Not Prime Farmland	No
109	Ayar and Diablo soils (9 – 15% slopes)	3	4	Not Rated	Not Prime Farmland	No
110	Ayar and Diablo soils (15 – 30% slopes)	4	4	Not Rated	Not Prime Farmland	No
114	Balcom-Nacimiento association, moderately steep	4	4	Grade Three – Fair	Not Prime Farmland	No
116	Botella sandy loam (2 – 9% slopes)	2	4	Grade One – Excellent	Prime Farmland if Irrigated	Yes
126	Cieneba coarse sandy loam (30 – 75% slopes)	7	7	Grade Six – Nonagricultural	Not Prime Farmland	No



**Table 4.1-1 Santa Margarita Ranch Soil Characteristics Map Units and Agricultural Classifications**

Map Unit	Name	Capability Class		CA Revised Storie Index	NRCS Prime Farmland Classification	Prime Soil?
		Irrigated	Non-Irrigated			
127	Cieneba-Andregg complex (30 – 75% slopes)	7	7	Grade Five – Very Poor	Not Prime Farmland	No
129	Clear Lake clay	3	4	Grade Five – Very Poor	Not Prime Farmland	No
130	Clear Lake clay, drained	2	4	Grade Three – Fair	Prime Farmland if Irrigated	Yes
133	Cropley clay (2 – 9% slopes)	2	4	Grade Three – Fair	Prime Farmland if Irrigated	Yes
134	Dibble clay loam (9 – 15% slopes)	3	4	Grade Three – Fair	Not Prime Farmland	No
138	Elder loam (0 – 2% slopes)	1	4	Grade One – Excellent	Prime Farmland if Irrigated	Yes
139	Elder loam (2 – 9% slopes)	2	4	Grade One – Excellent	Prime Farmland if Irrigated	Yes
140	Elder loam, flooded (0 – 5% slopes)	2	4	Grade Two – Good	Prime Farmland if Irrigated and Drained	Yes
143	Gaviota-San Andreas association, very steep	7	7	Not Rated	Not Prime Farmland	No
144	Gazos shaly clay loam (9 – 30% slopes)	4	4	Grade Four – Poor	Not Prime Farmland	No
145	Gazos shaly clay loam (30 – 50% slopes)	6	6	Grade Five – Very Poor	Not Prime Farmland	No
147	Hanford and Greenfield soils (0 – 2% slopes)	1	4	Grade One – Excellent	Prime Farmland if Irrigated	Yes
148	Hanford and Greenfield soils (2 – 9% slopes)	2	4	Grade One – Excellent	Farmland of Statewide Importance	Yes
149	Hanford and Greenfield gravelly sandy loams (0 – 2% slopes)	2	4	Grade Three – Fair	Prime Farmland if Irrigated	Yes
150	Hanford and Greenfield gravelly sandy loams (2 – 9% slopes)	2	4	Grade Three – Fair	Prime Farmland if Irrigated	Yes
152	Linne-Calodo complex (9 – 30% slopes)	4	4	Grade Four – Poor	Not Prime Farmland	No
153	Linne-Calodo complex (30 – 50% slopes)	NA	NA	Grade Four – Poor	Not Prime Farmland	No
162	Lompico-McMullin complex (50 – 75% slopes)	7	7	Grade Four – Poor	Not Prime Farmland	No
166	Metz loamy sand (0 – 5% slopes)	3	4	Grade Two – Good	Farmland of Statewide Importance	No
167	Metz-Tujung complex, occasionally flooded (0 – 5% slopes)	3	4	Grade Two – Good	Not Prime Farmland	No
169	Millsholm-Dibble clay loams (15 – 30% slopes)	NA	NA	Not Rated	Not Prime Farmland	No
170	Millsholm-Dibble clay loams (30 – 50% slopes)	6	6	Not Rated	Not Prime Farmland	No
177	Nacimiento-Ayar complex (9 – 30% slopes)	4	4	Grade Three – Fair	Not Prime Farmland	No



**Table 4.1-1 Santa Margarita Ranch Soil Characteristics Map Units and Agricultural Classifications**

Map Unit	Name	Capability Class		CA Revised Storie Index	NRCS Prime Farmland Classification	Prime Soil?
		Irrigated	Non-Irrigated			
179	Nacimiento-Los Osos complex (9 – 30% slopes)	4	4	Not Rated	Not Prime Farmland	No
182	Oceano loamy sand (2 – 9% slopes)	3	6	Grade Two – Good	Prime Farmland if Irrigated	Yes
183	Pico fine sandy loam (0 – 2% slopes)	1	4	Grade One – Excellent	Prime Farmland if Irrigated	Yes
185	Pits	8	8	Not Rated	Not Prime Farmland	No
188	Rincon clay loam (2 – 9% slopes)	2	4	Grade One – Excellent	Prime Farmland if Irrigated	Yes
190	Rock outcrop-Gaviota complex (30 – 75% slopes)	8	8	Not Rated	Not Prime Farmland	No
191	Ryer clay loam (2 – 9% slopes)	2	4	Grade One – Excellent	Prime Farmland if Irrigated	Yes
192	San Andreas sandy loam (15 – 30% slopes)	4	4	Grade Three – Fair	Not Prime Farmland	No
193	San Andreas-Arujo complex (9 – 15% slopes)	3	4	Not Rated	Farmland of Statewide Importance	No
198	Santa Lucia-Lopez complex (15 – 50% slopes)	6	6	Not Rated	Not Prime Farmland	No
199	Santa Lucia-Gazos complex (50 – 75% slopes)	7	7	Not Rated	Not Prime Farmland	No
202	Shimmon loam (30 – 50% slopes)	6	6	Grade Four – Poor	Not Prime Farmland	No
203	Shimmon-Dibble association, steep	6	6	Grade Four – Poor	Not Prime Farmland	No
204	Shimmon-Dibble association, very steep	7	7	Grade Four – Poor	Not Prime Farmland	No
207	Still gravelly loam (0 – 2% slopes)	2	4	Grade Three – Fair	Prime Farmland if Irrigated	Yes
208	Still clay loam (0 – 2% slopes)	1	4	Grade One – Excellent	Prime Farmland if Irrigated	Yes
209	Still clay loam (2 – 9% slopes)	2	4	Grade One – Excellent	Prime Farmland if Irrigated	Yes
210	Vista coarse sandy loam (9 – 15% slopes)	4	4	Grade Three – Fair	Not Prime Farmland	No
211	Vista-Cieneba complex (15 – 30% slopes)	4	6	Grade Three – Fair	Not Prime Farmland	No
212	Xerofluvents-Riverwash association	6	8	Not Rated	Not Prime Farmland	No

Sources: U.S. Department of Agriculture (USDA), Soil Conservation Service (SCS), *Soil Survey of San Luis Obispo County, California, Paso Robles Area, May 1983*. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/> accessed 8/3/2007.





A total of 54 soil map units occur on the Santa Margarita Ranch. Of these soils, 13 are considered prime regardless of irrigation (i.e. have a California Revised Storie Index of Grade One), while 20 (total) are considered prime if irrigated.<sup>1</sup>

**d. Santa Margarita Ranch Farmland Characteristics.** The California Department of Conservation (DOC) identifies and designates important farmlands throughout the State (2004) (refer to Figure 4.1-3). DOC important farmlands differ from the NRCS farmland classification because the NRCS farmland classification is based solely on soil quality, while the DOC important farmland designation is based on both soil quality and current land use. According to the DOC important farmland mapping, the Santa Margarita Ranch contains approximately 416 acres of Prime Farmland. The Ranch also contains approximately 389 acres of Farmland of Statewide Importance and 105 acres of Unique Farmland. In addition, the Ranch contains approximately 443 acres of Farmland of Local Importance and 3,788 acres of Farmland of Local Potential. Examples of Farmland of Local Importance include dry farmed areas of the ranch, while examples of Farmland of Local Potential includes some of the ranch that is currently used for grazing that has soils that are suitable for farming but are not cultivated at this time. Some areas of the ranch that have been previously mapped as Prime Farmland or as Farmland of Statewide Importance may be included in this category if the land has not been in agricultural irrigation for the last four years. The Santa Margarita Ranch contains approximately 5,868 acres of land designated as Grazing Land. These ranch lands are currently used primarily for cattle grazing.

Approximately 2,340 acres in the southern portion of the Ranch property have not been mapped by the Department of Conservation. Therefore, important farmlands data is not available for this area (refer to Figure 4.1-3). Approximately 258 acres of the Ranch are designated as Other Land.

Refer to Section 4.6, *Geologic Stability*, for a detailed discussion of soil characteristics as they impact Agricultural Residential Cluster Subdivision and Future Development Program development.

**e. Available Forage.** The term available forage refers to the portion of the forage, expressed as weight of forage per unit land area, which is accessible for consumption by a grazing animal. Available forage is an important component in calculating stocking rate, or the amount of land allotted to each animal for the entire grazeable portion of the year.

Available forage production throughout the Santa Margarita Ranch ranges from 200 pounds per acre to 2,750 pounds per acre. Available forage of 200 lbs/acre permits approximately 1 animal unit per 50 acres, while available forage of 2,750 lbs/acre permits approximately 1 animal unit per 4 acres [one animal unit equates to 1,000 pounds of grazing animal(s)]. Generally, available forage is greatest for the fine loamy bottom, loamy bottom, clayey, and fine loamy range sites and less for the sandy or shallow soil range sites. Areas of thistle infestation will also reduce the availability of palatable forage.

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<sup>1</sup> This distinction is made because the Land Capability Class and NRCS farmland classification may change depending on irrigation, while the California Revised Storie Index does not. Irrigation is available in the project area.



**f. Existing Cropland and Rangeland Conditions.** Based solely on soil characteristics taken from NRCS data, the Ranch contains approximately 7,174 acres suitable for the production of a variety of crops including, but not limited to, alfalfa, barley, grain hay, wheat, almonds, walnuts, olives, irrigated pasture, safflower, vegetables, seed and other crops suited to the ranch's microclimates. Of the above 7,174 acres, approximately 6,276 acres are suitable for winegrapes, again, based solely on soil characteristics and regional soil uses.

Range condition compares the present forage production capacity of an area to a desirable standard and is a product of long-term grazing management. Most of the ranch has a good to excellent range condition comprised of a mixture of palatable annual grasses and perennial bunch grasses, which would be expected, based on soil types and climatic conditions. Rangeland assessments typically equate stocking rates to a particular "level" or intensity of cattle grazing. Existing cattle stocking on the entire Ranch is light to moderate with ample residual dry matter on a ranch-wide basis that shows a management commitment to high-quality stewardship practices. Stocking has been lighter than normal to allow the ranch to rest (Filipponi, pers. comm., 2006). Rangeland conditions on the Agricultural Residential Cluster Subdivision site are excellent with a light to moderate livestock stocking rate and ample residual dry matter. Cattle distribution is predicated by management practices, available water, cross fencing, temperatures, slope, and access. Existing cattle distribution continues to improve with new cross-fencing and livestock water observed in many locations.

The Ranch's stocking rate is currently about 660 cow/calve pairs, 40 bulls, and 85 heifers that equates to about 750 animal units per year (Filipponi, pers. comm., 2006). With additional cross fencing and livestock water development, and with continued thistle control, approximately 900 to 1,000 animal units could be grazed at a moderate level of grazing on the ranch.

As an agricultural cluster subdivision, the Agricultural Residential Cluster Subdivision component of the proposed project is subject to the County's Agricultural Lands Clustering Ordinance (Section 22.22.150 of the Land Use Ordinance). Refer to Appendix C, *Policy Consistency*, for discussion of the Agricultural Subdivision Ordinance.

#### **4.1.2 Impact Analysis**

**a. Methodology and Significance Thresholds.** The conversion of prime agricultural land to non-agricultural use or impairment of the productivity of prime agricultural land is a significant unavoidable impact. The conversion of prime soils to urban uses constitutes such an impact. As a reasonable worst case scenario, the EIR considers soils prime if they meet either State or federal definitions of prime agricultural land or prime farmland, respectively. The State defines prime agricultural land as follows (Government Code § 51201):

- (c) "Prime agricultural land" means any of the following:
  - (1) All land that qualifies for rating as Class I or Class II in the Natural Resource Conservation Service land use capability classification [now referred to in the Arabic numerals 1 and 2].
  - (2) Land which qualifies for rating 80 through 100 in the Storie Index Rating [Under the California Revised Storie Index, this translates to Grade 1 (excellent) index rating].



- (3) Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United State Department of Agriculture.

As defined in the Code of Federal Regulations (CFR) Title 7 (Agriculture) § 657.5(a) (1), prime farmland is defined as follows:

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses.

Soils are designated as prime farmland by the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), in accordance with 7 CFR § 657.5. As a matter of federal law and County policy [refer to San Luis Obispo County's Agriculture and Open Space Element Appendix C (Agricultural Mapping Criteria)], NRCS farmland classifications of "prime farmland if irrigated" are also considered prime.

Based on the State and federal definitions of prime agricultural land and prime farmland outlined above, for the purposes of this EIR, prime soils are defined as those with a Land Capability Class of 1 or 2, a California Revised Storie Index of Grade One (Excellent), or an NRCS farmland classification of "prime farmland if irrigated." In accordance with Appendix G of the State CEQA Guidelines impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in any of the following:

- *Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use;*
- *Conflict with existing zoning for agricultural use, or a Williamson Act contract; and/or*
- *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.*

**For the purposes of this analysis, "Farmland" includes land which is currently under agricultural production (including grazing).**

**b. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact AG-1**      **The proposed Agricultural Residential Cluster Subdivision would permanently compromise the sustainability of a 676.7-acre grazing unit and would permanently convert 21.2 acres containing prime soils to non-agricultural uses. Impacts related to agricultural conversion would be Class I, significant and unavoidable.**

As illustrated in Figure 4.1-3, the Agricultural Residential Cluster Subdivision area is primarily composed of Grazing Land (as defined by the California Department of Conservation, Farmland Mapping and Monitoring Program). The proposed Agricultural Residential Cluster



Subdivision includes 111 clustered residential parcels, one ranch headquarters unit (located on Parcel 42), and related infrastructure, which would directly convert approximately 163 acres from existing grazing use to residential use. In addition, based on the non-contiguous layout of the proposed lots, approximately 513 acres of the grazing unit (including areas between and around lots) would not be suitable for grazing after development of proposed residential lots because of inherent incompatibilities between residential uses and cattle grazing (refer to Agricultural Residential Cluster Subdivision Impact AG-2 for a discussion of potential land use conflicts). As a result, the 676.7-acre grazing unit would no longer meet the California Department of Conservation Farmland Mapping criteria for Grazing Land (defined as land on which the existing vegetation is suited to the grazing of livestock, based on technical soil ratings and current land use) and would instead be classified as Other Land/Rural Residential (defined as land not included in any other mapping category, including low density rural development). In addition, using a ratio of 1 animal unit per 8 acres based on the rangeland productivity of soil types within the Agricultural Residential Cluster Subdivision area [U.S. Department of Agriculture (USDA), Soil Conservation Service (SCS), *Soil Survey of San Luis Obispo County, California, Paso Robles Area*, May 1983], conversion of the 676.7-acre grazing unit would result in a reduction in the overall carrying capacity of the Ranch by 85 animal units per year.

In addition to permanently compromising the sustainability of a 676.7-acre grazing unit, the proposed Agricultural Residential Cluster Subdivision would permanently convert prime agricultural soils. Prime soils are defined as those with a Land Capability Class of 1 or 2, a California Revised Storie Index of Grade One (Excellent), or an NRCS farmland classification of “prime farmland if irrigated.” Of the 32 soil map units that are found on the Agricultural Residential Cluster Subdivision site, eight are considered prime regardless of irrigation (i.e. have a California Revised Storie Index of Grade One), while 14 (total) are considered prime if irrigated.

Of the 163 acres that would be directly converted by Agricultural Residential Cluster Subdivision development, four soil types occur that are considered a prime soils regardless of irrigation status [Arbuckle-Positas complex (9 - 15% slopes), Botella sandy loam (2 - 9% slopes), Elder loam (2 - 9% slopes), and Still clay loam (0 - 2% slopes)]. Two additional soil types occur that are considered prime if irrigated: [Cropley clay (2 - 9% slopes) and Oceano loamy sand (0 - 2% slopes)]. In total, these soils comprise approximately 21.2 acres near the center of the Agricultural Residential Cluster Subdivision area (refer to inset in Figure 4.1-1). Therefore, the Agricultural Residential Cluster Subdivision could result in the direct conversion of 21.2 acres of prime agricultural soils. In addition, although prime soils located outside of direct development areas but within the 676.7 acre grazing unit would not be directly converted by the proposed development, these areas would nonetheless be impacted because they would no longer be viable for commercial agriculture due to the adjacency of residential development. These areas would therefore be secondarily converted by the Agricultural Residential Cluster Subdivision.

Refer to Appendix C, *Policy Consistency*, for an analysis of the Agricultural Residential Cluster Subdivision’s potential inconsistency with the County’s Agricultural Lands Clustering Ordinance (Section 22.22.150 of the Land Use Ordinance).



Mitigation Measures. No feasible measures are available that would mitigate impacts to the grazing unit and prime soils located on the Agricultural Residential Cluster Subdivision site without substantial redesign of the proposed Agricultural Residential Cluster Subdivision.

Residual Impacts. Impacts would remain Class I, *significant and unavoidable*.

**Agricultural Residential Cluster Subdivision Impact AG-2**      **The proposed Agricultural Residential Cluster Subdivision would create conflicts between proposed urban uses and existing and future agricultural uses. Potential land use conflicts are a Class I, *significant and unavoidable*, impact.**

Active grazing lands and vineyards are located on the Agricultural Residential Cluster Subdivision site, within and adjacent to proposed development areas. In addition, approximately 1,026 acres of additional vineyards (above existing plantings), as well as approximately 500 acres of orchards, are planned throughout the Ranch property. Since the proposed residential development would remove existing grazing uses from the site, the majority of development would be located at least 500 feet from adjacent grazing land uses. However, Lots 1, 53, 54, 56, 78, 79, 80, 82, 87, 99, 100, 101, 108 and 115 would be located within 500 feet of existing on-site vineyards (the Cuesta Ridge Vineyard) while Lots 39 and 40 would be located within 500 feet of potential vineyards. According to the San Luis Obispo County Agricultural Commissioners' Office, based on a lot-specific review of site conditions relative to adjacent existing and potential agricultural uses, the locations of proposed residential parcels are considered compatible with the adjacent agricultural production areas, and additional buffer distances are not required with the exception of Lots 1, 39, 40, 99 and 100. It should be noted, however, that the Agricultural Commissioner recommends that Lots 39 and 40 be relocated at least 500 feet from the northwestern project boundary. Because the relocation areas have not been identified, and because such relocations would fundamentally alter the proposed project evaluated in this EIR, this cannot be required as mitigation. The proposed residential uses would be expected to result in potential conflicts between the existing on-site agricultural operations and new non-agricultural uses. Potential land use conflicts are described below.

*Impacts to Agricultural Uses.* Implementation of the proposed residential development would generate approximately 302 residents. The 112 residential units and associated 302 people in the Santa Margarita area would constitute an approximate 22.8% increase in the existing population of the Santa Margarita community, which was estimated as 1,325 people as of the year 2005. Residential development adjacent to farmland can have several negative impacts on the continued on-site and adjacent agricultural production activities. Direct physical impacts resulting from trespassing may include vandalism to farm equipment and theft of crops. These can result in indirect economic impacts. These impacts are potentially significant but mitigable.

Other indirect impacts to agriculture from nearby urban uses can affect the long-term viability of such operations. Increased regulations and liability insurance to protect the farmer from adjacent urban uses cost time and money. Some farmers sensitive to nearby public uses voluntarily limit their hours of operation and do not intensively use the portions of their property closest to urban uses, in effect establishing informal buffer zones on their own property. This has the effect of lowering the crop yield, and therefore the long-term economic viability, of the agricultural operation. Over time, this may provide an incentive for the property owners of adjacent lands under Williamson Act contract to file a notice of non-renewal.



*Impacts to Residential Uses.* Residents living adjacent to farmland commonly cite odor nuisance impacts, noise from farm equipment, dust, and pesticide spraying as typical land use conflicts. Other incompatibilities include unpredictable behavior by cattle in the presence of pedestrians, bicyclists, and/or domestic pets. The County's right to farm ordinance provides, as a good neighbor policy, for disclosure to residents of the inherent potential problems associated with the purchase of residential properties adjacent to agricultural uses [Sec 5.16.020]. In addition, the ordinance also provides for alternative dispute resolution [Sec 5.16.090].

The County Department of Agriculture/Measurement Standards maintains recommended standards for setbacks (buffers) and screening techniques between development and agricultural property. Buffers are used to address a range of compatibility issues that can either impact the agricultural operation (trespass, litter, vandalism, theft, and general liability issues) or adjacent residents (dust, day and night-time noise, odor, and heavy vehicle traffic). Legal pesticide use would continue to be allowed for vineyard operations, gopher or weed control on the project site. However, some legal pesticides are restricted if residences are in close proximity. Therefore, the development of residences in close proximity to agricultural operations can limit certain legal pesticide applications. The County of San Luis Obispo has developed agricultural buffer policies and procedures that recommend buffer distance ranges for intensive and non-intensive agricultural uses from proposed residential uses. These buffers are designed to reduce land use incompatibilities. Intensive uses include vineyards and non-intensive uses include rangeland/pasture uses outside of the residential portion of the Agricultural Residential Cluster Subdivision site. The County requires vineyard buffers ranging between 200 to 600 feet, and rangeland buffers are recommended of 50-100 feet from residential uses. Given the non-contiguous design of the proposed Agricultural Residential Cluster Subdivision, buffers would not effectively mitigate incompatibilities. Therefore, grazing activities on the existing 676.7-acre grazing unit could not practicably occur. In addition, although with mitigation the location of proposed residential lots satisfies buffer distances recommended by the County Agricultural Commissioners Office, with the exception of Lots 39 and 40, ongoing agricultural operations could result in nuisances experienced by future homeowners. This may include agricultural burning of materials in close proximity to or upwind of Agricultural Residential Cluster Subdivision residences, which may create nuisances and negative health effects. These would be potentially significant land use compatibility impacts.

Mitigation Measures. The following mitigation measures are required to reduce potential impacts related to conflicts between agriculture and adjacent proposed residential uses:

**Agricultural Residential Cluster Subdivision AG-2(a)**

**Disclosure of Potential Nuisance.** In accordance with the County Right to Farm Ordinance (No. 2050), upon the transfer of real property on the Agricultural Residential Cluster Subdivision site, the transferor shall deliver to the prospective transferee a written disclosure statement that shall make all prospective homeowners in the proposed Agricultural Residential Cluster Subdivision aware that although potential impacts or discomforts between agricultural and non-agricultural uses may be lessened



by proper maintenance, some level of incompatibility between the two uses would remain. This notification shall include disclosure of potential nuisances associated with on-site agricultural uses, including the frequency, type, and technique for pesticide spraying, frequency of noise-making bird control devices, dust, and any other vineyard practices that may present potential health and safety effects. In addition, the notification shall identify that adjoining agricultural land is permanently protected for agricultural uses, and that future agricultural uses may vary from current uses and might include processing facilities, nighttime operation, wind machines, odor, dust, noise, legal chemical applications, use and creation of compost, and/or changes in irrigation patterns and water use. The establishment of new agricultural uses, if established in accordance with standard agricultural practices, will not be considered a nuisance from the time of establishment.

**Plan Requirements and Timing.** The disclosure shall be provided by the property transferor to prospective homeowners upon the transfer of real property on the Agricultural Residential Cluster Subdivision site. Updated disclosure notifications shall be provided to existing and prospective homeowners on the Agricultural Residential Cluster Subdivision site as necessary if agricultural maintenance practices change. **Monitoring.** Planning and Building staff shall review the disclosure statement prior to project occupancy.

**Agricultural Residential  
Cluster Subdivision  
AG-2(b)**

**Agricultural Buffers.** The applicant shall maintain buffered lot locations as approved by the Agricultural Commissioner. Additionally, a building limit line shall be established for habitable structures on Lots 1, 99 and 100.

**Plan Requirements and Timing.** This provision shall be noted on the applicant's site plan. **Monitoring.** Planning and Building staff shall approve a site plan that conforms to this requirement.

**Agricultural Residential  
Cluster Subdivision  
AG-2(c)**

**Oak Tree Retention.** All existing oak trees located between Agricultural Residential Cluster Subdivision lots and vineyards shall be retained for screening/buffering purposes. Should oak tree removal be required for safety reasons, trees shall be replaced in accordance with Agricultural Residential Cluster Subdivision measure B-3(b) (Oak Tree Replacement, Monitoring, and Conservation).

**Plan Requirements and Timing.** Planning and Building shall review individual site plans for retention of oak trees located between Agricultural Residential Cluster Subdivision lots and



vineyards. **Monitoring.** Planning and Building staff shall monitor for conformance with this requirement.

**Agricultural Residential Cluster Subdivision AG-2(d)**

**No-Climb Fencing.** Existing fencing located between the outer perimeter of Agricultural Residential Cluster Subdivision residential lots and vineyards shall be maintained in perpetuity, or new no-climb fencing shall be installed, to reduce trespass potential.

**Plan Requirements and Timing.** Planning and Building shall review tract maps for inclusion of no-climb fencing as applicable. **Monitoring.** Planning and Building shall review tract maps prior to issuance of grading permits and inspect units prior to occupancy clearance for each phase.

Residual Impacts. Implementation of the above mitigation measures and the proposed agricultural conservation easements would partially reduce land use compatibility impacts. However, given the non-contiguous design of proposed lots and the intensity of existing agricultural activities on the site (vineyards), impacts would remain Class I, *significant and unavoidable*.

Refer to Section 4.9, *Public Safety*, for a discussion of impacts related to agricultural chemicals and agricultural vehicle conflicts. Refer to Section 4.4, *Cultural Resources*, for a discussion of impacts to the historical agricultural values of the site.

It should be noted that the proposed Agricultural Residential Cluster Subdivision and envisioned Future Development Program would not result in impacts related to agricultural tourism activities on the site (e.g., tours, dude ranch activities), when compared to existing conditions, because no intensification of existing baseline agricultural tourism activities is proposed with the exception of the guest ranch and other lodging units evaluated throughout this EIR. Ongoing and/or intensified agricultural tourism activities are subject to County land use regulations and nuisance ordinances.

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**c. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.1.2(b) for a discussion of agricultural resource impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development Program Impact AG-1**

**Development in accordance with the Future Development Program could permanently convert existing grazing lands and 758 acres containing prime soils to non-agricultural uses. Impacts related to agricultural conversion would be Class I, significant and unavoidable.**





As illustrated in Figure 4.1-3, areas envisioned for future development subsequent to the Agricultural Residential Cluster Subdivision are primarily composed of Farmland of Local Potential and Grazing Land (as defined by the California Department of Conservation, Farmland Mapping and Monitoring Program). The Future Development Program conceptual land use locations comprise approximately 1,836 acres. Assuming a reasonable worst case scenario with respect to the location and amount of disturbance within anticipated future development areas, a large portion of these 1,836 acres would be converted to non-agricultural land uses. Of the acres that may be converted, approximately 736.8 acres are considered prime if irrigated (758 including the proposed Agricultural Residential Cluster Subdivision) (refer to Figure 4.1-2).

Land uses envisioned for location in areas containing prime soils (if irrigated) include: a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater and 40,000 square foot winery near the existing Ranch headquarters location; a residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery, and 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop southwest of the community of Santa Margarita; a livestock sales yard; a 5-acre park and community pool, three worship centers, and 50 units of work force housing located east of the community of Santa Margarita; nine wineries and five ranch headquarters located along the eastern portion of the Ranch property (refer to Figure 4.1-2). Because no application has been filed for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, as a worst case scenario, any of these uses could be located directly atop prime soils within their anticipated development areas. Permanent conversion of prime soils would result.

Because the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision is conceptual, it does not provide specific locations or sizes of potential future development. However, 758 acres of prime soil (including 21.2 acres on the Agricultural Residential Cluster Subdivision site) may be directly converted to non-agricultural use. In addition, future development would fragment existing grazing units on the Ranch. This is a potentially significant impact and mitigation is required.

Mitigation Measures. The following mitigation measures are required:

**Future Development Program AG-1(a)**

**Avoidance of Agricultural Areas.** Relocate and/or reduce the size of conceptual future development as land uses are finalized for each area to avoid prime soils areas, incorporate required buffers from existing and potential future agricultural operations, reduce land use incompatibilities, and reduce the fragmentation of existing and potential future agricultural production areas. This could include the relocation of potential future winery and ranch headquarter uses within the Agricultural Conservation Easements, and the relocation of potential future urban uses envisioned for location southwest and east of the community of Santa Margarita (refer to Figure 4.1-1).

**Plan Requirements and Timing.** Residential location shall be subject to review by Planning and Building. **Monitoring.**



Planning and Building shall be responsible for ensuring that all structures meet the preferred location requirement. If structures are proposed for location in areas containing prime soils, Planning and Building shall ensure that proper mitigation is applied.

**Future Development Program AG-1(b)**

**Future Agricultural Conservation Easements.** Agricultural conservation easement(s) shall be established for all agricultural areas of the entire Ranch, including both rangeland and cropland, which are outside of the area anticipated to be converted to future development. These easements will protect the remaining ranchland from further fragmentation. The easements shall be in perpetuity, shall preserve agricultural uses, and shall be held by an independent third party that is knowledgeable regarding working landscape agricultural conservation easements. Future applicants shall provide an endowment for the funding of future monitoring requirements of the easements. These easements shall be in lieu of suggested 40-year Land Conservation Act contracts since these contracts do not provide for the preservation of agricultural land in perpetuity. Permitted uses retained in the agricultural conservation easement (retained rights) may include those allowable uses listed in Section 2.4.2 of the EIR Project Description provided that those allowable uses are acceptable to the easement holder and do not compromise, and are not inconsistent with, the stated purposes of the agricultural conservation easements to preserve agricultural land and to provide habitat conservation.

**Plan Requirements and Timing.** This provision shall be noted on future site plans. **Monitoring.** Planning and Building staff shall review site plans for conformance.

Residual Impacts. With implementation of required mitigation measures, impacts related to agricultural conversion would be reduced to the extent feasible. However, no feasible measures are available that would fully mitigate impacts related to the fragmentation of agricultural areas and conversion of prime soils without substantial limitations to the location and extent of future conceptual development envisioned for the Future Development Program. Therefore, impacts would remain Class I, *significant and unavoidable*.

**Future Development Program Impact AG-2**

**The Future Development Program would create conflicts between proposed urban uses and existing and future agricultural uses. Potential land use conflicts are a Class I, *significant and unavoidable*, impact.**

Active grazing lands are located throughout the Ranch property and an existing vineyard (Cuesta Ridge Vineyard) is located in the southern portion of the Ranch property. All potential future development pursuant to the Future Development Program has the potential to abut



farming operations, creating potential conflicts. Potential conflicts that may occur are described in detail under Agricultural Residential Cluster Subdivision Impact AG-2 in Section 4.1.2(b). This is a potentially significant impact.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure AG-2(a) (Disclosure of Potential Nuisance) would apply to all Future Development Program land uses. Future Development Program measures AG-1(a) (Avoidance of Agricultural Areas) and AG-1(b) (Future Agricultural Conservation Easements) would also reduce impacts related to land use conflicts. The following additional mitigation measure is also required to reduce conflicts:

**Future Development Program AG-2(a)**

**Future Trail Locations.** Future trails shall be installed in locations that will minimize cattle and foot traffic interaction and not adversely impact the ranch livestock operation, per County policy.

**Plan Requirements and Timing.** This provision shall be noted on future site plans. **Monitoring.** Planning and Building staff shall review site plans for conformance.

Residual Impacts. With implementation of required mitigation measures, land use compatibility impacts between agricultural and urban land uses would be reduced to the extent feasible. However, no feasible measures are available that would fully mitigate impacts related to land use compatibility without substantial limitations to the location and extent of future conceptual development envisioned for the Future Development Program. Therefore, impacts would remain Class I, *significant and unavoidable*.

**d. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative agricultural impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.





## 4.2 AIR QUALITY

*Agricultural Residential Cluster Subdivision. There are several sources of air emissions associated with the proposed Agricultural Residential Cluster Subdivision. These include: long term emissions associated with vehicle traffic and electricity and natural gas usage; emissions associated with construction equipment; dust generated by grading required for the installation of infrastructure systems as well as individual lot development; and potential odor emissions associated with proposed private septic systems. Agricultural Residential Cluster Subdivision-related mobile and stationary source emissions have been determined to be Class II, significant and unavoidable impacts. Potential dust generation and odor impacts have been determined to be Class II, significant but mitigable. Odor nuisance impacts from private septic systems are Class III, less than significant. Since the Agricultural Residential Cluster Subdivision is potentially inconsistent with the CAP, this is a Class I, significant and unavoidable, impact.*

*Future Development Program. Because no active application exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, the assessment of air quality impacts is based on a reasonable worst case scenario with regard to the future location and size of future land uses within anticipated development areas. Future Development Program air emissions sources would be similar to those associated with the Agricultural Residential Cluster Subdivision individually. Potential dust generation and odor impacts have been determined to be Class II, significant but mitigable. Since the Future Development Program is potentially inconsistent with the CAP, this is a Class I, significant and unavoidable, impact.*

*Cumulative air quality impacts would be significant and unavoidable. Global Climate Change related impacts are discussed in Section 4.2.3.*

### 4.2.1 Setting

The Santa Margarita Ranch is part of the South Central Coast Air Basin (SCCAB) which includes all of San Luis Obispo, Santa Barbara, and Ventura counties. The climate of San Luis Obispo County and all of the SCCAB is strongly influenced by its proximity to the Pacific Ocean and the location of the semi-permanent high pressure cell in the northeastern Pacific. With a Mediterranean-type climate, the Santa Margarita Ranch is characterized by warm, dry summers and cool winters with occasional rainy periods. Maximum summer temperatures in the County average about 70 degrees Fahrenheit near the coast, while inland valleys are often in the high 90's. Average minimum winter temperatures range from the low 30's along the coast to the low 20's inland.

Airflow around the County plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific high pressure system and other global patterns, topographical factors, and circulation patterns resulting from temperature differences between the land and the sea. The region is also subject to seasonal "Santa Ana" winds. These are typically hot, dry northerly winds which blow offshore at 15-20 mph, but can reach speeds over 60 mph. Two types of temperature inversions (warmer air on top of cooler air) are created in the area: subsidence and radiational. The subsidence inversion is a regional effect created by the Pacific high in which air is heated as it is compressed when it flows from the high pressure area to the low pressure areas inland. This type of inversion generally forms at about 1,000 to 2,000 feet and can occur



throughout the year, but it is most evident during the summer months. Surface inversions are formed by the more rapid cooling of air near the ground during the night, especially during winter. Both types of inversions limit the dispersal of air pollutants within the regional airshed, with the more stable the air (low wind speeds, uniform temperatures), the lower the amount of pollutant dispersion.

**a. Air Pollution Regulation.** Both the federal and state governments have established ambient air quality standards for the protection of public health. The U.S. Environmental Protection Agency (EPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) is the state equivalent in the California Environmental Protection Agency. Local control in air quality management is provided by the CARB through regional-level Air Pollution Control Districts (APCDs). The CARB has established air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. The CARB has established 14 air basins statewide.

The U.S. EPA has set primary and secondary ambient air quality standards for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM<sub>10</sub>) and lead. In addition, the State of California has established health-based ambient air quality standards for these and other pollutants, which are more stringent than the federal standards. Table 4.2-1 shows the federal and state primary standards for the major pollutants. On July 18, 1997, the U.S. EPA announced changes to the National Ambient Air Quality Standards for ozone and particulate matter. The federal ozone standard was lowered to 0.08 parts per million (ppm) and the averaging period was changed from one-hour to an eight-hour running average. A new particulate matter standard for 2.5 micron particulates (PM<sub>2.5</sub>) was created in addition to the standard for 10 micron particulates (PM<sub>10</sub>).

**Table 4.2-1 Air Quality Standards**

Pollutant	Averaging Time	Federal Primary Standards	California Standard
<b>Ozone</b>	1-Hour	---	0.09 PPM
	8-Hour	0.08 PPM	0.070 PPM
<b>Carbon Monoxide</b>	8-Hour	9.0 PPM	9.0 PPM
	1-Hour	35.0 PPM	20.0 PPM
<b>Nitrogen Dioxide</b>	Annual	0.053 PPM	0.030 PPM
	1-Hour	---	0.18 PPM
<b>Sulfur Dioxide</b>	Annual	0.030 PPM	---
	24-Hour	0.14 PPM	0.04 PPM
	1-Hour	---	0.25 PPM
<b>PM<sub>10</sub></b>	Annual	---	20 µg/m <sup>3</sup>
	24-Hour	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
<b>PM<sub>2.5</sub></b>	Annual	15 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>
	24-Hour	30 µg/m <sup>3</sup>	*
<b>Lead</b>	30-Day Average	---	1.5 µg/m <sup>3</sup>
	3-Month Average	1.5 µg/m <sup>3</sup>	---

\* No separate State standard  
 ppm = parts per million  
 µg/m<sup>3</sup> = micrograms per cubic meter  
 Source: ARB, February 22, 2007

The local air quality management agency is required to monitor air pollutant levels to assure that air quality standards are met, and if they are not met, to develop strategies to meet these



standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in “attainment” or as in “nonattainment.” The proposed Agricultural Residential Cluster Subdivision and Future Development Program falls within the jurisdiction of the County of San Luis Obispo APCD. Federal air quality standards within the jurisdiction of the San Luis Obispo APCD have been attained, while the County is in non-attainment for the state standards for both PM<sub>10</sub> and ozone. In addition, the San Luis Obispo Air Basin is in attainment for the state and federal carbon monoxide standards.

**b. Current Ambient Air Quality.** The nearest air monitoring station to the Agricultural Residential Cluster Subdivision and Future Development Program is located on Lewis Avenue in the City of Atascadero, approximately eight miles north of the community of Santa Margarita. This station measures ozone, PM<sub>10</sub>, CO, and NO<sub>x</sub>. Table 4.2-2 summarizes the available annual air quality data for the local airshed. As described therein, this monitoring station has recorded one exceedance of State standards for ozone in 2005 and one exceedance of State standards for PM<sub>10</sub> in 2003. However, this monitoring station has not recorded exceedances of State or federal standards for NO<sub>x</sub> over the years 2003-2005, inclusive, or for CO between 2003 and 2004 (CO monitoring ceased in June 2004).

**Table 4.2-2. Ambient Air Quality Data at the Atascadero Monitoring Station**

Pollutant	2003	2004	2005
Ozone, ppm – Worst Hour	0.093	0.085	0.096
Number of days of State exceedances (>0.09 ppm)	0	0	1
Number of days of Federal exceedances (>0.12 ppm)	0	0	0
Particulate Matter <10 microns, µg/m <sup>3</sup> Worst 24 Hours	58	42	45
Number of samples of State exceedances (>50 µg/m <sup>3</sup> )	1	0	0
Number of samples of Federal exceedances (>150 µg/m <sup>3</sup> )	0	0	0
Carbon Monoxide (ppm), Highest 8-Hour Average	1.46	1.25	ND
Number of days of State exceedances (>9.0 ppm)	0	0	ND
Number of days of Federal exceedances (>9.0 ppm)	0	0	ND
Nitrogen Dioxide (ppm), Worst Hour	0.063	0.051	0.052
Number of days of State exceedances (>0.25 ppm)	0	0	0

Source: CARB, Annual Air Quality Data Summaries, 2003-2005.

Ozone is a secondary pollutant that is not produced directly by a source, but rather is formed by a reaction between nitrogen oxides (NO<sub>x</sub>) and reactive organic gases (ROG) in the presence of sunlight. Reductions in ozone concentrations are dependent on reducing the amount of these precursors. In San Luis Obispo County, the major sources of ROG are motor vehicles, organic solvents, the petroleum industry, and pesticides; and the major sources of NO<sub>x</sub> are motor vehicles, public utility power generation, and fuel combustion by various industrial sources.

On April 28, 2005, the California Air Resources Board (CARB) approved the nation’s most health protective ozone standard with special consideration for children’s health. The new 8-hour-average standard at 0.070 parts per million (ppm) will further protect California’s most vulnerable population from the adverse health effects associated with ground-level ozone. Based on monitoring data, San Luis Obispo County has once again been deemed non-attainment for the new ozone standard.

As noted above, San Luis Obispo County is in nonattainment for State ozone and PM<sub>10</sub> levels. In 2005, the Atascadero Monitoring Station had one violation of the State 1-hour ozone standard



and would have had at least three violations of the current 8-hour standard. The station also had one exceedance of the State PM<sub>10</sub> standard between 2003 and 2005.

Ground level ambient ozone is primarily generated by combustion byproducts reacting with sunlight and ambient conditions. San Luis Obispo County's primary areas where ozone violations occur are in the northern and eastern portions of the County where the summer temperatures are high. In addition, ozone is transported to San Luis Obispo County from upwind regions of the state.

Ambient PM<sub>10</sub> concentrations have been primarily a localized issue of concern in the southern portion of San Luis Obispo County, providing the major impetus for the County's non-attainment designation for the State PM<sub>10</sub> standard. The major sources for PM<sub>10</sub> are mineral quarries, grading, demolition, agricultural tilling, road dust, and vehicle exhaust. PM<sub>10</sub> levels in the Santa Margarita Ranch area are primarily due to agriculture tilling, road dust, motor vehicle emissions, and the sand and gravel quarry located northeast of the Ranch property.

#### **4.2.2 Impact Analysis**

**a. Methodology and Significance Thresholds.** This analysis of air quality issues follows the guidance and methodologies recommended in the APCD's *CEQA Air Quality Handbook* (April, 2003). The URBEMIS 2007 version 9.2 for Windows computer modeling program, which was developed by the California Air Resources Board, was utilized in estimating composite mobile emission factors for the Agricultural Residential Cluster Subdivision and is based on the number and length of vehicle trips to and from the proposed development. A program-level analysis was performed for the Future Development Program. According to the APCD, a program-level environmental review does not require a quantitative air emissions analysis at the project scale. Rather, a qualitative analysis of the air quality impacts was conducted, based upon criteria such as prevention of urban sprawl and reduced dependence on automobiles. A finding of significant impacts can be determined qualitatively by comparing consistency of the project with the Transportation and Land Use Planning Strategies outlined in the District's Clean Air Plan.

Pursuant to the State CEQA Guidelines, air quality impacts related to the proposed Agricultural Residential Cluster Subdivision and Future Development Program would be significant if they would:

- *Conflict with or obstruct implementation of the applicable air quality plan;*
- *Violate any air quality standard or contribute substantially to an existing or projected air quality violation;*
- *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);*
- *Expose sensitive receptors to substantial pollutant concentrations; and/or*
- *Create objectionable odors affecting a substantial number of people.*

The APCD has established four separate categories of evaluation for determining the significance of project impacts: 1) Comparison of calculated project emissions to District





emission thresholds; 2) Consistency with the most recent Clean Air Plan (CAP) for San Luis Obispo County; 3) Comparison of predicted ambient pollutant concentrations resulting from the project to state and federal health standards, when applicable; and 4) The existence of special conditions which apply to certain projects.

Comparison to APCD Emissions Thresholds. The threshold criteria established by the District to determine the significance and appropriate mitigation level for long-term emissions from a project are presented in Table 4.2-3. Emissions which equal or exceed the designated threshold levels are potentially significant and should be mitigated. As shown in the table, the level of analysis and mitigation recommended follows a tiered approach based on the amount of emissions generated by the project.

**Table 4.2-3 Significance Thresholds for Operational Emissions**

Pollutant	Minimal Emissions	Tier 1	Tier 2	Tier 3
ROG, NO <sub>x</sub> , SO <sub>2</sub> , PM <sub>10</sub>	< 10 lbs/day	10 lbs/day	25 lbs/day	25 tons/year
Carbon Monoxide	< 550 lbs/day		550 lbs/day	
Significance	Insignificant	Potentially Significant	Significant	Significant
Environmental Document	Negative Declaration (ND)	Mitigated ND	Mitigated ND or EIR	EIR

Comparison to Air Quality Standards. State and federal air quality standards are excerpted in Table 4.2-1. A project is to have a significant impact if its emissions are predicted to cause or contribute to a violation of any ambient air quality standard.

Short-Term Construction Impacts. Table 4.2-4 below shows the approximate level of construction activity that would result in a potentially significant impact for each pollutant of concern:

**Table 4.2-4. Level of Construction Activity Requiring Mitigation**

Pollutant of Concern	Thresholds		Amount of Material Moved	
	Tons/Qtr	Lbs/Day	Cu. Yds/Qtr	Cu. Yds/Day
ROG	2.5	185	247,000	9,100
	6.0	185	593,000	9,100
NO <sub>x</sub>	2.5	185	53,500	2,000
	6.0	185	129,000	2,000
PM10	2.5		Any project with a grading area greater than 4.0 acres of continuously worked area will exceed the 2.5 ton PM10 quarterly threshold. Combustion emissions should also be calculated based upon the amount of cut and fill expected.	

*All calculations assume working conditions of 8 hours per day, 5 days per week, for a total of 65 days per quarter.  
 Source: San Luis Obispo County APCD, CEQA Air Quality Handbook, April 2003.*

In addition, since the County is in nonattainment for both PM<sub>10</sub> and ozone, construction mitigation measures are required for all projects involving earthmoving activities regardless of size or duration.



Consistency with the District's Clean Air Plan (CAP). Projects and programs requiring an analysis of consistency with the Clean Air Plan include: General Plan Updates and Amendments, Specific Plans, Area Plans, large residential developments and large commercial/industrial developments. Therefore, both the proposed Agricultural Residential Cluster Subdivision and the Future Development Program are evaluated for impacts related to CAP consistency. The consistency analysis must evaluate the following questions:

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

If the answer to all of the above questions is yes, then the proposed project or plan is consistent with the CAP. If the answer to any one of the questions is no, then the emissions reductions projected in the CAP may not be achieved, which could delay or preclude attainment of the state ozone standard. This would be inconsistent with the Clean Air Plan.

**b. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact AQ-1**      **The proposed Agricultural Residential Cluster Subdivision will result in operational air pollutant emissions, primarily from vehicular traffic. This would result in an exceedance of the APCD thresholds, and would be a Class I, significant and unavoidable, impact.**

Based on APCD criteria, a project that generates more than 10 pounds per day (lbs/day) of ROG, NO<sub>x</sub> or PM<sub>10</sub> would exceed Tier 1 significance thresholds, while a project that generates more than 25 lbs/day of ROG, NO<sub>x</sub> or PM<sub>10</sub> would exceed Tier 2 significance thresholds (refer to Table 4.2-3). Agricultural Residential Cluster Subdivision-related vehicle emissions were calculated using the URBEMIS 2007 version 9.2 air quality model. The model assumed a buildout year of 2008, which is a reasonable worst case scenario.

Table 4.2-5 summarizes the emissions from area sources and vehicular traffic associated with the proposed Agricultural Residential Cluster Subdivision. Assumptions used in the mobile emissions analysis included a project fleet mix of 41.7% light automobiles; 38.6% light trucks; 8% medium trucks; 4.7% heavy trucks; 5.1% motorcycles; 1.7% motor home; and 0.2% urban, school and other buses. Average trip type, speed and cold/hot start default percentages provided with the model were used. Average trip length was based on the remote nature of the Agricultural Residential Cluster Subdivision, per guidance from the San Luis Obispo APCD.



**Table 4.2-5. Operational Emissions Associated with Proposed Agricultural Residential Cluster Subdivision (lbs/day)\***

<b>Emission Source</b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>PM<sub>10</sub></b>
Area Source	13.47	3.18	63.4	10.25
Operational (Vehicle)	25.38	38.34	291.4	27.17
<i>Totals</i>	<i>38.85</i>	<i>41.52</i>	<i>354.8</i>	<i>37.42</i>
<i>Tier 1 Threshold</i>	<i>10</i>	<i>10</i>		<i>10</i>
<i>Tier 2 Threshold</i>	<i>25</i>	<i>25</i>	<i>550</i>	<i>25</i>
<i>Threshold Exceeded?</i>	<i>Yes, Tier 2</i>	<i>Yes, Tier 2</i>	<i>No</i>	<i>Yes, Tier 2</i>

\* Although winter emissions were used as a worst case scenario, summer emissions would similarly exceed Tier 2 thresholds for ROG, NO<sub>x</sub> and PM<sub>10</sub>.

Note: See Appendix D for Calculations

The proposed Agricultural Residential Cluster Subdivision is projected to generate 38.85 lbs/day of ROG, 41.52 lbs/day of NO<sub>x</sub>, and 37.42 lbs/day of PM<sub>10</sub> as a result of operational emissions associated with project vehicular traffic and electrical and natural gas usage. When compared to the County’s thresholds of significance, the Agricultural Residential Cluster Subdivision would exceed the Tier 2 threshold for ROG, NO<sub>x</sub> and PM<sub>10</sub>. This is a potentially significant impact.

Mitigation Measures. The San Luis Obispo County APCD CEQA Air Quality Handbook (April 2003) requires that all projects generating 25 or more pounds per day of any individual pollutant implement standard site design and energy efficiency measures, as well as all feasible discretionary site design and energy efficiency mitigation measures. Standard and discretionary measures are described in greater detail below. In addition, in certain cases further mitigation measures are required for projects generating 25 or more pounds per day, including off-site measures, which are designed to offset emissions from large projects that cannot be fully mitigated with on-site measures.

APCD requires standard site-design measures for urban uses, such as: linking cul-de-sacs and dead-end streets to encourage pedestrian and bicycle travel; providing traffic calming modifications to project roads, such as narrower streets, speed platforms, bulb-outs and intersection modifications designed to reduce vehicle speeds; easements or land dedications for bikeways and pedestrian walkways; and, providing continuous sidewalks separated from the roadway by landscaping and on-street parking. These measures apply primarily to urban residential development and would not be applicable to the Agricultural Residential Cluster Subdivision. Similarly, not all discretionary site-design measures would be feasible due to the rural location of the Agricultural Residential Cluster Subdivision, including providing transit turnouts and pedestrian signalization and signage. Due to the infeasibility of standard and discretionary site-design measures, as well as the remote nature and size of the Agricultural Residential Cluster Subdivision, off-site mitigation would be required.

It should be noted, however, that several Agricultural Residential Cluster Subdivision measures in Section 4.12, *Transportation and Circulation*, improve pedestrian and bicyclist infrastructure. These measures include Agricultural Residential Cluster Subdivision measures T-1(a) (SR 58 South of J Street), T-1(e) (Estrada Avenue/H Street Warning Beacon), T-4(a) (El Camino Real/Encina Avenue In-Pavement Flashing Lights) and T-4(b) (Pedestrian Pathway). Although these measures would not reduce the transportation-related air quality impacts to a less than significant level, they would partially reduce vehicle trips in the vicinity.



The following mitigation measures are required, which incorporate all applicable and feasible standard and discretionary measures, as well as off-site measures in accordance with APCD guidance:

**Agricultural Residential Cluster Subdivision AQ-1(a)**

**Energy Efficiency.** The applicant shall increase building energy efficiency ratings by at least 10% above what is required by Title 24 requirements. Potential energy consumption reduction measures include, but are not limited to:

- Using roof material with a solar reflectance value meeting the EPA/DOE Energy Star® rating to reduce summer cooling needs and/or installing photovoltaic roof tiles;
- Using high efficiency gas or solar water heaters;
- Using built-in energy efficient appliances;
- Installing double-paned windows;
- Installing door sweeps and weather stripping if more efficient doors and windows are not available;
- Installing low energy interior lighting;
- Using low energy street lights (i.e. sodium); and
- Installing high efficiency or gas space heating.

**Plan Requirements and Timing.** The applicant shall incorporate the listed provisions into development plans or shall submit proof of infeasibility prior to issuance of grading permits.

**Monitoring.** Planning and Building shall site inspect to ensure development is in accordance with approved plans prior to occupancy clearance.

**Agricultural Residential Cluster Subdivision AQ-1(b)**

**Shade Trees.** Shade trees native to the Santa Margarita Ranch shall be planted to shade the southern exposure of on-site homes and structures, decreasing indoor temperatures and reducing energy demand for air conditioning. The landscape plan shall be submitted to the San Luis Obispo APCD for review and comment. County Planning and Building shall review project landscaping plans for consistency with this mitigation measure.

**Plan Requirements and Timing.** The applicant shall incorporate the listed provision into development plans. **Monitoring.**

Planning and Building shall conduct a site inspection to ensure development is in accordance with approved plans prior to occupancy clearance. Planning and Building staff shall verify installation in accordance with approved building plans.

**Agricultural Residential Cluster Subdivision AQ-1(c)**

**Outdoor Electrical Outlets.** All new homes shall be constructed with outdoor electrical outlets to encourage the use of electric appliances and tools.

**Plan Requirements and Timing.** The applicant shall incorporate



the listed provision into development plans. **Monitoring.** Planning and Building shall conduct a site inspection to ensure development is in accordance with approved plans prior to occupancy clearance. Planning and Building staff shall verify installation in accordance with approved building plans.

**Agricultural Residential  
Cluster Subdivision  
AQ-1(d)**

**Telecommuting.** All new homes shall be constructed with internal wiring/cabling that allows telecommuting, teleconferencing, and telelearning to occur simultaneously in at least three locations in each home. This control measure seeks to reduce emissions by promoting telecommuting for any employee whose job can accommodate working from home.

**Plan Requirements and Timing.** The applicant shall incorporate the listed provision into development plans. **Monitoring.** Planning and Building shall conduct a site inspection to ensure development is in accordance with approved plans prior to occupancy clearance. Planning and Building staff shall verify installation in accordance with approved building plans.

**Agricultural Residential  
Cluster Subdivision  
AQ-1(e)**

**Residential Wood Combustion.** All new homes shall only be permitted to install APCD-approved wood burning devices, as applicable. Approved devices include:

- All EPA-certified phase II wood burning devices;
- Catalytic wood burning devices which emit less than or equal to 4.1 grams per hour of particulate matter which are not EPA-certified but have been verified by a nationally-recognized testing lab;
- Non-catalytic wood burning devices which emit less than or equal to 7.5 grams per hour of particulate matter which are not EPA-certified but have been verified by a nationally-recognized testing lab;
- Pellet-fueled wood heaters; and
- Dedicated gas-fired fireplaces.

“Backyard” green waste burning shall be prohibited due to nuisance and negative health effects.

**Plan Requirements and Timing.** Wood burning devices shall be shown on development plans submitted to Planning and Building for review and approval prior to issuance of building permits, as applicable. **Monitoring.** Planning and Building shall review site plans for compliance prior to issuance of building permits. County inspector shall inspect site for installation of APCD-approved wood burning devices prior to occupancy of the structures.



**Agricultural Residential  
Cluster Subdivision  
AQ-1(f)**

**Off-Site Mitigation.** Prior to issuance of grading permits, the applicant shall work with APCD to define and implement off-site emission reduction measures to reduce emissions to below Tier 2 levels. In accordance with APCD methodology, the excess emissions shall be multiplied by the cost effectiveness of mitigation as defined in the State's current Carl Moyer Incentive Program Guidelines to determine the annual off-site mitigation amount. This amount shall then be extrapolated over the life of the project to determine total off-site mitigation. Off-site emission reduction measures may include, but would not be limited to:

- Developing or improving park-and-ride lots;
- Retrofitting existing homes in the project area with APCD-approved wood combustion devices;
- Retrofitting existing homes in the project area with energy-efficient devices;
- Constructing satellite worksites;
- Funding a program to buy and scrap older, higher emission passenger and heavy-duty vehicles;
- Replacing/re-powering transit buses;
- Replacing/re-powering heavy-duty diesel school vehicles (i.e. bus, passenger or maintenance vehicles);
- Funding an electric lawn and garden equipment exchange program;
- Retrofitting or re-powering heavy-duty construction equipment, or on-road vehicles;
- Re-powering marine vessels;
- Re-powering or contributing to funding clean diesel locomotive main or auxiliary engines;
- Installing bicycle racks on transit buses;
- Purchasing particulate filters or oxidation catalysts for local school buses, transit buses or construction fleets;
- Installing or contributing to funding alternative fueling infrastructure (i.e. fueling stations for CNG, LPG, conductive and inductive electric vehicle charging, etc.);
- Funding expansion of existing transit services;
- Funding public transit bus shelters;
- Subsidizing vanpool programs;
- Subsidizing transportation alternative incentive programs;
- Contributing to funding of new bike lanes;
- Installing bicycle storage facilities; and
- Providing assistance in the implementation of projects that are identified in City or County Bicycle Master Plans.

**Plan Requirements and Timing.** The applicant shall coordinate with APCD and implement off-site emissions reduction



measures prior to issuance of grading permits. **Monitoring.** Planning and Building shall verify compliance prior to issuance of grading permits.

Residual Impacts. Standard site-design mitigation measures required by the APCD would not be applicable to the proposed Agricultural Residential Cluster Subdivision, and discretionary site design measures would be largely infeasible. Off-site measures would reduce emissions to below Tier 2 thresholds. However, the Agricultural Residential Cluster Subdivision would still exceed Tier 1 thresholds. Impacts would therefore remain Class I, *significant and unavoidable*.

**Agricultural Residential Cluster Subdivision Impact AQ-2**     **The Agricultural Residential Cluster Subdivision will generate construction-related emissions as the site develops. These emissions would exceed PM<sub>10</sub> significance thresholds. Construction activities could also expose people to naturally-occurring asbestos. Construction related air quality impacts are Class II, *significant but mitigable*.**

Construction activities are expected to result in temporary short-term air quality impacts. These impacts are associated with dust generated by on-site grading activities and as a result of heavy construction vehicle emissions. No import or export of material is anticipated. Agricultural Residential Cluster Subdivision grading includes earthwork for construction of roads (including off-site circulation improvements), driveways, tank sites, and residential building pads.

Table 4.2-6 summarizes the dust generation from construction activities. As identified in Table 4.2-6, Agricultural Residential Cluster Subdivision construction emissions of PM<sub>10</sub> are potentially significant.

**Table 4.2-6 Emissions During Agricultural Residential Cluster Subdivision Development**

Pollutant of Concern	Tons per Quarter (Tons/Qtr)		
	Emissions	Threshold	Threshold Exceeded?
ROG	1.92	2.5	No
NO <sub>x</sub>	1.61	2.5	No
PM <sub>10</sub>	2.98	2.5	Yes

The proposed Agricultural Residential Cluster Subdivision is projected to generate 1.92 tons/qtr of ROG, 1.61 tons/qtr of NO<sub>x</sub>, and 2.98 tons/qtr of PM<sub>10</sub> as a result of construction emissions. When compared to the County's thresholds of significance, the Agricultural Residential Cluster Subdivision would exceed the tons per quarter threshold for PM<sub>10</sub>. This is a potentially significant impact.

The Agricultural Residential Cluster Subdivision would be required to comply with standard APCD permitting and requirements, including the prohibition of developmental burning of vegetative material within San Luis Obispo County.



Given that San Luis Obispo County violates the state standards for PM<sub>10</sub>, any amount of dust generated from construction activities is potentially significant and mitigation measures are required. Additionally, grading activities may uncover naturally occurring asbestos. Human contact with asbestos would result in significant adverse health effects. Measures must be taken to assure proper handling if asbestos is present.

Refer also to Agricultural Residential Cluster Subdivision Impact S-6 in Section 4.9, *Public Safety*, for a discussion of impacts related to valley fever.

Mitigation Measures. Portable equipment 50 horsepower or greater will require California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit. In addition, the following mitigation measures are recommended to minimize emissions and to reduce the amount of dust that drifts onto adjacent properties. These measures would apply to both tract grading and development of individual lots:

**Agricultural Residential  
Cluster Subdivision  
AQ-2(a)**

**Construction Equipment Controls.** Upon application for grading permits, the applicant shall submit grading plans, the proposed rate of material movement and a construction equipment schedule to the APCD. In addition, the applicant shall implement the following measures to mitigate equipment emissions:

- All construction equipment and portable engines shall be properly maintained and tuned according to manufacturer's specifications;
- All off-road and portable diesel powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB-certified motor vehicle diesel fuel;
- The applicant shall maximize to the extent feasible, the use of diesel construction equipment meeting the California Air Resources Board's 1996 (or newer) certification standard for off-road heavy-duty diesel engines.
- All on and off-road diesel equipment shall not be allowed to idle for more than 5 minutes. Signs shall be posted in the designated queuing areas to remind drivers and operators of the 5 minute idling limit;
- The applicant shall electrify equipment where feasible;
- The applicant shall substitute gasoline-powered for diesel-powered equipment where feasible;
- The applicant shall use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, where feasible; and
- The applicant shall apply Best Available Control Technology (CBACT) as determined by the APCD.





**Plan Requirements and Timing.** The applicant shall provide the grading amounts and schedule to the APCD Planning Division at least 3 months prior to the start of construction, at which time the APCD will define the appropriate level of BACT for the Agricultural Residential Cluster Subdivision. The application of all BACT features shall occur prior to Agricultural Residential Cluster Subdivision construction. These measures shall be shown on all grading and construction plans prior to issuance of construction permits. Compliance with these measures shall be included as bid specifications submitted to contractors.

**Monitoring.** The applicant shall provide the APCD with proof that the above listed measures, as well as those required by the APCD upon review of grading plans, have been implemented prior to the start of the Agricultural Residential Cluster Subdivision's construction activity. The grading inspector shall perform periodic site inspections.

**Agricultural Residential  
Cluster Subdivision  
AQ-2(b)**

**Dust Control.** The following measures shall be implemented to reduce PM<sub>10</sub> emissions during Agricultural Residential Cluster Subdivision construction:

- Reduce the amount of the disturbed area where possible;
- Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Water shall be applied as soon as possible whenever wind speeds exceed 15 miles per hour. Reclaimed (nonpotable) water should be used whenever possible;
- All dirt-stock-pile areas shall be sprayed daily as needed;
- Permanent dust control measures shall be identified in the approved project revegetation and landscape plans and 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 the APCD;
- All roadways, driveways, sidewalks, etc., to be paved shall be completed as soon as possible. In addition, building pads shall 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 shall be covered or shall maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;
- Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site; and
- Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible.

The above measures shall be shown on development plans.

**Plan Requirements and Timing.** Conditions shall be adhered to throughout all grading and construction periods for all project components. Prior to issuance of grading permits, the applicant shall include, as a note on a separate informational sheet to be recorded with any map, the aforementioned dust control requirements. All requirements shall be shown on grading and building plans. **Monitoring.** Planning and Building inspectors shall perform periodic spot checks during grading and construction. APCD inspectors shall respond to nuisance complaints.

**Agricultural Residential  
Cluster Subdivision  
AQ-2(c)**

**Cover Stockpiled Soils.** If importation, exportation, or stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting material shall be tarped from the point of origin.

**Plan Requirements and Timing.** Conditions shall be adhered to throughout all grading and construction periods for all project components. **Monitoring.** Planning and Building inspectors shall perform periodic spot checks during grading and construction. APCD inspectors shall respond to nuisance complaints.

**Agricultural Residential  
Cluster Subdivision  
AQ-2(d)**

**Dust Control Monitor.** The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering as necessary to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress.

**Plan Requirements and Timing.** The name and telephone number of such persons shall be provided to the APCD prior to land use clearance for map recordation and finished grading of the area. The dust monitor shall be designated prior to approval



of a Land Use Permit. **Monitoring.** Planning and Building shall contact the designated monitor as necessary to ensure compliance with dust control measures.

**Agricultural Residential  
Cluster Subdivision  
AQ-2(e)**

**Active Grading Areas.** Prior to commencement of tract improvements, a Construction Management Plan shall be submitted for county approval that shows how the project will not exceed continuous working of more than four acres at any given time (according to the APCD, any project with a grading area greater than 4 acres of continuously worked area will exceed the 2.5 ton PM<sub>10</sub> quarterly threshold). The Dust Control Monitor shall verify in the field during tract improvements that the Construction Management Plan is being followed.

**Plan Requirements and Timing.** Conditions shall be adhered to throughout all grading and construction periods for all project components. **Monitoring.** Planning and Building inspectors shall perform periodic spot checks during grading and construction.

**Agricultural Residential  
Cluster Subdivision  
AQ-2(f)**

**Naturally Occurring Asbestos.** Prior to grading on the Agricultural Residential Cluster Subdivision site, the applicant shall ensure that a geologic evaluation is conducted to determine if naturally occurring asbestos is present within the areas that will be disturbed. At a minimum, the geologic evaluation must include:

1. A general description of the property and the proposed use;
2. A detailed site characterization which may include:
  - a. A physical site inspection;
  - b. Offsite geologic evaluation of adjacent property;
  - c. Evaluation of existing geological maps and studies of the site and surrounding area;
  - d. Development of geologic maps of the site and vicinity;
  - e. Identification and description of geologic units, rock and soil types, and features that could be related to the presence of ultramafic rocks, serpentine, or asbestos mineralization; and
  - f. A subsurface investigation to evaluate the nature and extent of geologic materials in the subsurface where vertical excavation is planned; methods of subsurface investigation may include, but are not limited to borings, test pits, trenching, and geophysical surveys;
3. A classification of rock types found must conform to the nomenclature based on the International Union of Geological Science system;
4. A description of the sampling procedures used;
5. A description of the analytical procedures used, which may



- include mineralogical analyses, petrographic analyses, chemical analyses, or analyses for asbestos content;
6. An archive of collected rock samples for third party examination; and
  7. A geologic evaluation report documenting observations, methods, data, and findings; the format and content of the report should follow the Guidelines for Engineering Geologic Reports issued by the State Board of Registration for Geologists and Geophysicists.

If naturally occurring asbestos is not present, an exemption request must be filed with the APCD. If naturally occurring asbestos is found, the applicant must comply with all requirements outlined in the State ARB's Asbestos Air Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations. These requirements may include but are not limited to: 1) an Asbestos Dust Mitigation Plan which must be approved by APCD before construction begins, and 2) an Asbestos Health and Safety Program.

The Asbestos Dust Mitigation Plan must specify dust mitigation practices which are sufficient to ensure that no equipment or operation emits dust that is visible crossing the property line, and must include one or more provisions addressing: track-out prevention and control measures; adequately watering or covering with tarps active storage piles; and controlling for disturbed surface areas and storage piles that will remain inactive for more than seven (7) days.

An Asbestos Health and Safety Program would be required if grading were to occur in serpentine or ultramafic rock deposits with such concentrations of asbestos present that there is potential to exceed the Cal OSHA asbestos permissible exposure limit (PEL: 0.1 fiber/cc). If required, the Asbestos Health and Safety Program shall be designed by a certified asbestos consultant to ensure the personal protection of workers. The Asbestos Health and Safety Program will include, but will not be limited to, an air monitoring plan approved by the APCD to include: air monitoring in the worker breathing zone, the use of respirators, and/or decontamination.

**Plan Requirements and Timing.** Prior to grading activities, a geologic evaluation shall be conducted by a registered geologist in all areas of disturbance. If naturally occurring asbestos is not present, the applicant shall file an exemption request with the APCD. If naturally occurring asbestos is found, the applicant shall comply with the State ARB's Asbestos Air Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and

Surface Mining Operations. **Monitoring.** The APCD shall ensure compliance with applicable requirements.

Residual Impacts. With implementation of the above mitigation measures, construction air quality impacts would be reduced to a less than significant level.

**Agricultural Residential Cluster Subdivision Impact AQ-3**     **The Agricultural Residential Cluster Subdivision involves development of private septic systems, which have the potential to generate odor nuisance effects. These impacts are Class III, less than significant.**

The Agricultural Residential Cluster Subdivision includes the use of individual septic systems. The septic systems are required to be installed per County Private Sewage Disposal System standards. If not properly installed, these have the potential of creating nuisance odors on the Agricultural Residential Cluster Subdivision site, or to existing residential development in the community of Santa Margarita. The APCD would respond to septic system odor complaints on a case-by-case basis, taking enforcement action as necessary. According to the APCD, however, odor complaints from septic systems are rare. As a result, no mitigation is required and impacts are less than significant.

Mitigation Measures. No mitigation is required.

Residual Impacts. Impacts would be less than significant.

**Agricultural Residential Cluster Subdivision Impact AQ-4**     **The Agricultural Residential Cluster Subdivision would exceed the population growth assumptions of the 2001 Clean Air Plan (CAP). In addition, due to the distance of the site from services, Agricultural Residential Cluster Subdivision implementation would result in a substantial increase in vehicle miles traveled. Therefore, the Agricultural Residential Cluster Subdivision is inconsistent with the CAP. This is a Class I, significant and unavoidable impact.**

As described in *Methodology and Thresholds*, above, the Agricultural Residential Cluster Subdivision would be consistent with the 2001 CAP if: (1) the population projections used in the Agricultural Residential Cluster Subdivision are equal to or less than those used in the CAP; (2) the rate of increase in vehicle trips and mile traveled is less than or equal to the rate of population growth for the same area; and (3) all applicable transportation control measures and land use management strategies from the CAP have been included in the Agricultural Residential Cluster Subdivision to the maximum extent feasible. The consistency of the Agricultural Residential Cluster Subdivision with each of these thresholds is discussed in the paragraphs below.

*Population Projection Consistency.* The 2001 CAP population statistics and projections for the County of San Luis Obispo are based on the San Luis Obispo County Planning Department and San Luis Obispo Council of Governments population estimates for January 1, 1999 and growth projections. San Luis Obispo County had a 1999 population of approximately 241,600 people, an increase of about 14,375, or 6%, since 1995. The CAP estimates the number of rural San Luis Obispo residents to increase 16% between the years 1995 and 2015. The proposed



Agricultural Residential Cluster Subdivision would increase the population of the community of Santa Margarita by approximately 22.8%, which would exceed the CAP growth rate estimate. Therefore, the Agricultural Residential Cluster Subdivision would be inconsistent with the CAP based on this CAP consistency criterion.

*Vehicle Trip Rate of Increase and Miles Traveled.* The CAP assumes a population growth rate of approximately 16% between the years 1995 and 2015 in rural San Luis Obispo. The proposed development of 112 residential units would generate approximately 1,150 trips per day. This increase in trips would represent a relatively large percentage of total trips on roadways in the project vicinity. The Agricultural Residential Cluster Subdivision would not provide a land use that would be considered a destination for substantial vehicles. However, residential development outside of urban areas tends to generate more, and longer trips compared with similar development within urban areas. Therefore, the Agricultural Residential Cluster Subdivision would be expected to substantially increase trip lengths and vehicle miles traveled in the vicinity. The rate of increase in vehicle trips and miles traveled would exceed the rate of population growth for the same area. Therefore, the Agricultural Residential Cluster Subdivision would be inconsistent with the CAP based on this CAP consistency criterion.

*Implementation of Transportation Control Measures (TCMs).* The following TCMs would apply to the proposed Agricultural Residential Cluster Subdivision: T-1C (Voluntary Commute Options Program); T-3 (Bicycling and Bikeway Enhancements); and T-8 (Telecommuting, Teleconferencing, and Telelearning). The Agricultural Residential Cluster Subdivision would partially implement TCM T-3 by including a trail between the Agricultural Residential Cluster Subdivision and the community of Santa Margarita (refer to Section 4.12, *Transportation and Circulation*). However, no other TCMs would be implemented in the Agricultural Residential Cluster Subdivision as proposed.

In addition, as described in San Luis Obispo County's Resource Management System, the County will implement applicable transportation and land use planning strategies recommended in the CAP. According to CAP Land Use Management Strategy L-1:

- Cities and unincorporated communities should be developed at higher densities that reduce trips and travel distances and encourage the use of alternative forms of transportation.
- Urban growth should occur within the urban reserve lines of cities and unincorporated communities. Rural areas of the county should be maintained as open space, agricultural lands and very low density residential development (20 acre or larger parcel size).
- Local planning agencies should encourage transit use by planning neighborhoods and commercial centers at densities to allow for convenient access to and use of local and regional transit systems.

The proposed Agricultural Residential Cluster Subdivision does not meet the intent of CAP Land Use Management Strategy L-1. The Agricultural Residential Cluster Subdivision would be developed at a relatively low density, and would be expected to substantially increase trip lengths and vehicle miles traveled in the vicinity (refer to *Vehicle Trip Rate of Increase and Miles Traveled* discussion above). In addition, the Agricultural Residential Cluster Subdivision would



place suburban uses in a rural area; thereby converting open space and fragmenting agricultural land (refer to Section 4.1, *Agricultural Resources*). Additionally, the Agricultural Residential Cluster Subdivision would not be located near a commercial center, and would be unlikely to create demand for transit facilities due to the relatively low density of the proposed development (refer to Section 4.12, *Transportation and Circulation*). Therefore, the Agricultural Residential Cluster Subdivision is inconsistent with the CAP based on this CAP-consistency criterion.

Because the proposed Agricultural Residential Cluster Subdivision does not include sufficient Transportation Control Measures or Land Use Management Strategies, and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area, the Agricultural Residential Cluster Subdivision would be potentially inconsistent with the CAP, which would be a Class I, *significant and unavoidable*, impact.

Mitigation Measures. No feasible measures are available to reduce the population generation associated with the Agricultural Residential Cluster Subdivision without substantially redesigning the proposed subdivision. In addition, no measures are available to substantially reduce the vehicle miles traveled associated with the Agricultural Residential Cluster Subdivision, due to the distance between the project and community services.

Residual Impacts. Impacts would remain Class I, *significant and unavoidable*.

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**c. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.2.2(b) for a discussion of air quality impacts resulting from the Agricultural Residential Cluster Subdivision independently. It should be noted that the Air Pollution Control District (APCD) does not require quantified analysis of construction or operational air contaminant emissions impacts for program-level evaluations, such as for the Future Development Program. Future projects proposed on the property would be required to comply with APCD requirements regarding residential wood stove combustion and backyard burning, residential and commercial site design, energy efficiency, transportation demand and compatible uses. In addition, all development would be subject to APCD operational permitting (e.g., for portable generators, fuel dealers, dry cleaning, and other commercial and industrial operations). Mixed uses air quality incompatibilities would also be regulated by APCD. Additionally, future projects proposed on the property would be required to conduct individual air contaminant emissions analyses as part of the separate, additional, required project-level CEQA review.

**Future Development Program Impact AQ-1**

**The Future Development Program involves development of equestrian facilities, a livestock sales yard, nine wineries, and private septic systems. All of these uses have the potential to generate odor nuisance effects. These impacts are Class II, significant but mitigable.**

There are four principal features of the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision that have the potential to create odors which may be nuisance either to adjoining residents, including residents of the Agricultural Residential



Cluster Subdivision and the community of Santa Margarita, or to residents and occupants of the Future Development Program land uses. These features include odors associated with equestrian uses, a livestock sales yard, nine wineries, and those that may be associated with individual septic systems on each lot.

Equestrian and livestock uses can generate odors that are perceived as unpleasant to some people. The degree of unpleasantness is partly a function of personal tolerance for short-term odors associated with horse manure, and the attending flies that are attracted. Horse manure is essentially highly-processed hay, with little additional organic material that produces long-term odors, such as those commonly associated with cow excrement. Odors generating from wineries may also be perceived as unpleasant, and result primarily from the fermentation and aging processes and the resultant ethanol emissions. Lastly, septic systems that are not properly installed have the potential of creating nuisance odors, as described in Agricultural Residential Cluster Subdivision Impact AQ-3.

The San Luis Obispo County Agricultural Commissioner responds to odor complaints from agricultural operations, including equestrian uses and livestock sales. The Agricultural Commissioner would respond to complaints on a case-by-case basis, taking enforcement action as necessary. The APCD would respond to septic system odor complaints in a similar manner. In both cases, odor nuisances are considered minor, and do not warrant mitigation beyond standard complaint procedures. However, odor from industrial uses, including wineries, could be significant.

Mitigation Measures. The following mitigation is required:

**Future Development Program AQ-1(a)**

**Odor Abatement Plan.** Future applicants for wineries shall develop and implement an Odor Abatement Plan (OAP). The OAP shall include the following:

- Name and telephone number of contact person(s) responsible for logging and responding to winery odor complaints;
- Policy and procedure describing the actions to be taken when an odor complaint is received, including the training provided to the responsible party on how to respond to an odor complaint;
- Description of potential odor sources (i.e. fermentation and aging processes and the resultant ethanol emissions);
- Description of potential methods for reducing odors, including minimizing potential add-on air pollution control equipment; and
- Contingency measures to curtail emissions in the event of a continuous public nuisance.

**Plan Requirements and Timing.** This plan shall be prepared prior to issuance of grading permits. **Monitoring.** Planning and Building shall review the OAP prior to issuance of grading permits.





Residual Impacts. With implementation of the above measure, the Future Development Program would have less than significant odor nuisance impacts.

**Future Development  
Program Impact AQ-2**

**Many of the Future Development Program conceptual land uses are inconsistent with the land use designations and population assumptions of the San Luis Obispo County General Plan. In addition, Future Development Program implementation would result in a substantial increase in vehicle miles traveled. Therefore, the Future Development Program is inconsistent with the 2001 Clean Air Plan (CAP). This is a Class I, significant and unavoidable impact.**

As described in *Methodology and Thresholds*, above, the Future Development Program would be consistent with the 2001 CAP if: (1) the population projections used in the project are equal to or less than those used in the CAP; (2) the rate of increase in vehicle trips and mile traveled is less than or equal to the rate of population growth for the same area; and (3) all applicable transportation control measures and land use management strategies from the CAP have been included in the project to the maximum extent feasible. The consistency of the Future Development Program with each of these thresholds is discussed in the paragraphs below.

*Population Projection Consistency.* As discussed in Section 2.0, *Project Description*, Future Development Program components subsequent to the Agricultural Residential Cluster Subdivision would require various land use approvals prior to implementation. Many of these uses would require a General Plan Amendment and/or a Specific Plan. Because implementation of the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision would require amendments to the General Plan, the Future Development Program is inconsistent with the land uses anticipated for the area and therefore inconsistent with the population projections of the CAP.

*Vehicle Trip Rate of Increase and Miles Traveled.* The development of 514 dwelling units included in the Future Development Program would generate approximately 9,290 trips per day. 1,150 of these trips would be generated by the Agricultural Residential Cluster Subdivision alone. This increase in trips would represent a substantial percentage of total trips on roadways in the Future Development Program vicinity. In addition, the Future Development Program would provide land uses that may be considered destinations for substantial vehicles, particularly the nine wineries and associated special events (with an estimated 120,000 visitors annually), golf course, and lodge. In addition, residential development outside of urban areas tends to generate more, and longer trips compared with similar development within urban areas. Therefore, the Future Development Program would be expected to substantially increase trip lengths and vehicle miles traveled in the vicinity. The rate of increase in vehicle trips and mile traveled would be expected to exceed the rate of population growth for the same area.

*Implementation of Transportation Control Measures (TCMs).* The following TCMs would apply to the Future Development Program: T-1C (Voluntary Commute Options Program); T-3 (Bicycling and Bikeway Enhancements); and T-8 (Telecommuting, Teleconferencing, and Telelearning). The Future Development Program would partially implement TCM T-3 by



including a trail that would implement a portion of the County Trails Plan by connecting the East Cuesta Ridge Trail to the Community of Santa Margarita (refer to Section 4.11, *Recreation*).

Although the Future Development Program partially implements TCM T-3 (Bicycling and Bikeway Enhancements), the trail would not be a viable commuter route because of the distance to employment locations in Atascadero or San Luis Obispo. Consequently, it would not substantially reduce commute-related vehicular emissions. For this reason, and because the rate of increase in vehicle trips and miles traveled associated with the Future Development Program may exceed population growth rates for the area, the Future Development Program would be inconsistent with the CAP, which would be a Class I, significant and unavoidable, impact.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure AQ-1(d) (Telecommuting) would apply to all Future Development Program land uses. The following additional mitigation measures are also required to reduce CAP inconsistency impacts:

**Future Development Program AQ-2(a)**

**Trip Reduction Measures.** To reduce overall trip generation and associated air contaminant emissions, future commercial tenants will be required to establish and maintain employee trip reduction programs that should include, but are not limited to, the following elements:

- Install bicycle racks and/or bicycle lockers at a ratio of 1 bicycle parking space for every 10 car parking spaces for customers and employees, or at a ratio otherwise acceptable the SLOAPCD to be determined prior to occupancy clearance;
- Post carpool, vanpool and transit information in employee break/lunch areas;
- Employ or appoint an Employee Transportation Coordinator;
- Implement a Transportation Choices Program. Project applicants should work with the Transportation Choices Coalition partners for free consulting services on how to start and maintain a program. Contact SLO Regional Rideshare at 541-2277;
- Provide for shuttle/mini bus service;
- Provide incentives to employees to carpool/ vanpool, take public transportation, telecommute, walk, bike, etc.;
- Implement compressed work schedules;
  
- Implement telecommuting program;
- Implement a lunchtime shuttle to reduce single occupant vehicle trips;
- Include teleconferencing capabilities, such as web cams or satellite linkage, which will allow employees to attend meetings remotely without requiring them to travel out of the area;



- Provide on-site eating, refrigeration and food vending facilities to reduce employee lunchtime trips;
- Provide preferential carpool and vanpool parking spaces; and
- Provide shower and locker facilities to encourage employees to bike and/or walk to work (typically one shower and three lockers per every 25 employees).
- Provide off-site improvements to offset contaminant emissions, including: retrofitting existing homes and businesses with energy-efficient devices, replacing transit or school buses, contributing to alternative fueling infrastructure, and/or improving park and ride lots.

The specific components of a trip reduction program that will be required for a particular commercial development will be at the discretion of the Planning and Building Department, based on the recommendations of the APCD.

**Plan Requirements and Timing.** Future commercial developers under the Future Development Program shall incorporate the listed provisions into development plans or shall submit proof of unfeasibility prior to initiation of construction. **Monitoring.** The Planning and Building Department shall site inspect to ensure development is in accordance with approved plans prior to occupancy clearance. Planning and Building staff shall verify installation in accordance with approved building plans.

Residual Impacts. Implementation of the above mitigation measure would reduce impacts. However, due to population projection inconsistencies and because no mitigation measures are feasible to sufficiently reduce vehicle miles traveled, impacts related to consistency with the CAP would remain Class I, *significant and unavoidable*.

**Future Development  
Program Impact AQ-3**

**Buildout of envisioned Future Development Program land uses would result in construction-related emissions. These emissions may result in short-term adverse impacts to local air quality. Construction activities could also expose people to naturally-occurring asbestos. However, such emissions would be temporary and would be mitigated on a specific development basis. Construction air quality impacts are therefore considered Class II, significant but mitigable.**

Construction activity, including off-site transportation improvements, that would occur in accordance with the Future Development Program would cause temporary, short-term emissions of various air pollutants. NO<sub>x</sub> and CO would be emitted by the operation of construction equipment, while fugitive dust (PM<sub>10</sub>) would be emitted by activities that disturb the soil, such as grading and excavation, road construction and building construction. Information regarding specific development projects, soil types, and the locations of receptors would be needed in order to quantify the level of impact associated with construction activity.



Taken individually, construction activities are not generally considered to have significant air quality impacts because of their short-term and temporary nature. However, given the amount of development that the Future Development Program would accommodate, it is reasonable to conclude that some major construction activity could be occurring at any given time over the life of the program. Impacts could also be complicated by the fact that multiple construction projects could occur simultaneously. Therefore, construction-related impacts associated with Land Use Element and Circulation Element Update buildout are considered potentially significant.

Given that the County violates the state standard for PM<sub>10</sub>, the amount of dust generated from construction activities is potentially significant and mitigation measures are required. Additionally, grading activities may uncover naturally occurring asbestos. Human contact with asbestos would result in significant adverse health effects. Measures must be taken to assure proper handling if asbestos is present.

Refer also to Future Development Program Impact S-7 in Section 4.9, *Public Safety*, for a discussion of impacts related to valley fever.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures AQ-2(a) (Construction Equipment Controls), AQ-2(b) (Dust Control), AQ-2(c) (Cover Stockpiled Soils), AQ-2(d) (Dust Control Monitor), AQ-2(e) (Active Grading Areas), and AQ-3(f) (Naturally Occurring Asbestos) would apply to all Future Development Program land uses. No additional mitigation measures are required.

Residual Impacts. With implementation of the above mitigation measures, construction air quality impacts would be reduced to a less than significant level.

**d. Cumulative Impacts.** In San Luis Obispo County, impact thresholds have been established to assess a project's effect on the regional air quality. A project that does not exceed SLOAPCD thresholds and is consistent with the 2001 Clean Air Plan would have a less than significant cumulative impact on the airshed. Conversely, a project that exceeds the SLOAPCD significance thresholds or is found to be inconsistent with the CAP would result in significant cumulative impacts.

The Agricultural Residential Cluster Subdivision independently exceeds the SLOAPCD Tier 1 & 2 **operational** thresholds of significance and is potentially inconsistent with long-term regional air quality planning efforts. Similarly, buildout of the Future Development Program is inconsistent with the CAP. Cumulative impacts on air quality would be significant and unavoidable, as described above.

### 4.2.3 Global Climate Change

**a. Greenhouse Effect and Greenhouse Gases (GHGs).** The greenhouse effect is a natural process by which some of the radiant heat from the sun is captured in the lower atmosphere of the earth. The gases that help capture the heat are called greenhouse gases (GHGs). While GHGs are not normally considered air pollutants, all have been identified as forcing the earth's atmosphere and oceans to warm above naturally occurring temperatures.



Some GHGs occur naturally in the atmosphere, while others result from human activities. Naturally occurring GHGs include water vapor, carbon dioxide, methane, nitrous oxide and ozone. Certain human activities add to the levels of most of these naturally occurring gases.

Of all the greenhouse gases in the atmosphere, water vapor is the most abundant and variable. The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from ice and snow, and transpiration from plant leaves. The primary human-related source of water vapor comes from fuel combustion in motor vehicles. However, this is believed to contribute a negligible amount (less than 1%) to atmospheric concentrations of water vapor. As a result, the control and reduction of water vapor emissions is not within reach of human actions, and is therefore excluded from regulation under AB 32.

The second most prevalent GHG is carbon dioxide (CO<sub>2</sub>). Natural sources of CO<sub>2</sub> include: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. However, in contrast to water vapor, CO<sub>2</sub> is primarily generated by anthropogenic (human caused) sources, including burning coal, oil, natural gas and wood.

In addition to CO<sub>2</sub>, the GHGs humans have the greatest control over include methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). CH<sub>4</sub> is a flammable gas and is the main component of natural gas. Natural sources of CH<sub>4</sub> include anaerobic decay of organic matter and natural gas fields; anthropogenic sources include landfills, fermentation of manure, and cattle. N<sub>2</sub>O is produced by microbial processes in soils and water, including those reactions which occur in fertilizer containing nitrogen. Anthropogenic sources of N<sub>2</sub>O include agricultural soil management, animal manure management, sewage treatment, and mobile and stationary combustion of fossil fuel. Reducing emissions from CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O is the focus of AB 32.

**b. Global Climate Change Impacts.** Global climate change (GCC) refers to a change in the average weather of the earth which can be measured by wind patterns, storms, precipitation, and temperature. The impact of anthropogenic activities on GCC is evident in the scientific correlation between rising global temperatures, atmospheric concentrations of CO<sub>2</sub> and other GHGs, and the industrial revolution<sup>1</sup>.

The United States is the top producer of GHG in the world. California's GHG emissions rank second in the United States (behind Texas) and rank internationally just below Australia.<sup>2</sup> The primary contributors to anthropogenic GHG emissions in California are transportation, electric power production from both in-state and out-of-state sources; industry; agriculture and forestry; and other sources, which include commercial and residential activities.

According to the 2006 California Climate Action Team Report (CCAT, 2006) the following climate change effects are predicted in California over the course of the next century:

- Diminishing Sierra snow pack by 70 to 90%, threatening the state's water supply.

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<sup>1</sup> Intergovernmental Panel on Climate Change (IPCC). *Climate Change 2001: The Scientific Basis*. Cambridge University Press, 2001.

<sup>2</sup> United Nations Framework Convention on Climate Change (UNFCCC). *GHG Emissions Data, National Inventory*. Available on-line at <http://unfccc.int/2860.php>. Accessed 29 August 2007.



- Increasing temperatures from 8 to 10.4 degrees Fahrenheit under the higher emission scenarios, leading to a 25 to 35% increase in the number of days ozone pollution levels are exceeded in most urban areas.
- Rising sea level (from 4 to 33 inches), causing coastal erosion along the length of California and sea water intrusion into the Delta. This would also exacerbate flooding in already vulnerable regions.
- Increased vulnerability of forests due to pest infestation and increased temperatures.
- Increased challenges for the State's agriculture industry from water shortages, increasing temperatures, and saltwater intrusion into the Delta.
- Increased electricity demand, particularly in the hot summer months.

**c. Regulatory Setting.** In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established that GHG emissions should be reduced to 2000 levels by 2010; to 1990 levels by 2020; and to 80 percent below 1990 levels by 2050. In furtherance of the goals established in Executive Order S-3-05, the Legislature enacted Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. AB 32 represents the first enforceable statewide program to limit GHG emissions from all major industries with penalties for noncompliance. The California Air Resources Board (CARB) has been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. By January 2008, a statewide cap for 2020 emissions based on 1990 levels must be adopted. The following year (January 2009), CARB must adopt mandatory reporting rules for major sources of GHGs and also a plan indicating how reductions in significant GHG sources will be achieved through regulations, market mechanisms, and other actions.

**d. Methodology and Significance Thresholds.** No air district in California, including the San Luis Obispo Air Pollution Control District (APCD), has identified a significance threshold for GHG emissions or a methodology for analyzing air quality impacts related to GHGs. Even though the GHG emissions associated with an individual development project could be estimated, there is no emissions threshold that can be used to evaluate the California Environmental Quality Act (CEQA) significance of these emissions. In addition, GCC models are not sensitive enough to be able to predict the effect of individual projects on global temperatures and the resultant effect on climate. Therefore, they cannot be used to evaluate the significance of a project's impact. Thus, insufficient information and predictive tools exist to assess whether an individual project would result in a significant impact on global climate. For these reasons, determining the CEQA significance of the impact of the Agricultural Residential Cluster Subdivision and Future Development Program at a project- or program-level is speculative.

In the absence of quantitative emissions thresholds, consistency with adopted programs and policies is used by many jurisdictions to evaluate the significance of cumulative impacts. A project's consistency with the implementing programs and regulations to achieve the statewide GHG emission reduction goals established under Executive Order S-3-05 and AB 32 cannot yet be evaluated because they are still under development. Nonetheless, the Climate Action Team, established by Executive Order S-3-05, has recommended strategies for implementation at the statewide level to meet the goals of the Executive Order. In the absence of an adopted plan or program, the Climate Action Team's strategies serve as current statewide approaches to reducing the State's GHG emissions. As no other plan or program for GHG emissions that



would apply to the Agricultural Residential Cluster Subdivision or Future Development Program has been adopted, consistency with these strategies is assessed to determine if the contribution of the Agricultural Residential Cluster Subdivision and/or Future Development Program to cumulative GHG emissions is considerable.

**e. Agricultural Residential Cluster Subdivision and Future Development Program Impacts.** The primary source of GHGs in California is fossil fuel combustion. The primary GHG associated with fuel combustion is carbon dioxide (CO<sub>2</sub>), with lesser amounts of methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). The Agricultural Residential Cluster Subdivision and Future Development Program would result in emissions of these GHGs due to fuel combustion in motor vehicles, which would contribute to potential cumulative impacts of GHG emissions on global climate. The URBEMIS 2007 version 9.2 computer modeling program, which was used to quantify emissions from the Agricultural Residential Cluster Subdivision, also estimates CO<sub>2</sub> emissions. In accordance with this model, the proposed Agricultural Residential Cluster Subdivision would generate and estimated 15,219.14 pounds per day (lbs/day) of CO<sub>2</sub> during construction and 17,645.93 lbs/day of CO<sub>2</sub> during operation (refer to Appendix A for calculations). As noted in Section 4.2.2(a), a program-level analysis does not require a quantitative air emissions analysis in accordance with APCD standards. As a result, no such analysis was conducted for the Future Development Program and no CO<sub>2</sub> emissions estimates are available.

In its report to the Governor and the Legislature, the Climate Action Team recommended strategies that could be implemented by various state boards, departments, commissions, and other agencies to reduce GHG emissions. The proposed Agricultural Residential Cluster Subdivision and Future Development Program contain design features and mitigation measures that would result in lower fuel combustion emissions, water conservation, increased energy efficiency, reduced energy usage and other collateral benefits with respect to GHG emissions. The Climate Action Team strategies that are relevant to the proposed Agricultural Residential Cluster Subdivision and Future Development Program and applicable design features or mitigation measures that would be consistent with these strategies are listed in Table 4.2-7 below.

**Table 4.2-7 Agricultural Residential Cluster Subdivision and Future Development Program Consistency with California Climate Action Team Strategies**

<b>CCAT Strategy</b>	<b>Implementing Design Features/Mitigation Measures</b>
Vehicle Climate Change Standards	The Agricultural Residential Cluster Subdivision and Future Development Program would be consistent with this strategy to the extent that new passenger vehicle and light trucks purchased by Agricultural Residential Cluster Subdivision residents and Future Development Program residents and patrons starting in the 2009 model year would be required to comply with said standards.
Achieve 50% Statewide Recycling Goal	Agricultural Residential Cluster Subdivision measure PS-5(b) (Recycling Plan) in Section 4.10, <i>Public Services</i> , requires that a long term plan for recycling be developed with a goal of 50% waste stream diversion. This measure would also apply to the Future Development Program.
Water Use Efficiency	Agricultural Residential Cluster Subdivision measure W-1(b) (Water Conservation Measures) in Section 4.14, <i>Water and Wastewater</i> , would help facilitate compliance with this strategy. This measure would also apply to the Future Development Program. In addition, Future Development Program measure W-1(a) (Reclaimed Water) would further implement this strategy.



**Table 4.2-7 Agricultural Residential Cluster Subdivision and Future Development Program Consistency with California Climate Action Team Strategies**

<b>CCAT Strategy</b>	<b>Implementing Design Features/Mitigation Measures</b>
Building Energy Efficiency Standards in Place	Agricultural Residential Cluster Subdivision measure AQ-1(a) (Energy Efficiency) in Section 4.2, <i>Air Quality</i> , requires that building energy efficiency ratings be increased by at least 10% above what is required by Title 24 requirements. Agricultural Residential Cluster Subdivision measure AQ-1(b) (Shade Trees) would also help reduce energy demands for air conditioning. Similar mitigation would apply to individual Future Development Program land uses once building permit applications are received and project-level CEQA analysis is completed.
Appliance Energy Efficiency Standards in Place	Agricultural Residential Cluster Subdivision measure AQ-1(a) (Energy Efficiency) in Section 4.2, <i>Air Quality</i> , includes the use of energy efficient appliances as a possible measure to increase energy efficiency ratings. Similar mitigation would apply to individual Future Development Program land uses once building permit applications are received and project-level CEQA analysis is completed.

Source: California Climate Action Team. Final 2006 Climate Action Team Report to the Governor and Legislature, March 2006.

Based on the analysis in Table 4.2-7, the contributions of the proposed Agricultural Residential Cluster Subdivision and Future Development Program to GHG emissions and GCC would be partially reduced due to consistency with the above strategies. However, the design of both the Agricultural Residential Cluster Subdivision and Future Development Program would result in inconsistencies with the Climate Action Team Strategy “Smart Land Use and Intelligent Transportation,” which promotes jobs/housing proximity, transit-oriented development, and high density residential/commercial development along transit corridors. Inconsistencies with this strategy from both the Agricultural Residential Cluster Subdivision and Future Development Program are outlined below.

Agricultural Residential Cluster Subdivision:

- The Agricultural Residential Cluster Subdivision would not be located in close proximity to any commercial or job center (approximately 8 miles to Atascadero and approximately 10 miles to San Luis Obispo). As a result, it would reduce job/housing proximity and increase vehicle trips and travel distances.
- The Agricultural Residential Cluster Subdivision would not be located along an established transit route and would be unlikely to create demand for transit facilities due to the relatively low density of the proposed development.
- The Agricultural Residential Cluster Subdivision would be developed at a relatively low density in a rural area.

Future Development Program:

- The Future Development Program would not be located in close proximity to any commercial or job center. As a result, it would reduce job/housing proximity and increase vehicle trips and travel distances.
- The Future Development Program would be located in a rural area and would provide land uses that may be considered destinations for substantial vehicles, particularly the





nine wineries and associated special events (with an estimated 120,000 visitors annually), golf course, and lodge.

- The Future Development Program would also include residential development outside of an urban area.

Despite being consistent with several Climate Action Team strategies, both the Agricultural Residential Cluster Subdivision and Future Development Program would be inconsistent with the “Smart Land Use and Intelligent Transportation” strategy. The Agricultural Residential Cluster Subdivision and Future Development Program would result in an incremental contribution to cumulative quantities of GCC.

**f. Mitigation Measures.** The San Luis Obispo County APCD has identified mitigation measures which are required to reduce impacts related to GCC. These measures include the following construction equipment controls: maintaining equipment according to manufacturer’s specifications; maximizing the use of diesel construction equipment; idling limitations; and using electric or alternatively fueled construction equipment. These controls are included in Agricultural Residential Cluster Subdivision measure AQ-2(a) (Construction Equipment Controls). In addition, the following mitigation measures are required:

**AQ-GCC(a)**

**Construction Phase Mitigation to Reduce Fuel Usage and thus Greenhouse Gases.** In addition to construction equipment controls required by Agricultural Residential Cluster Subdivision measure AQ-2(a), the following construction equipment measures shall be implemented to improve fuel efficiency and reduce greenhouse gas (GHG) emissions such as CO<sub>2</sub>:

1. Maximize, to the extent feasible, the use of on-road heavy-duty equipment and trucks that meet the CARB’s 1998 or newer certification standard for on-road heavy-duty diesel engines.
2. Add a section to the Construction Management Plan identified in Agricultural Residential Cluster Subdivision measure AQ-2(e) (Active Grading Areas) that schedules construction-related trips during non-peak hours to reduce peak hour and congestion-related emissions.

**Plan Requirements and Timing.** These measures shall be shown on all grading and construction plans prior to issuance of construction permits. Compliance with these measures shall be included as bid specifications submitted to contractors.

**Monitoring.** The applicant shall provide the APCD with proof that the above listed measures have been implemented prior to the start of the Agricultural Residential Cluster Subdivision’s construction activity. The grading inspector shall perform periodic site inspections.



**AQ-GCC(b)**

**Operational Phase Mitigation to Reduce Fuel Usage and thus Greenhouse Gases.** In addition to energy efficiency measures listed in Agricultural Residential Cluster Subdivision measure AQ-1(a) (Energy Efficiency), the following green building techniques shall be implemented where feasible:

1. Engineer and position buildings to eliminate or minimize the development's active heating and cooling needs (e.g., solar orientation).
2. Install solar systems to reduce energy needs (e.g., solar panels).
3. Install solar water heaters.
4. Plant native, drought resistant landscaping.
5. Use locally-produced building materials.
6. Use renewable or reclaimed building materials.
7. Increase building energy efficiency ratings by at least 20% above what is required by Title 24 requirements, rather than 10% as required by Agricultural Residential Cluster Subdivision measure AQ-1(a) (Energy Efficiency).

**Plan Requirements and Timing.** The applicant shall incorporate the listed provisions into building and improvement plans or shall submit proof of infeasibility prior to issuance of grading permits.

**Monitoring.** Planning and Building shall site inspect to ensure development is in accordance with approved plans prior to occupancy clearance.

**AQ-GCC(c)**

**Alternative Transportation.** The Agricultural Residential Cluster Subdivision shall further offset greenhouse gas (GHG) emissions by improving nearby transit amenities to help expand the interest and use of transit, thus reducing vehicle trips, fossil fuel consumption, and related GHG impacts:

1. Provide Regional Transit Authority (RTA) approved transit shelters for the three unsheltered RTA bus stops in the community of Santa Margarita.
2. Provide the funding needed by the RTA to implement real-time Smart Signage for the four RTA bus stops in the community of Santa Margarita.
3. Work with RTA to include bus stops at the two Agricultural Residential Cluster Subdivision entrances for the Santa Margarita Lake Shuttle.

**Plan Requirements and Timing.** The applicant shall coordinate with APCD and implement above transit-related measures prior to issuance of grading permits. **Monitoring.** Planning and Building shall verify compliance prior to issuance of grading permits.



In addition to the above measures, several Climate Action Team strategies could be implemented by the Agricultural Residential Cluster Subdivision and Future Development Program. Voluntary implementation of these strategies would further reduce the Agricultural Residential Cluster Subdivision and Future Development Program's contributions to GHG emissions and GCC:

- High Recycling. Additional recovery of recyclable materials beyond the 50% goal (refer to Table 4.2-7).
- Green Buildings Initiative. Reducing energy use in public and private buildings by 20% by the year 2015, as compared with 2003 levels.
- California Solar Initiative. Installation of solar roofs on homes and businesses, increased use of solar thermal systems to offset the increasing demand for natural gas, and use of advanced metering in solar applications.



### **4.3 BIOLOGICAL RESOURCES**

Agricultural Residential Cluster Subdivision. The Agricultural Residential Cluster Subdivision site contains one human-created “non-natural” and 12 natural plant communities and/or wildlife habitat types. The natural habitat types include California annual grassland, native perennial grassland, central (Lucian) scrub, chamise chaparral, blue oak woodland, coast live oak woodland, valley oak woodland, riparian/riverine, emergent wetland, seasonal pools, mixed oak woodland and ruderal. The non-natural habitat is agriculture (vineyard). Impacts to common habitat types such as California annual grassland, central (Lucian) coastal scrub, and chamise chaparral would be Class III, less than significant unless they support special-status species. Agricultural Residential Cluster Subdivision impacts to the native perennial grassland, which is a rare plant community and includes valley needlegrass grassland, which is a California Department of Fish and Game (CDFG) Sensitive Natural Plan Community, would be Class II, significant but mitigable. Impacts related to the removal of and/or impact to blue oak, coast live oak, and valley oak trees, as well as conversion of native oak woodland habitat, would be Class I, significant unavoidable. Riparian/riverine and emergent wetland habitats, including Trout and Tostada Creeks, several unnamed ephemeral drainages and their adjacent wetlands, and seasonal pools located throughout the Agricultural Residential Cluster Subdivision site, are likely to be under the jurisdiction of the U. S. Army Corps of Engineers (ACOE), CDFG, Regional Water Quality Control Board (RWQCB) and in some cases National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS). Impacts to ACOE, CDFG, RWQCB and NMFS jurisdictional areas would be Class II, significant but mitigable.

Development of the Agricultural Residential Cluster Subdivision would reduce the populations and available habitat of special-status plant and wildlife species and alter the existing wildlife corridors for wildlife movements through the site. Implementation of the Agricultural Residential Cluster Subdivision would impact one special-status plant species, the San Luis Obispo Mariposa Lily, a CNPS List 1B plant species, and may impact San Luis Obispo County morning glory, also a CNPS List 1B species, which would be a Class II, significant but mitigable, impact. Implementation of the proposed Agricultural Residential Cluster Subdivision would impact three federally threatened species, the Vernal Pool Fairy Shrimp (VPFS), the South/Central California Coast Steelhead (Steelhead), and the California red-legged frog (CRLF). Project impacts to VPFS, CRLF and Steelhead and their habitat would be Class II, significant but mitigable. Two State Fully Protected wildlife species, the white-tailed kite and golden eagle, were observed foraging and potentially nesting within the residential footprint. Agricultural Residential Cluster Subdivision impacts to the State Fully Protected raptor species, and their foraging and nesting habitat is Class II, significant but mitigable. Numerous CDFG California Special Concern (CSC) wildlife species were identified on-site or have high potential to occur within the Agricultural Residential Cluster Subdivision and include the Cooper’s hawk, sharp-shinned hawk, pallid bat, American badger, legless lizard, southwestern pond turtle, and several other species. Agricultural Residential Cluster Subdivision impacts to CSC wildlife species and their habitat would be Class II, significant but mitigable. Because of the size, relatively undisturbed aspect, degree of habitat diversity, and known or potential presence of special-status wildlife species on and in the vicinity of the Agricultural Residential Cluster Subdivision site, the loss of wildlife habitat is a Class II, significant but mitigable, impact. The Agricultural Residential Cluster Subdivision would further reduce the migration corridor for special-status and common wildlife species, which would be a Class II, significant but mitigable, impact.

Future Development Program. Because no active application currently exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, the assessment of



*biological resources impacts is based on a reasonable worst case scenario with regard to the location of future land uses within anticipated development areas. Buildout of the Future Development Program would result in impacts similar to those resulting from the Agricultural Residential Cluster Subdivision. The mitigation measures identified for the Agricultural Residential Cluster Subdivision would similarly apply to the Future Development Program. Impacts to special-status species and their habitats, wildlife corridors, and other special-status biological resources would be Class II, significant but mitigable. Impacts related to the removal of and/or impact to blue oak, coast live oak, and valley oak trees, as well as conversion of native oak woodland habitat, would be Class I, significant unavoidable.*

#### **4.3.1 Setting**

The description of existing biological resources on the Agricultural Residential Cluster Subdivision site and Future Development Program area is based on the review of background documents (Althouse and Meade, Inc., 2003, McClelland Engineers, 1987, and Olberding Environmental, 2005) and a series of field surveys conducted by Rincon Consultants biologists between October 24, 2005 and June 5, 2006. Information on documented occurrences of special-status species on-site was obtained through communication with Althouse and Meade, with Rincon Consultants field verifications. Other species not previously observed on-site, but with the potential to occur within the project site were identified through a search of the California Natural Diversity Data Base (CNDDDB) RareFind 3.0.1 (2006), knowledge of the area, and discussions with the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) biologists.

Extensive general and focused surveys for special-status and common plant and wildlife species have been conducted on the Santa Margarita Ranch property. As part of this EIR, Rincon Consultants biologists conducted focused botanical and wildlife surveys and a wetland delineation review. Focused (or seasonally timed) rare plant surveys were conducted in the spring and summer of 2006 for the Agricultural Residential Cluster Development area per California Department of Fish and Game (CDFG), and the U.S. Fish and Wildlife (USFWS) guidelines (CDFG, 1998 and USFWS, 2000). Rincon Consultants prepared a protocol site assessment of suitable habitats within the Agricultural Residential Cluster Development area for listed vernal pool branchiopods and the California red-legged frog (Rincon Consultants, 2006a). One protocol wet-season surveys for the federally threatened vernal pool fairy shrimp per USFWS guidelines (1996) was conducted at seasonal pools within and adjacent to the Agricultural Residential Cluster Subdivision during the winter and spring of 2006 by Rincon Consultants (Rincon Consultants, 2006b). Protocol California red-legged frog surveys were also conducted by Rincon Consultants. In addition, Rincon biologists field verified the Army Corps of Engineers (ACOE) wetland determination conducted by Olberding (2000 and revised 2005).

In addition to the focused surveys performed by Rincon Consultants, prior surveys were completed on the Santa Margarita Ranch. Althouse and Meade conducted a thorough wildlife and plant inventory (Inventory; Althouse and Meade, 2003, revised 2005) and a plant and wildlife survey for the Phase I vineyards (Althouse and Meade, *unpublished*) located in the southwestern portion of the Agriculture Residential Cluster Subdivision. Dr. David Keil and LynnDee Althouse conducted a focused wetland plant survey for on-site wetland and adjacent upland areas on the property (Althouse and Meade, 2002, *unpublished*). As part of the inventory efforts, Julie Thomas conducted one non-protocol wet-season surveys for fairy shrimp within several on-site seasonal pools (Thomas, 2003). In addition, Paul Collins performed a USFWS



protocol survey within Taco Creek for the Robert Mondavi Safe Harbor Agreement Area (Althouse and Meade, 2004). Several other surveys were performed and included a focused bat survey, small mammal trapping surveys, electrofishing and snorkel surveys for steelhead and other fish species, focused special-status amphibian pool surveys, and mammal spotlighting surveys. The combined survey time used to document general and special-status biological resources for the property totaled over 3,000 field hours. Table 4.3-1 provides the biological categories, performed survey types, surveyors, and approximate hours spent per survey type. As a result of the extensive field work performed for the property, only special-status species observed during focused and/or general surveys are included herein with the exception of wildlife species that have potential to occur on-site, but require focused surveys that were not performed as part of this evaluation.

**Table 4.3-1 Biological Survey Types Performed for the Santa Margarita Ranch**

<b>Biota Group</b>	<b>Survey Type</b>	<b>Surveyors<sup>*1</sup></b>	<b>Approx. Hours</b>
<b>Plants</b>	Quadrat and General	J. Dart, D. Meade, L. Althouse, C. England	196
	Focused Rare Plant	D. Keil, L. Althouse, V. Holland, J. Dart, C. England	232
	Sudden Oak Death	T. Kleeman, L. Althouse	8
	<i>EIR – Focused Rare Plant</i>	J. Davis, K. Merk, and P. Farrell	80
	Wetland Delineation	J. Isaacs, G. Liu, R. Lodge, R. Rossi, J. Olberding, L. Althouse, C. England, D. Martel	254
	<i>EIR - Wetland Delineation Review</i>	K. Merk, J. Davis	48
<b>Insects and Crustaceans</b>	Point Collections	D. Meade, J. Dart, C. Murphy, C. England	212
	Fairy Shrimp non-protocol – wet-season	J. Thomas, J. Dart, D. Meade, L. Althouse	76
	<i>EIR – Fairy Shrimp USFWS protocol, wet-season</i>	J. Davis, P. Farrell, C. Powers, K. Merk, J. Dart	96
<b>Fish</b>	General	J. Dart	2
	Electro-fishing	M. Hill, D. Highland, D. Meade, and J. Dart	32
	Steelhead	R. Larsen, L. Thompson, B. Hodges	?
<b>Amphibian</b>	Special-Status Species: Dip and Seine	P. Collins, J. Dart, L. Althouse, D. Meade, M. Caterino	264
	CRLF USFWS Protocol Surveys	J. Dart, P. Collins, C. England	164
	Pond Surveys – 1603 Permit	L. Althouse, J. Issacs, M. Hill, C. Veenstra, P. Gomes	36
	General	J. Dart, D. Meade	34
	<i>EIR – CRLF USFWS Protocol Site Assessment and Surveys</i>	J. Davis, K. Merk, P. Farrell, J. Dart, W. Knight	160
<b>Reptile</b>	General and coverboard	J. Dart, C. Murphy	292
<b>Bird</b>	Point Count	J. Dart, C. Murphy, F. Villablanca, T. Edell	434
<b>Mammal</b>	Small mammal trapping	J. Dart, F. Villablanca, Cal Poly Senior Project Students	176
	Bat surveys; acoustic and visual	P. Collins, J. Dart, S. Seay	44
<b>Wildlife</b>	General and spotlighting	J. Dart, D. Meade, F. Villablanca, L. Althouse, C. England	256
<b>Total</b>			<b>3,096</b>



**Table 4.3-1 Biological Survey Types Performed for the Santa Margarita Ranch**

Biota Group	Survey Type	Surveyors <sup>*1</sup>	Approx. Hours
*1 <u>Althouse and Meade:</u> LynneDee Althouse Jason Dart Cletis England Jodi Isaacs Dan Meade, PhD. Cassie Murphy Stephanie Seay	<u>Cal Poly, San Luis Obispo:</u> V.L. Holland, PhD. David Keil, PhD. Francis Villablanca, PhD. Senior Project Students	<u>Other Consultants:</u> Tom Edell Brian Hodge, U.C. Davis Royce Larsen, UCCE Jeff Olberding Julie Thomas Lisa Thompson, U.C. Davis	<u>U.S. Army Corp of Engineers:</u> Gordon Liu Phelicia Gomes Dan Martel Corrie Veenstra
<u>Rincon Consultants:</u> John H. Davis IV Paige Farrell Kevin Merk Chris Powers	<u>Santa Barbara Natural History Museum:</u> Mike Caterino Paul Collins	<u>California Department of Fish and Game:</u> Mike Hill Dave Highland	<u>U.S. Department of Agriculture:</u> Tamara Kleeman
		<u>Regional Water Quality Control Board:</u> Ryan Lodge	<u>U.S. Fish and Wildlife Service:</u> Ray Bransfield Mary Root Julie Vanderwier

**a. Characterization of the Santa Margarita Ranch Area.** The Agricultural Residential Cluster Subdivision site is located approximately 9.5 miles northeast of the City of San Luis Obispo on the approximately 14,000 acre Santa Margarita Ranch (Ranch) within the County of San Luis Obispo. The Ranch is situated within the southern portion of the San Lucia Mountains of the greater South Coast Range. Locally, these mountains consists of flat valleys to steeply sloping hills ranging in elevation from approximately 900 feet above mean sea level (msl) within Santa Margarita Valley to about 2,858 feet msl at Lopez Mountain approximately 2.75 miles southwest of the Ranch. The plant communities surrounding the Ranch are diverse and range from grasslands, chaparral, oak woodland, and riparian to knobcone pine forest and Sargent’s cypress forest.

The Agricultural Residential Cluster Subdivision site is located in the southern portion of the Santa Margarita Ranch, southeast of the community of Santa Margarita and west of West Pozo Road. Los Padres National Forest is to the southwest, and Taco Creek and the remainder of the Santa Margarita Valley is to the southeast. The habitats in the vicinity if the property are composed of grasslands, coastal scrub, chaparral, oak woodlands, riparian, and emergent wetlands/seasonal pools that occur in a mosaic pattern across the landscape. Perennial and intermittent streams, which support riparian habitat for resident and migratory wildlife species, occur throughout the region. Vineyards comprise a substantial portion of the agricultural landscape within the southern portion of the Agricultural Residential Cluster Subdivision site, while dry farmed grains are found in the northern portion of the Ranch property. Cattle ranching occurs within on-site habitats with the exception of dry-farmed and vineyard areas.

**b. Habitat Types.** Thirteen habitat types were identified within the Agricultural Residential Cluster Subdivision site, and include: 1) California annual grassland, 2) native perennial grassland, 3) central (Lucian) scrub, 4) chamise chaparral, 5) blue oak woodland, 6) coast live oak woodland, 7) valley oak woodland, 8) riparian/riverine, 9) emergent wetland, 10) seasonal pools, 11) mixed oak woodland, 12) ruderal, and 13) agriculture (vineyard). Classification of the on-site habitat types or plant communities was based generally on Holland’s *Preliminary Description of the Terrestrial Natural Communities of California* (1986), and was compared to more recent habitat classification systems (Sawyer and Keeler-Wolf, 1995, and Holland and Keil, 1995). Cowardin’s *Classification of Wetlands and Deepwater Habitats of the*





*United States* (1979) was used to classify the wetland habitat. In addition, two creeks and several ephemeral drainage features are located within the Agricultural Residential Cluster Subdivision boundaries that are “waters” of the United States under the jurisdiction of the ACOE, and streambeds and associated riparian habitat potentially under CDFG jurisdiction under Fish and Game Code Section 1600 *et. seq.* A description of habitat types identified on the Agricultural Residential Cluster Subdivision site is provided below. The discussion of habitat types includes a brief description of common plant and wildlife species that were observed or that can be expected to occur within each on-site habitat type. A detailed discussion of special-status species is provided in Section 4.3.1(e): *Special-Status Species*. Several habitat descriptions for the Agricultural Residential Cluster Subdivision also apply to areas within the Ranch property designated as Future Development Program conceptual land use areas; however, specific community elements may vary. The location and extent of each habitat type is depicted on Figure 4.3-1 and quantified in Table 4.3-2.

**Table 4.3-2 Agricultural Residential Cluster Subdivision  
 Site Habitat Summary Table**

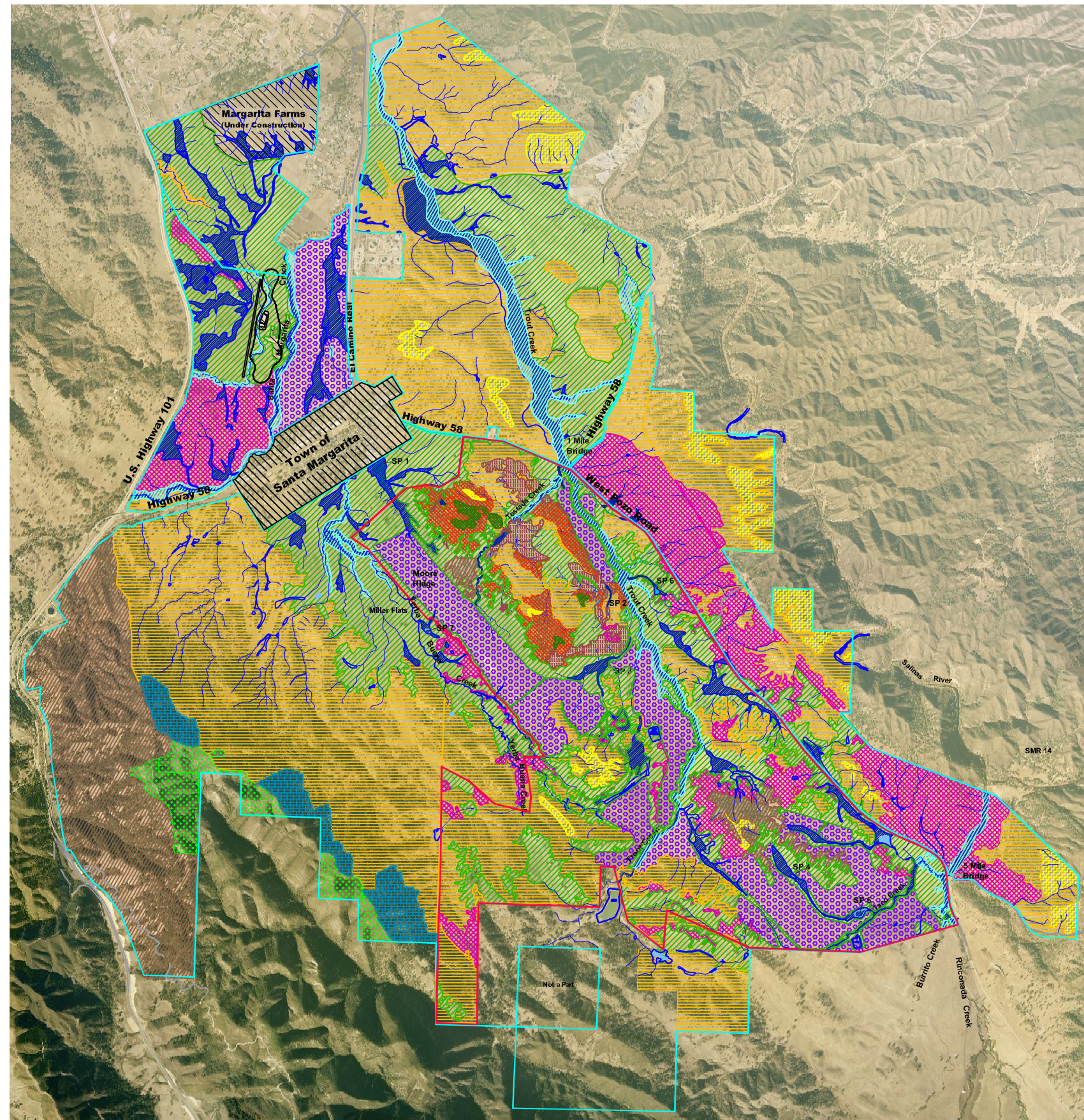
<b>Habitat Type</b>	<b>Approximate Acres</b>
California annual grassland	1151.3
Native perennial grassland	79.8
Central (Lucian) coastal scrub	20.5
Chamise chaparral	33.9
Blue oak woodland	890.0
Coast live oak woodland	104.3
Valley oak woodland	215.7
Mixed oak woodland	190.4
Riparian/riverine	41.6
Emergent wetlands	191.7
Seasonal pools	4.8
Ruderal	0.5
Agriculture (vineyards and stock ponds)	853.6
<b>Total Acres</b>	<b>3,778.0</b>






















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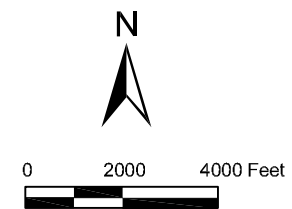






**LEGEND**

-  Native Perennial Grassland
-  CA Annual Grassland
-  Central (Lucian) Coastal Scrub
-  Chamise Chaparral
-  Santa Lucia Manzanita-Eastwood Manzanita Chaparral
-  Blue Oak Woodland
-  Coast Live Oak Woodland
-  Valley Oak Woodland
-  Mixed Oak Woodland
-  Ruderal
-  Emergent Wetland
-  Waters of the U.S.
-  Seasonal Pools
-  California Bay Forest
-  Riparian
-  Urban/Residential
-  Agricultural (Vineyard/Dry Farm)
-  Agricultural Residential Cluster Subdivision
-  Ranch Property Boundary



Habitat Map

Source: EDA Design Professionals, 2005, Rincon Consultants, Inc., June 2006.





California Annual Grassland. The California Annual Grassland habitat type within the Agricultural Residential Cluster Subdivision site most closely corresponds to the Non-Native Grassland plant community as described by Holland (1986) and the California Annual Grassland series (i.e., plant community) as described by Sawyer and Keeler-Wolf (1995). This habitat type is typically found on seasonally dry hillsides and valleys in the Central Valley, interior valleys of the Coast Ranges, and along the coast of central and southern California as well as some of the off-shore islands. Although annual grasses form the dominant plant species composition, often native annual forbs offer the greatest diversity in select areas. This mix of grasses and forbs are often found on gravelly to deep fine-grained soils that are well suited for annual growth. California annual grassland occurs throughout the Agricultural Residential Cluster Subdivision site in valleys, swales, and on ridges between oak woodlands, riparian, and wetlands habitats. It also forms the understory of many of the open oak woodland habitats (savanna) in several locations. California annual grassland comprises 1,151.3 acres or 30.5% of the vegetative cover on the Agricultural Residential Cluster Subdivision site.

Vegetation in this habitat type is composed primarily of non-native short to tall annual grasses and native and non-native broad-leafed forbs. Noxious weeds are also present in disturbed areas adjacent to this habitat type. Dominant grasses include soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), slender wild oats (*Avena barbata*), Italian ryegrass (*Lolium multiflorum*), rat-tail fescue (*Vulpia myuros*), red-stem filaree (*Erodium cicutarium*), Italian thistle (*Carduus pycnocephalus*), and tocalote (*Centaurea melitensis*), while native flowering herbs include the Paso Robles navarretia (*Navarretia jaredii*), Jolon brodiaea (*Brodiaea jolonensis*), California milkweed (*Asclepias californica*), turkey mullein (*Eremocarpus setigerus*), California poppy (*Eschscholzia californica*), hayfield tarweed (*Deinandra congesta* ssp. *luzulifolia*), and yarrow (*Achillea millefolium*). A few scattered coast live oak (*Quercus agrifolia*), blue oak (*Quercus douglasii*) and valley oak (*Quercus lobata*) trees can also be found within this habitat type.

California annual grasslands provide foraging and/or breeding habitat and movement corridors for wildlife species in the area. Mammals including mountain lion (*Felis concolor*), bobcat (*Lynx rufus*), coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), Botta's pocket gopher (*Thomomys bottae*), American badger (*Taxidea taxus*), and California ground squirrel (*Spermophilus beecheyi*) have been observed within the California annual grassland habitat. Several of these species, such as the American badger, California ground squirrel, Botta's pocket gopher, and deer mice (*Peromyscus* spp.), are known to breed within this habitat type.

Currently, the California annual grassland habitat within the Agricultural Residential Cluster Subdivision site is important for dispersal and foraging by mammals and other vertebrate taxa. Birds including raptors ("birds of prey") such as golden eagle (*Aquila chrysaetos*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*), along with other common bird species such as western kingbird (*Tyrannus verticalis*), western meadowlark (*Sturnella neglecta*), lark sparrow (*Chondestes grammacus*), yellow-billed magpie (*Pica nuttalli*), black phoebe (*Sayornis nigricans*), Brewer's blackbird (*Euphagus cyanocephalus*), and goldfinches (*Carduelis* spp.) rely on open expanses of grasslands for foraging habitat and are common in the Santa Margarita area. Grasslands that are bordered by habitats containing trees are particularly important for raptors because the birds can use the large trees as nesting, roosting, and as observation points to locate potential prey within nearby grassland habitats. Reptiles and amphibians common to grasslands have been observed on-site and include coast range fence lizard (*Sceloporus occidentalis bocourti*), California alligator lizard (*Elgaria multicarinatus multicarinatus*), San Diego



gophersnake (*Pituophis catenifer annectens*), California kingsnake (*Lampropeltis getula californiae*), ring-necked snake (*Diadophis punctatus*) and coast gartersnake (*Thamnophis elegans terrestris*). In addition, in areas on the Agricultural Residential Cluster Subdivision site where California annual grassland surrounds creeks, wetlands, and seasonal pools amphibians including bullfrog (*Rana catesbeiana*), California red-legged frog (*Rana draytonii*), California toad (*Bufo boreas halophilus*), Pacific treefrog (*Hyla regilla*) and reptiles including the southwestern pond turtle (*Actinemys marmorata pallida*) and California kingsnake are also seasonally evident.

Native Perennial Grassland. The three most common native perennial grasses found on-site are purple needlegrass (*Nassella pulchra*), Sandberg's bluegrass (*Poa secunda*), deergrass (*Muhlenbergia rigens*), and California oatgrass (*Danthonia californica*). Valley needlegrass grassland (as designated by Holland 1986) occurs within this habitat type, and is described by Sawyer and Keeler-Wolf (1995) as Purple Needlegrass. Purple needlegrass is present with approximately 10% cover in this habitat type, but due to natural seasonal and annual variation as well as grazing regime, percent cover estimates are expected to vary over time. Areas with stands of deergrass are common on the Agricultural Residential Subdivision site along intermittent drainages and the margins of wetlands. Patches of Native Perennial Grassland may have a large component of species found in California annual grassland. This plant community also occurs as an understory in oak woodlands. Additional plant species and the animals species expected to be found in native perennial grassland include most species that are described under California Annual Grassland. Valley needlegrass grassland is listed by the California Department of Fish and Game as a special status Natural Community. Native perennial grassland comprises 79.8 acres or 2.1% of the vegetative cover within the Agricultural Residential Subdivision site.

Central (Lucian) Coastal Scrub. The Central (Lucian) Coastal Scrub habitat type within the Agricultural Residential Cluster Subdivision site most closely corresponds to the Central (Lucian) Coastal Scrub plant community described by Holland (1986) and the California sagebrush series described by Sawyer and Keeler-Wolf (1995). Coastal scrub communities are adapted to drier south-facing slopes and terraces along the coastal zone of California and northern Baja California. In southern California, coastal scrub also occurs within the interior valleys and foothills of the Transverse and Peninsular Mountain Ranges. In Central California, from Monterey to Point Conception, coastal scrub occurs primarily below 2,000 feet on the ocean side of the Santa Lucia range. Within the Agricultural Residential Cluster Subdivision site, central (Lucian) coastal scrub occurs on hilltops in openings within oak woodland habitats and south-facing slopes in the northern portion of the site. Central (Lucian) coastal scrub comprises 20.5 acres or 0.5% of the vegetative cover on the Agricultural Residential Cluster Subdivision site.

Vegetation in this habitat type is composed primarily of soft-leaved deciduous shrubs three to six feet tall that occur on rocky or sandy nutrient poor soils. Evergreen shrubs are also often present within this habitat type. The dominant shrub observed on-site is California sagebrush (*Artemisia californica*), while native sub-shrubs and herbaceous plant species such as deerweed (*Lotus scoparius*), rock rose (*Helianthemum scoparium*), lilac mariposa lily (*Calochortus splendens*), California peony (*Paeonia californica*), and holly-leaved navarretia (*Navarretia atractyloides*) are also present within this understory of this community.



Central (Lucian) Coastal Scrub provides foraging or breeding habitat and movement corridors for several wildlife species in the area. Mammals including bobcat, coyote, mule deer, and big-eared woodrat (*Neotoma macrotis*), California mouse (*Peromyscus californica*), and brush rabbit (*Sylvilagus bachmani*) have been observed foraging within this habitat. It is likely that the big-eared woodrat, brush rabbit, and deer mice also breed within this habitat. Common birds including California thrasher (*Toxostoma redivivum*), blue-gray gnatcatcher (*Poliophtila caerulea*), and Bewick's wren (*Thryomanes bewickii*) rely on the dense foliage for foraging and breeding habitat and are common on-site. Other bird species observed in neighboring habitats such as oak woodland may use this habitat for foraging, but not for breeding. Reptiles common to coastal scrub that have been observed on-site include coast range fence lizard, California alligator lizard, San Diego gophersnake, common king snake, and southern Pacific rattlesnake (*Crotalus viridis helleri*). The small areas of on-site Central (Lucian) Coastal Scrub are considered to be of high habitat quality due to their relatively undisturbed nature and connectivity with several other native habitat types.

Chamise Chaparral. The Chamise Chaparral habitat type within the Agricultural Residential Cluster Subdivision site most closely corresponds to the Chamise Chaparral (Chamisal) plant community as described by Holland (1986) and the Chamise series as described by Sawyer and Keeler-Wolf (1995). Chaparral is widespread in California, occurring on sandy soils near the coast and steep, rocky south-facing slopes of the Coast Ranges and the inland Sierra Nevada Mountain Range. The on-site Chamise Chaparral is located in the more xeric areas on gently to steeply sloping hills and in the understory of the coast live oak woodland. Chamise Chaparral comprises 33.9 acres or 0.9% of the vegetative cover on the Agricultural Residential Cluster Subdivision site.

Vegetation in this habitat type is characterized primarily by evergreen, sclerophyllous (hard-leaved) shrubs. The dominant species is chamise (*Adenostoma fasciculatum*), and other shrub species include big berry manzanita (*Arctostaphylos glauca*), buckbrush (*Ceanothus cuneata*), and buckwheat (*Eriogonum* spp.). Native herbaceous plant species such as deerweed, rock rose (*Helianthemum scoparium*), winecup clarkia (*Clarkia purpurea*), red-spot clarkia (*Clarkia speciosa* ssp. *speciosa*), holly-leaved navarettia, and Michael's rein orchid (*Piperia michaelii*) are also present within this community.

On-site chamise chaparral provides cover and nesting habitat for a variety of animals such as coast range fence lizard, southern Pacific rattlesnake, California whipsnake (*Masticophis lateralis*), blue-gray gnatcatcher, wrentit (*Chamae fasciata*), greater roadrunner (*Geococcyx californianus*), deer mouse, and gray fox (*Urocyon cinereoargenteus*). The Chamise Chaparral located on the Agricultural Residential Cluster Subdivision site is considered to be of high habitat quality due to its relatively undisturbed nature and contiguous connection with major expanses of open space.

Oak Woodland. This habitat comprises approximately 1,400.4 of the 3,778 acre Agricultural Residential Cluster Subdivision area (37%). On-site oak woodland varies from open (savanna) habitats with a grassland understory to closed canopy woodlands dominated by blue oak and coast live oak. Valley oak (*Quercus lobata*) occurs adjacent to ephemeral drainages, as a component of the mixed oak woodland, and as the species in some savanna habitats. Oak trees that occur on-site scattered within grassland habitats as oak savanna generally were mapped as grassland habitat, depending on the density of oak trees.



The understory species composition in oak woodland habitat types varies depending upon local conditions such as moisture availability and soil type in addition to the historical use of the land for agricultural practices such as grazing. The majority of the oak woodland understory on the Agricultural Residential Cluster Subdivision site is composed of native and non-native perennial and annual grasses and forbs characteristic of on-site native perennial grasslands and California annual grassland habitats. In the northern portion of the Agricultural Residential Cluster Subdivision site, chamise chaparral species can also be found in the understory. Other species present in the understory include poison oak (*Toxicodendron diversilobum*), sticky monkey flower (*Mimulus aurantiacus*), mugwort (*Artemisia douglasiana*), toyon (*Heteromeles arbutifolia*), California coffeeberry (*Rhamnus californica*), and blue elderberry (*Sambucus mexicanus*).

Oak woodlands, in general, provide good habitat for a large variety of animal species. Oaks provide nesting/roosting sites and cover for birds, bats, and many other mammals. Dead and decaying oak trees provide perches from which to search for prey and resting spots for many bird species. They also contribute woody debris to the duff in the woodland understory which provides foraging areas for small mammals and microclimates suitable for amphibians and reptiles in addition to fungi. Acorns are a valuable food source for many animal species, including acorn woodpecker (*Melanerpes formicivorus*), scrub jay (*Aphelocoma corulescens*), western gray squirrel (*Sciurus griseus*), and mule deer. Bird species observed within on-site oak woodland include American kestrel, red-shouldered hawk (*Buteo lineatus*), spotted towhee (*Pipilo maculatus*), Bewick's wren, western bluebird (*Sialia mexicana*), bushtit (*Psaltriparus minimus*), California towhee (*Pipilo crissalis*), dark-eyed junco (*Junco hyemalis*), oak titmouse (*Baeolophus inornatus*), wrentit, black phoebe (*Sayornis nigricans*), western wood pewee (*Contopus sordidulus*), Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), California quail (*Callipepla californica*), and Brewer's blackbird (*Euphagus cyanocephalus*). Mammals observed within the Agricultural Residential Cluster Subdivision site oak woodland habitat include mule deer, coyote, California ground squirrel, desert cottontail (*Sylvilagus auduboni*), pocket gopher, woodrat, North American raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginianus*) and deer mice. Mountain lion and bobcat also utilize on-site oak woodland for foraging and movement opportunities. Other representative animal species of oak woodlands that occur on-site include arboreal salamander (*Aneides lugubris*), southern alligator lizard, and common king snake. Descriptions of the oak woodland habitat types within the Agricultural Residential Cluster Subdivision site are listed below.

*Blue Oak Woodland.* The Blue Oak Woodland habitat type within the Agricultural Residential Cluster Subdivision site most closely corresponds to Blue Oak Woodland as described by Holland (1986) and the Blue Oak Series described by Sawyer and Keeler-Wolf (1995). This habitat type is the most widespread of California oak woodlands. It is located on well-drained soils in foothills of Coast Ranges, Transverse Ranges, Sierra Nevada, Cascades, and Klamath-Siskiyou mountain ranges. Locally, blue oak woodland occurs on hillsides and valleys of the La Panza Range in the central portion of the county. Blue oak woodland on-site is dominated by blue oaks and can be found in open (savanna) to dense stands. Hybrids of blue oaks and valley oaks called *Quercus jolonensis* may occur on-site but have not been genetically confirmed (Althouse and Meade, Inc., 2005). California annual grassland and native perennial grassland form the understory of the blue oak woodland. In some areas, chamise chaparral is mixed within blue oak woodland. Blue oak woodland occurs on hills and within valleys





throughout the Agricultural Residential Cluster Subdivision site and comprises 890.0 acres or 23.6% of the vegetative cover.

*Coast Live Oak Woodland.* The Coast Live Oak Woodland habitat type within the Agricultural Residential Cluster Subdivision site most closely corresponds to Coast Live Oak Woodland as described by Holland (1986) and the Coast Live Oak Series described by Sawyer and Keeler-Wolf (1995). This habitat type is restricted to coastal areas from Sonoma County to Baja California. This habitat type is dominated by coast live oak, and it intergrades with mixed oak and blue oak woodland. California annual grassland or native perennial grassland form the understory in more open, savanna-like settings. Along drainages and north-facing slopes, coast live oak woodland forms a very dense canopy with extensive understory shading, while in drier, more exposed areas coast live oak woodland forms an open canopy often with a shrubby understory. Within the Agricultural Residential Cluster Subdivision site, coast live oak woodland occurs on relatively low slopes to level terrain adjacent to the upper portions of Tostada Creek. Coast live oak woodland comprises 104.3 acres or 2.8% of the on-site vegetative cover.

*Mixed Oak Woodland.* Mixed Oak Woodland most closely corresponds to Open Digger Pine Woodland or Blue Oak-Digger Pine as described by Holland (1986) and Mixed Oak Series by Sawyer and Keeler-Wolf (1995). On-site, this habitat contains all three oak species (blue, valley, and coast live) as well as foothill pine (*Pinus sabiniana*). This relatively diverse woodland habitat often has a complex understory of shrubby species, such as those described as chamise chaparral and central (Lucian) coastal scrub. It may form dense stands with a nearly closed canopy adjacent to riparian areas. Mixed oak woodland occurs in large stands throughout the Agricultural Residential Cluster Subdivision site. Mixed oak woodland comprises 190.4 acres or 5% of the on-site vegetative cover.

*Valley Oak Woodland.* The Valley Oak Woodland habitat type within the Agricultural Residential Cluster Subdivision most closely corresponds to Valley Oak Woodland as described by Holland (1986) and the Valley Oak Series described by Sawyer and Keeler-Wolf (1995). This habitat type is usually located on deep, well drained alluvial soils in valley bottoms and as a component of riparian communities. Valley Oak Woodland is listed as a Sensitive Natural Community by the CDFG. Within the Agricultural Residential Cluster Subdivision site, valley oak woodland occurs as an open canopy (savanna) on the floor of the Santa Margarita Valley adjacent to West Pozo Road and on hilltops within several proposed lots. Isolated valley oaks occur throughout vineyards on Moore Ridge. Many of these trees are senescent and, based on field observations, many appear to have been ~~were~~ recently removed. Valley oak woodland comprises 215.7 acres or 5.7% of the on-site vegetative cover.

Riparian. The Riparian habitat type within the Agricultural Residential Cluster Subdivision site most closely corresponds to the Central Coast Cottonwood-Sycamore Riparian Forest Central Coast, Arroyo Willow Riparian Forest, and Central Coast Riparian Scrub as described by Holland (1986) and the Fremont Cottonwood Series, Red Willow Series, and Arroyo Willow Series as described by Sawyer and Keeler-Wolf (1995). The riparian habitat is located in the middle to northern portion of the Agricultural Residential Cluster Subdivision site associated with Trout and Tostada Creeks. The majority of riparian habitat is characterized by Fremont cottonwood (*Populus fremontii*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), coast live oak, valley oak, and foothill pine depending on topography, aspect, and,



adjacent habitats. In open areas with less water, arroyo willow and deergrass (*Muhlenbergia rigens*) are the dominant species. Understory in this habitat type is an herbaceous cover of forbs, broadleaved, and emergent wetland plant species. Riparian habitat comprises 41.6 acres or 1.1% of the on-site vegetative cover.

Riparian communities are important for many animal species since the abundance of moisture and associated vegetation provide structure, materials, food sources and habitat for nesting and roosting. Common inhabitants of riparian woodland habitats include amphibians and reptiles such as the Pacific treefrog and western fence lizard, and mammals such as raccoon, opossum, striped skunk (*Mephitis mephitis*), big-eared woodrat, desert cottontail, and shrews (*Sorex* spp.) Riparian woodland habitat also supports a diverse number of resident and migratory bird species including raptors. Species observed in on-site riparian habitat include house wren (*Troglodytes aedon*), ruby-crowned kinglet (*Regulus calendula*), warbling vireo (*Vireo gilvus*), Wilson's warbler (*Wilsonia pusilla*), common yellowthroat (*Geothlypis trichas*), black phoebe, goldfinches, and turkey vulture (*Cathartes aura*). Natural drainage features supporting the riparian habitat are discussed below in Section 4.3.1(b), *Natural Drainages*.

Emergent Wetland. The Emergent Wetland habitat type within the Agricultural Residential Cluster Subdivision site most closely corresponds to Freshwater Palustrine Persistent Emergent Wetland as described by Cowardin (1979) and the Sedge Series described by Sawyer and Keeler-Wolf (1995). Wetlands occur in nutrient-rich mineral soils that are saturated throughout part or all of the year. These habitats are best developed in locations with slow-moving or stagnant shallow water such as drainage corridors and they also occur as in seeps or in areas with adequate water sources. These areas are characterized by a dominance of hydrophytic (water-loving) plant species. Emergent wetland habitats occur within the Agricultural Residential Cluster Subdivision site in seasonally wet areas within oak woodland and grassland habitats and are dominated by herbaceous hydrophytic plant species This habitat type can be found on-site within seasonal pools, ephemeral drainages, and along and adjacent to creeks. Seasonal pools are discussed below in Section 4.3.1(d), *Seasonal Pools*. Agricultural ponds that do not contain emergent wetland vegetation are discussed below under the Vineyard habitat type. Emergent wetland comprises 191.7 acres or 5.1% of the on-site vegetative cover.

Emergent Wetland habitat is characterized by erect, rooted herbaceous hydrophytes. These areas are either perennially flooded, or are flooded frequently enough so that the roots of the vegetation prosper in an anaerobic (i.e., oxygen-lacking) environment. Vegetation includes Mexican rush (*Juncus mexicanus*), common spikerush (*Eleocharis macrostachya*), and curly dock (*Rumex crispus*). Other species present include toad rush (*Juncus bufonius*), rabbitfoot grass (*Polypogon monspeliensis*), and hyssop loosestrife (*Lythrum hyssopifolium*). Due to the seasonal inundation with water and well-developed vegetative stratum, the on-site emergent wetland habitat provides habitat to several aquatic wildlife species including aquatic invertebrates such as seed shrimp (Class Ostracoda), freshwater snails, (Class Gastropoda) and water boatmen (Family Corixidae), amphibians such as the Pacific chorus frog, bullfrog, and California toad, and reptiles such as the southwestern pond turtle. Aquatic birds such as the mallard duck (*Ana platyrhynchos*) and American coot (*Fulica Americana*) were also observed in association with open water habitat in these areas. Emergent vegetation associated with this habitat type provides breeding habitat for the red-winged blackbird (*Agelaius phoeniceus*) and common snipe (*Gallinago gallinago*).



Seasonal Pools. Seasonal pools are wetland habitats that contain standing water on an ephemeral basis. In some cases, seasonal pools contain emergent wetland vegetation or may be classified as vernal pools. However, seasonal pools with shorter hydroperiods may contain few emergent wetland plant species. Vegetation in these pools may be sparse and consist mainly of upland plant species. Puddles that form in road ruts or other anthropogenic areas can be considered seasonal pools. These areas are important biologically because they can contain threatened and endangered species, such as vernal pool fairy shrimp, and provide habitat for a variety of aquatic invertebrates. Pacific treefrogs, California toads, and western spadefoot can breed in seasonal pools. Bird and mammal species can use these areas as a water source. Seasonal pools comprise 4.8 acres or less than 1% of the on-site cover.

Ruderal. Ruderal habitats are disturbed areas that are typically sparsely vegetated by invasive non-native plants. This habitat type is not identified by Holland (1986) or Sawyer and Keeler-Wolf (1995). On-site, this habitat type is restricted to a cattle feeding area that is mostly devoid of vegetation due to trampling, grazing and vehicular impacts. It comprises 0.5 acres or less than 1% of the area within the Agricultural Residential Cluster Subdivision.

Agriculture (Vineyard). Agriculture is a human-created habitat, and vineyards are the type of agriculture that have been planted over the majority of the Agricultural Residential Cluster Subdivision site. Agriculture is not described by Holland (1986) or Sawyer and Keeler-Wolf (1995) as it is not a native plant community, though it is considered a wildlife habitat under the California Wildlife Habitat Relationships (CDFG, California Interagency Wildlife Task Group, CHWR ver. 8.1). The on-site vineyard consists of intensively maintained wine-grape vines that are actively managed, regularly irrigated, and has few native plant species. Vineyard maintenance eliminates the ability for many native plants to survive, and the plant species present in these areas are adapted to frequent disturbance, and primarily consist of ruderal species. Common Ruderal species occurring in vineyard habitats include bromes, wild radish (*Raphanus sativus*), and mustard (*Brassica* sp.). In addition, two clay-lined irrigation ponds are located in the southern portion of the site and are considered part of this habitat type. Vineyard comprises 853.6 acres or 22.6% of the on-site vegetative cover.

Vineyards often support a low to moderate diversity of small mammal and bird species adapted to frequent disturbance and open coverage. Species commonly observed in vineyards include mourning doves (*Zenaida macroura*), European starlings (*Sturnus vulgaris*), northern mockingbirds (*Mimus polyglottos*), desert cottontails, and California ground squirrels. In areas within the vineyard where isolated valley oaks remain or where vineyards are adjacent to oak woodlands, avian species diversity was found to be greater than in areas without trees (Jason Dart, pers. comm.). It should be noted that vineyard habitats are typically managed to minimize crop depredation by such species as starlings, blackbirds, ground squirrels, gophers, and any other opportunistic wildlife species.

**c. Natural Drainages.** The following creek descriptions include the location of the creeks, associated riparian and wetland vegetation, creek characteristics, and in-stream pool measurements.

*Trout Creek.* Trout Creek is located within a flat area along the eastern portion of the Agricultural Residential Cluster Subdivision site between West Pozo Road and the hills to the



west. Trout Creek is a perennial creek that originates south of the Agricultural Residential Cluster Subdivision site in the Santa Lucian Mountains near Cuesta Ridge. From its origins it heads northeast/north through the site and eventually converges with the Salinas River east of the Santa Margarita Ranch property. The Agricultural Residential Cluster Subdivision site segment of Trout Creek is approximately 1.50 miles long and contains mature riparian forest habitat with riparian scrub and emergent perennial wetland habitats lining and submerged within its diverse channel. Average bankfull of Trout Creek is approximately 50 feet and the channel is often 4.0 feet wide. Substrate found in riffles is small sized gravel to cobbles, while coarse sand to medium gravel is common in most runs. Twelve in-stream pools have been identified within the on-site creek segment that occurs within the development area. On average, these pools are 5-6 feet wide, 5-7 feet long, and 2-4 feet deep. They typically consist of coarse sand, but in many cases contain gravel and cobble substrate.

*Tostada Creek.* Trout Creek is located along an unnamed ranch road between two hills in the mid-eastern portion of the Agricultural Residential Cluster Subdivision site. Tostada Creek is a seasonal creek that originates within the Agricultural Residential Cluster Subdivision site near Moore Ridge and extends east until it converges with Trout Creek at the one mile bridge of Highway 58. Tostada Creek receives runoff from ephemeral drainages from Moore Ridge and in the hills that surround the lower portion of the creek. On-site, Tostada Creek is approximately 1.25 miles long and contains two very different segments. To the west, the upper 0.75 mile long segment supports sparse riparian scrub and deer grass habitats over an open channel and to the east, the lower 0.50 mile long segment supports riparian forest habitat consisting of red willow, foothill pine, and coast live oak. Average bankfull of Tostada Creek is approximately 40 feet and the channel is often 3.0-4.0 feet wide. Substrate found in riffles is small to large sized gravel, while coarse sand to medium gravel is common in most runs. Ten in-stream pools have been identified within the on-site creek segment. On average, these pools are 4.0-5.0 feet wide, 4.0-6.0 feet long and 1.0-3.0 foot deep. They typically have fine to coarse sand, but in some cases contain small to medium sized gravel substrate.

**d. Seasonal Pools.** Seven seasonal pools are located within the Agricultural Residential Cluster Subdivision. These pools were named Seasonal Pool 1 (SP 1), SP 2, SP 3, SP 4, SP 5, SP 6, and SP 7 for the purposes of this study. Seasonal pool numbers in parentheses (i.e. SMR 4) are from the Inventory of the entire Santa Margarita Ranch. Only seasonal pools located within or directly adjacent to the Agricultural Residential Cluster Subdivision site and that have potential to be impacted by development were included in this investigation and are discussed herein. All seasonal pools have a moderately impervious clay or sandy loam soil substrate (USDA 1994) that supports seasonal pooling (Althouse and Meade, 2003, J. Davis, personal observation). The following are seasonal pool descriptions and include the location of the pool, pool area and depth, surrounding habitat description, and substrate type.

SP 1 (SMR 17) is in a natural pool located just south of the community of Santa Margarita in a flat area at the end of a low gradient ephemeral drainage that supports emergent wetland vegetation. A human-created earthen berm constructed along the southern edge of the community has increased the maximum depth and size of the pool. The ephemeral drainage has a very shallow sandy loam to clay loam channel, which expands as it approaches the topographic low area supporting SP 1 (USDA 1994). The dominant wetland species within the ephemeral drainage and in the shallow areas of SP 1 include Mexican rush, common spikerush, and curly dock. SP 1 covers a maximum area of approximately 6.31 acres and a maximum



depth of approximately 35 inches. The southernmost portion of SP 1 is within the Agricultural Residential Cluster Subdivision site.

SP 2 (SMR 12) is a human-created pool located along an unnamed ranch road toward the top of a hill within the Agricultural Residential Cluster Subdivision site. SP 2 was formed by the placement of an earthen dam within a low to moderate gradient ephemeral drainage. The pool is surrounded by blue oak woodland habitat. A well used ranch road lies directly west of the pool. SP 2 covers a maximum area of approximately 0.12 acre and a maximum depth of approximately 70 inches.

SP 3 (SMR 23) is a shallow pool located within a large wetland area between the blue oak woodland covered hills to the north and vineyards to the east and west. The dominant wetland species within SP 3 are Mexican rush and common spikerush. SP 3 covers a maximum area of approximately 0.04 acre and a maximum depth of approximately 12 inches. SP 3 is located approximately 0.50 mile west of Trout Creek and 0.75 mile east of Yerba Buena Creek.

SP 4 (SMR 4) is located in the southern portion of the Agricultural Residential Cluster Subdivision site within an open wetland area surrounded by vineyards. The dominant wetland species surrounding SP 4 include red willow, Mexican rush, and common spikerush. SP 4 covers a maximum area of approximately 0.30 acres and a maximum depth of approximately 60 inches. SP 4 is located less than 1.00 mile from Trout Creek.

SP 5 (SMR 5) is located in the southern portion of the Agricultural Residential Cluster Subdivision site within an open wetland area surrounded by vineyards. The dominant wetland species surrounding SP 5 include Mexican rush and common spikerush. SP 5 covers a maximum area of approximately 1.93 acres and a maximum depth of approximately 16 inches. SP 5 is located approximately 1.25 miles southeast of Trout Creek. This pool was coined the "frog pond" by Althouse and Meade (2003) due to the abundance of Pacific chorus frogs and California (western) toads.

SP 6 (SMR 35) is located approximately 150 feet west of Highway 58 near a short branch of Trout Creek. SP 6 is situated within valley oak woodland and California annual grassland habitat. A very low gradient drainage and sheet flow from a small watershed supply water seasonally to this pool. The dominant emergent wetland vegetation surrounding the perimeter of SP 6 includes Mexican rush and common spikerush. SP 6 covers a maximum area of approximately 0.68 acre **and** a maximum depth of approximately 40 inches. SP 6 is located less than 0.10 mile from Trout Creek.

SP 7 (SMR 19) is located in a wetland below Moore Ridge and just west of the eastern Agricultural Residential Cluster Subdivision site boundary. The dominant emergent wetland vegetation surrounding the perimeter of SP 7 includes Mexican rush and common spikerush. SP 7 covers a maximum area of approximately 0.59 acre and a maximum depth of approximately 20 inches. SP 7 is located less than 0.10 mile from Yerba Buena Creek.

**e. Special-Status Species.** For the purpose of this evaluation, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the Federal Endangered Species Act (FESA); those listed or proposed for listing as rare, fully protected, threatened, or endangered by the CDFG under the



California Endangered Species Act (CESA); animals designated by the CDFG as “California Special Concern (CSC) species” that occur on the Special Animal list (CDFG 2006); plants occurring on the CDFG’s *Special Vascular Plants, Bryophytes, and Lichens List* (CDFG 2006); and plants occurring on Lists 1 and 2 of the CNPS’s *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001) and CNPS Inventory On-line (2006). Additionally, a number of special-status wildlife species are considered to be of “local concern.” Animals in this category are of interest because they have limited distributions, are experiencing local or regional population declines, are vulnerable to current or future threats to their preferred habitat, and/or are of unusual scientific, recreational, or educational value.

Rincon Consultants biologists developed a target list of special-status plant and wildlife species that could potentially occur within the Agricultural Residential Subdivision Cluster site based on review of the California Natural Diversity Database (CNDDDB), previous studies in the vicinity of the site (Althouse and Meade, 2003; McClelland Engineers, 1987; and Olberding Environmental, 2005), personal communication with Althouse and Meade, Inc. biologist LynneDee Althouse and Jason Dart, USFWS, CDFG, and other, including Rincon Consultants biologists’ knowledge of the area. Field reconnaissance to identify habitat types and an evaluation of the on-site soils helped refine the target list of species and focus the assessment of the actual occurrence of special-status species on the project site.

USFWS protocol wet-season surveys for the federally threatened vernal pool fairy shrimp and California red-legged frog (CRLF) were conducted within the seven seasonal pools. USFWS protocol CRLF surveys were also conducted within Tostada Creek and the on-site portion of Trout Creeks between December 11, 2005 and May 26, 2006. Focused rare plant surveys were conducted within the residential development areas of the Agricultural Residential Cluster Subdivision by Rincon Consultants botanists during spring and summer of 2006. Table 4.3-3 lists special-status plant species observed within the Agricultural Residential Cluster Subdivision site, as well as the Ranch property (Future Development Program area) and Table 4.3-4 lists those special-status wildlife species observed within the Agricultural Residential Cluster Subdivision site and Ranch property (Future Development Program area). Special-status plant and wildlife species that were not identified on the Agricultural Residential Cluster Subdivision site during general and focused surveys performed by Rincon Consultants and the inventory performed by Althouse and Meade were only included if they had potential to occur on the Ranch property based on the presence of suitable habitat. Appendix L lists special-status plant and animal species included on the Rincon target list that are not expected to occur within the Agricultural Residential Cluster Subdivision site based on the results of current and past biological investigations.

**Special-Status Plants.** The CNDDDB contains records of 41 special-status plant species that are known from relatively localized occurrences near the Agricultural Residential Cluster Subdivision site. Extensive survey time was devoted to determine presence or absence of special-status plant species within the Agricultural Residential Cluster Subdivision site. Plants not observed during inventory efforts and/or focused rare plant surveys are not expected to occur and are not listed in Table 4.3-3 unless occurrences are within the Ranch property (Future Development Program area).



**Table 4.3-3. Special-Status Plant Species Occurring Within the Project Site**

Species	Status <sup>1</sup> Fed/CDFG/CNPS	Habitat Requirements and Blooming Period <sup>2</sup>	Suitability/Observations	
			Agricultural Residential Cluster Subdivision Site	Future Development Program Area
Santa Lucia manzanita <i>Arctostaphylos luciana</i>	--/--/List 1B	Chaparral; cismontane woodland; on shale outcrops, on slopes; 1,150 to 2,750 blooms February to March.	Marginal habitat on-site; Not observed during focused rare plant surveys or Inventory efforts within the Residential Development. Unlikely to occur within the proposed disturbance areas.	Suitable habitat on-site; observed during general survey and Inventory efforts in the southwest portion of the site within chaparral habitat.
Catalina mariposa lily <i>Calochortus catalinae</i>	--/--/List 4	Valley and foothill grasslands; cismontane woodland; chaparral; sandy soils, often granite, sometime serpentine; 1,300 to 3,600 feet; blooms April to May.	Suitable habitat on-site; Not observed during focused rare plant surveys or Inventory efforts within the Residential Development. Unlikely to occur within the proposed disturbance areas.	Suitable habitat on-site; Inventory efforts identified an occurrence in the western portion of the site near Yerba Buena Creek.
San Luis Obispo mariposa lily <i>Calochortus simulans</i>	--/--/List 1B	Valley and foothill grasslands; cismontane woodland; chaparral; sandy soils, often granite, sometime serpentine; 1,300 to 3,600 feet; blooms April to May.	Suitable habitat on-site; observed during focused rare plant surveys and Inventory efforts within the proposed disturbance areas.	Suitable habitat on-site.
San Luis Obispo County morning glory <i>Calystegia subacaulis</i> ssp. <i>episcopalis</i>	--/--/List 1B	Chaparral, cismontane woodland, grasslands; 200 to 1640 feet; blooms April to May.	Suitable habitat on-site; Not observed during focused rare plant surveys or Inventory efforts.	Suitable habitat on-site; Inventory efforts identified an occurrence in the western portion of the area within Miller Flats.
Obispo owl's clover <i>Castilleja densiflora</i> ssp. <i>obispoensis</i>	--/--/List 1B	Valley and foothill grasslands; 30 to 700 feet; blooms in April.	Suitable habitat on-site; Not observed during focused rare plant surveys or Inventory efforts. Unlikely to occur within the proposed disturbance areas.	Suitable habitat on-site; Inventory efforts identified an occurrence in the western portion of the area within Miller Flats.
Straight-awned spineflower <i>Chorizanthe rectispina</i>	--/--/List 1B	Chaparral, cismontane woodland, coastal scrub. Often on granite in chaparral or on shale in coastal scrub; blooms from May to June.	Suitable habitat on-site; observed during Inventory efforts within the vineyards within the southeastern portion of the site. Unlikely to occur within the proposed disturbance areas.	Suitable habitat on-site.
San Luis Obispo County lupine <i>Lupinus ludovicianus</i>	--/--/List 1B	Chaparral, cismontane woodland; open areas in sandy soil; Santa Margarita Formation; 165 to 1,725 feet; blooms April to June.	Suitable habitat on-site; Observed during focused rare plant surveys and Inventory efforts adjacent to vineyards within blue oak woodland. Unlikely to occur within the proposed disturbance areas.	Suitable habitat on-site; Potential to occur on-site on sandy soil within oak woodland habitats.



**Table 4.3-3. Special-Status Plant Species Occurring Within the Project Site**

Species	Status <sup>1</sup> Fed/CDFG/CNPS	Habitat Requirements and Blooming Period <sup>2</sup>	Suitability/Observations	
			Agricultural Residential Cluster Subdivision Site	Future Development Program Area
Caper-fruited tropicocarpum <i>Tropicocarpum capparideum</i>	--/--/List 1B	Chaparral, cismontane woodland, coastal scrub. Often on granite in chaparral or on shale in coastal scrub; blooms from May to June.	Suitable habitat on-site; Observed during Inventory efforts within grassland habitat along West Pozo Road near Five Mile Bridge. Unlikely to occur within the proposed disturbance areas.	Suitable habitat on-site.

**CDFG**

S1 = Less than 6 viable element occurrences or less than 1,000 individuals or less than 2,000 acres

S2 = 6-20 viable element occurrences or less than 1,000- 3,000 individuals or less than 2,000-10,000 acres

S3 = 21-80 viable element occurrences or less than 3,000- 10,000 individuals or less than 10,000-50,000 acres

**CNPS**

List 1B = Plants Rare, Threatened, or Endangered in California or elsewhere

List 4 = A "Watch List" for Plants of Limited Distribution

<sup>1</sup> CNPS List 1B=rare or endangered in California and elsewhere; -- =no status.

<sup>2</sup> CNDDB and CNPS *Inventory of Rare and Endangered Plants of California* (2001) and On-line Inventory (2006).





**Table 4.3-4. Special Status Wildlife Species Potentially Occurring on the Project Site**

Species	Status Fed/CA	Habitat Requirements	Suitability/Observations	
			Agricultural Residential Cluster Subdivision (ARCS)	Future Development Program (FDP)
<b>INVERTEBRATES</b>				
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT/--	Vernal pools in grassland, coastal scrub, chaparral, alkaline flats, terraces, and other habitats of the central valley, and central and southern coastal and adjacent inland areas. Pools are small and formed by the collection of freshwater in sandstone, hard-pan or clay-pan layer depression, grassy swales, or earth slumps.	Suitable habitat present on-site; Not observed during USFWS protocol wet-season surveys within Seasonal Pools 1-7. Dry-season surveys are required to complete the protocol survey and conclusively determine presence or absence of this species.	Suitable habitat present on-site; USFWS protocol surveys have not been performed. California Linderiella was observed within two seasonal pools along the quarry access road during Inventory efforts. Potential to occur on the property within seasonal pools
<b>FISH</b>				
Steelhead trout – South Central Coast ESU <i>Onchorhynchus mykiss irideus</i>	FT/CSC	Fast flowing, highly oxygenated, clear cool streams.	Suitable habitat present on-site. Observed on-site within Trout Creek during inventory efforts and snorkel surveys. Could potentially occur in Tostada Creek.	Suitable habitat present on-site. Observed within Trout Creek and Santa Margarita Creek. Rainbow trout observed in Rinconada Creek may produce juveniles that go to the ocean, but they cannot return to Rinconada Creek due to Pierce Dam. A similar condition may exist in Taco Creek.
<b>REPTILES AND AMPHIBIANS</b>				
Southwestern pond turtle <i>Actinemys marmorata pallida</i>	--/CSC	Permanent or nearly permanent water bodies in many habitats Uses upland habitat for nesting.	Suitable habitat present on-site. Observed on-site within SP 2. Suitable habitat also occurs within SP 4, SP6, and Trout Creek.	Suitable habitat present on-site. Observed on-site within SP 7 and Yerba Buena Creek. Also expected to occur within all long-term inundated aquatic areas.
California tiger salamander (Central Population; Central Coast Region) <i>Ambystoma californiense</i>	FE/CSC	Breeding habitat consists of large vernal pools, stock ponds, and seasonal and perennial ponds and associated grassland savanna habitat. Upland habitat also includes active California ground squirrel and Botta's pocket gopher burrows.	Suitable habitat present on-site; Not observed during aquatic survey efforts: wet-season VPFS surveys, CRLF surveys, or Inventory efforts and focused vertebrate sampling. Unlikely to occur on-site due to regional distribution.	Suitable habitat present on-site; Not observed during aquatic survey efforts or focused vertebrate sampling. Unlikely to occur on the property due to regional distribution.
Silvery legless lizard <i>Anniella pulchra pulchra</i>	--/CSC	Prefers open vegetation in chaparral and scrub habitats with sandy loose soils or wooded areas with loose soils and leaf debris.	Suitable habitat present on-site. Observed on-site within blue oak woodland during Inventory efforts. Also expected to occur on sandy soils within chaparral, coastal scrub, and oak woodlands throughout the site.	Suitable habitat present on-site; Not observed during Inventory efforts. Suitable habitat on sandy soils within chaparral, coastal scrub, and oak woodlands. Expected to occur on the property.



**Table 4.3-4. Special Status Wildlife Species Potentially Occurring on the Project Site**

Species	Status Fed/CA	Habitat Requirements	Suitability/Observations	
			Agricultural Residential Cluster Subdivision (ARCS)	Future Development Program (FDP)
Coast horned lizard <i>Phrynosoma coronatum</i> ( <i>frontale</i> population)	--/CSC	Wide variety of habitats, especially in coastal scrub communities and along washes with scattered shrubs for cover.	Suitable habitat within chaparral, oak woodlands, and grassland habitats. Not observed during Inventory efforts or general surveys. Focused surveys were not performed. Expected to occur on sandy soils within chaparral, scrub, and oak woodlands throughout the site.	Suitable habitat present on-site. Observed during Inventory efforts on sandy soils within coastal scrub habitat east of West Pozo Road. Expected to occur on sandy soils within chaparral, coastal scrub, and oak woodlands throughout the property.
California red-legged frog <i>Rana aurora draytonii</i>	FT/CSC	Permanent sources of deep water with emergent or riparian vegetation. Can use a variety of habitats.	Observed on-site during USFWS protocol surveys within Trout and east Tostada Creeks; however, CRLF was not observed in on-site seasonal pools.	Suitable habitat present on-site; Observed during Inventory efforts within Trout, Taco, Yerba Buena Creeks, and SMR Pond 4a and 2b (within Taco Creek). Suitable habitat exists in Santa Margarita Creek.
Western spadefoot-toad <i>Spea hammondi</i>	--/CSC	Grasslands, valley and foothill woodlands near ephemeral/vernal pools or seasonal agricultural ponds that are used for breeding.	Suitable habitat present on-site; Not observed during aquatic survey efforts: wet-season VPFS survey, CRLF surveys, <del>or</del> Inventory <del>and</del> or focused vertebrate sampling; however, because this species is difficult to detect, they are common in the area, and suitable habitat exists, it is possible that they could occur on-site.	Suitable habitat present on-site; Observed during Inventory and general survey efforts within SMR Pond 33. Expected to occur in seasonal pools on the property.
Coast range newt <i>Taricha torosa torosa</i>	--/CSC	Valley-foothill woodlands, coastal scrub, chaparral, and annual grassland habitats. Breeding occurs in clear streams with rocks and boulders in central and southern California, and they breed in ponds and reservoirs in northern parts of their range.	Suitable habitat is not present on-site; Not observed during CRLF protocol surveys or Inventory efforts. Unlikely to occur on-site.	Suitable habitat present on-site. Observed on-site within the upper segment of Yerba Buena and Trout Creeks during Inventory efforts.
<b>BIRDS</b>				
Cooper's hawk <i>Accipiter cooperii</i>	--/CSC	Woodlands for nesting. Open areas and human structures for foraging.	Suitable nesting and foraging habitat present within oak woodlands, grasslands, and buildings. Observed foraging on-site during Inventory efforts. Expected to nest on-site.	Suitable nesting and foraging habitat present within oak woodlands, grasslands, and buildings. Expected to nest and forage on the property.
Golden eagle <i>Aquila chrysaetos</i>	--/CSC, FP	Cliffs trees, and rocky ledges for nesting. Grasslands and open country for foraging.	Good nesting habitat on-site within mixed oak woodlands. Observed foraging during Inventory efforts and general surveys within open oak woodland, grasslands, and agricultural areas. Expected to nest on-site.	Good nesting habitat on-site within mixed oak woodlands. Suitable foraging habitat present within oak woodlands and grasslands. Observed nesting on a high power line tower on the property and expected to forage on the property.



**Table 4.3-4. Special Status Wildlife Species Potentially Occurring on the Project Site**

Species	Status Fed/CA	Habitat Requirements	Suitability/Observations	
			Agricultural Residential Cluster Subdivision (ARCS)	Future Development Program (FDP)
Ferruginous hawk <i>Buteo regalis</i>	--/CSC	Cliffs, banks, shrublands, and sparse woodlands for nesting. Open grassland, sagebrush, agricultural, and desert scrub habitats for foraging.	Suitable foraging habitat occurs within on-site chaparral, agricultural fields, and grasslands. Does not nest in the region. Observed foraging on-site during Inventory efforts.	Observed foraging on the property during Inventory efforts. Does not nest in the region. Suitable foraging habitat within chaparral, agricultural fields and grasslands.
Yellow warbler <i>Dendroica petechia brewsteri</i>	--/CSC	Riparian habitat, prefers willows, cottonwoods, aspens, sycamores, and alders for nesting and foraging.	Suitable foraging and nesting habitat within riparian woodlands. Vocalizations heard during Inventory efforts at the convergence of Trout and Tostada Creeks. Expected to occur on-site.	Suitable nesting and foraging habitat within riparian woodlands. Expected to occur on the property.
White-tailed kite <i>Elanus leucurus</i>	--/FP	Woodlands for nesting and open country, grasslands and marshes for foraging.	Observed nesting behavior on-site within oak woodland during Inventory efforts. Nest site was not located. Observed foraging above Moore Ridge and Miller Flats during general survey efforts.	Suitable nesting habitat within oak woodlands. Observed foraging within grasslands during Inventory efforts and general surveys.
California homed lark <i>Eremophila alpestris actia</i>	--/CSC	Sparse coastal sage scrub and grasslands for nesting and foraging.	Observed foraging on-site during Inventory efforts. Suitable nesting and foraging on-site habitat within grasslands and agricultural fields.	Suitable nesting and foraging in habitat on the property within grasslands and agricultural fields. Expected to occur on the property.
Merlin <i>Falco columbarius</i>	--/CSC	Breeds in Alaska and Canada in open country such as open coniferous woodland and prairie, and occasionally in adjacent suburbs. Winters in California in open woodland, grassland, open cultivated fields, marshes, estuaries, and seacoasts.	Suitable habitat exists on-site for wintering individuals. Observed during Inventory efforts on the Ranch but the location of the observation is not known.	Suitable habitat exists on-site for wintering individuals. Observed during Inventory efforts on the Ranch but the location of the observation is not known.
Prairie falcon <i>Falco mexicanus</i>	--/CSC	Cliffs overlooking large areas for nesting. Open habitats and grasslands for foraging. Present in California year-round.	Suitable nesting habitat within off-site cliff ledges and suitable foraging habitat exists within grasslands and chaparral. Observed foraging on-site during Inventory efforts. No nesting individuals observed. Expected to occur as a transient and uses the site for foraging.	Suitable foraging habitat within grasslands and chaparral. Expected to occur as a transient and likely uses the site for foraging.
Bald eagle <i>Haliaeetus leucoccephalus</i>	FT/SE, FP	Large mature trees for roosting and nesting and large bodies of water for foraging. Nests near large bodies of water.	Observed foraging on-site during Inventory efforts and within nearby Santa Margarita Lake. Not observed nesting on-site during Inventory efforts or general surveys.	Suitable foraging habitat on-site and within nearby Santa Margarita Lake. Expected to occur on the property.
Yellow breasted chat <i>Icteria virens</i>	--/CSC	Thickly vegetated riparian habitats near watercourses for nesting and foraging.	Suitable foraging and nesting habitat within riparian woodlands and riparian scrub. Records of nesting on-site	Suitable foraging and nesting habitat within riparian woodlands and riparian scrub. Expected to occur on the



**Table 4.3-4. Special Status Wildlife Species Potentially Occurring on the Project Site**

Species	Status Fed/CA	Habitat Requirements	Suitability/Observations	
			Agricultural Residential Cluster Subdivision (ARCS)	Future Development Program (FDP)
			exist.	property.
Loggerhead shrike <i>Lanius ludovicianus</i>	--/CSC	Coastal sage scrub, riparian scrub, riparian woodland for nesting. Grasslands and other semi-open habitats for foraging.	Suitable nesting habitat within riparian areas, chaparral and woodlands. Suitable foraging within grasslands and chaparral. Observed nesting on-site during Inventory efforts within riparian woodland of Taco Creek in the southeastern portion of the site during Inventory efforts.	Suitable nesting habitat within riparian areas, chaparral and woodlands. Suitable foraging within grasslands and chaparral. Expected to occur on the property.
Purple martin <i>Progne subis</i>	--/CSC	Woodlands including sycamores, low elevation coniferous forests, mixed and oak woodlands for nesting and foraging. Primarily nests in old woodpecker cavities.	Suitable foraging and nesting habitats within riparian and oak woodlands, and grasslands fields. Observed nesting on-site during Inventory efforts within the riparian corridor of Trout Creek.	Suitable nesting and foraging habitat present. Suitable foraging and nesting habitats within riparian and oak woodlands, and grasslands fields. Expected to occur on the property.
<b>MAMMALS</b>				
American badger <i>Taxidea taxus</i>	--/CSC	Open grassland and desert area with friable soils and a suitable rodent prey base.	Suitable habitat on-site within grassland and open oak woodland habitats. Observed on-site within oak woodland during Inventory efforts.	Suitable habitat within grassland and open oak woodland habitats. Observed within oak woodland during Inventory efforts.
Pallid bat <i>Antrozous pallidus</i>	--/CSC	Grasslands, shrublands, and woodlands, but most common in open, dry habitats with rocky ledges for roosting.	Suitable roosting sites within oak woodland habitats, especially old valley oak trees, and suitable foraging habitat within most on-site habitats. Not observed on-site during Inventory efforts or general surveys. Expected to occur.	Suitable habitat present. Roosting site observed on the Santa Margarita creek bank, under Highway 101 bridge during Inventory efforts. Suitable foraging habitat within chaparral and grasslands.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	--/CSC	All habitat types except sub-alpine areas. Requires caves, tunnels, or other areas suitable for roosting.	Unlikely roosting habitat on-site. Suitable foraging habitat exists within all plant communities. Not observed within the development during Inventory efforts or general surveys. Expected to forage on-site.	Observed roosting within the Santa Margarita Ranch headquarters barn during Inventory efforts. Suitable foraging habitat exists within all plant communities.

<sup>1</sup> Federal: FE= Federally Endangered; FT= Federally Threatened; State (CA)/CDFG: SE= State Endangered; FP= Fully Protected; CSC= California Special Concern.



The Inventory conducted by Althouse and Meade, Inc. (2003) also covered Future Development Program areas.

The following species accounts briefly present relevant ecological and range information and legal status for all the special-status plant species observed within the Agricultural Residential Cluster Subdivision site and Future Development Program area.

**San Luis Obispo mariposa lily** (*Calochortus simulans*), a CNPS List 1B species, is a perennial bulbiferous herb in the lily family (Liliaceae), and typically blooms from April to May. This plant is endemic to San Luis Obispo County and is known from localized occurrences in the San Luis Obispo and Arroyo Grande region. This plant is found in chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill woodland habitats on sandy, often granitic soils. It has also been observed in areas dominated by serpentinite. This species is known from approximately sixteen occurrences throughout San Luis Obispo County. The San Luis Obispo mariposa lily was observed in grassy openings in blue oak woodland and within valley needlegrass grassland within the east/southeast portion of the Agricultural Residential Cluster Subdivision site. Approximately 200 plants were observed.

**Straight-awned spineflower**, a CNPS List 1B species, is a small prostrate herbaceous plant in the buckwheat family (Polygonaceae) that blooms from June through July. This species is known to occur in chaparral, cismontane woodlands, and coastal scrub habitat types in Monterey, San Luis Obispo, and Santa Barbara counties. CNPS reports that this species is known from approximately twenty-three occurrences, primarily within San Luis Obispo County (19 occurrences). Straight-awned spineflower individuals were observed within the vineyards in the southeastern portion of the Agricultural Residential Cluster Subdivision site. Approximately 1,000 plants were observed in this occurrence (J. Dart, pers. comm. 2006). This species was not observed within proposed Agricultural Residential Cluster Subdivision disturbance areas.

**San Luis Obispo lupine** (*Lupinus ludovicianus*) a CNPS List 1B species, is a perennial herb in the legume family (Fabaceae), and typically blooms from April to July. This plant is endemic to San Luis Obispo County and is known from sixteen occurrences in the Santa Lucia Mountains to the east of the Cities of San Luis Obispo and Arroyo Grande. This plant is found in chaparral and cismontane woodland on the Santa Margarita Formation within sandstone or sandy soils. It was observed in grassy openings in blue oak woodland within the east/southeast portion of the Agricultural Residential Cluster Subdivision site. Approximately 20 plants were observed in this occurrence. This species was not observed within proposed Agricultural Residential Cluster Subdivision disturbance areas.

**Caper-fruited tropidocarpum** (*Tropidocarpum capparideum*) a CNPS List 1B species, is an annual herb in the mustard family (Brassicaceae), and typically blooms from March to April. This species is known to occur in valley and foothill grassland habitat on alkaline clay soils from 0 to 1,400 feet elevation in Monterey, San Luis Obispo, and Santa Barbara counties. CNDDDB reports that this species is known from approximately nineteen occurrences, with half of them likely to have been extirpated. Caper-fruited tropidocarpum was observed in a California annual grassland habitat in the east/southeast portion of the Agricultural Residential Cluster Subdivision site near West Pozo Road and the five-mile bridge. Approximately 100 plants were



observed in this occurrence. This species was not observed within proposed Agricultural Residential Cluster Subdivision disturbance areas.

**Other uncommon plant species** observed on-site are the Catalina mariposa lily (*Calochortus catalinae*), Paso Robles navarretia (*Navarretia jaredii*), and Michael's rein orchid (*Piperia michaelii*). These three plants are on the CNPS List 4: Plants of Limited Distribution, a "watch list" for uncommon plants whose vulnerability or susceptibility appear relatively low at this time (CNPS 2001), but may become rare in the future as their habitat is impacted and lost.

**Special-Status Wildlife.** The CNDDDB contains records of 29 special-status wildlife species that are known from relatively localized occurrences within the vicinity of the Agricultural Residential Cluster Subdivision site. The majority of these species have highly specialized habitat requirements that do not occur on the project site, and can be dismissed from occurring on-site. Table 4.3-4 presents a summary of habitat requirements, on-site suitability, and observations for the special-status wildlife species that are known to occur within the site.

The following are detailed descriptions of special-status wildlife species known to occur within or directly adjacent to the Agricultural Residential Cluster Subdivision site.

#### *Special-Status Fish Species*

**Steelhead, south/central California coast ESU**, (*Oncorhynchus mykiss irideus*; federally Endangered and CDFG California Special Concern wildlife species). The south/central California coast steelhead (steelhead) is an anadromous (ocean-run) form of coast rainbow trout (also *Oncorhynchus mykiss irideus*). Steelhead have extremely well developed homing abilities. They usually will spawn in the same stream and area where they lived as fry (young fish). However, steelhead are opportunistic spawners and will spawn in other areas of a stream if their particular tributary or reach is unreachable due to new dams, other barriers, or pollution. When in fresh water, the steelhead trout prefer a fast flowing, highly oxygenated, clear, cool stream where riffles tend to predominate pools. This species is found in appropriate streams throughout California. Steelhead were observed in Trout Creek during Inventory efforts. Steelhead potentially spawn within the Agricultural Residential Cluster Subdivision site in-stream pooled portions of Trout Creek and use the remainder of Trout Creek habitat for migration to and from the Pacific Ocean via the Salinas River. Steelhead could potentially occur in Tostada Creek. Coast rainbow trout have been observed in Rinconada Creek, and they likely produce juveniles that migrate to the ocean, but they are unable to return to spawning sites due to Pierce Dam.

#### *Special-Status Reptiles and Amphibian Species*

**Southwestern pond turtle** (*Actinemys [Clemmys] marmorata pallida*; CDFG California Special Concern wildlife species). The southwestern pond turtle is a highly aquatic species that requires permanent slow moving or stagnant water with basking sites, such as partially submerged logs, vegetation mats, or open mud banks. It lays its eggs in the banks of creeks and can nest up to one-half mile in adjacent uplands if suitable habitat exists. Hatchlings then migrate to the water where they require areas of shallow water with dense vegetation. This species inhabits streams and ponds throughout the western half of the state. Southwestern pond turtle occurs within or adjacent to the Agricultural Residential Cluster Subdivision site in



SP 2, SP 7, and Yerba Buena Creek. This species also has potential to occur within pooled portions of Trout Creek, SP 1, SP 4, and SP6.

**Silvery legless lizard** (*Anniella pulchra pulchra*; CDFG California Special Concern wildlife species). The silvery legless lizard occurs in areas of loose soil, such as banks of streams, sand dunes, sandy canyon bottoms, and ravines. Soil with high moisture content and scattered vegetation is preferred by the species because it seeks cover by burying itself under leaf litter or loose soil. This species forages for insects or insect larvae at the base of a shrub or near the surface of the soil under leaf litter. The silvery legless lizard occurs along the coast from San Francisco to Baja California. Silvery legless lizard occurs in the southeastern portion of the Agricultural Residential Cluster Subdivision site on sandy soils within blue oak woodland. This species also has potential to occur throughout the site on sandy and sandy loam soils within open oak woodland, chamise chaparral, and central coastal scrub habitats.

**Coast horned lizard** (*Phrynosoma coronatum* [frontale population]); CDFG California Special Concern wildlife species). The coast horned lizard is found in a variety of plant communities including scrub and chaparral habitats, valley-foothill woodlands, annual grasslands, and open riparian woodlands. This species tends to thrive in areas with friable soils with which they can burrow into during times of inactivity. The coast horned lizard forages on open ground and subsists primarily on ants. This species occurs along the coast from San Francisco south to Baja California and throughout the Central Valley and Sierra Nevada foothills. This species occurs east of Pozo Road on the Future Development Program site within the chamise-chaparral habitat. Coast horned lizard has potential to occur throughout the Agricultural Residential Cluster Subdivision site on sandy and sandy loam soils within open oak woodland, chamise chaparral, and central coastal scrub habitats.

**California red-legged frog** (*Rana aurora draytonii*; CRLF; Federally Threatened and CDFG California Special Concern wildlife species). The CRLF is found in stagnant or slow moving water with depths greater than two feet and surrounded by dense shrubs, or emergent riparian vegetation, such as arroyo willow, cattails, and bulrushes. However, CRLF use a variety of habitat types, including various aquatic, riparian, and upland habitats. Additionally, at any time of the year, adult CRLF may move long distances from breeding sites. The majority of extant localities are isolated, fragmented remnants of larger historical populations and occur along the coast from Mendocino County to Baja California and throughout the Central Valley and Sierra Nevada foothills. California red-legged frogs occurs within or adjacent to the Agricultural Residential Cluster Subdivision site in Trout, Tostada, Taco, and Yerba Buena Creeks, and an agricultural pond between Trout and Taco Creeks. This species also has potential to use on-site seasonal pools and upland habitats including grasslands and oak woodlands for dispersal during the November through April rain season.

**Western spadefoot** (*Spea hammondi*; CDFG California Special Concern wildlife species). The western spadefoot is a toad in the family Pelobatidae. The adults remain under ground during dry conditions in grassland, scrub or chaparral habitats. They can persist for many years under ground without emerging or feeding during dry periods. They move to breeding pools in mid-winter after seasonal pools have filled. They breed in vernal pools, ephemeral ponds and seasonal agricultural ponds that lack fish. The larval period can be completed in 3 to 11 weeks. The western spadefoot is distributed from the Central Valley at Redding, California south to Kern County, and along coastal counties from the Bay Area to Baja California. In southern



California their range extends inland to desert areas. This species was found during Inventory efforts in the Future Development area in SMR Pond 33.

**Coast Range newt** (*Taricha torosa torosa*; CDFG California Special Concern wildlife species). The Coast Range newt breeds in streams with clear water, rocks and boulders in central and southern California. They also breed in ponds and reservoirs in the northern part of their range. In central California, breeding occurs in two waves: January to February and March to April. The larval period is three to six months. The adults occupy terrestrial habitats as much as 1.6 miles from breeding sites. Terrestrial habitats include oak woodland, chaparral, grassland and coastal scrub. They are distributed along the coast from Mendocino County to San Diego County. This species was found during Inventory efforts in the upper portions of Yerba Buena and Trout Creeks.

#### *Special-Status Bird Species*

**Cooper's hawk** (*Accipiter cooperi*; CDFG California Special Concern wildlife species). The Cooper's hawk is an uncommon resident species that can be found in various wooded areas. It nests in tall trees and often hunts around human structures such as houses and birdfeeders. This species range occurs throughout most of the state. Cooper's hawk was observed foraging east of West Pozo Road within the riparian woodland of Trout Creek. This species is likely to occur on-site along Trout Creek east of West Pozo Road, the lower wooded portion of Tostada Creek, and oak woodlands throughout the Agricultural Residential Cluster Subdivision site.

**Sharp-shinned hawk** (*Accipiter striatus*; CDFG California Special Concern wildlife species). The sharp-shinned hawk is an uncommon permanent resident or winter visitor found in a variety of habitats. It tends to prefer riparian plant communities, but will also inhabit pine and oak woodlands on north facing slopes and forages at the edge of woodlands where it hunts birds, mammals, insects, and reptiles. The sharp-shinned hawk occurs throughout California. The sharp-shinned hawk was observed foraging east of West Pozo Road within the riparian woodland of Trout Creek. This species is likely to occur on-site along Trout Creek east of West Pozo Road, the lower wooded portion of Tostada Creek, and oaks woodlands throughout the site.

**Golden eagle** (*Aquila chrysaetos*; CDFG California Special Concern wildlife species). The golden eagle is an uncommon resident of mountainous and valley-foothill areas. Nesting occurs on cliff ledges and overhangs or in large trees. Foraging typically occurs in open terrain where small rodent prey is seen while soaring high above ground. This species occurs throughout California except the central valley. The golden eagle was observed foraging over grasslands and open woodland throughout the Agricultural Residential Cluster Subdivision site and nesting was observed on a high power line tower within the Santa Margarita Ranch.

**Ferruginous hawk** (*Buteo regalis*; CDFG California Special Concern wildlife species). The ferruginous hawk is an uncommon winter resident and migrant found in open grassland, sagebrush, and desert scrub habitats. It is a fairly common winter resident in grasslands and agricultural areas in southwestern California. This species nests on cliffs, cut banks, natural or man-made structures, shrubs, or in an isolated tree. It hunts for small mammals, birds, and reptiles by flying low over open areas. The ferruginous hawk occurs throughout California except for high elevation or heavily forested areas of the Sierra Nevada, Klamath, and Cascade





Mountains. The ferruginous hawk was observed foraging east of West Pozo Road within the riparian woodland along Trout Creek and would be expected to forage within the open grasslands and scrub of the Agricultural Residential Cluster Subdivision site and roosting within the woodlands.

**Yellow warbler** (*Dendroica petechia*; CDFG California Special Concern wildlife species). The yellow warbler is a common summer resident found in riparian woodland habitats. It forages for insects in the upper canopy of deciduous woodlands and nests in the dense understory vegetation. This species occurs throughout mountainous areas of California. The yellow warbler was observed foraging within the riparian woodland of Trout Creek near Sycamore Canyon. Nesting was also expected at this location. This species is likely to occur on-site within other portions of Trout Creek, Yerba Buena Creek, and the lower wooded portion of Tostada Creek.

**White-tailed kite** (*Elanus leucurus*; Fully Protected Species). The white-tailed kite is found in open herbaceous habitats and is rarely found far from agricultural areas. It nests at the top of trees with dense canopy cover and feeds primarily on voles and other diurnal mammals by hovering and then swooping down on its prey. This species occurs west of the Sierra Nevada Range. The white-tailed kite was observed foraging over Moore Ridge and Miller Flats during general survey efforts. Nesting behavior was observed within the northwest portion of the Agricultural Residential Cluster Subdivision site in blue oak woodland. The nest was not located.

**California horned lark** (*Eremophila alpestris actia*; CDFG California Special Concern wildlife species). California horned larks are resident species found in open country with sparse vegetation, including agricultural fields and short grassland. This species nests and forages on the ground and feeds on insects, snails, seeds, and grass. The California horned lark can be found throughout most of the state and is less common in mountainous or heavily forested areas. This species is likely to occur on-site within more or less level areas within the California annual grassland habitat.

**Merlin** (*Falco columbarius*; CDFG California Special Concern wildlife species). The merlin is an uncommon resident and migrant species found in open habitats including grasslands, desert scrub, rangelands, and agricultural areas. This species requires large cliff ledges overlooking open areas for nesting. It hunts for small mammals, reptiles, and birds by diving from a perch or while soaring above ground. The merlin occurs throughout California except in heavily forested areas of the Sierra Nevada and north Coast Ranges.

**Prairie falcon** (*Falco mexicanus*; CDFG California Special Concern wildlife species). The prairie falcon is present in California year-round. It nests in cliffs overlooking large open areas. They forage in open habitats and grasslands. This species has been observed on the Santa Margarita Ranch.

**Bald eagle** (*Haliaeetus leucocephalus*; Federally Threatened and State Endangered, Fully Protected). The bald eagle is found in various woodlands near large bodies of water. It winters at lakes, reservoirs, and river systems and nests mainly in mountainous areas with large mature trees near water. This species are opportunistic foragers and eat fish, birds, and small mammals. The bald eagle can be found throughout most of the state except in dry desert areas



Potential foraging habitat for the bald eagle is likely to occur within nearby Santa Margarita Lake and the Salinas River. The bald eagle is not expected to nest on-site, but they have been observed foraging on Santa Margarita Ranch.

**Yellow breasted chat** (*Icteria virens*; CDFG California Special Concern wildlife species). The yellow-breasted chat is an uncommon summer resident and migrant found in various riparian habitats. It requires thick riparian vegetation near watercourses for nesting and feeding. This species occurs throughout the Klamath and Cascade Mountains, western Sierra Nevada Foothills, and along the coast from San Francisco south to Baja California. This species has potential to nest and forage on-site with the riparian woodlands of Tostada and Trout Creeks, and there is a historical record of nesting in lower Trout Creek.

**Loggerhead shrike** (*Lanius ludovicianus*; CDFG California Special Concern wildlife species). The loggerhead shrike is a common resident species that frequents a variety of open and semi-open habitats including grassland, coastal sage scrub, and open riparian scrub and riparian woodland. The shrike nests in shrubs in coastal sage scrub and chaparral habitats or in trees that overlook grasslands. This species searches for prey over semi-open habitats and feeds primarily on large insects and often skewers prey on a barb or thorn to cache for later feeding. The loggerhead shrike occurs throughout most of the state except the Sierra Nevada Range and northwest California. The loggerhead shrike was observed nesting in a red willow overhanging Taco Creek bordering the southeastern boundary of the Agriculture Residential Cluster Subdivision. This species has the potential to nest and forage on-site with the riparian woodland and scrublands of Tostada and Trout Creeks and coastal scrub, chaparral, and grasslands throughout the site.

**Purple martin** (*Progne subis*; CDFG California Special Concern wildlife species). The purple martin is a summer migrant that inhabits valley-foothill woodlands, montane woodlands, coniferous, and riparian habitats. It hunts for insects by gliding above the ground and nests in old, tall trees often near water. The purple martin occurs throughout the Coast Ranges, Klamath and Cascade Mountains, and western Sierra Nevada foothills.

#### *Special-Status Mammal Species*

**Pallid bat** (*Antrozous pallidus*; State Species of Special Concern). Pallid bats are large bats and can be found in a variety of habitats including grasslands, shrublands, and woodlands, but are most common in open, dry habitats with rocky ledges for roosting. This is a resident species that occurs throughout the entire state.

**Townsend's big-eared bat** (*Corynorhinus townsendii*; CDFG California Special Concern wildlife species). The Townsend's big-eared bat is an uncommon resident found in all habitat types except for sub-alpine and alpine areas and requires caves, tunnels, mines, or other man-made structures for roosting. This bat feeds primarily on moths, but will eat a variety of soft-bodied insects. This species occurs throughout the state.

**American badger** (*Taxidea taxus*; CDFG California Special Concern wildlife species). American badgers occur in open scrubland or grassland habitats with friable soils and adequate prey base. This species digs burrows for cover and feeds on a variety of rodents, insects, reptiles, worms,



birds, and carrion. The American badger can be found throughout the state except in the northern coastal area.

**Other uncommon wildlife species** observed on-site include the California fairy shrimp (*Lindleriella occidentalis*), grasshopper sparrow (*Ammodramus savannarum*), Lawrence's goldfinch (*Carduelis lawrencei*), lark sparrow (*Chondestes grammacus*), olive-sided flycatcher (*Contopus cooperi*), oak titmouse (*Parus inornatus*), Nuttall's woodpecker (*Picoides nuttallii*), California thrasher (*Toxostoma redivivum*), western red bat (*Lasiurus cinereus*), small-footed myotis (*Myotis ciliolabrum*), long-legged myotis (*Myotis volans*), and Yuma myotis (*Myotis yumanensis*). These wildlife species are ranked by the CDFG in the CNDDDB and are found on other lists including Bureau of Land Management, U.S. Forest Service, California Department of Forestry, United States Bird Conservation, Birds of Conservation Concern, Western Bat Working Group, and Point Reyes Bird Observatory.

**f. Regulatory Setting.** Regulatory authority over biological resources is shared by Federal, State, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions, in this instance, the County of San Luis Obispo. The CDFG is a trustee agency for biological resources throughout the state under CEQA and also has direct jurisdiction under the Fish and Game Code of California. Under the State and Federal Endangered Species Acts, the CDFG and the USFWS also have direct regulatory authority over species formally listed as Threatened or Endangered. The ACOE has regulatory authority over specific biological resources, namely wetlands and waters of the United States, under Section 404 of the federal Clean Water Act. Protection for wetlands and riparian habitat is also afforded through the California Fish and Game Code, and local and regional water quality control boards. Additionally, Section 3503.5 of the Fish and Game Code of California protects birds of prey, their nests and eggs against take, possession, or destruction.

Pursuant to the Federal Endangered Species Act (FESA), a permit from USFWS is required for "take" of a Federally listed species through either the Section 7 or Section 10 consultation process. Species "take" can be authorized under Section 7 of the FESA if a Federal agency is involved in the project (e.g., ACOE Section 404 permitting and/or Federal funding) and agrees to be the lead agency requesting Section 7 consultation. This consultation process includes a Biological Assessment of the predicted impacts of a project on the species with measures to minimize and mitigate for such impacts. The result is a Biological Opinion rendered by USFWS that includes a specified allowable incidental take as well as terms and conditions to minimize and offset such take. Take may or may not be issued for operation of a project. The Section 10 consultation process is used to authorize incidental take when no Federal agency is involved. This process includes development of a Habitat Conservation Plan for protecting and enhancing the Federally listed species at a specific location in perpetuity. If "take" were only issued for construction activities, or limited only to those specific areas where an ACOE Section 404 permit is required, a Section 10 permit may be needed for the long-term life of a project. If no Federal nexus can be invoked through the Section 404 permitting process, a Section 10 permit must be obtained for construction and operation of a project.



### 4.3.2 Impact Analysis

**a. Methodology and Significance Thresholds.** This impact analysis of biological resources was based on a review of previous biological studies prepared for the Santa Margarita Ranch including an extensive plant and animal inventory, general field surveys and focused botanical surveys, USFWS protocol California red-legged frog (CRLF) and a USFWS protocol wet-season vernal pool fairy shrimp (VPFS) survey, a wetland delineation review, and consultation with knowledgeable local biologists and resource protection agencies. Data used for this analysis includes project related map layers, aerial photographs, topographic maps, CNDDDB database, previous biological report findings, field survey results, scientific literature, and professionally accepted flora manuals and wildlife field guides to identify species.

Project impacts to plant and wildlife and their habitats may be determined to be significant even if they do not directly affect rare, threatened, or endangered species. CEQA, Chapter 1, Section 21001 (c) states that it is the policy of the state of California to “Prevent the elimination of fish and wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities.” Environmental impacts relative to biological resources may be assessed using impact significance criteria encompassing CEQA guidelines, federal, state and local plans, and ordinances.

In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in any of the following:

- *Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;*
- *Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;*
- *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*
- *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites;*
- *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or*
- *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.*

The County of San Luis Obispo General Plan, Salinas River Planning Area, and the County of San Luis Obispo Land Use Ordinance contain specific policies for the protection of biological resources. Project consistency with these policies is evaluated in Appendix C, *Policy Consistency*, of this EIR.



**b. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

Table 4.3-5 provides a summary of habitat impacts discussed in the Impacts B-1 through B-3. Impacts and Mitigation Measures are discussed below:

**Table 4.3-5 Impacts to Habitat Types Resulting from Development of the Proposed Agricultural Residential Cluster Subdivision**

Habitat Type	Total Acreage	% of Total Site	Impacted Area (Acres)	% of Habitat Area Impacted per habitat type
California Annual Grassland	1151.3	30.5%	32.7	3%
Native perennial grassland	79.8	2.1%	34.3	43%
Central (Lucian) Coastal Scrub	20.5	0.5%	0.2	1%
Chamise Chaparral	33.9	0.9%	0.0	0%
Blue Oak Woodland	890.0	23.6%	26.0	3%
Coast Live Oak Woodland	104.3	2.8%	4.3	4%
Valley Oak Woodland	215.7	5.7%	2.4	1%
Mixed oak woodland	190.4	5.0%	27.4	14%
Riparian/Riverine	41.6	1.1%	0.0	0%
Emergent Wetlands	191.7	5.1%	0.0	0%
Seasonal Pools	4.8	0.1%	0.0	0%
Ruderal	0.5	0.0%	0.0	0%
Agriculture (Vineyards and stock ponds)	853.6	22.6%	0.0	0%
<b>TOTAL</b>	<b>3,778</b>	<b>100%</b>	<b>127.2</b>	<b>3%</b>

*Habitat type acreages are approximate and are based on aerial photography.*

**Agricultural Residential Cluster Subdivision Impact B-1**

**The proposed Agricultural Residential Cluster Subdivision would result in the conversion of the common habitat types California Annual Grassland, Central (Lucian) Coastal Scrub, and Chamise Chaparral to residential uses and associated improvements. This is a Class III, less than significant impact.**

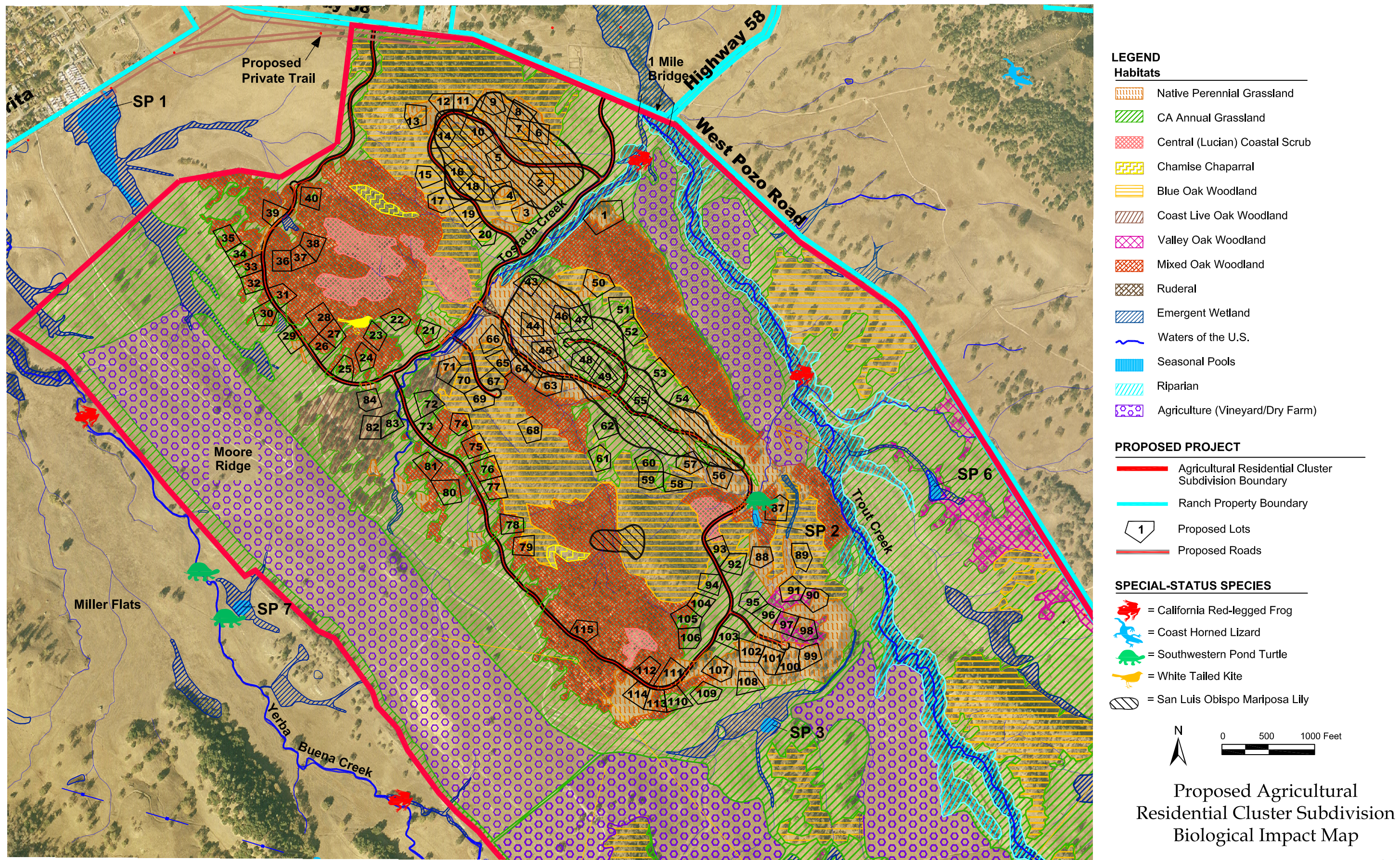
The California Annual Grassland habitat, as illustrated in Figure 4.3-2, is located throughout the Agricultural Residential Cluster Subdivision site in flatter areas and areas bordering oak woodland habitats while Central (Lucian) Coastal Scrub and Chamise Chaparral habitats are primarily located in the northern portion of the site on south and west facing hillsides. Development of several proposed lots within the Agricultural Residential Cluster Subdivision would directly impact these habitats. Development of Lots 1, 21-27, 29-35, 39-40, 43, 66, 71-80, 83, and 88-114 and associated roads would directly impact 39.6 acres of California annual grassland habitat, development of Lot 93 and associated roads would directly impact approximately 0.7 acre of central (Lucian) coastal scrub habitat, and development of Lots 74 – 79 would directly convert approximately 2.1 acres of chamise chaparral habitat. These habitat types are not considered to be rare plant communities as they relate to botanical resources, since they are common throughout the region and central to southern portions of the state. The rarest habitats are those that occupy less than 0.08% of vegetation cover in California (California Department of Forestry and Fire Protection, 2002). In California, the California annual grassland occupies approximately 10.7 million acres or 10.61% of vegetation; the coastal scrub occupies approximately 1.7 million acres or 1.71% of vegetation cover; and, the chamise chaparral habitat occupies approximately 1.4 million acres or 1.37% of vegetation (California Department of Forestry and Fire Protection, 2002). As such, impacts to these habitat types from implementation of the Agricultural Residential Cluster Subdivision would be considered Class III, less than significant.



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Source: EDA Design Professionals, 2005, Rincon Consultants, Inc., June 2006, and October 2007.

Figure 4.3-2







Mitigation Measures. No mitigation is required to address the loss of these common habitat types. However, California annual grassland within the Agricultural Residential Cluster Subdivision supports foraging habitat for special-status wildlife species including the golden eagle, white-tailed kite, loggerhead shrike, and pallid bat and potential foraging habitat for merlin, prairie falcon, bald eagle, and ferruginous hawk. It also potentially provides nesting habitat for the horned lark and den habitat for the American badger. California red-legged frog (CRLF) may also use these habitats for dispersal during the rain season. In addition, these habitats could potentially support special-status reptile species including the silvery legless lizard and coast horned lizard. Therefore, impacts to these habitat types would represent impacts to special status wildlife species. Agricultural Residential Cluster Subdivision measures B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation Measures), B-9(a) (Legless and Horned Lizard Capture and Relocation), B-9(c) (Pre-Construction Bird Survey) and B-9(d) (American Badger Avoidance) would mitigate for special-status species that may use California annual grassland, central (Lucian) coastal scrub, and chamise chaparral habitats should they occur on-site. No special-status plant species were observed within these habitats.

Residual Impacts. Impacts would be less than significant. Implementation of the mitigation measures referenced above would reduce impacts to special-status species that use or may use these habitats to a less than significant level.

**Agricultural Residential Cluster Subdivision Impact B-2**      **The proposed Agricultural Residential Cluster Subdivision would result in direct impacts to Native Perennial Grassland, which is a rare plant community and includes Valley Needlegrass Grassland, which is a CDFG Sensitive Natural Community. This would be a Class II, significant but mitigable impact.**

As illustrated in Figure 4.3-2, residential lots and associated roads within the Agricultural Residential Cluster Subdivision would occur in areas of Native Perennial Grassland habitat. Development of the following proposed lots would convert Native Perennial Grassland habitat to residential uses: 1-13, 29, 39, 43-46, 50, 56-57, 63-66, 71, 87-88, 90, 99-102, 107-108, 111 and 114. Impacts to this habitat would occur as a result of soil and surface disturbance or fragmentation of habitat through grading and other ground disturbance, and the placement of permanent residential structures and anticipated landscaping within the lots. Additional impacts include typical residential activities, rural residential uses such as livestock grazing, creation of horse paddocks or other fenced areas for pets, and vehicle storage. About 34.3 acres of Native Perennial Grassland, which is a rare plant community and includes Valley Needlegrass Grassland, which is a CDFG Sensitive Natural Community, would be impacted by grading and development activities, based on field observations of contiguous grassland areas with approximately 10% cover of purple needlegrass, Sandberg's bluegrass, California oatgrass, or deergrass. Percent cover of native grasses is expected to vary seasonally and annually, as well as under different grazing pressures. Therefore, any extensive areas in which native perennial bunchgrasses are a significant component of the species composition should be considered for impact analysis (Dave Hacker, CDFG, personal communication). Therefore, the loss of this rare plant community is a Class II, *significant but mitigable* impact.



Mitigation Measures. The following mitigation measure would reduce impacts related to Native Perennial Grassland habitat:

**Agricultural Residential  
Cluster Subdivision  
B-2(a)**

**Native Perennial Grassland Restoration Plan.** The applicant shall contract with a qualified biologist to develop a Native Perennial Grassland Restoration Plan. The Plan would consist of enhancing the remaining Native Perennial grassland habitat found on-site or creating Native Perennial Grassland habitat within areas presently vegetated by California annual grassland. Specifically, the area of restoration should include at least 69 acres (2:1 ratio) with at least 10% cover by purple needlegrass, deergrass, or California oatgrass, and should include open areas within blue oak woodland and coast live oak woodland. In addition, native forbs shall be established in the restoration areas representing the species composition and relative cover that is present in the areas to be lost. Other areas consisting of California Annual Grassland such as between Lots 88 and 108 are also suitable for enhancement. In such areas, grassland management strategies such as seasonal mowing shall be employed, which will allow for a higher likelihood that perennial grasses could compete with the annual grasses found within these areas. The following measures shall be implemented.

1. A county-approved botanist/biologist shall develop a Plan that provides specific measures to enhance and maintain the remaining on-site occurrences of Native Perennial Grassland. This Plan shall be focused on adaptive management principles, and shall identify detailed enhancement areas and strategies based on the parameters outlined below, with timing and monitoring long-term requirements. The Plan shall:
  - a. Provide an up-to-date inventory of on-site occurrences of Native Perennial Grassland habitat;
  - b. Define attainable and measurable goals and objectives to achieve through implementation of the Plan;
  - c. Provide site selection and justification;
  - d. Detail restoration work plan including methodologies, restoration schedule, plant materials (seed), and implementation strategies.
  - e. Provide a detailed maintenance plan to include mowing to provide a sufficient disturbance regime to keep non-native plant species from further reducing the extent of this habitat type on the property over time. This approach would also have the residual benefit of providing wildland fire protection. Enhancement and maintenance options shall employ recent techniques and



effective strategies for increasing the overall area of Native Perennial Grassland on-site and shall include but not be limited to reseeded disturbed areas with an appropriate native plant palette;

- f. Define performance standards. Within the agriculture residential cluster subdivision project area, the restored area should include at least 69 acres (2:1 ratio) with at least 10% cover by native perennial grasses; and,
- g. Provide a monitoring plan to include methods and analysis of results. Also, include goal success or failure and an adaptive management plan and suggestions for failed restoration efforts.

**Plan Requirements and Timing.** The Native Perennial Grassland Restoration Plan shall be prepared by a County approved biologist/botanist. Prior to issuance of Grading Permits, the applicant shall submit a copy of the Plan to Planning and Building for review and approval. Monitoring. Planning and Building staff, in consultation with a County assigned biologist/botanist, shall verify that the open space mitigation and monitoring plan for the Native Perennial Grassland habitat is adequate. A monitor approved and hired by the County at the applicant's expense shall be required to monitor all phases of the mitigation plan.

Residual Impacts. The implementation of the above mitigation measure would reduce impacts to Native Perennial Grassland habitat to a less than significant level. Seasonal mowing or low-impact grazing practices could have beneficial secondary impacts with respect to wildland fire protection.

**Agricultural Residential Cluster Subdivision Impact B-3**

**The proposed Agricultural Residential Cluster Subdivision would result in the removal of and/or impacts to an estimated 200 to 400 blue oak, coast live oak, and valley oak trees as well as the conversion of 60.1 acres of native oak woodland habitat. In accordance with Kuehl Bill mitigation techniques, half of the oak trees that are removed or impacted can be replaced, but due to the long time-period required for the planted trees to possess equivalent oak woodland habitat values and the fact that there is no assurance that oak trees designated to remain on the lots will be protected in the future, impacts to oak trees and oak woodlands are Class I, significant and unavoidable.**

The proposed development of residential lots and associated roadways within the Agricultural Residential Cluster Subdivision would result in the direct removal and indirect impacts to blue oak, coast live oak, and valley oak trees, as well as the conversion of native oak woodland habitats. Valley Oak Woodland is considered to be a Sensitive Natural Community by the



CDFG. Development impacts would disturb or fragment approximately 26.0 acres of Blue Oak, approximately 4.3 acres of Coast Live Oak, 27.4 acres of Mixed Oak, and 2.4 acres of Valley Oak Woodland habitat. Because many lots are situated in oak woodland habitats with a high density of oak trees, residential construction would require the removal of a substantial number of trees, as discussed below. Additional impacts to oak woodland resources would be through direct removal and impacts to individual trees as a result of road improvements for the development. An unknown number of trees would be impacted within the lots due to grading or compaction within the root zone; limbing or thinning per CalFire requirements; changes to water regime due to landscape irrigation, leach fields, or creation of impervious surfaces; decreased reproduction due to browsing by livestock, mowing, and other ground disturbance; and other types of residential activities that would affect the soil fungi upon which oak trees are associated.

Removal of large areas of Blue Oak Woodland, Coast Live Oak Woodland, Mixed Oak Woodland, and Valley Oak Woodland habitat types is considered a significant impact due to the long time period necessary for these habitats to establish, and the relatively high quality wildlife habitat that these areas provide. Re-establishment rates can vary widely between project sites and over time. For example, valley oaks planted in a favorable site can develop to sizable trees with adequate canopies in 25 to 30 years. In contrast, blue oaks, which are a slower growing species, may require 100 years for trees to develop moderate-sized canopies. Establishment rates would be shorter in riparian floodplains that lack agricultural uses (Bernhardt and Swiecki, 2001).

In the short-term, impacts to oak woodland habitats are significant and unavoidable because a substantial amount of native oak woodland habitat will be converted to other land uses, and there will be a long delay before replanted trees will possess equivalent wildlife habitat values.

Senate Bill 1334, the Kuehl Bill, specifies procedures for mitigating effects of oak woodland conversions. Under SB 1334, mitigation may include: (1) conservation of oak woodlands through the use of conservation easements; (2) planting and maintaining replacement trees for a period of seven years; (3) contribution of funds to the Oak Woodlands Conservation Funds; and/or (4) other mitigation measures developed by the County. It should be noted that replacement plantings may only fulfill up to 50% of a particular project's mitigation requirement under this bill. As noted previously, the County of San Luis Obispo currently defines "oak woodlands" as those areas with greater than 10% canopy cover by native oak trees, and defines an impact to oak woodlands as the removal of 10% of the canopy cover or ten oak trees. Under these definitions, the Agricultural Residential Cluster Subdivision would have a significant impact to oak woodlands.

The County currently requires a 4:1 replacement ratio (trees replaced to trees lost) for oak trees greater than five inches diameter at Diameter Breast Height (DBH) at 4.0 feet above mean natural grade, and a 2:1 replacement ratio for oak trees impacted but not removed as a result of construction activities. Development of residential lots and road infrastructure within the Agricultural Residential Cluster Subdivision would directly or indirectly impact oak trees during construction activities, road improvements, and through residential use of the lots. Although a few lots contain scattered oaks and avoidance measures may limit impacts to individual oak trees, 50 of the proposed 112 lots contain relatively dense stands of oak trees (proposed Lots 14-19, 23-24, 26-28, 30-40, 65-72, 74-84, 87, 89, 91, 93, 97-98, 112, 113 and 115) and



as such, the proposed Agricultural Residential Cluster Subdivision would result in direct and indirect impacts to hundreds of blue oak, coast live oak, and valley oak trees.

Based on an aerial map assessment of the proposed lot and associated road locations, it is estimated that more than 200 and as many as 400 oak trees have potential to be directly impacted as a result of the residential development. This is a Class I, *significant and unavoidable*, impact. These trees are a biological resource that provide habitat for several species of resident and migratory birds including the raptors listed in Table 4.3-4. Impacts and analysis regarding wildlife species associated with these trees are included in Agricultural Residential Cluster Subdivision Impact B-9.

Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially impact individual oak trees, depending on final design.

Mitigation Measures. Individual oak trees are considered to be a special-status biological resource by the County of San Luis Obispo and mitigation measures are required. The following measures are designed to reduce development-related impacts to oak trees. Agricultural Residential Cluster Subdivision measure B-9(c) (Pre-Construction Bird Survey) contains requirements for avoiding impacts to potential nesting raptors or other migratory birds.

**Agricultural Residential Cluster Subdivision B-3(a)**

**Oak Tree Inventory, Avoidance, and Protection Plan.** The applicant shall prepare an Oak Tree Inventory, Avoidance and Protection Plan as outlined herein. The plan shall be reviewed by the County approved arborist prior to approval of grading permits, and shall include the following items:

1. Comprehensive Oak Tree Inventory. This shall include the following information:
  - a) An inventory of all trees at least 5 inches in diameter at breast height within 50 feet of all proposed Agriculture Residential Cluster Subdivision impact areas. All inventoried trees shall be shown on maps. The species, diameter at breast height, location, and condition of these trees shall be documented in data tables.
  - b) Identification of trees which will be retained, removed, or impacted. This information shall be shown on maps and cross-referenced to data tables described in Item (a).
  - c) The location of proposed structures, utilities, driveways, septic tanks, leach fields, grading, retaining walls, outbuildings, and impervious surfaces shall be shown on maps. The applicant shall clearly delineate the building sites/building control lines containing these features on the project plans. In addition, the plans shall include any fenced areas for livestock or pets and clearance areas prescribed by



CalFire.

- d) A landscaping plan that describes the size and species of all trees, shrubs, and lawns proposed to be planted in the project area, including the limits of irrigated areas.
  - e) Revised drainage patterns that are within 100 feet upslope of any existing oak trees to remain. All reasonable efforts shall be made to maintain historic drainage patterns and flow volumes to these trees. If not feasible, the drainage plan shall clearly show which trees would be receiving more or less drainage.
2. Oak Tree Avoidance Measures. Grading and development within proposed lots shall avoid the removal of oak trees to the maximum extent possible. Such activities must minimize potential disturbance to oaks and their associated root zones to the maximum extent possible, with final site plans requiring concurrence from County staff to ensure compliance with this provision.
  3. Oak Tree Protection Guidelines. Tree protection guidelines and a root protection zone shall be established and implemented for each tree to be retained that occurs within 50 feet of impact areas. The following guidelines shall be included:
    - a) A qualified arborist shall determine the critical root zone for each retained tree on a case-by-case basis, based upon tree species, age, and size. This area will vary from 1.0 to 1.5 times its diameter at breast height [as specified in Harris, Clark and Matheny (2004) Arboriculture]. At a minimum, the critical root zone shall be the distance from the trunk to the drip line of the tree.
    - b) All oak trees to remain within 50 feet of impact areas (construction or grading) shall be marked for protection and the root zone fenced prior to any grading. Grading, utility trenching, compaction of soil, or placement of fill shall be avoided within these fenced areas. If grading in the root zone cannot be avoided, retaining walls shall be constructed to minimize cut and fill impacts. The project arborist must approve any work within the root protection zone.
    - c) Care shall be taken to avoid surface roots within the top 18 inches of soil. If any roots must be removed or exposed, they shall be cleanly cut and not left exposed above ground surface.



- d) Unless previously approved by the County, the following activities shall be prohibited within the root zone of remaining oak trees: year-round irrigation (no summer watering, unless “establishing” a new tree or native compatible plant for up to 3 years); grading (includes cutting and filling of material); compaction (e.g., regular use of vehicles); placement of impermeable surfaces (e.g., pavement); or disturbance of soil that impacts roots (e.g., tilling).
- e) Trimming oak branches shall be minimized, especially for larger lower branches, and the amount done in one season shall be limited to 10 to 30% of the canopy to reduce stress/shock. If trimming is necessary, the applicant shall either use a qualified arborist or utilize accepted arborist’s techniques.

**Plan Requirements and Timing.** The Oak Tree Inventory, Avoidance, and Protection Plan shall be prepared by a County approved arborist. Prior to approval of Grading Permits, the applicant shall submit a copy of the Plan to Planning and Building for review and approval. **Monitoring.** Planning and Building staff or a County approved arborist or botanist shall approve the Oak Tree Inventory, Avoidance, and Protection Plan.

**Agricultural Residential  
Cluster Subdivision  
B-3(b)**

**Oak Tree Replacement, Monitoring, and Conservation.** Of those trees identified under Agricultural Residential Cluster Subdivision measure B-3(a) as being removed or impacted, 50% shall be replaced per County and Kuehl Bill standards. A conservation easement or monetary contribution to the Oak Woodlands Conservation Fund shall be used for the remaining mitigation.

1. **Replacement.** The County approved arborist shall provide or approve an oak tree replacement plan at a minimum 4:1 ratio for oak trees removed and a minimum replacement ratio of 2:1 for oak trees impacted (i.e., disturbance within the root zone area).
  - a) Replacement plantings shall be from regionally- or locally-collected seed stock grown in vertical tubes or deep one-gallon tree pots. Four-foot diameter shelters shall be placed over each oak tree to protect it from deer and other herbivores, and shall consist of 54” tall welded wire cattle panels (or equivalent material) and be staked using T-posts. Wire mesh baskets, at least two-foot diameter and 2-feet deep, shall be used below ground. Planting during the warmest, driest months (June through September) shall be avoided. The plan shall provide a species-specific planting



schedule. If planting occurs outside this time period, a landscape and irrigation plan shall be submitted prior to permit issuance and implemented after approved by the County. Average tree densities shall be no greater than one tree every twenty feet and shall average no more than four planted per 2,000 square feet. Trees shall be planted in random and clustered patterns to create a natural appearance. Replacement trees shall be planted in a natural setting on the north side of and at the canopy/dripline edge of existing mature native oak trees; on north-facing slopes; within drainage swales (except when riparian habitat present); where topsoil is present; and away from continuously wet areas (e.g., lawns, leach lines, etc). Replanting areas shall be either in native topsoil or areas where native topsoil has been reapplied. A seasonally timed maintenance program, which includes regular weeding (hand removal at a minimum of once early fall and once early spring within at least a three-foot radius from the tree or installation of a staked "weed mat" or weed-free mulch) and a temporary watering program, shall be developed for all oak tree planting areas on the Agricultural Residential Cluster Subdivision. A qualified arborist/botanist shall be retained to monitor the acquisition, installation, and maintenance of all oak trees to be replaced within the Agricultural Residential Cluster Subdivision. Replacement trees shall be monitored and maintained by a qualified arborist/botanist for at least seven years or until the trees have successfully established as determined by the County's Environmental Coordinator. Annual monitoring reports will be prepared by a qualified arborist/botanist and submitted to the County by October 15 each year. Annual monitoring reports will include specifics discussed below.

- b) The restored area shall be at a minimum equal in size to the area of oak woodlands lost or disturbed.
- c) An approved arborist shall submit to the County an initial post-planting letter report, and thereafter annual monitoring reports shall be submitted. All trees planted as mitigation shall have an 80% survival rate after seven years. If any trees planted as mitigation do not survive at seven years from the time of planting, they will be replaced as soon as possible as determined by the arborist/botanist.
- d) A cost estimate for the planting plan, installation of new trees, and maintenance of new trees for a period of seven years shall be prepared by a qualified individual and approved by the County. Prior to site grading/issuance of





construction permits, a performance bond, equal to the cost of the estimate, shall be posted by the applicant. The replacement mitigation trees shall also have an overall survival rate of 80% after seven years from date of planting.

2. Maintenance. Unless previously approved by the County, the following activities are not allowed within the root zone of newly planted oak trees:
  - a) Year-round irrigation (no summer watering, unless 'establishing' a new tree or native compatible plant for up to 3 years);
  - b) Grading (includes cutting and filling of material);
  - c) Compaction (e.g., regular use of vehicles);
  - d) Placement of impermeable surfaces (e.g., pavement); or
  - e) Disturbance of soil that impacts roots (e.g., tilling).

Trimming oak branches shall be minimized, especially for larger lower branches, and the amount done in one season shall be limited to 10 to 30% of the canopy to reduce stress/shock. If trimming is necessary, the applicant shall either use a qualified arborist or utilize accepted arborist's techniques.

3. Conservation Easements and/or Contribution to the Oak Woodlands Conservation Fund. Replanting detailed above can account for up to 50% of the mitigation requirement. The remaining mitigation shall be in accordance with the County's Oak Woodland Mitigation Plan. Per the County's draft Plan, the mitigation shall be a minimum of a 2,000 square foot conservation easement per tree removed (based upon an average 50 foot diameter canopy). The oak conservation area shall be designated on-site and be managed by a third party.

**Plan Requirements and Timing.** The oak tree replacement plan shall be prepared by a County approved arborist and reviewed by Planning and Building prior to issuance of grading permits. This report shall also identify the final number of replacement trees utilizing the County's replacement ratio identified above. Prior to issuance of grading permits, the applicant shall file a receipt of evidence of posting a performance security that is acceptable to the County. Prior to occupancy clearance, trees shall be planted, fenced, and appropriately irrigated. The conservation easement shall be established and/or contribution to the Oak Woodlands Conservation Fund shall be paid prior to issuance of grading permits. **Monitoring.** Planning and Building staff shall verify that the oak tree replacement plan and conservation easements and/or contribution to the Oak Woodlands Conservation Fund meet County mitigation ratios and other requirements. Planning and



Building shall conduct site inspections throughout all phases of development to ensure compliance with the plan and evaluate all oak tree replacement measures. Release of performance security requires Planning and Building staff approval.

Residual Impacts. Implementation of the above mitigation measures would reduce impacts to oak trees and oak woodland habitat to the extent feasible. The effectiveness of the long-term provisions of the oak tree replacement would be a function of the financial capabilities of the applicant and the willingness of that entity to implement the recommendations of the County-approved arborist conducting the monitoring program.

In the short-term, impacts to oak trees and oak woodland habitats cannot be mitigated, because of the length of time required for replacement trees to reach maturity and for the conservation areas to have a similar habitat values as the oak woodland areas that removed and /or impacted. Therefore, impacts remain a Class I, *significant and unavoidable*.

**Agricultural Residential Cluster Subdivision Impact B-4**      **The proposed Agricultural Residential Cluster Subdivision would impact wetland and waters of the U.S. regulated by the U.S. Army Corps of Engineers (ACOE) and Regional Water Quality Control Board (RWQCB) and riparian areas regulated by the California Department of Fish and Game (CDFG). These impacts are Class II, *significant but mitigable*.**

Approximately 0.8 acres of riparian habitat within the Agricultural Residential Cluster Subdivision site would be directly impacted and several wetland areas adjacent to residential lots and road would be indirectly impacted by the proposed development. The on-site wetland habitat consists of emergent wetlands adjacent to on-site creeks, wetlands within ephemeral drainages, and isolated wetlands. ACOE defined wetland does not include isolated wetlands and seasonal pools. The ACOE wetland habitat type has potential to be impacted by development of the Agricultural Residential Cluster Subdivision within proposed Lot 1 and Road "A". Additionally, ACOE defined "waters of the U.S." (i.e. ephemeral drainages without emergent wetlands that are connected to intermittent and perennial streams) and the riparian habitat associated with Trout and Tostada Creeks occur within or adjacent to the Agricultural Residential Cluster Subdivision. Development of proposed Lots 2, 10, 14, 17, 21, 29-30, 39, 43, 46-47, 51, 57, 63-64, 69, 78, 81, 83, 84, 85, 88, 100, 102, and 108 and Road A and D would directly impact waters of the U.S. (i.e. primarily tributaries (ephemeral drainages) to Tostada or Trout Creeks) and indirectly impacts Tostada and Trout Creeks via sedimentation. In addition, waters of the U.S. would be impacted by implementation of three road crossings over Tostada Creek.

The wetlands and waters of the U.S. areas on-site would be regulated on a federal, state, and local level, thus making it necessary to coordinate with applicable regulatory agencies such as the ACOE, RWQCB, and CDFG prior to impacting these resources. The fill of wetlands and waters of the U.S. is subject to a Section 404 permit under the Federal Clean Water Act (CWA). Discharges to wetlands and other waters are also subject to a CWA Section 401 certification from the RWQCB, and the removal of riparian vegetation may require a Streambed Alteration Agreement (SAA) through the CDFG. The 2001 Supreme Court S.W.A.N.C.C. decision (Solid Waste Authority of Northern Cook County vs. ACOE, 2001) has resulted in isolated waters



(unless interstate commerce is supported by the waters) being removed from the ACOE regulatory authority. However, the RWQCB has adopted isolated wetlands into its 401 Water Quality Certification. Additionally, vernal or seasonal pools may be regulated by ACOE, RWQCB, and possibly by the USFWS if a special-status species is present.

Direct impacts to wetlands and waters of the U.S. from development of the proposed Agricultural Residential Cluster Subdivision would result from road and lot construction. The proposed 40-foot wide Road A which begins at West Pozo Road near One Mile Bridge follows Tostada Creek between two residential areas: Lots 2-40 to the north and Lots 1, and 30-115 to the south. From the point of entry onto the site, Road A bends south towards Lot 1 and then tightly meanders southwest along Tostada Creek until it forks to the southeast and northwest along the entire stretch of Tostada Creek and its associated riparian habitat. Three roads cross Tostada Creek from Road A and include, Road C between Lots 72-77 and 80-84, Road D between Lots 63-66 and 44-45, and Road H between Lots 21 and 69-71. In all cases, a distinct bed or bank is evident and numerous adjacent wetlands associated with ephemeral drainages spur from Tostada Creek towards the proposed residential subdivision in a southeast and northwest direction. Trout Creek will not be impacted by any proposed road crossings; however, development of lots will indirectly impact Trout and Tostada Creeks.

Development of lots within the Agricultural Residential Cluster Subdivision will impact Trout Creek, Tostada Creek, adjacent wetlands, and seasonal pools. Trout Creek will be impacted by the development of Lots 87, 89, and 90 and Tostada Creek will be impacted by development of Lots 1, 21, 43, 66, 71, 83, 84, and 25. Indirect impacts could occur to the structure or vegetation within these areas due to nearby grading activities and bank modifications. Run-off from construction could have short-term significant impacts to on-site drainages. Silt, sedimentation, or run-off from construction practices could effect water quality in on-site drainages and in turn affect the species residing in or utilizing these areas. Dredge or fill would be required to build the various structures and road crossings. Because these areas may be considered jurisdictional, coordination with applicable regulatory agencies related to impacts on these areas is necessary.

Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially impact jurisdictional areas at road crossings, depending on final design.

Mitigation Measures. The following mitigation would reduce impacts related to state and federal jurisdictional wetlands, ephemeral drainages (other waters), and riparian habitat to a less than significant level. In addition, these habitat types support special-status wildlife species, namely California red-legged frog (CRLF) and South/Central California Coast Steelhead. Agricultural Residential Cluster Subdivision measures B-6(a) (VPFS Presence/Absence Determination), B-6(b) (Mitigation for VPFS), B-7(a) (South/Central California Coast Steelhead (Steelhead) Mitigation, Minimization and Protection Plan), B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation Measures) and B-9(b) (Southwestern Pond Turtle Avoidance, Capture and Relocation) would reduce impacts to special-status species that may use the on-site wetland, seasonal pool, and riparian habitat types to a less than significant level. It should be noted that the grading and erosion control plan required to be prepared by the applicant [refer to Agricultural Residential Cluster Subdivision measure G-2(b) (Grading and Erosion Control Plan) in Section 4.6, *Geologic Stability*] includes measures, such as installation of silt fences, straw bales and sand bags, and buffers for



temporary construction equipment storage and washing areas, that specifically protect wetland, other waters, and riparian resources, during and following construction.

**Agricultural Residential  
Cluster Subdivision  
B-4(a)**

**Wetland and Riparian Protection.** Implementation of the following measures are required to mitigate the loss of riparian/wetland habitat:

1. Building envelopes shall be located so that all riparian and wetland habitat is buffered from development (including grading) by a minimum 200-foot setback from Trout, Yerba Buena and Tostada Creeks, or any other habitats found to support CRLF or Steelhead. Other wetlands, and waters of the U.S. or state shall have a minimum setback of 100 feet. If seasonal pools contain VPFS, a minimum 300 foot setback shall be required. Setback requirements may be increased by the Corps, RWQCB, CDFG, NMFS and/or USFWS.
2. The wetland and riparian habitat area buffer zones for preserved wetland and riparian areas shall be shown on all grading plans and shall be demarcated with highly visible construction fencing to ensure that these areas are not impacted during construction-related activities.
3. Erosion control measures including, but not limited to straw wattles, silt fences, and fiber mats shall be implemented at the limits of grading to reduce sediments from entering the wetland and riparian habitat area buffer zones.
4. Outlet structures shall minimize disturbance to the natural drainage and avoid use of hard bank structures. Where erosion of outlet structures is a concern and bank stabilization must be utilized, bioengineering techniques (e.g., fiber mats and rolls, willow wattling, and natural anchors) shall be used for bank retaining walls. If concrete must be used, then prefabricated crib wall construction shall be used rather than pouring concrete. Rock grouting shall only be used if no other feasible alternative is available as determined by Planning and Building.
5. Disturbance to drainage bottoms due to the installation of any drain or outlet structures shall be minimized to the greatest extent possible and shall be permitted by all appropriate regulatory agencies as described in 8 below.
6. A grease trap and/or silt basin shall be installed in all drop inlets closest to the creek to prevent oil, silt and other debris from entering the creek. Such traps/basins shall be maintained and cleaned out every spring and fall to prevent



overflow situations and potential mosquito habitats from forming;

If impacts to wetland and riparian habitat are not fully avoided, the following shall be implemented to mitigate impacts.

7. The applicant shall obtain a permit from the ACOE pursuant to Section 404 of the Clean Water Act, a water quality certification from the RWQCB pursuant to Section 401 of the Clean Water Act, and a Streambed Alteration Agreement from the CDFG pursuant to Section 1600 et seq. of the California Fish and Game Code for any grading or fill activity within drainages and wetlands.

For development of Roads C, D, and H, which are proposed to cross Tostada Creek, the applicant shall consult with the ACOE and CDFG in designing creek crossings. Where appropriate, and if there is concurrence with ACOE and CDFG, pre-engineered bridge structures are recommended to minimize disturbance within the western portion of Tostada Creek.

It is recommended that the applicant contact these agencies prior to final plan submittal in order to incorporate any additional requirements into the project design. As part of the permitting process, the applicant will be required to provide a compensatory habitat mitigation and monitoring program for impacts to jurisdictional areas. The Plan shall follow the minimum criteria described in Item 8 below.

8. A compensatory mitigation program at a minimum 2:1 ratio for the loss of any wetlands, including those not under federal or state jurisdiction but meeting one-parameter criteria (hydrology, vegetation, or soils), shall be designed. Regulatory agencies may require a greater mitigation ratio. At a minimum, the plan shall include the following components:
  - a. Mitigation plantings for the loss of existing wetland and riparian habitat shall be located in the drainages that are proposed to be modified or preserved as part of the proposed Agricultural Residential Cluster Subdivision to the fullest extent feasible.
  - b. As part of the plan, the applicant shall include a mitigation-phasing section to ensure that all restoration plantings are in place with sufficient irrigation prior to final inspection.



- c. Restoration/revegetation activities shall use native riparian and wetland species from locally collected stock.
- d. Removal of native species in the creeks/drainages that are to be retained shall be prohibited; however, select willow cuttings and emergent plant division are permissible.
- e. Prior to commencement of grading, the applicant shall file a performance security with the County to complete restoration and maintain plantings for a five (5) year period.

**Plan Requirements and Timing.** Prior to issuance of Grading Permits, the applicant shall submit the habitat mitigation and monitoring plan and a copy of the ACOE permit, RWQCB 401 water quality certification, and CDFG Streambed Alteration Agreement or written confirmation that a permit is not required to Planning and Building for review and approval. **Monitoring.** Planning and Building shall conduct site inspections throughout all phases of development to ensure compliance with all habitat restoration measures. Planning and Building shall receive and review all required wetland permits from the ACOE, RWQCB, and CDFG.

A qualified biologist/wetland scientist knowledgeable about wetland permit requirements and approved by Planning and Building shall monitor all grading activities within 100 feet of Trout Creek and 50 feet of Tostada Creek or the appropriate setback as required by the USFWS, wetlands, and ephemeral drainages under jurisdictional Waters of the U.S. to ensure compliance with permit conditions. The monitor shall have the authority to stop all work immediately that is considered to be in violation of one or more permit conditions, at the sole discretion of the monitor. The monitor shall prepare inspection reports and submit them to Planning and Building on a weekly basis, unless more frequent submittals are considered necessary.

The erosion and sediment control structures and facilities shall be monitored throughout project construction by the wetland monitor and by Planning and Building. Planning and Building and construction personnel shall perform site inspections throughout the construction phase.

Planning and Building staff shall: 1) check plans prior to approval of Grading Permits; 2) inspect the site throughout the construction period to ensure compliance with all applicable permits; 3) inspect mitigation areas for permit compliance; 4) ensure bank stabilization structures are constructed according to the plan.



Planning and Building shall site inspect prior to occupancy clearance to verify installation of grease basins/traps and once each year to monitor maintenance.

Residual Impacts. Implementation of the above recommended mitigation measure would reduce impacts to a less than significant level. In addition, obtaining all the required ACOE, CDFG, and RWQCB permits for impacts within jurisdictional areas would result in a no-net-loss of functions and values to riparian/wetland habitats on-site.

**Agricultural Residential Cluster Subdivision Impact B-5**      **The proposed Agricultural Residential Cluster Subdivision would impact San Luis Obispo Mariposa Lily, and may impact San Luis Obispo County morning glory, which are Special-Status Plant Species. This would be a Class II, significant but mitigable impact.**

Construction of the proposed Agricultural Residential Cluster Subdivision would impact known occurrences of the San Luis Obispo mariposa lily, a special-status plant species. The San Luis Obispo mariposa lily is a CNPS List 1B plant and protected as a rare biological resource by the CDFG and County. It is not currently listed or proposed for listing by the Federal or State governments as identified in Table 4.3-3. Two extensive occurrences of San Luis Obispo mariposa lily plants were observed within the Agricultural Residential Cluster Subdivision disturbance areas. Development of proposed Lots 2 through 19, Lots 43 through 49, and Lots 51 through 66 and associated roadways would impact the San Luis Obispo mariposa lily by removal of plants or disturbance and fragmentation of habitat through grading and other ground disturbance. Although the San Luis Obispo morning glory, a CNPS List 1B species, was not identified during the 2006 spring and summer surveys, this species may nevertheless occur because it randomly distributes its seeds annually. It is likely that its on-site distribution would increase under ideal wet-spring conditions, or decrease in drought years. This would be a Class II, *significant but mitigable*, impact.

Mitigation Measures. The following mitigation measures are required in order to reduce impacts to the San Luis Obispo mariposa lily and San Luis Obispo County morning glory to a less than significant level:

**Agricultural Residential Cluster Subdivision B-5(a)**      **Follow-up Special-status Plant Surveys.** Follow-up special-status plant surveys for San Luis Obispo mariposa lily and San Luis Obispo County morning glory shall be performed in the spring prior to commencement of ground disturbance. The survey for San Luis Obispo mariposa lily shall be required only on potential impact areas (i.e., Lots 2 through 19, Lots 43 through 49, Lots 51 through 66, and the portion of Roads A and B) containing San Luis Obispo mariposa lily that are delineated on Figure 4.3-2. The applicant shall submit to the County an updated San Luis Obispo mariposa lily population survey report of the Agricultural Residential Cluster Subdivision site conducted by a County approved botanist.



The San Luis Obispo County morning glory has not previously been observed in the Agricultural Residential Subdivision area, but it is known to occur adjacent to the site southeast of Yerba Buena Creek in the Miller Flats area. Since suitable habitat exists, surveys shall be conducted prior to grading to determine whether this species exists in the project area.

The purpose of the follow-up special-status plant surveys is to provide accurate baseline information for the preparation of the San Luis Obispo mariposa lily and San Luis Obispo County morning glory mitigation and monitoring plan for the areas proposed for construction. The follow-up will ensure a current and accurate assessment of the numbers of individuals within the Agricultural Residential Cluster Subdivision site that will be impacted by development. The updated survey shall quantify the total number of individuals within each lot and road segment proposed for development. Areas occupied by these species shall be flagged (and/or identified using a Global Positioning System) for future bulb and plant salvage and seed collection efforts.

**Plan Requirements and Timing.** The applicant shall submit to the County an updated survey report consistent with the survey criteria described above. The survey shall be conducted by a County approved botanist during April through June when plants are in bloom and evident. The applicant shall submit written proof that the CDFG has been contacted and supplied with the most recent survey results. The results of the follow-up survey shall be incorporated into the preparation of the mitigation and monitoring plan for the development.

**Monitoring.** The County shall verify that the survey has been conducted by a County approved botanist. The County shall also verify that the CDFG has been notified and any of their comments or concerns are included in the special-status plant species mitigation and monitoring plan.

**Agricultural Residential  
Cluster Subdivision  
B-5(b)**

**San Luis Obispo Mariposa Lily and San Luis Obispo County Morning Glory Mitigation and Monitoring Plan.** Prior to the issuance of any grading permits, a mitigation and monitoring plan that addresses impacts to the San Luis Obispo mariposa lily and San Luis Obispo County morning glory (if present) shall be prepared and approved by the County and CDFG. The detailed mitigation and monitoring plan shall be developed by a County-approved qualified biologist to protect and enhance the remaining occurrences of these species within the Agricultural Residential Cluster Subdivision site and describe a collection and restoration plan to mitigate for impacted areas. The mitigation





and monitoring plan shall at a minimum to include the following:

- A worker education program that shall include identification of special-status plant species and their habitat, the limits of construction, efforts required to reduce impacts to these species, and a fact sheet summarizing this information;
- Description of a collection plan to ensure that all San Luis Obispo mariposa lily bulbs and seeds from San Luis Obispo County morning glory plants located within 25 feet of the proposed lots and roads will be removed by a qualified biologist during the appropriate season prior to clearing and grading activities associated with lot development and road construction;
- Description of proposed propagation techniques using collected material;
- Specific areas proposed for revegetation and rationale for why these sites are suitable;
- Specific habitat management and protection concepts to be used to ensure long-term maintenance and protection of the San Luis Obispo mariposa lily and San Luis Obispo County morning glory such as annual population census surveys and habitat assessments; establishment of monitoring reference sites; fencing of species preserves and signage to identify the environmentally sensitive areas; a seasonally-timed weed abatement program; and seasonally-timed plant/seed/bulb collection, propagation, and reintroduction of San Luis Obispo mariposa lily and San Luis Obispo County morning glory into specified receiver sites;
- Success criteria based on the goals and measurable objectives to ensure a viable San Luis Obispo mariposa lily and San Luis Obispo County morning glory populations on the Agricultural Residential Cluster Subdivision site in perpetuity;
- An adaptive management program to address both foreseen and unforeseen circumstances relating to the preservation and mitigation programs;
- Remedial measures to address negative impacts to San Luis Obispo mariposa lily and San Luis Obispo County morning glory and their habitat that may occur during construction activities, as well as post-construction when dwellings are occupied;
- An education program to inform residents of the presence of San Luis Obispo mariposa lily, San Luis Obispo County morning glory, and other sensitive biological resources on-site, and to provide methods that residents can employ to



reduce impacts to species occurrences in protected open space areas;

- Reporting requirements to track success or failure of the mitigation program and to ensure consistent data collection and reporting methods used by monitoring personnel; and,
- Maintenance and cost estimates.

The mitigation ratio (habitat area created to habitat area impacted) will be 2:1 for special-status plant species' habitat impacted by development of the Agricultural Residential Cluster Subdivision. Mitigation for the San Luis Obispo morning glory may also occur in mitigation area designated for the Valley Needlegrass Grassland as this is the preferred habitat for this species [please refer to Agricultural Residential Cluster Subdivision measure B-2(a)].

**Plan Requirements and Timing.** The applicant shall submit to the County Environmental and Resource Management Division and CDFG the San Luis Obispo mariposa lily and San Luis Obispo County morning glory mitigation and monitoring plan for their review prior to issuance of grading permits. Seed and/or bulbs shall be collected in the appropriate season immediately prior to the start of grading activities. The mitigation and monitoring efforts shall be continued for a period of five years to ensure that success criteria are met, and annual reports evaluating the success of the program shall be submitted to the County. **Monitoring.** The County Environmental and Resource Management Division and CDFG shall incorporate any recommendations from their review into the final mitigation and monitoring program. The County shall review the annual monitoring reports and verify that the monitoring program has been conducted appropriately by a County-approved botanist.

**Agricultural Residential Cluster Subdivision B-5(c)**

**Protective Fencing.** A qualified biologist shall oversee the installation of temporary fencing around habitat containing the San Luis Obispo mariposa lily and/or San Luis Obispo County morning glory occurrences, prior to any construction activities in the vicinity. Protective fencing shall remain in place throughout construction activities.

**Plan Requirements and Timing.** Fencing shall be installed prior to the start of grading activities. **Monitoring.** Planning and Building shall site inspect during construction for compliance.

Residual Impacts. The implementation of the above mitigation measures would reduce impacts to a less than significant level.



**Agricultural Residential Cluster Subdivision Impact B-6**      **The proposed Agricultural Residential Cluster Subdivision could result in a direct take of the federally threatened Vernal Pool Fairy Shrimp through grading activities for the proposed development, and sediment runoff into seasonal pools. This potential impact is Class II, significant but mitigable.**

All seasonal pools are potentially suitable habitat for the Vernal Pool Fairy Shrimp (VPFS). All of the seasonal pools on the Agricultural Residential Cluster Subdivision site are situated within low gradient ephemeral drainages and/or wetland habitats. Thomas (2003) conducted wet-season VPFS surveys at 19 sites in 2003, but because these surveys were conducted within more than the 14-day requirement following pool filling, they were not considered to meet USFWS (1996) protocol requirements. The habitat assessment for the VPFS determined that potentially suitable VPFS habitat was present within SP 1, 2, 3, 4, 5, 6, and -7 (Rincon Consultants, 2006a). Following this initial assessment, one season of USFWS protocol wet season surveys for VPFS was conducted in 2005/2006. No VPFS were observed during wet season survey efforts within SP 1, 2, 3, 4, 5, 6, or 7 (Rincon Consultants, 2006b). However, in accordance with the USFWS (1996) survey protocol, a consecutive dry season survey must have been performed within the same year following the first wet season survey, or a second wet season survey shall be performed within 5 years of the first wet season survey to conclusively determine the presence or absence of VPFS. The second wet season survey would ~~have~~ **need** to be conducted during or before the 2010-2011 rain year. A wet season survey was conducted in lieu of the dry season survey because the EIR environmental review process was initiated during winter, in the wet season. Furthermore, branchiopod species are more accurately determined during wet season survey than the dry season surveys where identification of fairy shrimp cyst (eggs) below the genus level is difficult and inconclusive. Because a second protocol wet season survey has not been performed to date, and since the period has expired in which a dry season survey could have been performed following the protocol wet season survey, the VPFS surveys remain inconclusive and VPFS can be presumed present at all suitable habitats. The development of residential lots and associated roads will directly impact Seasonal Pool 2 (SP 2) through road construction and indirectly impact SP 1, SP 3, and SP 7 through grading activities.

Impacts to seasonal pools primarily consist of sedimentation from grading activities associated with lot and road construction, and long-term changes in hydrology and water quality. The development of Lots 29 through 35 and construction of the proposed access road to these lots would indirectly impact SP 1; the development of Lots 87, 88, 92, and 93 and construction of the access road to these lots would indirectly impact SP 3; the development of lots 99 through 109 and construction of the access road to these lots would directly impact SP 2; and, the installation of a pipeline within the 100 foot fee title right-of-away for pipeline purposes will impact SP 7.

Mitigation Measures. The following mitigation measures are required to conclusively determine the presence or absence of VPFS within the on-site seasonal pools and reduce impacts to VPFS to a less than significant level, if present:

**Agricultural Residential Cluster Subdivision B-6(a)**      **VPFS Presence/Absence Determination.** Prior to issuance of Grading Permits, a USFWS protocol wet season survey shall be conducted prior to 2010/2011 by a qualified and federally permitted biologist to complete protocol survey requirements to



conclusively determine the presence or absence of VPFS within the Agricultural Residential Cluster Subdivision site. The wet season survey shall include surveys of SP 1, 2, 3, 4, 5, 6, and 7 per the USFWS (1996) guidelines. A report consistent with current federal reporting guidelines shall be prepared to document the methods and results of surveys. Should the presence of VPFS or additional special-status wildlife species be determined, a map identifying locations in which these species were found shall be prepared and included in the report.

If the surveys produce a negative finding for the presence of VPFS, then no further mitigation would be required. If VPFS are identified within SP 1, 2, 3, 4, 5, 6, or 7, then Agricultural Residential Cluster Subdivision measure B-6(b) would be required.

**Plan Requirements and Timing.** The applicant shall hire a USFWS-permitted biologist to conduct a dry season survey and prepare a final report of findings. A copy of the biologist's federal permit shall be submitted to Planning and Building before the surveys are initiated. Survey results shall be submitted to the USFWS and Planning and Building prior to issuance of Grading Permits. **Monitoring.** Planning and Building shall verify completion of the surveys and coordination with USFWS prior to approval of Grading Permits.

**Agricultural Residential  
Cluster Subdivision  
B-6(b)**

**Mitigation for VPFS.** This measure shall only apply if VPFS are identified during USFWS protocol surveys.

The applicant shall implement measures that minimize the Agricultural Residential Cluster Subdivision adverse effects on VPFS. Subject to concurrence by and coordination with USFWS, required measures may include the following:

- Avoidance of occupied habitats and a three hundred-foot setback from occupied habitats; and
- Where avoidance is not possible, compensatory mitigation for impacts to occupied habitats at a 3:1 ratio, and impacts to potentially suitable habitats in which VPFS were not found at a 2:1 ratio.

A USFWS permitted biologist familiar with VPFS habitat "creation" techniques shall review VPFS compensatory mitigation areas. Enhancement of the on-site vernal pool/wetland habitat that is undisturbed by Agricultural Residential Cluster Subdivision may also be a part of the mitigation program for any impacted VPFS habitats. Upon approval from the USFWS, an appropriate salvage and relocation



methodology will be selected that will include the following:

- Shrimp cysts shall be collected during the dry season from the existing habitat and placed into storage;
- Topsoil shall also be removed and stored under conditions suitable to retain cysts, and used as a top dressing for created vernal pools as proposed in the VPFS mitigation plan;
- If topsoil is not used, preserved cysts would be added to the recreated vernal pool/wetlands in December or January, after sufficient pooling has occurred.

**Plan Requirements and Timing.** Prior to approval of Grading Permits for the Agricultural Residential Cluster Subdivision, the applicant shall coordinate with USFWS, and the ACOE if necessary. The applicant shall present written confirmation from USFWS that the project complies with the applicable requirements of FESA. During construction, the biologist shall submit a report to the County detailing the results of the monitoring. **Monitoring.** Planning and Building staff shall verify that the Agricultural Residential Cluster Subdivision development plan is in compliance with the federal Endangered Species Act. Planning and Building shall review monitoring reports and site inspect during construction for compliance.

Residual Impacts. Implementation of the above mitigation measures in concert with Agricultural Residential Cluster Subdivision measures B-4(a) (Wetland and Riparian Protection), B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation Measures) and B-9(b) (Southwestern Pond Turtle Avoidance, Capture and Relocation) would reduce impacts to VPFS to a less than significant level. Therefore, the impact to VPFS is Class II, *significant but mitigable*.

**Agricultural Residential Cluster Subdivision Impact B-7**

**The proposed Agricultural Residential Cluster Subdivision could result in a direct take of the federally threatened South/Central California Coast Steelhead and/or the loss of Federally designated Steelhead Critical Habitat through grading activities for the proposed development, and sedimentation of occupied creeks. This potential impact is Class II, *significant but mitigable*.**

The federally threatened **South/Central California Coast Steelhead (Steelhead)** is known to occur within the on-site portion of Trout Creek (Thomson and Larsen, unpublished data). Trout Creek is located within the upper Salinas River watershed and is a tributary to Santa Margarita Creek, which converges with the Salinas River northeast of the project site. The Salinas River enters the Pacific Ocean approximately 150 miles north near the City of Monterey. Santa Margarita Creek and the Salinas River are Steelhead-occupied streams (Mike Hill [CDFG], personal communication; NMFS, 2005). In addition, all of these waterways are within Steelhead Critical Habitat (NMFS, 2005). Within the Agricultural Residential Cluster Subdivision site,



Steelhead are likely to occupy Trout Creek during moderate to high flow periods in average to above average rain years (Mike Hill [CDFG], personal communication). The on-site portion of Trout Creek has exceptional breeding and migratory habitat consisting of rounded gravel to cobble bed substrate, tree snags, overhanging banks, and moderate to deep pools suitable for Steelhead spawning. Steelhead potentially could occur in Tostada Creek during periods when conditions are suitable.

Impacts from development of the proposed Agricultural Residential Cluster Subdivision would occur to Steelhead from construction of proposed lots and roads and associated sedimentation in Steelhead creeks. Habitat degradation caused by sediment entering Trout and Tostada Creeks during grading activities may result in the loss of suitable spawning pools and reduction in abundance and diversity of prey. Sedimentation from grading and other construction activities could potentially bury and suffocate eggs and fry, and clog the gills of juvenile and adult Steelhead.

Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially affect this species, depending on final designs.

It should be noted that, as discussed in Section 4.14 (*Water and Wastewater*) of this EIR, water demand from the proposed Agricultural Residential Cluster Subdivision may contribute to overdraft of the aquifer system. Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply) requires that the applicant acquire imported water supply to serve the Agricultural Residential Cluster Subdivision. Due to uncertainty regarding timing and availability of these sources, this impact is *significant and unavoidable*. Although this is a Class I impact, the applicant is required to obtain imported water prior to implementation of the Agricultural Residential Cluster Subdivision, and development could not occur without adequate water supply. As a result, water use to serve the proposed Agricultural Residential Cluster Subdivision would not reduce stream flow or water supply available for riparian vegetation and Steelhead migration and breeding habitats.

Mitigation Measures. The following mitigation measures are required to reduce impacts caused by development of the Agricultural Residential Cluster Subdivision to the Steelhead to a less than significant level:

**Agricultural Residential Cluster Subdivision B-7(a)**

**South/Central California Coast Steelhead (Steelhead)**

**Mitigation, Minimization and Protection Plan.** Steelhead have been identified on-site and setbacks from their identified habitat shall be implemented to avoid or minimize impacts to this federally listed species and its habitat. Prior to development, a Steelhead Protection Plan shall be prepared by a qualified Steelhead biologist to protect Steelhead within the on-site portions of Trout and Tostada Creeks. The plan shall include, but not be limited to the following:

- A 200 foot permanent buffer from the top of bank of Trout and Tostada Creeks and 50 foot buffer or minimum setback from ephemeral drainages that are tributaries to Trout Creek shall be established and maintained in



perpetuity. In the short term, this buffer will ensure construction activities do not increase the erosion potential in the area or facilitate construction related sediment from entering the creek. The buffer shall be demarcated with highly visible construction fencing for the benefit of contractors and equipment operators. In the long term, this buffer will minimize impacts to riparian habitats that are critical for Steelhead, and reduce the amount of sediment and pollutant runoff that would enter these waterways. Roadways, grading, landscaping, structures and other types of disturbance shall be prohibited within these buffer areas, with the exception of road crossings, as detailed below.

- Road crossings of Trout and Tostada Creeks are allowable (if permitted by the appropriate agencies) if the following measures are implemented. The crossings must be designed following the NMFS Southwest Region's (2001) Guidelines for Salmonid Passage at Stream Crossings [<http://swr.nmfs.noaa.gov/hcd/MNFSSCG.PDF>]. Clear-span structures are recommended. Areas of temporary disturbance resulting from the construction or improvements to road crossings shall be restored using native vegetation at a minimum of 2:1 (area restored:area temporarily impacted). However, agency permitting for impacts to riparian and/or wetland resources may require a higher ratio. Additional details required for riparian restoration are contained within measure B-4(a).
- The applicant shall prepare and submit for approval to the County a sediment and erosion control plan that specifically seeks to protect waters and riparian woodland resources adjacent to construction site. Erosion control measures shall be implemented to prevent runoff into Trout and Tostada Creeks, ephemeral drainages, and wetlands. Silt fencing, straw bales, and/or sand bags shall be used in conjunction with other methods to prevent erosion and sedimentation of the stream channel. The plan shall specify locations and types of erosion and sediment control structures and materials that would be used on-site during construction activities. The plan shall also describe how any and all pollutants originating from construction equipment would be collected and disposed.
- During construction activities, washing of concrete, paint, or equipment shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Washing will not be allowed in locations where the tainted water could affect sensitive biological resources.



The applicant shall coordinate with the NOAA National Marine Fisheries Service and ACOE, and shall demonstrate compliance with Section 7 (federal nexus) and/or Section 10 (no federal nexus) of the federal Endangered Species Act (FESA), as applicable. This consultation may necessitate the issuance of a NMFS Biological Opinion and/or the preparation of a Habitat Conservation Plan for Steelhead and their habitat. The applicant shall also coordinate with CDFG and other resource agencies, as applicable. The applicant shall implement all measures prescribed by these agencies.

**Plan Requirements and Timing.** Prior to issuance of Grading Permits, the Steelhead Protection Plan shall be prepared by a qualified biologist and submitted to NMFS and Planning and Building for review. The plan shall be implemented prior to issuance of grading permits. **Monitoring.** Planning and Building shall review plans in consultation with NMFS, and site inspect during construction for compliance.

**Residual Impacts.** Implementation of the above mitigation measures in concert with Agricultural Residential Cluster Subdivision measures B-4(a) (Wetland and Riparian Protection) and B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation Measures) and those resulting from compliance with the FESA would reduce impacts to Steelhead to a less than significant level. Therefore, the impact to Steelhead is Class II, *significant but mitigable*.

**Agricultural Residential Cluster Subdivision Impact B-8**      **The proposed Agricultural Residential Cluster Subdivision would result in take of the federally threatened California red-legged frog through grading activities for the proposed development, and would fragment the amount of available habitat potentially used for movement and dispersal. This potential impact is Class II, *significant but mitigable*.**

Several federally threatened California red-legged frogs (CRLF) were observed during the 2002-2003 inventory efforts and concurrent incidental sightings within Trout, Taco, and Yerba Buena Creeks and in an agricultural pond midway between Taco Creek and Trout Creek. CRLF tadpoles were observed in the agricultural pond. In 2006, Rincon Consultants surveyed a segment of Trout Creek in which CRLF had not previously been identified the eastern portion of Tostada Creek near its confluence with Trout Creek. Adult CRLF were found in both of these locations. Movement of CRLF, especially breeding season movement and dispersal, likely occurs between Trout, Tostada, and Yerba Buena Creeks. They also likely occur at the irrigation reservoirs, stock ponds and some of the seasonal ponds (i.e., especially SP2) when sufficient water is present. CRLF-occupied aquatic habitats and upland areas between aquatic features would be directly and indirectly impacted by development of the proposed Agricultural Residential Cluster Subdivision. Since CRLF dispersal patterns can occur over a variety of topographic features, CRLF could potentially use any of the proposed development area for movement activities. The Agricultural Residential Cluster Subdivision site does not occur within CRLF Critical Habitat (USFWS, 2006).





Long-term impacts from development of the proposed Agricultural Residential Cluster Subdivision would occur to CRLF from construction of roads and residential uses within the proposed lots. Construction activities could block movement or dispersal of CRLF and result in the death or injury of CRLF by vehicles and heavy equipment. Other long-term impacts are discussed below. Primarily, impacts include direct take and reduced water quality. The CRLF occurrence within Tostada Creek would be impacted by the development of Lots 1, 43, 21, and 83 and Road A. The CRLF occurrence within Trout Creek would be impacted during construction of Lots 87 through 114 and Road D. Indirect impacts to CRLF due to development of the proposed Agricultural Residential Cluster Subdivision include:

- Disturbances due to the presence of humans and associated domestic pets, light, and noise;
- Changes in water quality and in stream pool longevity in occupied or dispersal areas; and,
- Potential for introduction of exotic species and predators.

Long-term impacts related to human presence and associated light, noise and pets may include disruption of foraging, sleeping patterns, habitat use patterns, dispersal, and breeding behavior and displacement of individuals. Nocturnal species, such as the CRLF, that rely on darkness to hunt or evade predators would experience adverse effects from lighting. If domestic pets harass CRLF during breeding, CRLF may abandon their attempt to breed. Domestic pets may dislodge CRLF eggs from vegetation in breeding pools or may cause siltation from trespass in and around pools. In addition, domestic pets may harass or kill dispersing CRLF. The impact to CRLF and its resources arising from long-term, human presence are significant.

The uplands adjacent to and between aquatic sites help maintain the integrity of aquatic sites by protecting them from disturbance and supporting the normal functions of aquatic habitat (USFWS March 2001b). Un-fragmented uplands also provide important dispersal areas between breeding sites. The proposed lot and road configuration could create a barrier to CRLF movement through the site. New roadways could also result in the long-term loss of individuals from automobiles.

Amphibians, in general, typically have complex life cycles and thus more opportunity for exposure to chemicals and more potential routes of exposure than other vertebrates (USFWS January 2000). Agricultural Residential Cluster Subdivision development will introduce chemicals, minerals, and sediment on-site that may act as pollutants to CRLF and its terrestrial and aquatic habitat. Construction of the proposed Agricultural Residential Cluster Subdivision could result in the runoff of sedimentation and other pollutants that would affect local drainages. However, implementation of BMPs, as required under the RWQCB National Permit Discharge Elimination Systems (NPDES) regulations (refer to *Section 4.14: Water and Wastewater*) and Water Quality Certification 401 permit regulations [refer to Agricultural Residential Cluster Subdivision measure B-4(a) (Wetland and Riparian Protection)], would reduce impacts to water quality within CRLF habitat.

The introduction of non-native animals would increase predation of CRLF or act as competitors with CRLF for available resources. Non-native plant species have the potential of displacing native riparian and wetland CRLF habitat. Raccoons and bullfrogs currently exist in the Agricultural Residential Cluster Subdivision area and are known predators of CRLF. These



predators would persist with development, as they are tolerant of urban uses and in the case of bullfrogs often out-compete CRLF for resources and habitat. Residential uses near CRLF breeding areas and throughout the site may encourage the presence of raccoons by the introduction of easily accessible food, such as human trash and pet food. Therefore, Agricultural Residential Cluster Subdivision development may increase the presence of predatory raccoons resulting in significant impacts on CRLF. Bullfrogs already have an extensive presence within the project site. Any impacts to CRLF and its habitat would allow further occupation of bullfrogs during rain season dispersal activities and risk local extinction of CRLF within Santa Margarita Ranch. As previously stated, domestic dogs and cats may harass or act as predators causing CRLF to flee the area or may cause direct mortality. Direct impacts to CRLF would most likely occur in wetland and riparian areas; however, individuals could be injured or killed in upland portions of the Agricultural Residential Cluster Subdivision area during construction because CRLF are known to move across otherwise unsuitable habitat during the rainy season while dispersing or looking for breeding areas. In addition, grading activities for the proposed Agricultural Residential Cluster Subdivision would increase the risk of direct mortality to dispersing CRLF via accidents with automobiles or construction equipment. Construction of the proposed Tostada Road creek crossings would directly impact CRLF aquatic habitat.

Vegetation clearing and earth moving activities associated with site preparation for the proposed Agricultural Residential Cluster Subdivision has the potential to disturb ground-dwelling species, including CRLF. CRLF may experience displacement if present in upland areas during construction activities and may experience direct mortality due to grading. Grading and the exposure of soils during construction activities could result in the transport of sediment to Tostada, Trout, and Taco Creek resulting in impacts to CRLF.

Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially affect this species, depending on final designs.

Mitigation Measures. If feasible, the applicant should avoid known CRLF breeding sites and potential movement corridors. The proposed project design would not avoid impacts to CRLF and its habitat. If avoidance cannot be achieved, the following mitigation measure is required to reduce direct and indirect impacts on the CRLF:

**Agricultural Residential Cluster Subdivision B-8(a)**

**California Red-legged Frog Avoidance, Minimization, and Mitigation Measures.** Subject to concurrence by and coordination with the USFWS, required measures shall include the following:

- At least 45 days prior to the onset of activities, the applicant shall submit the name(s) and credentials of biologists who would conduct activities specified in the following measures. No project activities shall begin until proponents have received written approval from the USFWS that the biologist(s) is qualified to conduct the work.
- A USFWS-approved biologist shall survey the work site



and suitable habitat within 330 feet of work sites two weeks before the onset of activities. If CRLF, tadpoles, or eggs are found, relocations shall be conducted only if authorized by the USFWS. If USFWS approves moving animals, the approved biologist shall be allowed sufficient time to move CRLF from the work site before work activities begin. Only USFWS-approved biologists shall participate in activities associated with the capture, handling, and monitoring of CRLF. All conditions specified by the USFWS exemption or authorization shall be implemented regarding relocation of this species.

- If CRLF are found during the preconstruction surveys within 330 feet of any work area, and for any areas already known to be occupied by CRLF, work within 330 foot of these habitats must be limited to the period between April 30 to July 30 *or* the work area must be surrounded by exclusionary fencing to reduce impacts to frogs that are in upland areas during the rainy season or juvenile dispersal. The exclusionary fencing shall be at least three feet high and keyed into the ground, made of solid mesh (such as silt fence; orange construction fence is not suitable) and shall be maintained throughout the construction period. This fencing can also function for erosion and sedimentation control. An approved biologist must survey the project limits for CRLF each morning prior to the start of work. Any CRLF found within the work area shall be relocated, if authorized by the USFWS. If relocations are not authorized by the USFWS, the fence shall be modified to allow the frog to pass through to suitable habitat, and work shall not commence until it has left.
- Before any construction activities begin on the Agricultural Residential Cluster Subdivision, a USFWS-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the CRLF and its habitat, the importance of the CRLF and its habitat, the general measures that are being implemented to conserve the CRLF as they relate to the project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.
- A USFWS-approved biologist shall be present at the work site until such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance



have been completed. After this time, the contractor or permittee shall designate a person to monitor the on-site compliance with all minimization measures. The USFWS approved biologist shall ensure that this individual receives training outlined above and in the identification of CRLF. The monitor and the USFWS-approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by USFWS during review of the proposed action. If work is stopped, USFWS, and the ACOE as applicable, shall be notified immediately by the USFWS-approved biologist or on-site biological monitor.

- During project activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from the work areas.
- All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 100 feet from any riparian habitat or water body. The permittee, and ACOE as applicable, shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the permittee shall prepare and comply with a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.
- A USFWS-approved biologist shall ensure that the spread or introduction of invasive non-native plant and animal species, especially bullfrogs shall be avoided to the maximum extent possible. Invasive exotic plants and animals in the development shall be removed and destroyed.
- Agricultural Residential Cluster Subdivision riparian and wetland areas shall be revegetated with an appropriate assemblage of native riparian wetland and upland vegetation suitable for the area. A species list and restoration and monitoring plan shall be included with the project proposal for review and approval by USFWS, and the ACOE as applicable. Such a plan must include, but not be limited to: location of the restoration, species to be used, restoration techniques, time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not



achieved.

- Stream contours shall be returned to their original condition at the end of project activities, unless consultation with USFWS has determined that it is not beneficial to the species or feasible.
- The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary for development. Routes and boundaries shall be clearly demarcated, and these areas shall be outside of riparian and wetland areas. Where impacts occur in these staging areas and access routes, restoration shall occur as identified in the above measures.
- A 200 foot permanent buffer (from the edge of the high water line for ponds, or from the top of bank on either side of creeks) shall be established and maintained in perpetuity around water bodies with confirmed occurrences of CRLF. This includes the lengths of Trout, Tostada, and Yerba Buena Creeks; an upstream pool in Taco Creek; and any stock ponds that may contain CRLF. In the short term, this buffer will ensure construction activities do not increase the erosion potential in the area or facilitate construction related sediment from entering the creeks. The buffer shall be demarcated with highly visible construction fencing for the benefit of contractors and equipment operators. In the long term, this buffer will minimize impacts to riparian and emergent wetland habitats that are critical for upland habitat use by CRLF, and reduce the amount of sediment and pollutant runoff that would enter these waterways. Roadways, grading, landscaping, structures and other types of disturbance shall be prohibited within these buffer areas. Road crossings of these streams are allowable (if permitted by the appropriate agencies) following the measures listed above. Permanent buffer areas shall be demarcated with a type of fencing that would prohibit vehicular and livestock access, discourage use by humans, but allow access by wildlife. An example of fencing that could meet these requirements is welded pipe fence such as the type that exists at the entrance of the Agricultural Residential Cluster Subdivision.
- Areas of temporary disturbance resulting from the construction or improvements to road crossings shall be restored using native vegetation at a minimum of 2:1 (area restored to area temporarily impacted). However,



agency permitting for impacts to riparian and/or wetland resources may require a higher ratio. Additional details required for the riparian restoration plan are contained within measure B-4(a).

- Restrictions on the use of pesticides near water bodies with confirmed occurrences of CRLF.

**Plan Requirements and Timing.** Prior to approval of Grading Permits for the Agricultural Residential Cluster Subdivision, the applicant shall coordinate with USFWS, and the ACOE if necessary. The applicant shall present written confirmation from USFWS that the project complies with the applicable requirements of the FESA. During construction, the biologist shall submit a report to the County detailing the results of the monitoring. **Monitoring.** Planning and Building shall confirm compliance with the FESA, review monitoring reports, and inspect site during construction for compliance.

Residual Impacts. Implementation of the above mitigation measure and those required as a result of FESA compliance would reduce impacts to the CRLF to a less than significant level. Therefore, the impact to CRLF is Class II, *significant but mitigable*.

**Agricultural Residential Cluster Subdivision  
Impact B-9**

**The proposed Agricultural Residential Cluster Subdivision would directly and indirectly reduce the populations and available habitat for wildlife in general, including special-status wildlife species. Because of the size of the site, degree of habitat diversity, and known or potential presence of a number of special-status wildlife species on-site, the loss of wildlife habitat is a Class II, *significant but mitigable*, impact.**

Potential long-term impacts to wildlife are related to the long term loss of substantial acreage of habitats, the barrier effect caused by the development, and constant human presence. Specific impacts include the loss and disruption of foraging and breeding habitat, reduction in continuous habitat or wildlife corridors, disruption of wildlife movements, displacement of individuals, and night lighting and increased noise.

Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially affect habitat for wildlife, depending on final designs.

*Impacts to Wildlife in General.* The vegetation changes associated with the Agricultural Residential Cluster Subdivision project development would reduce the acreage of the vegetation and would change the ability of the on-site plant communities to support wildlife populations, including special-status species. In addition to the direct loss of habitat, development would likely result in increased mortality to species that continue to utilize the site after development due to domestic and feral animal predation and collecting, as well as attrition of important prey resources for wildlife in the remaining habitat.



A wide variety of wildlife species could be adversely affected by the presence of lights from the proposed development. Nocturnal species that rely on darkness to hunt or evade predators would be impacted, including owls, nighthawks and rodents. Certain species of aerial-foraging bats may benefit from night lighting because of the attraction of their prey to lights.

*Impacts to Special-Status Wildlife.* The special-status species listed in Table 4.3-3 that are present within the Agricultural Residential Cluster Subdivision project site are likely to be impacted by direct and indirect activities associated with implementation of the proposed Agricultural Residential Cluster Subdivision. Development activities may impact aquatic species such as South/Central California Coast Steelhead and its designated critical habitat within Trout Creek. Similarly, CRLF breeding and dispersal/movement corridors within Trout and Tostada Creeks and upland areas through the site would be affected as would southwestern pond turtle's breeding pools (seasonal pools and in stream pools) and dispersal corridors. The western spadefoot has not been documented on the Agricultural Residential Subdivision site. However, because suitable habitat exists, they are known to occur on other portions of the Ranch, and they are difficult to detect, it is possible that they may occur on the site. Southwestern pond turtles were observed during survey efforts in seasonal pools 2 and 6 and within Trout and Yerba Buena Creek. Impacts to these species would include potential loss of aquatic and upland habitat and decreased dispersal. The development will reduce habitat for terrestrial special-status reptile species including the coast horned lizard and silvery legless lizard. The project will also impact numerous bird species and their habitat, including foraging and nesting habitat including for Fully Protected species such as the white-tailed kite and golden eagle, as well as birds protected under the Migratory Bird Treaty Act. The proposed Agricultural Residential Cluster Subdivision would also result in potential impacts to special-status mammal species such as the American badger, pallid bat and Townsend's big-eared bat. The development would directly impact the American badger by reducing breeding and foraging habitat, and indirectly through house lighting, domesticated pets, and an increase in traffic. The use of rodenticides may also directly kill this species through consumption of poisoned mammalian prey. The removal of oak trees, especially aging or older valley and blue oak trees, would reduce roosting habitat for the pallid bat, and the conversion of on-site habitat to development would reduce foraging habitat for the pallid and Townsend's big-eared bat. The development area does not currently contain roosting sites (limestone caves, lava tubes, mine tunnels, buildings, or other human-made structures) for the Townsend's big-eared bat.

*Impacts to Wildlife Movement.* The construction of new roads and residential development would fragment habitat patches, thereby negatively affecting wildlife movements. These types of barriers to movement have greater impacts for small-sized and less-mobile animals, but even large mammal movements can be affected by development at this scale. Impacts to larger animals can result in re-adjustment of home ranges, breeding territories, and foraging habits in response to changes in prey movements. The presence of roadways would introduce a source of mortality not currently present on the site. Impacts to potential CRLF movement corridors are addressed in Agricultural Residential Cluster Subdivision Impact B-8 above.

*Impacts Related to Invasive Non-Native Species.* Development of the Agricultural Residential Cluster Subdivision would result in the introduction or maintenance of non-native animals such as bullfrogs, house sparrows, European starlings, dogs, cats, Norway and black rats, house mice and horses to the Agricultural Residential Cluster Subdivision site. In addition, the proposed lot development for residential uses would intentionally and unintentionally



introduce or maintain non-native invasive plants through landscaping of new residences/structures and streets. The introduction and/or continued presence of these species would directly and indirectly impact wildlife resources in several ways: 1) by out-competing native species for food; 2) predation; and 3) habitat alteration. Domestic animals, especially cats and dogs, can be major predators of many bird and small reptile species in residential areas. Residential development may result in the spread of non-native plants through disturbance and escapes of ornamentals. This could potentially impact wildlife, including special-status species, due to loss of food resources and cover.

*Impacts to Water Resources.* Adverse effects on the water quality of Trout and Tostada Creeks, ephemeral drainages, and wetlands, both on-site and downstream from the Agricultural Residential Cluster Subdivision, could pose a risk to these habitats and the species that use them. Potential risk comes from the following sources: (a) fuels, hydraulic fluids, paints, solvents, and other chemicals; (b) increased sedimentation could occur during construction; (c) roadways would become point sources for runoff into nearby creeks; (d) additional pesticides, fertilizers, and herbicides would be introduced onto the site.

Because of the sensitivity of habitats associated with the oak woodland within the ephemeral drainages and riparian habitat within Trout and Tostada Creeks, as well as their connection to the Salinas River, the introduction of sediments, fuels, oils, solvents, pesticides, fertilizers, herbicides, and animal waste to these watercourses is a potentially significant impact. If not properly mitigated, these potential impacts could result in take of federally threatened South/Central California Coast Steelhead. Refer to Section 4.5, *Drainage, Erosion and Sedimentation*, of this EIR for further discussion of impacts and mitigation relating to water quality.

Mitigation Measures. Because of the potential for the Agricultural Residential Cluster Subdivision to cause impacts to wildlife in general, the following mitigation measures are required:

**Agricultural Residential Cluster Subdivision B-9(a)**

**Legless and Horned Lizard Capture and Relocation.**

Immediately prior to the initiation of construction in the developable area, capture and relocation efforts shall be conducted for the silvery legless lizard and coast horned lizard. Designated areas in permanent open space shall be identified within the Agricultural Residential Cluster Subdivision site for release of captured legless lizards and coast horned lizards.

Surveys shall be conducted by a County approved biologist, and shall include the following minimum requirements:

- Raking of leaf litter and sand under shrubs within suitable habitat in the area to be disturbed to a minimum depth of eight inches for the silvery legless lizard.
- In addition to raking, “coverboards” shall be used to capture silvery legless lizards and coast horned lizards. Coverboards can consist of untreated lumber, sheet metal, corrugated steel,





or other flat material used to survey for reptiles and amphibians. Coverboards shall be placed flat on the ground and checked regularly in the survey areas. Coverboards shall be placed in the survey area a minimum of two weeks, but preferably at least four weeks, before surveys begin and will be checked once a week during raking surveys. Captured lizards will be placed immediately into containers containing sand or moist paper towels and released in designated release areas no more than three hours after capture.

- During all grading activities, a qualified biologist shall be on-site to recover any silvery legless lizards that may be excavated/unearthed with native material. The unearthed lizards shall be immediately relocated and released to the designated release area.

**Plan Requirements and Timing:** The applicant shall hire a County approved biologist and submit survey results prior to issuance of Grading Permits. Prior to issuance of grading permits, the biologist shall submit a report to the County detailing the results of the monitoring and if applicable, relocation efforts. **Monitoring:** Planning and Building shall review the survey report and site inspect during construction for compliance.

**Agricultural Residential  
Cluster Subdivision  
B-9(b)**

**Southwestern Pond Turtle Avoidance, Capture and Relocation.** A County approved biologist shall conduct spring surveys for this species before the onset of construction activities. The survey area shall include ponds located within the Agricultural Residential Cluster Subdivision site with ponded water as well as on-site drainage corridors. If any southwestern pond turtles are found within 1,000 feet of construction activities such as lot grading or road construction, the approved biologist shall contact CDFG to determine if moving any individuals is appropriate. If CDFG approves moving animals, the biologist shall be allowed sufficient time to move the animals from the work site before work activities begin. If CDFG does not recommend moving the animals, a 1,000 foot buffer from the pond, seasonal pool, in stream pools, and /or nesting site shall be implemented. No grading or other construction activities shall occur within the set buffer. Only the approved biologist shall participate in activities associated with the capture and handling of turtles. Agricultural Residential Cluster Subdivision measures B-4(a), B-6(b), and B-8(a) will also benefit this species. B-4(a) will reduce direct impacts (development), restore impacted areas, and reduce potential indirect impacts (sedimentation and concrete/oil runoff) into wetlands and riparian habitat used for breeding and foraging by the southwestern pond turtle. B-6(b) will provide



protection to seasonal pool/wetland habitat that are occupied by the federally threatened VPFS and that may also be used by the SWPT and B-8(a) will provide federal protection to riparian and seasonal pool/wetland habitat that are occupied by the federally-threatened CRLF and that may also be used by the SWPT.

**Plan Requirements and Timing:** The applicant shall hire a County approved biologist and submit survey results prior to issuance of Grading Permits. Prior to issuance of grading permits, the biologist shall submit a report to the County detailing the results of the monitoring and if applicable, relocation efforts. **Monitoring:** Planning and Building shall review the survey report and site inspect during construction for compliance.

**Agricultural Residential  
Cluster Subdivision  
B-9(c)**

**Pre-construction Bird Survey.** To avoid impacts to nesting special-status bird species, namely the state Fully Protected white-tailed kite and golden eagle, the federally-threatened and Fully Protected bald eagle, other special-status bird species listed in Table 4.3-4, and all birds protected under the Migratory Bird Treaty Act, the initial ground-disturbing activities and tree removal shall be limited to the time period between September 1 and February 15. If initial site disturbance, grading, and tree removal cannot be conducted during this time period, a pre-construction survey for active nests within the limits of grading shall be conducted by a qualified biologist at the site two weeks prior to any construction activities. All potential nest locations shall be searched by the biologist including, but not limited to grassland, chaparral, central coastal scrub, and oak woodlands. If active nests are located, all construction work must be conducted outside a buffer zone from the nests to be determined by a qualified biologist. No direct disturbance to nests shall occur until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed and young have fledged the nest prior to the start of construction in the buffer zone. Surveys following the *Protocol for Evaluating Bald Eagle Habitat and Populations in California Bald Eagle* (Jackson and Jennings, 2004) are also required.

**Plan Requirements and Timing.** Required surveys shall be completed by a qualified biologist prior to issuance of grading permits. If required, buffers shall be observed during construction. **Monitoring.** Planning and Building shall site inspect during construction of the development for compliance.

**Agricultural Residential  
Cluster Subdivision  
B-9(d)**

**American Badger Avoidance.** The mitigation measures below are recommended to determine whether badgers are present in the area prior to development and to prevent **American** badgers



from becoming trapped in burrows during construction activities.

- A pre-construction survey for active American badger dens shall be conducted within one month of initial ground disturbance activities by a County qualified biologist. To avoid the potential direct take of adults and nursing young, no grading shall occur within 50 feet of an active badger den as determined by a County-approved biologist between March 1 and June 30.

Construction activities during July 1 through March 1 shall comply with the following measures to avoid direct take of adult and weaned juvenile badgers:

- A County-approved biologist shall conduct a biological survey of the entire development area prior to the start of ground clearing or grading activity. The survey shall cover the entire area proposed for development. Surveys shall focus on both old and new den sites. If dens are too long to see the end, a fiber optic scope (or other acceptable method such as den characteristics) shall be used to assess the presence of badgers. If no fiber optic scope is available, occupation of the potential dens by badgers can be ascertained by dusting the den openings with a fine layer of dust for three successive nights and looking for footprints or other evidence of occupation. Inactive dens shall be excavated by hand with a shovel to prevent badgers from re-using them during construction.
- If American badger dens are found, the qualified biologist shall establish and clearly mark an appropriate buffer zone to protect the den. No grading or construction activities shall occur within the buffer zone until the biologist can safely close the badger den and has removed the buffer zone markings.

**Plan Requirements and Timing:** The applicant shall hire a County approved biologist and submit survey results prior to issuance of Grading Permits. Prior to issuance of grading permits, the biologist shall submit a report to the County detailing the results of the monitoring and if applicable, relocation efforts. **Monitoring:** Planning and Building shall review the survey report and site inspect during construction for compliance.

**B-9(e)** landscaping does not introduce invasive non-native plant species into the vicinity of the site, the final landscaping plan shall be reviewed and approved by a County approved biologist and County Environmental and Resource Management Division prior to implementation. All invasive plant species shall be removed from the landscaping plan.

**Plan Requirements and Timing.** Prior to issuance of Grading Permits, the applicant shall submit a landscaping plan for approval by Planning and Building. **Monitoring.** Planning and Building shall check plans for compliance and shall site inspect six months after completion of the development for compliance.

**Agricultural Residential Cluster Subdivision B-9(f)**

**Pet Brochure.** The applicant shall prepare a brochure that informs prospective homebuyers about the impacts associated with non-native animals, especially cats and dogs, and other non-native animals to the project site. Similarly, the brochure shall inform potential homebuyers of the potential for coyotes to prey on domestic animals.

**Plan Requirements and Timing.** Prior to issuance of Grading Permits, the applicant shall draft a notice which includes the above information, to be recorded with the final map, subject to approval by Planning and Building. **Monitoring.** Planning and Building shall check plans for compliance.

**Agricultural Residential Cluster Subdivision B-9(g)**

**Night Lighting Standards.** Night lighting of public areas shall be kept to the minimum necessary for safety purposes. Exterior lighting within 100 feet of open space shall be shielded and aimed as needed to avoid spillover into open space areas. Decorative lighting shall be low intensity and be less than 25 watts.

**Plan Requirements and Timing.** Prior to issuance of Grading Permits, the applicant shall submit a lighting plan for approval by Planning and Building. **Monitoring.** Planning and Building shall review all lighting plans prior to issuance of building permits and shall site inspect one year after completion of tract development for compliance.

**Agricultural Residential Cluster Subdivision B-9(h)**

**Minimize Road Widths.** Roadway widths adjacent to open space/agricultural areas shall be reduced to the minimum width possible, while maintaining Fire Department Requirements for emergency access, with slower speed limits introduced. Posted speed limits should be 25 mph or less.

**Plan Requirements and Timing.** Prior to final map clearance,



the applicant shall submit the above changes in plans for approval by Planning and Building. **Monitoring.** Planning and Building shall check plans for compliance and shall site inspect one year after completion of the development for compliance.

Residual Impacts. The implementation of the above mitigation measures would reduce impacts to wildlife in general to a less than significant level.

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**c. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.3.2(b) for a discussion of biological resource impacts resulting from the Agricultural Residential Cluster Subdivision independently.

<b>Future Development Program Impact B-1</b>	<b>Implementation of Future Development Program land uses would result in the conversion of California Annual Grassland habitat to urban uses. This is a Class II, <i>significant but mitigable, impact.</i></b>
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As illustrated in Figure 4.3-3, the Future Development Program area contains Central (Lucian) Coastal Scrub, Chamise Chaparral, and California Annual Grassland. The development of several Future Development Program land use components, including wineries, golf course, residential, resort, and ranch headquarters and would directly impact California annual grassland habitat. No impacts are expected to occur to Central (Lucian) Coastal Scrub and Chamise Chaparral from implementation of Future Development Program. The California Annual Grassland habitat type is not considered to be a rare plant community botanically as it is common in the region as well as common throughout central and southern portions of the state. However, if the Future Development Program is implemented, substantial impacts will occur to wildlife that uses California annual grassland for breeding, foraging, migration, and dispersal (Please refer to the Agriculture Residential Cluster Subdivision B-1 mitigation measures for special-status species that are expected to occur in the California annual grassland habitat). As such, impacts to this habitat type from implementation of the Future Development Program would be Class II, *significant but mitigable*.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures B-2(a) (Native Perennial Grassland Restoration Plan), B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation Measures), B-9(c) (Pre-construction Bird Surveys), and B-9(d) (American Badger Avoidance) would apply to all Future Development Program land uses. Future Development Program measures B-5(a) (Seasonally-Timed Rare Plant Surveys) and B-6(a) (VPFS Presence/Absence Determination) would reduce impacts. No additional mitigation is required.

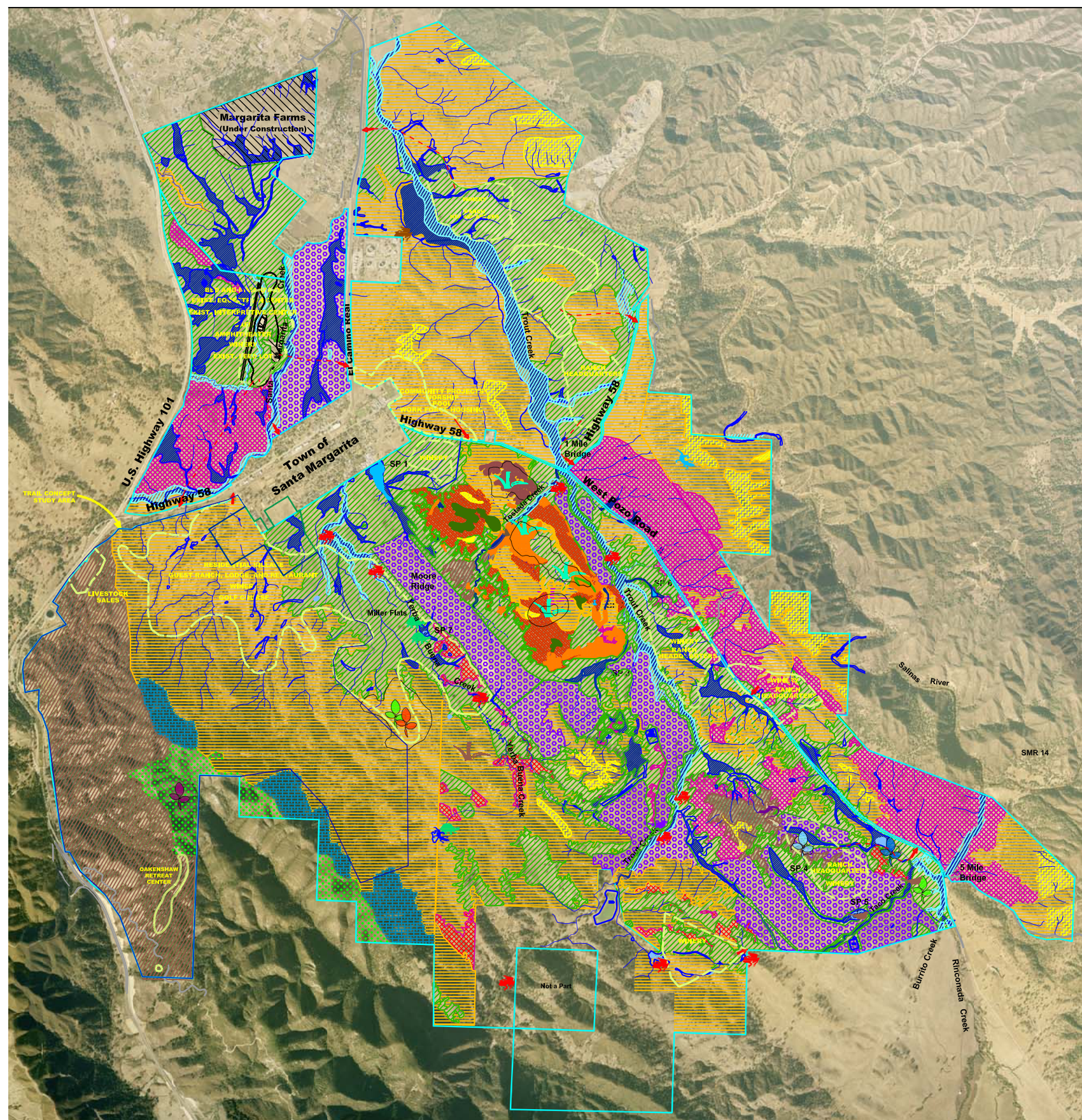
Residual Impact. Implementation of the mitigation measures listed above would reduce impacts to California Annual Grassland habitat and special-status species that may use these habitats to a less than significant level.



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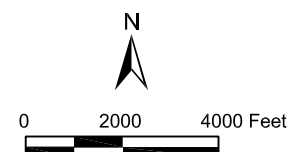


**LEGEND**

- |  |  |  |   |
|--|--|--|---|
|  | Native Perennial Grassland                         |  | Ruderal                                       |
|  | CA Annual Grassland                                |  | Emergent Wetland                              |
|  | Central (Lucian) Coastal Scrub                     |  | Waters of the U.S.                            |
|  | Chamise Chaparral                                  |  | Seasonal Pools                                |
|  | Santa Lucia Manzanita-Eastwood Manzanita Chaparral |  | California Bay Forest                         |
|  | Blue Oak Woodland                                  |  | Riparian                                      |
|  | Coast Live Oak Woodland                            |  | Urban/Residential                             |
|  | Valley Oak Woodland                                |  | Agriculture (Vineyard/Dry Farm)               |
|  | Mixed Oak Woodland                                 |  | Ranch Property Boundary                       |
|  |  |  | Future Development Program Land Use Locations |

**SPECIAL-STATUS SPECIES**

- |  |                              |  |  |
|--|------------------------------|--|--|
|  | = Silvery Legless Lizard     |  | = Catalina Mariposa Lily               |
|  | = California Red-legged Frog |  | = San Luis Obispo Mariposa Lily        |
|  | = Western Spadefoot          |  | = Michael's Rein Orchid                |
|  | = Southwestern Pond Turtle   |  | = Caper-fruited Tropidocarpum          |
|  | = Loggerhead Shrike          |  | = San Luis Obispo County Morning Glory |
|  | = Purple Martin              |  | = San Luis Obispo Owl's Clover         |
|  | = White Tailed Kite          |  | = San Luis Obispo County Lupine        |
|  | = Coast Horned Lizard        |  | = Santa Lucia Manzanita                |
|  | = Coast Range Newt           |  |  |



Future Development Program  
 Biological Constraints Map







**Future Development  
Program Impact B-2**

**Implementation of the Future Development Program would result in the conversion of oak woodland habitat and the removal of and/or impacts to an unknown number of native coast live oak, blue oak, and valley oak trees. This is a Class I, significant and unavoidable impact.**

Implementation of the Future Development Program would result in the direct removal and indirect impacts to blue oak, coast live oak, and valley oak trees, as well as the conversion of native oak woodland habitats into winery, ranch headquarters, retreat center, livestock sales, and a golf course and associated structures and improvements. Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially remove individual oak trees, depending on final designs. Removal of large areas of these oak woodland habitats is a significant impact due to the long time-period necessary for these habitats to establish, and the relatively high amount and quality of wildlife habitat that they provide.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure B-2(a) (Native Perennial Grassland Restoration Plan), B-3(a) (Oak Tree Inventory, Avoidance, and Protection Plan), and B-3(b) (Oak Tree Replacement, Monitoring, and Conservation) would apply to all Future Development Program land uses. No additional mitigation is required.

Residual Impacts. In the short-term, impacts to oak trees and oak woodland habitats cannot be mitigated because of the length of time required for replacement trees to reach maturity and for the conservation areas to have a similar habitat values as those that are removed and/or impacted. Therefore, impacts will remain Class I, *significant and unavoidable*.

**Future Development  
Program Impact B-3**

**Implementation of the Future Development Program would result in the conversion of Native Perennial Grasslands, including Valley Needlegrass Grassland, which is a CDFG Sensitive Natural Community. This would be a Class II, significant but mitigable, impact.**

Implementation of the Future Development Program would impact a portion of on-site Native Perennial Grassland occurring within the conceptual future development areas. Impacts to this habitat would occur as a result of soil and surface disturbance through grading and other ground disturbance, and would lead to fragmentation of habitat areas. Valley Needlegrass Grassland, which is a component of Native Perennial Grassland, is listed by the CNDDDB as a special-status plant community. In addition, any extensive areas in which native perennial bunchgrasses are a significant component of the species composition should be considered for impact analysis (Dave Hacker, CDFG, personal communication).

Mitigation Measures. Agricultural Residential Cluster Subdivision measure B-2(a) (Native Perennial Grassland Restoration Plan) would apply to all Future Development Program land uses.

Residual Impacts. The implementation of the above mitigation measure would reduce impacts to Native Perennial Grassland habitat to a less than significant level.



**Future Development  
Program Impact B-4**

**Implementation of the Future Development Program would impact wetland and waters of the U.S. regulated by the U.S. Army Corps of Engineers (ACOE) and Regional Water Quality Control Board (RWQCB) and riparian areas regulated by the California Department of Fish and Game (CDFG). This is a Class II, significant but mitigable impact.**

Emergent wetland/~~seasonal pool~~ habitat occurs within many areas of the Future Development Program. As described in Agricultural Residential Cluster Subdivision Impact B-4, emergent wetlands consist of wetlands adjacent to on-site creeks, wetlands within ephemeral drainages, isolated wetlands, and seasonal pools. ACOE defined wetland does not include isolated wetlands and seasonal pools. ACOE defined “waters of the U.S.” and the riparian habitat associated with Burrito, San Margarita, Trout, Taco, and Yerba Buena Creeks occur within the Future Program Development conceptual land use areas. The wetlands and “waters of the U.S.” areas on the property would be regulated on a federal, state, and possibly local level, thus making it necessary to coordinate with applicable regulatory agencies such as the ACOE, RWQCB, and CDFG prior to impacting these resources. Refer to Agricultural Residential Cluster Subdivision Impact B-4 for further discussion of wetland, waters of the U.S., and riparian zone regulations. Development of the Residential Village and Golf Course would directly and indirectly impact Yerba Buena Creek and known CRLF occurrences. Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially affect jurisdictional areas at road crossings.

It should be noted that the Future Development Program conceptually includes creek drainage improvements. However, since these improvements have not been specified, impacts are potentially significant.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure B-4(a) (Wetland and Riparian Protection) would apply to all Future Development Program land uses. Because these habitat types support special status animal species, impacts to this habitat type would require mitigation. Agricultural Residential Cluster Subdivision measures B-6(a) (VPFS Presence/Absence Determination), B-6(b) (Mitigation for VPFS), B-7(a) (South/Central California Coast Steelhead (Steelhead) Mitigation, Minimization and Protection Plan), B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation Measures) and B-9(b) (Southwestern Pond Turtle Avoidance, Capture and Relocation) would mitigate for special-status species that may use the on-site vernal pool/wetland habitat type. The following additional mitigation measure is required:

**Future Development  
Program B-4(a)**

**Avoidance of Jurisdictional Wetlands and Waters of the U.S.** Future Development Program disturbance areas, including structures and grading, shall be setback a minimum of 200 feet from Yerba Buena, Taco, Trout, and Santa Margarita Creeks. Wetlands, including seasonal pools, or waters of the U.S. or state shall be avoided with a minimum setback of 100 feet, or as otherwise determined by ACOE, RWQCB, NMFS and/or USFWS. Habitats occupied by VPFS require a minimum 300-foot setback, and those occupied by CRLF or Steelhead require a 200-foot setback.



**Plan Requirements and Timing.** The location and design of Future Development Program land uses shall be subject to review by Planning and Building. **Monitoring.** Planning and Building shall review site plans prior to issuance of Grading Permits.

Residual Impacts. Implementation of required mitigation measures would reduce impacts to a less than significant level. In addition, obtaining all the required ACOE, CDFG, and RWQCB permits for impacts within jurisdictional areas and implementation of the required fuel modification zone restrictions would result in a no-net-loss of functions and values to riparian/wetland habitats on-site.

**Future Development Program Impact B-5**

**Implementation of the Future Development Program would impact San Luis Obispo Owl's Clover, San Luis Obispo County Morning Glory, Santa Lucia manzanita and potentially other Special-Status Plant Species, occurring within the Future Development Program conceptual land use areas. This would be a Class II, significant but mitigable impact.**

Construction of the Future Development Program would impact known occurrences of special-status plant species identified in Table 4.3-3. The envisioned residential village, guest ranch, lodge, restaurant, winery, and golf course in the central-west portion of the Future Development Program area would impact occurrences of San Luis Obispo owl's clover, San Luis Obispo County morning glory, and San Luis Obispo mariposa lily, which are CNPS List 1B plants. Development of the Oakenshaw Retreat Center in the far west portion of the Future Development Program area would impact an occurrence of the Santa Lucia manzanita, a CNPS List 1B plant. Development of the envisioned ranch headquarters and associated road in the southeastern portion of the Future Development Program area would impact the caper-fruited tropidocarpum. Other special-status plant species may be present in the Future Development Program areas. Impacts would occur to these species as a result of removal of plants, or disturbance or fragmentation of habitat through grading and other ground disturbance. Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially affect these species, depending on final designs. This would be a Class II, significant but mitigable, impact.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures B-5(a) (Follow-Up Special-Status Plant Surveys), B-5(b) (San Luis Obispo Mariposa Lily and San Luis Obispo County Morning Glory Mitigation and Monitoring Plan), and B-5(c) (Protective Fencing) would apply to all Future Development Program land uses. The following additional mitigation measures are required:

**Future Development Program B-5(a)**

**Seasonally-Timed Rare Plant Surveys.** Prior to development of Future Development Program land use components, seasonally-timed directed floral surveys shall be completed by a County-approved qualified biologist/botanist during the appropriate season to determine the presence or absence of the species listed in Table 4.3-3. This list of plant species shall be augmented by a qualified biologist in consultation with relevant regulatory



agencies and a recent California Natural Diversity Database (CNDDDB) search. Surveys shall be floristic in nature (i.e., all plant species observed shall be recorded), and shall be conducted in accordance with the CDFG *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities* (revised May 8, 2000), and USFWS *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants* (USFWS, 2000).

Multiple focused field surveys may be required to capture the flowering period of the target species. The location and extent of any rare plant occurrences observed in development areas shall be documented in a report and accurately mapped onto site-specific topographic maps and aerial photographs. If special-status plants are identified, the applicant for the future project shall submit written proof that the County and CDFG have been contacted. The report shall include estimates of the plant populations and the percentage of the total population that will be lost as a result of development.

**Plan Requirements and Timing.** Prior to approval of Grading Permits, the applicant shall hire the qualified biologist/botanist and submit survey results. **Monitoring.** Planning and Building shall review survey results in consultation with CDFG.

#### **Future Development Program B-5(b)**

##### **Special-Status Plant Species Mitigation and Monitoring Plan.**

If special status plant species are identified during surveys required in Future Development Program measure B-5(a), a mitigation and monitoring plan that addresses impacts to all special-status plant species, including the San Luis Obispo owl's clover, San Luis Obispo County morning glory, San Luis Obispo mariposa lily, San Lucia manzanita, Catalina mariposa lily, Michael's rein orchid, San Luis Obispo County lupine, and caper-fruited tropidocarpum shall be prepared by a County-approved biologist/botanist and reviewed by the County and CDFG. The detailed mitigation and monitoring plan shall be developed to protect and enhance the remaining occurrences of these species and to increase the overall numbers of special-status plants located within the Future Program Development area. Please refer to the Agricultural Residential Cluster Subdivision measure B-5(b) (San Luis Obispo Mariposa Lily and San Luis Obispo County Morning Glory Mitigation and Monitoring Plan) above for the minimum requirements of the special-status plant species mitigation and monitoring plan.

**Plan Requirements and Timing.** Prior to the issuance of grading permits, the applicant shall submit a mitigation and monitoring plan developed by a County approved biologist/botanist that



addresses impacts to all special-status plants known to occur within the Future Development Program land use area.

**Monitoring.** The County shall verify that the CDFG has reviewed the mitigation and monitoring plan, and that any recommendations by the resource agencies have been incorporated into the final mitigation and monitoring program. A County approved biologist/botanist shall be retained to monitor all construction activities to ensure compliance with the final special-status plant mitigation and monitoring plan. After clearing and/or grading have been started, the biologist/botanist shall submit a report to the County detailing the results of the monitoring and if applicable, any relocation efforts. The County shall verify that the annual monitoring program has been conducted by a County approved biologist.

Residual Impacts. The implementation of the above mitigation measures would reduce impacts to a less than significant level.

**Future Development Program Impact B-6**

**Implementation of the Future Development Program could result in a direct take of the federally threatened Vernal Pool Fairy Shrimp (VPFS). This potential impact is Class II, significant but mitigable.**

Suitable habitat for the VPFS occurs within seasonal pools found throughout the Future Development Program area. Over thirty-five seasonal pools have been observed and recorded during inventory efforts for the property. The Future Development Program area contains at least twenty-five seasonal pools found within wetlands, low gradient ephemeral drainages, and depressions within flatter areas of the site. Thomas (2003) conducted wet-season VPFS surveys at 19 sites in 2003, but because these surveys were conducted within more than the 14-day requirement following pool filling, they were not considered to meet USFWS (1996) protocol requirements. In addition, this survey did not include all potentially suitable habitats. VPFS have potential to occur within seasonal pools within the conceptual golf course, residential village, guest ranch, lodge and restaurant – winery area in the central-west portion of the Future Development Program area, as well as within several envisioned ranch headquarters and winery areas. VPFS habitat may be present along the trail concept study area as well as in other areas envisioned for development. Impacts could occur to VPFS as a result grading and other ground disturbance activities or any changes in hydrology. Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially affect this species, depending on final designs. This would be a Class II, *significant but mitigable*, impact.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures B-6(a) (VPFS Presence/Absence Determination) and B-6(b) (Mitigation for VPFS) would apply to all Future Development Program land uses. The following additional mitigation measure is required:

**Future Development Program B-6(a)**

**VPFS Presence/Absence Determination.** Prior to issuance of Grading Permits, USFWS (1996) protocol surveys shall be



conducted by a County-approved qualified biologist who possesses a federal 10(A)(1)(a) handling permit for VPFS to determine the presence or absence of VPFS within all potentially suitable habitat areas within the Future Development Program land use areas. A report consistent with current federal reporting guidelines shall be prepared to document the methods, surveyed pool locations, and results of surveys. Should the presence of VPFS or additional special-status wildlife species be determined, a map identifying locations in which these species were found shall be included in the report.

If the surveys produce a negative finding for the presence of VPFS, the results of the survey shall be submitted to the USFWS and the applicant shall request a letter of concurrence that the project is unlikely to result in the take of VPFS. The USFWS shall determine if additional surveys or information is required. Once a letter of concurrence is obtained from the USFWS, no further mitigation would be required. If VPFS are identified, then Agricultural Residential Cluster Subdivision measure B-6(b) Mitigation for VPFS) would be required.

**Plan Requirements and Timing.** The applicant shall hire a USFWS permitted biologist to conduct protocol surveys and prepare a final report of findings. Survey results shall be submitted to the USFWS and Planning and Building prior to issuance of Grading Permits. **Monitoring.** Planning and Building shall verify completion of the surveys and approval of survey methodology from the USFWS prior to issuance of Grading Permits.

Residual Impacts. Implementation of the above mitigation measures in concert with Agricultural Residential Cluster Subdivision measures B-4(a) (Wetland and Riparian Protection), B-6(a) (VPFS Presence/ Absence Determination), B-6(b) (Mitigation for VPFS) and B-9(b) (Southwestern Pond Turtle Avoidance, Capture and Relocation) would reduce impacts to VPFS to a less than significant level. **Therefore**, the impact to VPFS is Class II, *significant but mitigable*.

**Future Development  
Program Impact B-7**

**Implementation of the Future Development Program could result in direct and/or indirect take of the federally threatened South/Central California Coast Steelhead and/or the loss of federally designated Steelhead Critical Habitat through grading activities and/or sedimentation of occupied creeks. This potential impact is Class II, *significant but mitigable*.**

The federally Threatened South/ Central California Coast Steelhead (Steelhead) is known to occur within the Future Development Program portion of Santa Margarita and Trout-Creeks (Althouse and Meade, 2005; Mike Hill, CDFG, personal communication; NMFS, 2005). These creeks are tributaries to the upper Salinas River and converge with the Salinas River north of



the site. The Salinas River enters the Pacific Ocean approximately 150 miles north near the City of Monterey. Coast rainbow trout have been observed in Rinconada Creek (Mike Hill, CDFG, personal communication; NMFS, 2005), but due to the presence of Pierce Dam on the Salinas River, any juveniles produced that may wash over the dam and make it to the ocean would not be able to return to their spawning sites (Dave Highland, CDFG Fish Habitat Specialist, personal communication). Therefore, the population in Rinconada Creek would not be considered to be Steelhead, but nevertheless, should be considered to be a locally important biological resource. Similarly, Taco Creek is also above Pierce Dam. All of these waterways are within Steelhead Critical Habitat (NMFS, 2005). Within the Future Development Program area, Steelhead are likely to occupy Trout Creek during moderate to high flow periods in average to above average rain years (Mike Hill, CDFG, personal communication). The portions of Santa Margarita and Rinconada Creeks and the Salinas River in the Future Development Program area have exceptional breeding and migratory habitat consisting of rounded gravel to cobble bed substrate, tree snags, overhanging banks, and moderate to deep pools suitable for Steelhead spawning.

Impacts from development of the Future Development Program would occur to Steelhead from development of envisioned land use components. A ranch headquarters and a winery are envisioned along Trout Creek in the northeastern portion of the site and an equestrian area is envisioned along Santa Margarita Creek in the northwestern portion of the site. Habitat degradation caused by sediment entering all the creeks and Salinas River during grading activities may result in the loss of suitable spawning pools and reduction in abundance and diversity of prey. Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially affect this species, depending on final designs.

It should be noted that, as discussed in Section 4.14 (*Water and Wastewater*) of this EIR, water demand from implementation of the Future Development Program may contribute to overdraft of the aquifer system. Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply), which applied to the Future Development Program as well, requires that the applicant acquire imported water supply to serve the envisioned Future Development Program land uses. Due to uncertainty regarding timing and availability of these sources, this impact is *significant and unavoidable*. Although this is a Class I impact, the applicant is required to obtain imported water prior to implementation of the Future Development Program land uses, and development could not occur without adequate water supply. As a result, water use to serve the Future Development Program land uses would not reduce stream flow and water supply available for riparian vegetation and Steelhead migration and breeding habitats.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure B-7(a) (South/Central California Coast Steelhead (Steelhead) Mitigation, Minimization and Protection Plan) would apply to all Future Development Program land uses. In particular, a minimum 200 foot buffer is required for all Steelhead-occupied habitats, including Santa Margarita and Trout Creeks. No additional mitigation is required.

Residual Impacts. Implementation of the above mitigation measure in concert with Agricultural Residential Cluster Subdivision measures B-4(a) (Wetland and Riparian Protection) and B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation Measures) would reduce impacts to Steelhead to a less than significant level.



**Future Development  
Program Impact B-8**

**Implementation of the Future Development Program would result in a direct take of the Federally Threatened California red-legged frog (CRLF) through grading activities for the envisioned land use components, and would fragment the amount of available habitat potentially used for movement and dispersal. This potential impact is Class II, *significant but mitigable*.**

Several federally threatened California red-legged frogs (CRLF) were observed during the 2002-2003 inventory efforts and concurrent incidental sightings within Trout, Taco, and Yerba Buena Creeks and in an agricultural pond (Pond 4a) midway between Taco Creek and Trout Creek. CRLF tadpoles were observed in the agricultural pond. Suitable habitat for CRLF exists in Santa Margarita Creek. Movement of CRLF likely occurs between aquatic sites occupied by the species on the property. CRLF-occupied aquatic sites and upland areas between aquatic features would be directly or indirectly impacted by development of the Future Development Program. CRLF that breed within Yerba Buena Creek would be directly impacted by development of the golf course and its associated elements (winery, residential village, guest ranch, and restaurant). CRLF that breed in Santa Margarita Creek would be directly impacted by development of the equestrian center and amphitheatre. CRLF may also be impacted in other portions of the Future Development Program in areas adjacent to and containing other suitable creeks, seasonal pools, and wetlands. Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially affect this species, depending on final designs. Refer to Agricultural Residential Cluster Subdivision Impact B-8(a) for further discussion of CRLF ecology and impacts to CRLF.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure B-8(a) (California Red-legged Frog Avoidance, Minimization, and Mitigation Measures) would apply to all Future Development Program land uses. No additional mitigation is required.

Residual Impacts. Implementation of the above mitigation measure and those required as a result of FESA compliance would reduce impacts to the CRLF to a less than significant level. Therefore, the impact to CRLF is Class II, *significant but mitigable*.

**Future Development  
Program Impact B-9**

**Implementation of the Future Development Program would reduce the populations and available habitat for wildlife in general, including special-status wildlife species. Because of the size of the site, degree of habitat diversity, and known and/or potential presence of a number of special-status wildlife species on-site, the loss of wildlife habitat is a Class II, *significant but mitigable* impact.**

The discussion regarding impacts to wildlife, special-status wildlife, wildlife movement, wildlife in general, and impacts related to introduction non-native species in the Agricultural Residential Cluster Subdivision Impact B-9 applies to implementation of the Future Development Program. In addition, the seasonal pools in the Future Development Program are suitable habitat for western spadefoot, a California Species of Concern. The western spadefoot was observed within SMR Pond 33, and it likely occurs in other locations throughout the site. Implementation of Future Development Program land uses would directly impact this species,





which is a potentially significant impact. Implementation of required roadway improvements described in Section 4.12, *Transportation and Circulation*, could also potentially affect habitat for wildlife, depending on final designs.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures B-9(a) (Legless and Horned Lizard Capture and Relocation), B-9(b) (Southwestern Pond Turtle Avoidance, Capture and Relocation), B-9(c) (Pre-Construction Bird Survey), B-9(d) (American Badger Avoidance), B-9(e) (Native Landscaping), B-9(f) (Pet Brochure), B-9(g) (Night Lighting Standards), and B-9(h) (Minimize Road Widths) would apply to all Future Development Program land uses.

Residual Impacts. The implementation of the above mitigation measures would reduce impacts to a less than significant level.

**d. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative biological resources impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.





## 4.4 CULTURAL RESOURCES

The following section is based on a cultural resources survey, Cultural Landscape Report (refer to Appendix E), and Native American consultation (refer to Appendix F) conducted by Applied Earthworks, Inc. (AE), and a Paleontology Study conducted by California State University, Fresno (CSUF) (refer to Appendix G).

*Agricultural Residential Cluster Subdivision.* As defined in Appendix E (Cultural Landscape Report), the historic core of the ranch qualifies as a rural historic district. The proposed Agricultural Residential Cluster Subdivision is located in one of the character-defining areas of this district. Development of the proposed residential cluster in this area would substantially diminish the integrity of the design, setting, materials, feeling, and association of this important character-defining area. In addition, implementation of the Agricultural Residential Cluster Subdivision would adversely impact traditional Native American values. Several prehistoric and historical archaeological sites have been identified within or immediately adjacent to the Agricultural Residential Cluster Subdivision site. All of these resources contribute to the significance of the Santa Margarita Ranch Rural Historic District and are eligible for the California Register of Historic Resources (CRHR) under multiple significance criteria. Although mitigation measures, including preservation of key cultural landscape elements, and resource data recovery, would lessen the impacts, impacts would remain Class I, significant and unavoidable. The proposed Agricultural Residential Cluster Subdivision would result in Class II, significant but mitigable, impacts related to disturbance of previously unidentified buried archeological deposits or previously unidentified human remains, and indirect impacts to identified or unidentified archaeological and historical resources. The Agricultural Residential Cluster Subdivision is anticipated to result in Class II, significant but mitigable, impacts to paleontological resources, since portions of the site lie on geological formations that may harbor significant vertebrate fossil remains.

*Future Development Program.* Because no active application currently exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, the assessment of cultural resources impacts is based on a reasonable worst case scenario with regard to the location of future land uses. Buildout of the Future Development Program would result in impacts similar to those resulting from the Agricultural Residential Cluster Subdivision individually. The Future Development Program would also result in Class I, Significant and Unavoidable, impacts related to disturbance of the cultural landscape of the Santa Margarita Ranch Rural Historic District, Native American values, and individual prehistoric and historical archaeological sites identified on the property. Additional cultural resources surveys are required to assess the potential for additional resources on portions of the Future Development Program area. The Future Development Program would also result in Class II, significant but mitigable, impacts related to disturbance of previously unidentified buried archeological deposits or previously unidentified human remains, and indirect impacts to identified or unidentified archaeological and historical resources. In addition, the Future Development Program would result in Class II, significant but mitigable impacts, related to disturbance of historical buildings and structures on the ranch. The Future Development Program would result in Class II, significant but mitigable, impacts to paleontological resources, since portions of the land use areas lie on geological formations that may harbor significant vertebrate fossil remains.

### 4.4.1 Setting

**a. Regional Prehistory.** Archaeological evidence indicates that coastal San Luis Obispo County was occupied as early as 10,000 years ago (Greenwood 1972; Fitzgerald 2000). In the



Santa Margarita area, Gibson (1995) collected an isolated fluted point fragment, an artifact type associated with the region's earliest occupation, from CA-SLO-1429. Most local archaeologists believe that the complex Chumash political, economic, and social organization present at the time of historic contact emerged during a relatively brief transitional period between A.D. 1000 and 1250 (Arnold 1992). The population continued to grow after A.D. 1250, and village size increased accordingly. By the time the first Europeans reached California, native people living along the Santa Barbara Channel resided in large villages housing as many as 1,000 residents at one time. Settlements in the San Luis Obispo region were never as populous as those along the channel, and as a result, lifestyles may have been more mobile with greater access to inland resources (Roper et al. 1997:2.12).

**b. Regional Ethnography and Ethnohistory.** The Santa Margarita Ranch lies in an area historically occupied by both Salinans and Obispeño Chumash. Generally, lands from Santa Margarita south and west have been ascribed to the Obispeño, while the Salinans utilized lands along the coast and in the rugged mountains of the interior, and may have occupied the area extending south from Soledad to a point near Atascadero. A recent study of Salinan and Northern Chumash linguistic and social geography (Milliken and Johnson 2003) concluded that villages around Santa Margarita were Northern Chumash during the Mission Period (and presumably before), but that Salinan speakers occupied the area during the middle and late nineteenth century. Both the Northern Chumash and Salinans lived in permanent villages along the coast and major inland drainages, but not in the rugged Coast Range. However, task-specific sites likely occurred in the mountains and along minor seasonal creeks and streams. Historically, there were at least two named native rancherías (villages) on or near the ranch. Following McLendon and Johnson (1999), Milliken and Johnson (2003) locate the rancherías *Chetpu* and *Chotnegle* at Santa Margarita. Additionally, they place *Tchena* and *Tipu* in the region (Milliken and Johnson 2003: 121). To date, these named settlements have not been clearly associated with any particular archaeological site or group of sites, though it is likely that at least one of these may have been located at the current ranch headquarters area.

The Spanish built a series of presidios, missions, and ancillary settlements (pueblos, ranchos, estancias, and asistencias) between San Diego and San Francisco; the first Spanish settlement in Salinan territory, Mission San Antonio de Padua, was established in 1771; Mission San Luis Obispo de Tolosa, the first Spanish establishment in Chumash territory, was founded 14 months later. The missions had "countless flocks and herds," orchards, and vineyards (Cooper 1875:24), and towns quickly grew up around the mission buildings. By the end of the Mission Period in 1834, the native population had been reduced to a small percentage of its former number by maltreatment, disease, and subsequent declining birthrates. Population loss as a result of disease and economic deprivation continued into the next century.

**c. Regional History.** During their initial explorations of Alta California, the Spanish traveled along the coast by land and sea and did not penetrate far inland. The Governor of Baja California, Gaspar de Portolá, captained a set of such expeditions in 1769 and 1770 that resulted in establishment of the first two California presidios and missions at San Diego and Monterey. These two settlements were used as bases from which to colonize the rest of California (Bancroft 1886a:152, 168-170). While traveling south from the Presidio at Monterey, Father Junipero Serra later established the fifth California mission, San Luis Obispo de Tolosa, in the fall of 1772.



When Juan Bautista de Anza led a party of colonists from Tubac, Arizona, to San Francisco in 1775-1776, he followed a new route that took the Spanish further inland than previous passages. The Anza Trail traversed Cuesta Grade and the Santa Margarita Valley on its northward journey from San Luis Obispo. It became known as El Camino Real, the King's Highway, and became the primary route from San Diego to Monterey.

Within 10 years of establishment of the mission at San Luis Obispo, crops were being cultivated and livestock raised in the Santa Margarita Valley. By 1790, the lands in the valley had become a productive part of the mission economy. A Chumash village was located there, from which the mission drew converts, but it appears no mission buildings had been erected at that time.

In 1817 Father Martinez, head of the San Luis Obispo Mission, wrote that he was constructing an asistencia in stone (Geiger 1965). The 1822 *Informe* (Annual Report) stated that the Santa Margarita asistencia was established to raise wheat and livestock for the main mission community and as a *retirada* (refuge) in case of attacks on the mission (Webb 1952:93).

An asistencia was a "mission on a small scale with all the requisites for a mission, and with Divine Service held regularly on days of obligations, except that it lacked a resident priest" (Weber 2003:4). Although it is not clear precisely when construction of the Santa Margarita de Cortona asistencia actually began, a construction date of 1816-1817 is most likely.

The asistencia flourished for a time, ultimately passing into control of the mission at San Miguel as the San Luis Obispo population declined in the 1820s. As a result, Salinan Indians from the San Miguel area gradually replaced the Chumash as workers on the asistencia.

Following Mexican independence from Spain and secularization of the missions, the Santa Margarita lands were granted to Joaquin Estrada in 1841. His Santa Margarita Ranch encompassed 17,735 acres and became an economic, social, and political focal point of the region. The 1840s were halcyon days for the Mexican ranchos. For the most part the ranchers raised cattle on native grasses.

In 1861 Estrada sold the ranch to Martin Murphy, Jr. By that time, most of the mission-era structures at the ranch were in ruins. In 1889, Murphy granted the Southern Pacific Railroad a right-of-way through the ranch and donated 640 acres for the town site of Santa Margarita. The railroad established a stop at Santa Margarita with depot, roundhouse, warehouse, spur lines, and wells for water. The town boomed in its early years as a home for railroad construction workers. After the road was completed, Santa Margarita lost population, and has remained a small town ever since.

At the turn of the century, Murphy sold the ranch to the Reis family. The Reis family established the Santa Margarita Land and Cattle Company and continued the ranching tradition. In 1904, Reis converted the main asistencia building into a hay barn. At that time he removed the interior walls, lowered the floor, and poured a concrete floor. Reis erected a superstructure of corrugated metal around the stone walls of the asistencia. The roof was the same material, giving the structure the appearance of a monitor barn. Besides the asistencia building, ranch house, and stage stop, there was a horse barn, blacksmith shop, implement shed, granary, and cow barn on the ranch. Another structure mentioned from that time was a



small adobe, then used as a pump house, although the original use was not known at that time (Hoover et al. 1948:307).

In 1961, Reis sold 4,000 acres of the ranch, and by 1989 the ranch acreage was down to its current 13,800 acres (Caine, 1989). Reis died in 1969, willing the ranch to Stanford University. The Robertson family from Texas purchased the ranch from Stanford in 1979. The leasing of farmland continued, as did cattle ranching. The current owners purchased the ranch in 1999. Cattle ranching continues on the ranch, although no land is leased for farming. Three vineyards have been planted; these are the only current agricultural pursuits on the ranch aside from cattle grazing operations.

#### **4.4.2 Existing Cultural Resources**

**a. Prior Research and Identification Efforts.** The historical and archaeological values of the Santa Margarita Ranch were recognized even in the late 19th century. In 1872 Edward Vischer's drawings of mission buildings were published in *Missions of Upper California*, and from 1881-1882 Henry Chapman Ford painted all 21 missions and five asistencias, including Santa Margarita.

In 1941, the Santa Margarita Asistencia was designated California Historic Landmark #364, and in 1953, Arnold Pilling recorded two Mission Period archaeological sites in the headquarters area: CA-SLO-127 and -128. Avocationalists began examining the local archaeology in the 1960s, when members of the San Luis Obispo County Archaeological Society performed the first systematic archaeological survey of ranch lands (Hunter 1971). They identified 14 prehistoric sites and collected numerous surface artifacts.

The next important body of research from the Santa Margarita area can be attributed to several water and oil pipeline projects in the mid 1990s. The State of California Department of Water Resources (DWR) built a 102-mile underground water pipeline (the Coastal Branch Aqueduct) that crossed the ranch at Miller Flat, continued along the south side of Santa Margarita, and followed Highway 58 and El Camino Real north toward the Salinas River. As a result of various cultural resources studies required during the project (e.g., survey, excavation, monitoring), several archaeological sites were identified at the ranch within the right-of-way. Studies on some of these sites included extended survey excavations at CA-SLO-1763, test excavations at CA-SLO-586 (originally recorded by Hunter), and data recovery excavations at CA-SLO-1644 and CA-SLO-1756 (Fitzgerald 1997a, 1997b; Johnson 1998; Painted Cave Archaeological Associates 1989; Wickstrom et al. 1996). Diagnostic artifacts, dateable carbon samples, and other important materials recovered during these excavations have broadened the database on prehistoric occupation in the Santa Margarita Valley.

UNOCAL replaced an existing oil pipeline that extends southwest from the oil tank farm adjacent to El Camino Real across the ranch to Highway 101. Gibson (1992) identified several sites along the pipeline route. Two of these are within or adjacent to the current project area. CA-SLO-1430, a lithic scatter, is located at ranch headquarters, and CA-SLO-1429, also a lithic scatter, is located along El Camino Real near the tank farm. A rare fluted point base recovered during construction monitoring at CA-SLO-1429 (Gibson 1995) provides invaluable evidence of the earliest human occupation of the area.



In 1999–2000, Applied EarthWorks, Inc. (Æ) surveyed approximately 4,000 discontinuous acres of the Santa Margarita Ranch for vineyards and possible residential use (Flint et al. 2000). Fifty-two previously unidentified sites and 67 isolated artifacts were encountered during the survey, which revealed a large and diverse array of prehistoric and historical sites including structures associated with Mission San Luis Obispo de Tolosa as well as sites associated with ranching, farming, and mining. Prehistoric sites ranged from small, isolated task-specific sites dating as far back as circa 6500–3500 B.C. (Milling Stone Period) to large villages, temporary camps, and special use areas that were occupied during the Late Period (circa A.D. 1250–1500) and possibly into the Mission Period (circa A.D. 1500–1834).

**b. Investigations for the Current Proposal.** To supplement these prior surveys of ranch lands, in May and June 2006 Æ performed additional archaeological surveys of approximately 526 acres focused on the portions of the currently proposed Agricultural Residential Cluster area that had been surveyed previously (Lloyd 2006). In addition to the field inventory, Æ conducted a literature review and records search at the Central Coastal Information Center of the California Historical Resources Information System, performed historical background research, and consulted with the Native American Heritage Commission (NAHC) and local Native American representatives from the Chumash and Salinan tribes. Æ recorded six previously unknown archaeological sites and two isolates during this investigation.

In addition to its archaeological study, Æ conducted a cultural landscape study that focused on the impacts of development on the historical integrity of the ranch. This analysis examined the existing ranch property within the context of the original land grant rancho and its historical development. The product of that study is a Cultural Landscape Report (CLR) that is appended to this EIR (Appendix E; Beedle and Price 2006). It describes the historical landscape of the Santa Margarita Ranch, identifies its important features and character-defining elements, and assesses the potential effects of the proposed development on the important qualities of the historical landscape. It provides a detailed historical context within which these evaluations are made, and offers recommendations to mitigate potentially significant impacts.

**c. Native American Consultation.** Æ contacted the Native American Heritage Commission (NAHC) in September 2005 to request a review of their Sacred Lands File and a current list of local Native American contacts. In a letter dated 20 October 2005, the NAHC responded that the Santa Margarita Ranch is listed in their Sacred Lands Inventory, and suggested contacting Chief Mark Vigil of the San Luis Obispo County Chumash Council for additional information and to determine potential impacts to the site. In addition, the NAHC supplied a list of 23 other local tribal contacts.

In January 2006, Æ submitted letters to each contact on the NAHC list, supplying details about the proposed project and soliciting information on Native American interests and concerns. Æ followed the letters with telephone calls to each of the contacts in March 2006. Follow-up contacts with the Northern Chumash Tribal Council have continued throughout the course of the EIR preparation. The NAHC contact list, a complete listing of contacts with dates and comments, and all relevant correspondence is provided in Appendix F.

**d. Inventory of Cultural Resources.** The archaeological and historical surveys described above have covered approximately 60% of Tract 2586 and an equivalent amount of



lands encompassed by the Future Development Program. All lands within or immediately adjacent to the proposed Agricultural Residential Cluster Subdivision have been inventoried. Archaeological survey coverage is shown on Figure 4.4-1. Within or immediately adjacent to the studied areas, 62 prehistoric and historic archaeological sites and 33 isolated artifacts have been identified. Complete descriptions of these sites can be found in the inventory reports (Flint et al. 2000; Gibson 1992; Hunter 1971; Lloyd 2006; Painted Cave Archaeological Associates 1989; Pilling 1953a, 1953b) and associated cultural resource records kept on file at the Central Coastal Information Center.

Cultural resources in the vicinity span all of local prehistory and history, and provide evidence for continuous occupation and use of the landscape over the past 10,000 years. Prehistoric archaeological sites range from large, dense midden deposits containing a broad range of artifact classes and types, dietary refuse, residential debris, structural remains, and human interments to small, diffuse scatters of stone tool manufacturing debris. Historic period sites include stone and adobe buildings associated with the asistencia of Santa Margarita de Cortona, other mission-era features, wood framed structures erected between the mid-nineteenth and mid-twentieth centuries, and the archaeological remains of homesteads, mines, trash dumps, and various agricultural and ranching activities. Historical sites reflect all of the major themes that have operated in the study area during mission times, the rancho period, and subsequent American era. Human remains and prehistoric graves have not been regularly encountered on the Ranch.

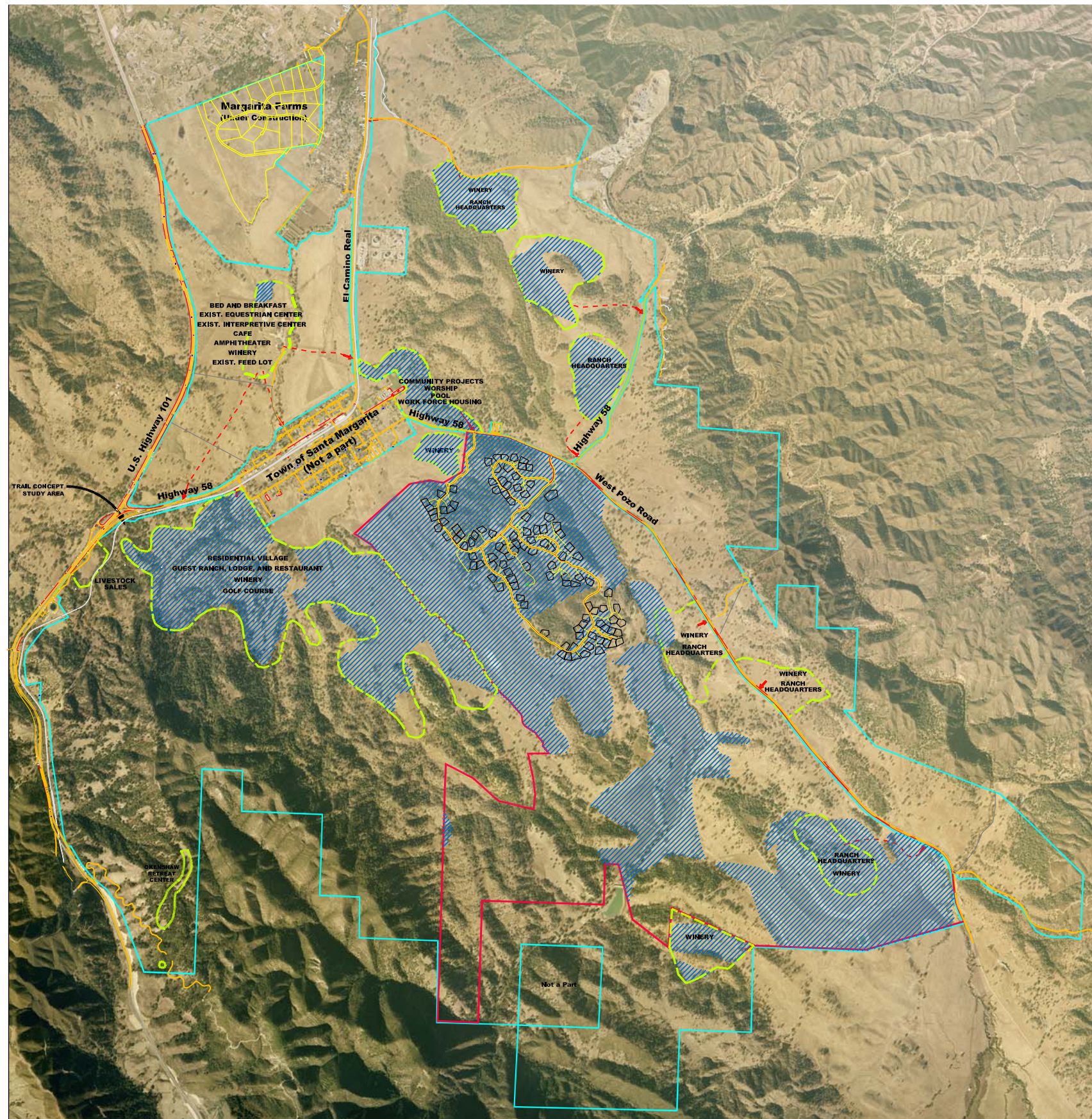
Currently available information indicates that two prehistoric sites within the study area have been formally evaluated for significance and found eligible for the National Register of Historic Places. During construction of Reach 4 of the Coastal Branch Aqueduct, test excavations were conducted along the pipeline right-of-way through CA-SLO-586. Wickstrom et al. (1996) concluded that the site was eligible under Criterion D for its potential to provide important information about local and regional prehistory [refer to “Regulatory Framework” Subsection 4.4.3(a), below, for a description of historic significance criteria]. For the same project, Fitzgerald (1997) performed data recovery excavations at CA-SLO-1644.

The archaeological sites, historical buildings, and other cultural remains on the ranch have combined with the unique natural environment of the Santa Margarita Valley to produce a distinctive cultural landscape shaped by American Indian, Spanish, Mexican, and Euro-American cultural traditions. As Beedle and Price (2006) describe in detail in their Cultural Landscape Report (refer to Appendix E), the Santa Margarita Ranch possesses a unique and unusual concentration of buildings, structures, and sites that have been connected through their shared history and by the continuation of historical traditions and patterns of land use into modern times. The landscape is considered sacred by local Native Americans, and qualifies as a historic district eligible for the California Register of Historic Resources.

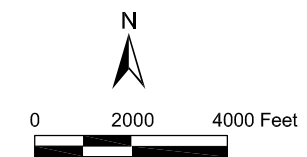
Sixty-two archaeological and historical sites are currently recorded within or adjacent to the study area. Thirty-two archaeological sites are within or adjacent to the boundaries of Tract 2586. Thirty archaeological sites are within or adjacent to Future Development Program areas proposed for residential development, guest ranches, golf courses, wineries, ranch headquarters, an interpretive center, and other uses. Of the 32 sites within Tract 2586, 22 are within or surrounding the Agricultural Residential Cluster Subdivision area.







- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- - - FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS
- ROADWAYS
- ARCHAEOLOGICAL SURVEY AREA



Archaeological Survey Coverage Map

Figure 4.4-1







In addition to the archaeological sites, 33 isolated artifacts have been recorded within the areas surveyed for cultural resources. Six isolates are within or immediately adjacent to the Agricultural Residential Cluster area. These isolates may represent broadly dispersed artifacts unassociated with a particular site but evidence that people have lived in the area and intensively utilized the landscape over many thousands of years. However, such isolates might also be considered evidence of cultural deposits that have become buried over time, so that only the slightest indication is visible on the surface. Which scenario is accurate for any particular isolate can only be determined by subsurface examination of the area.

**e. Existing Paleontological Resources.** Paleontological resources are organic remains or their traces, usually older than 11,000 years, which are naturally preserved and imbedded in rocks or rock-like material such as amber. Organisms that possess hard parts (e.g., bone or shell) are most typically preserved, but fossils can represent soft parts, hard parts, tracks, trails, molds, casts, and trace indications such as burrows. Fossils occur primarily in sedimentary rocks, but some fossils have been excavated from other rock types, especially volcanic rocks.

There is a temporal threshold for an entity to become a fossil. If the organic material is 5,000 years old, it is not considered a fossil by most paleontologists. If it is 10,000 years old, it may be deemed a fossil. If it dates to 100,000 B.P., there is no question about its classification as a fossil if the organic material is found in situ in rocks preserved by natural processes.

The published record identifies numerous invertebrate fossil localities in the Santa Margarita region, especially in marine rocks. These fossils are usually well preserved in the rock, and are commonplace throughout the area, although some sites are more productive than others. Invertebrate fossils generally are regarded as less significant than other types of paleontological remains. Elevated areas within the Santa Margarita Valley have extensive exposures of the Late Cretaceous Atascadero and Late Miocene Santa Margarita and Monterey formations; these are marine deposits that may contain extensive invertebrate faunas. One such exposure of fossilized shell strata is found within the Agricultural Residential Cluster Subdivision site. Because of the richness of invertebrate fossils in marine rocks and their widespread distribution, they are not discussed individually in the summary of fossil resources below.

Neither the UCMP nor the LACM have recorded vertebrate fossil localities within the project area. However, both the LACM and UCMP identify vertebrate sites from elsewhere in the region in some of the same sedimentary rock units that are exposed in the study area.

**f. Paleontological Potential of Rock Units in the Project Area.** Although no specific vertebrate fossil sites have been identified within the Agricultural Residential Subdivision site, the project area contains several rock units that have produced fossils. The paleontological sensitivity of these rock units has been evaluated based on the density of recorded fossils and sites in exposures of the unit in or near the area under observation. Sedimentary rocks, especially detrital or nonmarine deposits, contain by far the most vertebrate fossil material. A rock unit is most likely to yield fossils in number and kind similar to those previously recorded from that unit in the same vicinity.

The paleontological sensitivity of the rock units in the study area is classified as high, low, unknown, or none. Each sensitivity class and its associated rock units are described below.



- **High Sensitivity:** High-sensitivity rock units include the older Quaternary Alluvium, Paso Robles Formation, Monterey Formation, Santa Margarita Formation, and Vaqueros Formation. These rock units have yielded important marine and nonmarine vertebrate fossils in the past, including marine mammals and fish, sharks, western horse, American mastodon, ground sloth, camel, and others.
- **Low Sensitivity:** The Simmler and Franciscan formations are classified as low sensitivity. The coarse clastic nature of the Simmler Formation, and the lack of fossils generated from the unit to date, suggest that it is unlikely to yield important fossil remains. While the Franciscan assemblage has produced vertebrate remains in the past, including plesiosaur and ichthyosaur, these fossils are rare and it is unlikely that significant fossils will be recovered from this assemblage in the project area.
- **Unknown Sensitivity:** It is undetermined whether the Atascadero Formation and Toro Formation will yield important vertebrate remains, although any vertebrate remains from these units would be significant.
- **No Sensitivity:** The Obispo Formation and Cretaceous granitic rocks are not sensitive because they contain little or no fossil material or contain fossils that are so common or widespread that a sensitivity designation is not warranted. Some rock units are of an igneous origin, and thus have no potential to contain fossils. Others are known to contain marine fossils, but better and more abundant localities are present in the region.

#### 4.4.3 Regulatory Framework

**a. California Register of Historical Resources (CRHR).** “The California Register is an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (Public Resources Code Section 5024.1(a)). The CRHR is overseen and administered by the State Historical Resources Commission. The criteria for listing resources on the CRHR are based on those developed by the National Park Service for listing on the National Register of Historic Places with modifications in order to include a broader range of resources which better reflect the history of California. A resource is considered historically significant if it:

- A. Is associated with events or patterns of events that have made a significant contribution to the broad patterns of the history and cultural heritage of California and the United States.*
- B. Is associated with the lives of persons important to the nation or to California’s past.*
- C. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.*
- D. It has yielded, or may be likely to yield, information important to the prehistory or history of the State and the Nation.*

**b. California Public Resources Code.** Section 5097.9 of the California Public Resources Code stipulates that it is contrary to the free expression and exercise of Native American religion to interfere with or cause severe irreparable damage to any Native American cemetery, place of worship, religious or ceremonial site, or sacred shrine.



Section 5097.5 of the California Public Resources Code (PRC) prohibits excavation or removal of any “vertebrate paleontological site or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.” PRC 30244 requires reasonable mitigation of adverse impacts to paleontological resources from development on public land. Penal Code Section 623 spells out regulations for the protection of caves, including their natural, cultural, and paleontological contents. It specifies that no “material” (including all or any part of any paleontological item) will be removed from any natural geologically formed cavity or cave.

**c. State Health and Safety Code.** If human remains are discovered or exposed during construction, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will then contact the most likely descendent of the deceased Native American, who will serve as a consultant on how to proceed with the remains (i.e., avoid, reburial).

**d. San Luis Obispo County Standards.** The County has a vital interest in preserving its many older buildings, and prehistoric and historic sites, which not only represent the heritage of San Luis Obispo County, but also help define the character of the region today.

In the event archaeological resources are unearthed or discovered during any construction activities, the following standards apply:

- Construction activities shall cease, and the County Environmental Coordinator shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with state and federal law.
- In the event archaeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County Coroner is to be notified in addition to the Environmental Coordinator so proper disposition may be accomplished. If the remains are determined to be Native American, then the County Coroner must notify the Native American Heritage Commission within 24 hours.

#### **4.4.4 Thresholds of Significance**

Appendix G of the State CEQA Guidelines states that a project would result in a potentially significant impact if it would:

- *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5;*
- *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;*
- *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;*  
*or*



- *Disturb any human remains, including those interred outside of formal cemeteries.*

**a. Historical and Archaeological Resources.** According to the State CEQA Guidelines, a resource shall generally be considered “historically significant” if the resource meets the criteria for listing on the California Register of Historic Resources (*supra*). The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historic Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

Under CEQA, an impact on a historical resource is considered significant if the impact lessens the integrity of the qualities of the property that qualify it for the California Register. If the proposed project may cause damage to a significant historical resource, the project may have a significant effect on the environment. Section 15064.5 of the *CEQA Guidelines* pertains to the determination of the significance of impacts to archaeological and 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. Indirect impacts primarily result from the effects of project-induced population growth. Such growth can result in increased construction as well as increased recreational activities that can disturb or destroy cultural resources; or*
- (4) *The incidental discovery of cultural resources without proper notification.*

Indirect impacts result primarily from the effects of project-induced population growth. Such growth can result in increased construction as well as increased recreational activities that can disturb or destroy cultural resources.

CEQA provides guidelines for mitigating impacts to historical or archaeological resources in Section 15126.4. Preservation in place is the preferred manner of mitigating impacts (14 CCR 15126.4(b)(3)). Preservation in place may be accomplished by planning construction to avoid the resource, incorporating sites within parks or open space, covering sites with chemically stable and culturally sterile fill, or deeding the site into a permanent conservation easement. For buildings and structures, maintenance, repair, restoration, preservation, conservation, or reconstruction consistent with the *Secretary of Interior’s Standards and Guidelines for the Treatment of Historic Properties* is considered mitigation of impacts to a less than significant level (14 CCR 15126.4(b)(1)). Documentation of an historical resource, however, will not mitigate the effects of demolition to a less than significant level (14 CCR 15126.4(b)(2)). When data recovery excavation of an archaeological site is the only feasible mitigation, a detailed data recovery plan must be prepared and adopted prior to any excavation.

**b. Paleontological Resources.** Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, uncommon, diagnostically or stratigraphically important, and/or add to an existing body of knowledge in specific areas



stratigraphically, taxonomically, or regionally. Significant resources include fossil remains of large to very small aquatic and terrestrial vertebrates, remains of plants and animals not previously represented in certain portions of the stratigraphic sequence, and assemblages of fossils that might aid stratigraphic correlations, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, paleoclimatology, and the relationships of aquatic and terrestrial species. Vertebrate fossils, some invertebrate fossils, and some suites of plant fossils may be classified as significant paleontological resources.

The discovery of a vertebrate fossil locality is of greater significance than that of an invertebrate fossil locality, especially if it contains a microvertebrate assemblage. The recognition of new vertebrate fossil locations could provide important information on the geographical range of the vertebrates, their age, evolutionary characteristics, the type of environment, and other important scientific research questions. Vertebrate fossils are almost always significant because they occur so rarely. Each additional vertebrate fossil provides considerable scientific information. Invertebrate fossils and plant fossils tend to be more abundant than vertebrate fossils. These fossils generally are ranked lower in significance than vertebrates unless they are in short supply, are age-diagnostic, or their paleoenvironmental framework is unique. Thus, geological rock units having the potential to contain vertebrate fossils are considered the most sensitive.

#### **4.4.5 Site Significance and Impact Analysis**

##### **a. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

<b>Agricultural Residential Cluster Subdivision Impact CR-1</b>	<b>As defined in Appendix E (Cultural Landscape Report), the historic core of the Santa Margarita Ranch is a rural historic district eligible for the CRHR. The proposed Agricultural Residential Cluster Subdivision is located in one of the character-defining areas of the district. Development of the proposed residential cluster in this area would substantially diminish the integrity of the design, setting, materials, feeling, and association of this important character-defining area. In addition, implementation of the Agricultural Residential Cluster Subdivision would adversely impact traditional Native American values. This is considered a Class I, <i>significant and unavoidable, impact.</i></b>
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Cultural forces have shaped the natural landscape of the Santa Margarita Ranch for many centuries. The resulting cultural landscape reflects Native American land use, ranching and agriculture under the mission system, and continued ranching, agricultural, mining, and other uses under private ownership until the present day. Local folklore – stories of events and human experience – add richness to this rural historic landscape. The ranch possesses a concentration, linkage, and continuity of sites, buildings, structures, and objects united aesthetically; by shared history; by both plan and physical development; and by the continuation of historical traditions into modern times. The ranch therefore qualifies as a Rural Historic District under the California Register criteria (see California Public Resources Code 5020.1[h]; National Park Service 1997:5). Because many ranching traditions, lifeways, crafts, and social institutions have been carried out continuously on the ranch for well more than a century,



the district may also qualify as a Traditional Cultural Property as defined in National Register Bulletin 38 (Parker and King 1998).

The boundary of a historic district is meant to “encompass but not exceed the extent of the significant resources and land areas comprising the property” (Seifert 1997:2). From the nebulous boundaries of the mission era and the Estrada diseño, the Santa Margarita Ranch has encompassed approximately 17,000 acres. In the late 1800s, Patrick Murphy sold the northern and southern portions of the ranch, leaving an area of about 9,600 acres. Although the Reis family expanded the ranch to 22,000 acres, this was new land not associated with the original rancho. The significant qualities of the district are found within the original boundaries of the ranch as depicted on the 1858 and 1880 survey maps of the ranch (Appendix E, Figures 3-3 and 3-4). Areas of the ranch that were sold are not included within the historic district, nor are any current ranch parcels that lie outside of the historic boundaries. Therefore, the historic district encompasses the 9,600-acre historic ranch core, which has remained essentially intact for more than 200 years (Appendix E, Figure 5-1).

The Santa Margarita Ranch Rural Historic District has local, regional, and statewide importance. It is eligible for the California Register under Criterion A [refer to “Regulatory Framework” Subsection 4.4.3(a) above for a description of historic significance criteria] because of its important association with broad patterns of California history, such as the establishment of missions as a means of colonizing California and the subsequent development of secular ranchos. Under Criterion A its period of significance begins with the Anza expedition’s entry into the valley in 1775 and continues to the present day. It is eligible under Criterion B because it is associated with persons important to our past, in this case General Patrick W. Murphy, rancher, businessman, and state senator, whose family owned the ranch between 1860 and 1900. Under Criterion B its period of significance begins in 1860 and continues to 1900. The district is eligible under Criterion C because of the distinctive local methods and techniques of construction used in the stone and adobe buildings erected at the asistencia during the Mission and Rancho periods; for the unique melding of Hispanic and American construction methods during the American Period; and for the distinctive characteristics and physical qualities of its spatial organization and land-use patterns, which illustrate traditional practices associated with self-contained rural ranch life. Under Criterion C the period of significance begins circa 1780 and continues to 1950. The district is eligible under Criterion D for its potential to yield important information in history and prehistory unavailable from the documentary record, notably about mission and ranch construction methods; about land use related to agriculture, ranching, mining, and other practices; and about the lives of Native Americans who lived on the land before and after the arrival of the Spanish.

To be eligible for the CRHR, a property must be significant and it must retain integrity. Integrity is the ability of a property to convey its important historical associations and significant cultural values. The ranch retains integrity of location, design, setting, materials, workmanship, feeling, and association. Intrusions on the integrity of the landscape have been minimal, and limited principally to the selling off of some ranch lands, development of vineyards on some agricultural and grazing lands, a new road system around the vineyards, and small-scale residential development. However, more than half of the original ranch acreage is still intact, and the current placement of buildings, agricultural fields, pastures, roadways, and other cultural elements in relationship to each other and to the natural environment still reflects





historical decisions about spatial organization and land use. Moreover, the ranch's natural material elements – soils, rock outcroppings, water courses, and vegetation – are largely unchanged from historic, and even prehistoric, times. Although vegetation is less static, with some species dying out or being replaced and their distributions changing with time, the current vegetation regime largely reflects historical conditions in scale, type, and visual effect.

Similarly, much of the original Spanish and Rancho construction at the ranch headquarters is preserved within more recent building additions, and the changes themselves are historically significant, reflecting an important stylistic tradition melding Spanish and American architectural elements. The coursed stone walls and tiled arched doors and windows of the main asistencia building illustrate a high degree of workmanship and are excellent representations of local mission architecture, even though the building has been partially demolished over the years. Similarly, adobe structures have deteriorated over the years, and extant adobe buildings have been incorporated into subsequent structures. Much adobe work is nonetheless preserved within the wooden siding and interior lath and plaster of the ranch headquarters buildings, and the overprinted construction displays excellent Queen Anne and vernacular workmanship. Finally, the agricultural and ranching workmanship, although seasonal and impermanent in nature, reflects traditional historic practices and contributes to the integrity of the district.

Through uninterrupted use and occupation, continuation and revival of historic cultural traditions and ranching practices, and the cumulative effect of setting, design, materials, workmanship, and feeling, the Santa Margarita Ranch retains a strong sense of association with the historic personages and events of its past.

Cultural landscapes have distinguishing character areas and contributing elements that define the significance of the landscape and are the starting point from which impacts of the proposed project can be assessed. These elements include individual cultural properties as well as other physical features and visual aspects that combine to create the historic landscape (National Park Service 2006:91).

One of the most distinctive character areas within the Santa Margarita Ranch cultural landscape is the ranch headquarters area. Encompassing the bottomlands along Santa Margarita and Yerba Buena creeks and generally delimited by the townsite to the south, Garden Farms to the north, Highway 101 on the west, and the Southern Pacific Railroad (now Union Pacific Railroad) on the east, this area was the focus of land use during the mission era and became the center of ranch operations during the Estrada and Murphy tenures. It is also the location of the principal historical structures on the ranch.

A second important cultural landscape character area encompasses all the historical water sources on the ranch. The creeks, springs, marshes, and pools sustained prehistoric and historic cultures, are viewed as sacred by modern Native American descendants, and gave life to the important cultural tradition that the ranch has never lacked for water. The stream courses, wetlands, other water sources, and their associated vegetation, play a key role in defining the setting, feeling, and historical associations of the ranch.

The views and vistas of the ranch help define the cultural landscape because they provide the backdrop for all of the cultural activities that have occurred in the valley. Views of mountains and hill slopes, fields and pastureland, rock outcroppings, oak woodlands and pine forests, crops and pasturelands, and similar visual elements have remained essentially the same as when described by the first travelers through the area, and have a very strong impact on the integrity of setting at the ranch. Photographs and paintings from the late nineteenth and early twentieth century confirm that the integrity of the setting is only minimally impaired.

Archaeological sites, historical structures, and small-scale landscape elements, both prehistoric and historic, reflect the utilization of the landscape over time and are another key contributing element to the significance of the district. Bedrock mortar outcrops, the petrified oyster shell deposits and related mines, charcoal ovens, historic fences and roads, and areas used for cultivation are the most obvious and visible of these elements; however, midden deposits as well as smaller and less visible sites and features within this category also contribute to the significance of the district.

The associated place names and folklore are an important part of the cultural landscape and constitute a significant, though less tangible, character-defining element. These reflect the traditional cultural values that have sustained the community through the centuries and are strongly linked to the integrity of design, setting, feeling, and association within the district.

In addition, the Santa Margarita Ranch lands hold substantial importance for modern Native American communities (refer to Appendix F). Many native people view the landscape and its component elements, both cultural and natural, as sacred elements of their cultural patrimony. Extensive consultation with Chumash and Salinan people revealed many historical and cultural connections between modern native communities and the Santa Margarita Ranch lands. Most native people who responded to inquiries remarked on the importance of the cultural sites; many view the landscape and its component elements, both cultural and natural, as sacred elements of their cultural patrimony. As described in the 16 October 2006 letter from the Northern Chumash Tribal Council (Appendix F), the project site has been used for ceremonial and religious expression for thousands of years, and is known to the native people as a place where there are many villages and cemeteries. Given the sensitivity of the property, any substantial development of undisturbed sites is considered a significant impact.

The proposed Agricultural Residential Cluster Subdivision is located in one of the character-defining areas of the ~~ranch~~ **district** – the ridge of petrified oyster shells that were used to temper the mortar for the asistencia (and perhaps mission) construction; as paving for El Camino Real; and possibly by local Native Americans for utilitarian tools, ornaments, and ritual objects. In addition, the ridge and its petrified shell deposits were a natural wonder for nineteenth- and twentieth-century travelers, many of whom remarked upon it in their journals and other writings. During the 1920s, a small oyster-shell mining industry was developed in the area; its remnants also have become part of the historic landscape. The undisturbed vistas and views from these hills, the watercourses traversing the proposed site, the vegetation, and the prehistoric and historical archaeological remains all contribute to the significance of this character-defining area. Development of the proposed Agricultural Residential Cluster Subdivision in this area would substantially diminish the integrity of the design, setting, materials, feeling, and association of this important character-defining area of the historical



landscape by damaging or destroying the shell deposits themselves, damaging or destroying archaeological remains, introducing uncharacteristic visual design elements into the historic setting, and disrupting the feeling and associations of the historical landscape.

In summary, development of the proposed Agricultural Residential Cluster Subdivision in this area would substantially diminish the integrity of the design, setting, materials, feeling, and association of this important character-defining area. In addition, implementation of the Agricultural Residential Cluster Subdivision would adversely impact traditional Native American values. This is considered a Class I, *significant and unavoidable*, impact.

Mitigation Measures. The following mitigation measures would reduce impacts on the historic landscape to the extent feasible:

**Agricultural Residential Cluster Subdivision CR-1(a)**

**Avoidance.** The preferred mitigation measure is avoidance of the impacts described above. If avoidance cannot be achieved, other forms of mitigation, such as graphic documentation (photographs, drawings, etc.) and archaeological data recovery, will lessen the impacts but will not mitigate the loss of integrity to a less than significant level.

**Plan Requirements and Timing.** The location of all development shall be reviewed and approved by Planning and Building prior to issuance of grading permits. **Monitoring:** Planning and Building shall check plans prior to prior to issuance of grading permits and shall spot check in the field.

**Agricultural Residential Cluster Subdivision CR-1(b)**

**Cultural Design Guidelines.** The Architecture and Landscape Guidelines (refer to Agricultural Residential Cluster Subdivision measure AES-1(b) in Section 4.13, *Visual Resources*) shall incorporate the design principles, plans, and massing of historic ranch structures, such as sandstone or adobe construction, one-story height, gable roofs, shiplap siding, and natural landscaping. The County will have final approval over the project design elements, based in part on consultation with a qualified historian.

**Plan Requirements and Timing.** Design specifications shall be reviewed and approved by Planning and Building, in consultation with a qualified historian, prior to issuance of grading permits. **Monitoring:** Planning and Building shall check plans prior to issuance of grading permits and shall spot check in the field.

**Agricultural Residential Cluster Subdivision CR-1(c)**

**Viewshed Preservation.** Because the native flora of the ranch is a key character defining feature of the historic landscape and a critical element of the historic viewshed, non-agricultural open space should be left in natural grasses, with native trees and other flora.



**Plan Requirements and Timing.** Building locations shall be reviewed and approved by Planning and Building prior to issuance of grading permits. **Monitoring:** Planning and Building shall check plans prior to issuance of grading permits and shall spot check in the field.

It should be noted that Agricultural Residential Cluster Subdivision measure AES-1(a) in Section 4.13, *Visual Resources*, which prohibits structural silhouetting on ridgelines, would also reduce this impact.

**Agricultural  
Residential Cluster  
Subdivision  
CR-1(d)**

**Preservation of Key Landscape Elements.** New roads on the ranch shall follow the natural topography to the extent possible, without substantial cuts or fills; the roads shall be as narrow as allowed by County requirements, with no verges. Signage must be subdued, and not mar or interfere with the views. Historic types of fencing shall be used.

To facilitate preservation of these landscape elements, historic roads and other landscape remnants shall be recorded and mapped in greater detail. In particular, a survey of El Camino Real shall be carried out by a qualified professional using the location on the 1858 and 1889 maps as a guide. Any remnants or other physical evidence of these roads shall be thoroughly documented, and no development of any kind shall be located in the path of El Camino Real or other historical transportation elements.

The current local historic place names indicate the history of the ranch and the people who impacted the landscape. These names shall be retained and incorporated into any development. New place names shall reflect the historical usage.

**Plan Requirements and Timing.** Transportation plans, design specifications, naming conventions, and signage shall be reviewed and approved by Planning and Building prior to issuance of grading permits. This condition shall be in effect throughout Agricultural Residential Cluster Subdivision construction.

**Monitoring:** Planning and Building shall check plans prior to issuance of grading permits and shall spot check in the field.

**Agricultural  
Residential Cluster  
Subdivision  
CR-1(e)**

**Nomination to the National Register of Historic Places.** The Santa Margarita Ranch **Rural Historic District** shall be nominated to the National Register of Historic Places. At a minimum, the NRHP nomination shall include the following elements:

- documentation of all extant historical buildings and



structures in the ranch headquarters area to the level of the Historic American Building Survey (HABS), particularly including measured drawings and large format photographs of the interior and exterior of the main asistencia building, ranch house, Wells Fargo building, and associated structures and features;

- reconstruction of the asistencia layout and the placement of buildings, structures, walls, and other features utilizing historical photographs, artwork, and other documentary evidence; and
- preparation of an ethnographic history of the ranch.

**Plan Requirements and Timing.** The National Register nomination shall be prepared and submitted to the California Office of Historic Preservation prior to issuance of grading permits. **Monitoring:** Planning and Building shall ensure that the applicant retains a qualified professional to prepare a thorough and National Register nomination prior to issuance of grading permits.

Residual Impacts. Although impacts would be reduced through the above mitigation measures, no mitigation is available to avoid significantly impacting the integrity of the design, setting, materials, feeling, and association of this important character-defining area, or its Native American values. Impacts would remain *significant and unavoidable*.

**Agricultural Residential  
Cluster Subdivision  
Impact CR-2**

**Thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site. All of these resources contribute to the significance of the Santa Margarita Ranch Rural Historic District and are eligible for the California Register of Historic Resources (CRHR) under multiple significance criteria. Recovery of the important information in these sites through excavation would lessen the impacts. However, damage to or destruction of the important associations of these sites, and disruption of their setting and feeling, is a Class I, *significant and unavoidable* impact.**

Based on the available mapping, 12 archaeological sites would be directly impacted by proposed home sites or access roads in the Agricultural Residential Cluster Subdivision: CA-SLO-1948H, -1949, 1973, -2060, -2061, -2062, -2505, -2506, -2507, -2508, -2509, and -2510H. The remaining sites are within or adjacent to the disturbance area, and may be indirectly impacted. It must be noted, however, that the boundaries of most sites are not well defined because much of the ground surface is obscured by vegetation and the surface distribution of artifacts at a site does not always match the subsurface distribution (Lloyd 2006). Additional site boundary definition would be needed to define the relationship of archaeological resources to direct impact areas. Impacts would be significant and unavoidable (Class I).



Mitigation Measures. The following mitigation measures would reduce impacts on the scientific values of archaeological resources:

**Agricultural Residential  
Cluster Subdivision  
CR-2(a)**

**Avoidance.** As feasible, all cultural sites within Tract 2586 shall be avoided during development. To ensure avoidance, the boundaries of all sites within or adjacent to the housing cluster shall be defined through a program of systematic subsurface boundary testing using shovel probes, surface test units, and other appropriate sampling units. The type and distribution of sampling units shall be determined by a qualified professional archaeologist, who will carry out the boundary testing in the presence of a Native American monitor. After site boundaries are defined, an exclusion zone shall be placed around each site. An exclusion zone is a fenced area where construction equipment and personnel are not permitted. The exclusion zone fencing shall be installed (and later removed) under the direction of a qualified archaeologist and shall be placed five meters beyond the defined site boundary to avoid inadvertent damage to sites during installation. If multiple pieces of heavy equipment are in use simultaneously at diverse locations during construction, each location may be monitored individually. If avoidance cannot be achieved, other forms of mitigation, such as data recovery, will lessen the impacts but will not mitigate the loss of integrity to a less than significant level.

**Plan Requirements and Timing.** Site boundaries, and exclusion zones shall be included on plans for all buildings, structures, utilities, roads and other elements of the development. Planning and Building shall review these plans prior to issuance of grading permits. **Monitoring.** Planning and Building shall be responsible for ensuring that all structures and utilities avoid cultural resources. Planning and Building staff shall inspect the project site during construction to ensure exclusion zones remain in place. If avoidance is not possible, Planning and Building shall ensure that Agricultural Residential Cluster Subdivision measure CR-2(b) (mitigative data recovery excavation) is applied.

**Agricultural Residential  
Cluster Subdivision  
CR-2(b)**

**Mitigative Data Recovery Excavation.** If avoidance of an archaeological site(s) is not possible, data recovery excavation shall be completed prior to issuance of grading permits. A data recovery plan shall be submitted by a qualified archaeologist for review by the County Environmental Coordinator. Data recovery shall be funded by the applicant, shall be performed by a County-qualified archaeologist, and shall be carried out in accordance with a research design consistent with the requirements of the California Office of Historic Preservation



Planning Bulletin 5, *Guidelines for Archaeological Research Design*.  
At a minimum, data recovery shall include:

- Mapping of site boundaries and the distribution of surface remains;
- Surface collection of artifacts;
- Excavation of a sample of the cultural deposit to characterize the nature of the site and retrieve a representative sample of artifacts and other remains within the proposed impact area;
- Monitoring of excavations at Native American sites by a tribal representative;
- Technical studies and analysis of the recovered sample, including radiocarbon dating, typological and technical analysis of tools and debris, identification and analysis of preserved faunal and floral remains, and other studies appropriate to the research questions outlined in the research design;
- Cataloguing and curation of all artifacts and records detailing the results of the investigations at a county approved curation facility;
- submission of a final technical report detailing the results of the investigations;
- preparation of an interpretive report suitable for distribution to the general public.

**Plan Requirements and Timing:** As applicable, the data recovery program shall be completed and the final reports shall be submitted to Planning and Building prior to issuance of a grading permit. Recommendations contained therein shall be implemented throughout all ground disturbance activities.

**Monitoring:** Planning and Building shall review and approve the required report prior to issuance of a grading permit. Building inspectors shall make site inspections to assure implementation of approved plans.

Residual Impacts. Although impacts would be reduced through the above mitigation measures, no mitigation is available to avoid significantly impacting identified cultural resources. Impacts would remain *significant and unavoidable*.

**Agricultural Residential Cluster Subdivision Impact CR-3**      **Construction of the Agricultural Residential Cluster Subdivision could disturb previously unidentified buried archeological deposits. This is considered a Class II, significant but mitigable impact.**

Given the presence of recorded archaeological sites, isolated artifacts, and the long record of prehistoric and historic settlement and use of the land, there is potential for buried



archaeological deposits to occur within the Agricultural Residential Cluster Subdivision site. Isolated artifacts may represent substantial buried deposits with little surface expression, and construction in areas not known to contain archaeological resources may nevertheless affect previously unidentified resources, given the cultural sensitivity of portions of the Agricultural Residential Cluster Subdivision site. This is a potentially significant but mitigable impact.

Mitigation Measures. The following mitigation measures would reduce impacts on the potentially significant buried archaeological remains to less than significant levels:

**Agricultural Residential  
Cluster Subdivision  
CR-3(a)**

**Buried Site Testing at Isolate Locations.** Isolated artifacts shall be tested by a qualified archaeologist to determine whether or not isolated artifacts within or adjacent to the Agricultural Residential Cluster Subdivision represent more substantial buried components. Such testing shall involve hand excavation of shovel probes and/or other sampling units. The type and distribution of sampling units shall be determined by a qualified professional archaeologist, who will carry out the isolate testing in the presence of a Native American monitor. If isolate testing reveals the presence of a buried site, then site boundary definition and avoidance, or mitigative data recovery, shall be carried out in accordance with Agricultural Residential Cluster Subdivision measures CR-2(a) or CR-2(b) above.

**Plan Requirements and Timing:** As applicable, isolate testing shall be completed and the final report shall be submitted to Planning and Building prior to issuance of a grading permit. Recommendations contained therein shall be implemented throughout all ground disturbance activities. **Monitoring:** Planning and Building shall review and approve the required report prior to issuance of a grading permit. Building inspectors shall make site inspections to assure implementation of approved plans.

**Agricultural Residential  
Cluster Subdivision  
CR-3(b)**

**Archaeological Resource Construction Monitoring.** An archaeological resource monitoring plan prepared by a qualified archaeologist shall be submitted for review by the County Environmental Coordinator. The plan shall include a list of personnel involved in monitoring activities, and descriptions of monitoring methods, resources expected to be encountered, circumstances that would result in halting work, procedures for halting work, and procedures for monitoring reporting.

At the commencement of Agricultural Residential Cluster Subdivision construction, an archaeologist and a Native American representative shall conduct an orientation for





construction workers to describe site avoidance requirements, the possibility of exposing unexpected archaeological resources, and the steps to be taken if such a find is encountered.

A qualified archaeologist and Native American representative shall monitor all earth moving activities within native soil. If multiple pieces of heavy equipment are in use simultaneously at diverse locations during construction, each location may be monitored individually. In the event that archaeological remains are encountered during construction, all work in the vicinity of the find will be halted until such time as the find is evaluated by a qualified archaeologist and appropriate mitigation, if necessary, is implemented.

**Plan Requirements and Timing.** This condition shall be in effect throughout Agricultural Residential Cluster Subdivision construction. **Monitoring:** Planning and Building shall check plans prior to approval of grading permits and shall spot check in the field.

Residual Impacts. With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.

**Agricultural Residential Cluster Subdivision Impact CR-4**      **There is the potential that Agricultural Residential Cluster Subdivision construction will disturb previously unidentified human remains. This is considered a Class II, significant but mitigable impact.**

Given the presence of recorded historical cemeteries and human remains at prehistoric archaeological sites, the potential to encounter human remains during construction of the Agricultural Residential Cluster Subdivision is high. This would be considered a significant impact unless mitigation is incorporated.

Mitigation Measures. The following mitigation measures would reduce impacts on human remains to less than significant levels:

**Agricultural Residential Cluster Subdivision CR-4(a)**      **Treatment of Human Remains.** In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps will be taken:

- I. State Health and Safety Code Section 7050.5 requires that there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
  - A. The County Coroner is contacted to determine that



- no investigation of the cause of death is required, and
- B. If the coroner determines the remains to be Native American, the coroner has 24 hours to notify the Native American Heritage Commission. The Native American Heritage Commission shall identify the person or persons it believes to be most likely descended from the deceased Native American. The most likely descendent may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public resources Code Section 5097.98.
- II. If the Native American Heritage Commission is unable to identify a most likely descendent; or if the most likely descendent fails to make a recommendation within 24 hours after being notified by the commission; or if the landowner or his authorized representative rejects the recommendation of the descendent, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner, then the landowner or his authorized representatives shall reinter the Native American human remains and associated grave items with appropriate dignity on the property in a location not subject to further subsurface disturbance. However, any such activity shall be supervised by a Chumash representative if a most likely descendent is either not identified or fails to respond to notification.

**Plan Requirements and Timing.** This condition shall be in effect throughout Agricultural Residential Cluster Subdivision construction. **Monitoring:** Planning and Building shall check plans prior to approval of grading permits and shall spot check in the field.

Residual Impacts. With implementation of the above mitigation measure, impacts would be reduced to a less than significant level.

**Agricultural Residential Cluster Subdivision Impact CR-5**

**Implementation of the Agricultural Residential Cluster Subdivision could result in indirect impacts to identified or unidentified archaeological and historical resources. This is considered a Class II, *significant but mitigable impact.***

Increased population in the area could result in an increase of relic collecting and/or vandalism that could potentially impact archaeological and historical sites. The establishment of horse



trails, foot and bike paths, parks, picnic areas, or other amenities on or through archaeological sites may result in their physical destruction, relocation of significant features, removal of artifacts, and loss of data classes that yield information important to prehistory. This would constitute a significant but mitigable impact.

Even if trails and other amenities are designed to avoid the sites directly, they are vulnerable indirectly as a result of their proximity to the developed areas and increased public access to and use of the sites. Examples of activities that could substantially alter the integrity and significant qualities of the resources due to such proximity and increased use include, but are not limited to: collection of artifacts from the archaeological sites; unauthorized excavation or looting of sites; erosion and other damage resulting from unmotorized or motorized vehicle use (horses, bicycles, dirt bikes, etc.); illicit trash dumping; and vandalism to cultural features. Such effects are considered significant but mitigable environmental impacts.

Mitigation Measures. The following mitigation measures would reduce potential indirect impacts related to identified and unidentified archaeological and historical resources to a less than significant level:

**Agricultural Residential  
Cluster Subdivision  
CR-5(a)**

**Prohibition of Archaeological Site Tampering.** Off-road vehicle use, unauthorized collecting of artifacts, and other activities that could destroy or damage archaeological or historical sites shall be prohibited and shall be punishable by fine. The applicant shall prepare a brochure for all homebuyers and other occupants describing the cultural sensitivity of the area and explaining the prohibitions. Informational material shall be general in content and shall not include any information that could lead to the identification or location of sensitive cultural resources. Homebuyers and other occupants shall acknowledge receipt and understanding of such prohibitions in writing.

**Plan Requirements and Timing.** The required brochure shall be prepared and distributed prior to occupancy clearance.

**Monitoring:** Planning and Building shall ensure that homebuyers and occupants acknowledge receipt of information on such prohibitions, and shall periodically check to ensure their effectiveness.

**Agricultural Residential  
Cluster Subdivision  
CR-5(b)**

**Periodic Monitoring of Archaeological Site Condition.** To ensure that prohibitions on site tampering and vandalism are effective, the applicant shall fund an annual inspection of cultural resources within or adjacent to the Agricultural Residential Cluster Subdivision, during which the condition of the sites shall be assessed and any degradation of integrity from vandalism, erosion, or other factors shall be identified. A qualified professional archaeologist and/or a Native American representative trained in site assessment shall carry out the annual site inspections and prepare a brief report for the County,



with recommendations for addressing any apparent site degradation. The applicant shall also develop a list of threatened and sensitive cultural resources sites on other lands within the Agricultural Residential Cluster Subdivision area, and shall retain a qualified archaeologist to inspect and report to the County Environmental Coordinator on the condition of those sites annually.

**Plan Requirements and Timing.** Condition assessments shall occur annually, preferably in the fall before the first rains, when surface visibility is at its best. A report shall be filed with Building and Planning within one month following completion of the field assessments. **Monitoring:** Planning and Building shall review condition assessments and ensure that recommendations regarding site degradation are implemented.

Residual Impacts. With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.

**Agricultural Residential Cluster Subdivision Impact CR-6**      **Agricultural Residential Cluster Subdivision facilities and infrastructure could impact fossil-bearing strata and could damage or destroy significant fossil materials. This is considered a Class II, significant but mitigable impact.**

The proposed Agricultural Residential Cluster Subdivision encompasses geological strata with both high and unknown sensitivity to produce significant fossils. High-sensitivity areas have the potential to yield vertebrate fossils and also may produce invertebrate materials that could provide new and important taxonomic, phylogenetic, and/or stratigraphic data. Any vertebrate fossils disturbed in areas where sensitivity is currently unknown (i.e. Atascadero or Toro formation deposits) would also be a significant impact.

Mitigation Measures. Implementation of the following mitigation measures would reduce impacts on paleontological resources to less than significant levels:

**Agricultural Residential Cluster Subdivision CR-6(a)**      **Preparation of a Paleontological Resource Monitoring Plan.** Prior to issuance of grading permits, the applicant shall retain a qualified accredited paleontologist to prepare a Paleontological Resource Monitoring Plan based on the specific construction plans. The monitoring plan shall detail the procedures for monitoring construction in areas of high or unknown sensitivity, collecting fossil remains and relevant geographic and stratigraphic data, stabilizing and preserving recovered specimens, and cataloguing and curating the collection (see Agricultural Residential Cluster Subdivision measure P-1(b and c) below). The monitoring plan shall include provisions for collecting a representative sample of invertebrates from the identified site at the Agricultural Residential Cluster Subdivision site prior to construction, documenting the site according to the



standards developed by the National Research Council (1987), and assessing the potential of this site to contain significant vertebrate remains.

**Plan Requirements and Timing:** The monitoring plan shall be prepared by a qualified paleontologist and reviewed and approved by the County prior to the issuance of grading permits. **Monitoring:** Planning and Building staff shall review the monitoring plan and ensure its implementation in the field.

**Agricultural Residential  
Cluster Subdivision  
CR-6(b)**

**Paleontological Monitoring.** A qualified paleontological monitor shall observe any initial excavation, grading, or other ground disturbance which extends below the upper soil layers in *in situ* sedimentary rock where paleontological sensitivity is high or unknown. Any excavation into *in situ* older Quaternary Alluvium, Paso Robles, Monterey, Santa Margarita, Vaqueros, Atascadero, or Toro formations shall be monitored. The areas covered by late Quaternary strata shall be monitored if excavation is undertaken below the uppermost few feet of sediment, because these strata have yielded vertebrate remains elsewhere in San Luis Obispo County. Shallow excavations in the Quaternary deposits are unlikely to yield significant fossils and do not need monitoring. Paleontologists who monitor excavations must be qualified and experienced in salvaging fossils and authorized to temporarily divert equipment while removing fossils. They must be properly equipped with tools and supplies to allow for rapid removal and preparation of specimens, and trained in safe practices when working around construction equipment. If multiple pieces of heavy equipment are in use simultaneously at diverse locations during construction, each location may be monitored individually.

**Plan Requirements and Timing:** Monitoring shall occur throughout initial ground disturbing activities. **Monitoring:** Planning and Building staff shall ensure paleontological monitoring in the field.

**Agricultural Residential  
Cluster Subdivision  
CR-6(c)**

**Treatment of Paleontological Remains Discovered During Monitoring.** If paleontological resources are found during excavations or other ground disturbance, work shall cease temporarily in the immediate area of the discovery. Ground disturbance may be redirected to another area so that the significance of the fossil find may be assessed. If an accredited paleontologist is not already on site, a vertebrate paleontologist with regional experience will be contacted to inspect the excavation, assess the significance of the fossil find, recover any exposed fossils of significance, and recommend additional mitigation measures, if necessary.



A standard sample (3–12 cubic meters) of matrix from each site will be taken for identification of microvertebrates (rodents, birds, rabbits), especially when the potential for microvertebrates is high. The monitors also will determine whether the fossils are part of an archaeological deposit. If the fossils are found with cultural material, the site then will be considered an archaeological discovery and treated according to the procedures specified in Agricultural Residential Cluster Subdivision measure CR-3(b).

Significant fossils found during construction shall be preserved by prompt removal whenever feasible. Due to the potential for rapid deterioration of exposed surface fossils, preservation by avoidance is not an appropriate measure. When a significant fossil cannot be removed immediately, stabilization is needed to prevent further deterioration prior to removal. The fossil location must be stabilized under the direction of a professional paleontologist.

At the time of collecting, each specimen or group of specimens will be clearly located and plotted on a USGS topographical quadrangle map. Field methods, other excavation activities, and working conditions during monitoring of the paleontological resources will be recorded in a field notebook or on a paleontological resources record or worksheet such as those developed by the National Research Council (1987). Recovered specimens will be stabilized and prepared for identification. Sedimentary matrix with microfossils will be screen washed and sorted to identify the contained fossils. Removal of excess matrix during preparation reduces long-term storage requirements. Competent qualified specialists will classify individual specimens to the lowest identifiable taxon, typically to genus, species, and element. Batch identification and batch numbering (e.g., “mammal, 25 specimens”) shall be avoided.

Paleontological specimens will be cataloged according to current professional standards, and a complete list of collected specimens must be prepared. A complete set of field notes, geologic maps, and stratigraphic sections must accompany the fossil collections.

All fossil remains recovered during construction and operation must be curated by a recognized, nonprofit paleontological specimen repository with a permanent curator, such as a museum or university. Specimens must be stored in a fashion

that allows researchers to retrieve specific individual specimens in the future. In addition to the LACM and UCMP, qualified research facilities include California State Polytechnic University, San Luis Obispo; the Santa Barbara Museum of Natural History; or Santa Barbara City College.

The project paleontologist will complete a final report summarizing findings, describing important fossil localities (vertebrate, megainvertebrate, or plant) discovered in the project area, and explaining any mitigation measures taken. The report will include a summary of the field and laboratory methods, site geology and stratigraphy, an itemized inventory of recovered specimens, faunal lists, and site records. The report also shall discuss the importance of the recovered fossil materials. The reports will be prepared by a professional paleontologist and distributed to the appropriate agencies, museums, colleges, or universities.

**Plan Requirements and Timing.** This condition shall be in effect throughout Agricultural Residential Cluster Subdivision construction. **Monitoring:** Planning and Building shall check plans prior to approval of grading permits and shall spot check in the field.

Residual Impacts. With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.

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**b. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.4.2(c) for a discussion of cultural resource impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development  
Program Impact CR-1**

**Future development in accordance with the Future Development Program could adversely impact the Santa Margarita Ranch Rural Historic District and could adversely impact traditional Native American values. This is considered a Class I, *significant and unavoidable* impact.**

The Santa Margarita Ranch Rural Historic District is eligible for the CRHR under all four significance criteria. Future buildout of the ranch has the potential to diminish the integrity of the district's character-defining features and contributing elements. Moreover, as discussed above, many native people view the landscape and its component elements, both cultural and natural, as sacred elements of their cultural patrimony. Given the sensitivity of the property, any substantial development of undisturbed sites is a significant impact.



Mitigation Measures. Agricultural Residential Cluster Subdivision measures CR-1(a) (Avoidance), CR-1(b) (Cultural Design Guidelines), CR-1(c) (Viewshed Preservation), CR-1(d) (Preservation of Key Landscape Elements) and CR-2(e) (Nomination to the National Register of Historic Places) would apply to all Future Development Program land uses. No additional mitigation is necessary.

Residual Impacts. Although impacts would be reduced through the above mitigation measures, no mitigation is available to avoid significantly impacting the integrity of the design, setting, materials, feeling, and association of this important character-defining area, or its Native American values. Impacts would remain *significant and unavoidable*.

**Future Development  
Program Impact CR-2**

**Future development in accordance with the Future Development Program could adversely impact identified and previously unidentified archeological deposits. These resources contribute to the significance of the Santa Margarita Ranch Rural Historic District and are eligible for the California Register of Historic Resources (CRHR) under multiple significance criteria. Recovery of the important information in these sites through excavation would lessen the impacts. However, damage to or destruction of the important associations of these sites, and disruption of their setting and feeling, is a Class I, *significant and unavoidable* impact.**

Sixty-two prehistoric and historical archaeological sites and 29 isolates are recorded on the surveyed portions of the ranch. Thirty sites are located within or immediately adjacent to identified Future Development Program parcels. Given the presence of recorded archaeological sites, isolated artifacts, and the known extent of prehistoric and historical land use, there is also potential for buried archaeological deposits to occur throughout the Ranch property, including Future Development Program locations. Disturbance of these resources is a significant impact.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures CR-2(a) (Avoidance), CR-2(b) (Mitigative Data Recovery Excavation), CR-3(a) (Buried Site Testing), and CR-3(b) (Construction Monitoring) would apply to all Future Development Program land uses. The following additional mitigation measure is also required.

**Future Development  
Program CR-2(a)**

**Additional Archaeological and Historical Surveys.** Additional archaeological and historical surveys shall be carried out on unsurveyed portions of the ranch subject to development. Any documented cultural resources on the ranch shall be avoided and protected during development. If resource avoidance is not feasible, then additional archival research and data recovery excavation shall be carried out [refer to Agricultural Residential Cluster Subdivision measure CR-2(b) (Mitigative Data Recovery Excavation)].

**Plan Requirements and Timing.** Additional surveys shall be completed, and reports reviewed and approved by Planning and Building, prior to issuance of grading permits for unsurveyed





areas. **Monitoring:** Planning and Building shall be responsible for ensuring that all necessary cultural resource surveys are completed prior to issuance of grading permits.

Residual Impacts. Although impacts would be reduced through the above mitigation measures, no mitigation is available to avoid significantly impacting identified and previously unidentified cultural resources. Impacts would remain *significant and unavoidable*.

**Future Development  
Program Impact CR-3**

**Future development in accordance with the Future Development Program could adversely impact historical buildings and structures on the ranch. This is considered a Class II, significant but mitigable impact.**

Numerous standing buildings and structures on the ranch have historical value and contribute to the significance of the historic district. Although not individually evaluated, several of these buildings may also qualify individually for the CRHR and NRHP. This is particularly true for buildings in the current ranch headquarters area, although it applies to all buildings and structures. Alteration of these buildings and structures in ways that diminish their historical integrity would be a significant impact unless mitigation is incorporated.

Mitigation Measures. The following mitigation measures would reduce impacts on historical buildings and structures to less than significant levels:

**Future Development  
Program CR-3(a)**

**Prohibition of Demolition of Buildings and Structures.** Demolition of buildings, structures, and other elements of the built environment that date from the period of significance of the historic district (as described in the Cultural Landscape Report contained in Appendix E) shall not be permitted.

**Plan Requirements and Timing.** Planning and Building shall review all demolition, restoration, preservation, or other development plans to ensure compliance prior to issuance of permits. **Monitoring:** Planning and Building shall check plans prior to issuance of permits and shall spot check in the field.

**Future Development  
Program CR-3(b)**

**Restoration, Stabilization, Repair, and Reconstruction.** Any stabilization, restoration, repair, or reconstruction of historic buildings and structures within the district, and particularly at the ranch headquarters, shall follow the *Secretary of Interior's Standards and Guidelines for the Treatment of Historic Properties*. Roof and floor tiles, mortar, and adobe bricks from the asistencia, ranch house, and previously demolished structures shall be analyzed and compared with Mission San Luis Obispo de Tolosa and other mission architecture.

**Plan Requirements and Timing.** Planning and Building shall



review all restoration, preservation, or other development plans to ensure compliance prior to issuance of permits. **Monitoring:** Planning and Building shall check plans prior to issuance of permits and shall spot check in the field.

**Future Development  
Program CR-3(c)**

**Resource Conservation.** The drawings in the bunkhouse room at the ranch shall be documented and preserved not only for their value as folk art but also for their information on ranch history. A conservator shall be consulted to ascertain the best method of preservation for the drawings. The results of the consultation shall be submitted to the County Environmental Coordinator. Documentation shall include 8 by 10 inch large format photographs.

The adobe core of the main ranch house at the headquarters shall be stabilized and preserved. A conservator with expertise in adobe preservation shall be consulted to ascertain the best method of preservation. The results of the consultation shall be submitted to the County Environmental Coordinator.

**Plan Requirements and Timing.** The applicant shall prepare a conservation plan for the drawings and adobe structural remains for County Environmental Coordinator review and approval prior to the issuance of Future Development Program land use or development permits. The plans shall include a schedule for implementation. **Monitoring:** Planning and Building shall ensure that conservation measures are implemented according to plan and schedule.

**Future Development  
Program CR-3(d)**

**Additional Archaeological and Historical Survey.** A thorough archaeological and historical survey shall be carried out at the ranch headquarters area, with particular attention to documentation and mapping of surface-visible prehistoric and historical features.

**Plan Requirements and Timing.** Additional surveys shall be completed, and reports reviewed and approved by Planning and Building, prior to issuance of Future Development Program grading or other development permits. **Monitoring:** Planning and Building shall be responsible for ensuring that all necessary cultural resource surveys are completed prior to issuance of permits.

Residual Impacts. With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.



**Future Development  
Program Impact CR-4**

**Future development in accordance with the Future Development Program could adversely impact previously identified or unidentified human remains. This is considered a Class II, *significant but mitigable* impact.**

Human remains have been identified at several locations within the ranch, and are likely to be present in other locations as well. Disturbance to or damage of human remains would be considered a significant impact unless mitigation is incorporated.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure CR-4(a) (Treatment of Human Remains) would apply to all Future Development Program land uses. No additional mitigation is necessary.

Residual Impacts. With implementation of the above mitigation measure, impacts would be reduced to a less than significant level.

**Future Development  
Program Impact CR-5**

**Future development in accordance with the Future Development Program could result in indirect impacts to identified or unidentified cultural resources. This is considered a Class II, *significant but mitigable* impact.**

Indirect impacts may result from increased population and visitorship within areas identified for future development. As a result, relic hunting and vandalism may increase, and archaeological and historical sites may be damaged by unauthorized artifact collection, excavation; or looting; erosion; illicit trash dumping; or other effects. Such effects are considered significant but mitigable environmental impacts.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure CR-5(a) (Prohibition of Site Tampering) and CR-5(b) (Periodic Monitoring and Condition Assessment) would apply to all Future Development Program land uses. No additional mitigation is necessary.

Residual Impacts. With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.

**Future Development  
Program Impact CR-6**

**Implementation of the Future Development Program could impact fossil-bearing strata and could damage or destroy significant fossil materials. This is considered a Class II, *significant but mitigable* impact**

Future Development Program land uses may be implemented on surface outcrops and underlying strata of the Santa Margarita, Monterey, Atascadero, and Obispo formations. Cretaceous granitics and older alluvium are also present in some of the areas identified for potential future development. The Cretaceous granitic and Obispo formations are defined as no sensitivity areas due to their igneous origin or their limited potential to produce significant fossil material. The Santa Margarita, Monterey, and alluvial deposits are high sensitivity areas that have produced important invertebrate as well as marine and non-marine vertebrate fossils in other locations. The sensitivity of the Atascadero Formation is unknown. Impacts from



future development of these areas could occur directly by destruction of fossils on or near the surface during brushing, grading, road construction, and other ground-disturbing activities; by excavation for foundations, trenches, tower pads, footings, wells, and septic systems; or by other subsurface activity in fossiliferous areas. Indirect impacts include unauthorized collection and increased erosion or compaction from vehicle and human activity, including intensified residential and recreational uses.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures CR-6(a) (Paleontological Monitoring Plan), CR-6(b) (Paleontological Monitoring), and CR-6(c) (Treatment of Paleontological Remains Discovered During Monitoring) would apply to all Future Development Program land uses and would reduce potential impacts on paleontological resources to less than significant levels.

Residual Impacts. With implementation of the above mitigation measures, impacts would be reduced to a less than significant level.

**c. Cumulative Impacts.** In this EIR, the evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative cultural resources impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.



## 4.5 DRAINAGE, EROSION, AND SEDIMENTATION

*The following section is based on a drainage analysis prepared by Boyle Engineering Corporation (refer to Appendix H).*

*Agricultural Residential Cluster Subdivision. Sediment transported from the Agricultural Residential Cluster Subdivision site during the construction period has the potential to cause downstream water quality impacts. Compliance with the National Pollutant Discharge Elimination System (NPDES) program would ensure less than significant impacts. The Agricultural Residential Cluster Subdivision would increase the area covered by impervious surfaces, resulting in potential increases in surface runoff and accelerated erosion. Although the Agricultural Residential Cluster Subdivision proposes a detention structure for the portion of the site draining to Yerba Buena Creek, runoff may overflow the proposed detention structure during a 100-year storm event. In addition, the Agricultural Residential Cluster Subdivision does not propose a detention structure for the portions of the site draining to Trout Creek and the unnamed tributary to Trout Creek. Potential inundation can be mitigated by the use of detention basins with adequate capacity to reduce the 24-hour 100-year post-development runoff to 100-year pre-development conditions, resulting in less than significant impacts. Portions of the Agricultural Residential Cluster Subdivision site are located in a 100-year flood zone. Since no habitable structures are proposed in these areas, impacts would be less than significant. Development of the Agricultural Residential Cluster Subdivision site with residential uses would be expected to increase the quantities of pollutants potentially entering stream courses with runoff from streets, lawns, and gardens. This is a Class II, significant but mitigable, impact.*

*Future Development Program. Because no active application currently exists for the Future Development Program, the assessment of drainage, erosion, and sedimentation impacts is based on a reasonable worst case scenario with regard to the location of future land uses within anticipated development areas. Buildout of the Future Development Program would result in impacts similar to those resulting from the Agricultural Residential Cluster Subdivision individually. However, because no active application currently exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, and the precise size and location of Future Development components are unknown, it is assumed as a reasonable worst-case scenario that components of the Future Development Program would be required to comply with the NPDES program. Compliance with the NPDES program would ensure less than significant impacts short-term water quality impacts. The Future Development Program would increase the area covered by impervious surfaces, resulting in long-term increases in surface runoff and accelerated erosion. Impacts are significant but mitigable. In addition, the Future Development Program may place habitable structures in a 100-year flood zone. Flooding impacts are therefore Class II, significant but mitigable. Due to the intensification of uses proposed as part of the Future Development Program, there is the potential for storm water transport of pollutants, bacteria, and sediment into downstream facilities. Impacts are Class II, significant but mitigable.*

### 4.5.1 Setting

**a. Topography.** The Santa Margarita Ranch property consists of varied terrain with the mountainous area on the west side of the Ranch containing the Santa Lucia Mountain ridge and slopes of 50 percent and greater. The predominant interior valleys of the Ranch are sloped at 1 to 9 percent while the Santa Margarita Creek lowlands typically contain slopes less than 5 percent. Elevations across the site range from a high of 1,276 feet along the Santa Lucia ridgeline to 1,020 feet at the north end of the site. At that location, the primary on-site tributary



(Trout Creek) drains to the Salinas River, located approximately 1.25 miles north of the subject property.

**b. Site Drainage Pattern.** The Santa Margarita Ranch is located in the Salinas River watershed which empties into the Pacific Ocean at Monterey Bay. Specifically, the Ranch contains a number of smaller internal drainage basins which are west bank tributaries to the Salinas River. Drainage generally flows from south to north via four main drainages: Trout Creek (northeast of Agricultural Residential Cluster Subdivision site); an unnamed tributary to Trout Creek (between Phase 1 and Phase 2 of the Agricultural Residential Cluster Subdivision site); Yerba Buena Creek (southwest of the Agricultural Residential Cluster Subdivision site); and Rinconada Creek (southeast of the Agricultural Residential Cluster Subdivision site). All of these drainages are categorized as Waters of the U.S. and each eventually flow to the Salinas River. From a hydrologic perspective, the water movement potential of the Ranch is quite variable because the Ranch's terrain varies from rugged mountains to rolling hills and flat land. A number of soil types on the Ranch are characterized by medium to very rapid runoff and high to very high erosion potential. Table 4.6-1 in Section 4.6, *Geologic Stability*, lists the different soils found on the Ranch property and includes an analysis of their drainage characteristics.

**c. Existing Flood Hazards.** Portions of the Santa Margarita Ranch are subject to potential flooding from Trout Creek, the unnamed tributary to Trout Creek, Yerba Buena Creek, and Rinconada Creek. The National Flood Insurance Program's Flood Insurance Rate Map (FIRM) for the Ranch property shows the central and northern portion of the property within the 100-year flood plain boundary adjacent to these creeks (refer to Figure 4.5-1). The 100-year flood, or "base flood," refers to the flood resulting from a storm event that has a probability of occurring once every 100 years, or a one percent chance of occurring in any given year. Areas mapped in the 100-year floodplain are subject to inundation during a 100-year storm event. The 100-year floodplain was used to designate Santa Margarita Creek and Yerba Buena Creek in the Flood Hazard combining designation within the Salinas River Area Plan.

## 4.5.2 Impact Analysis

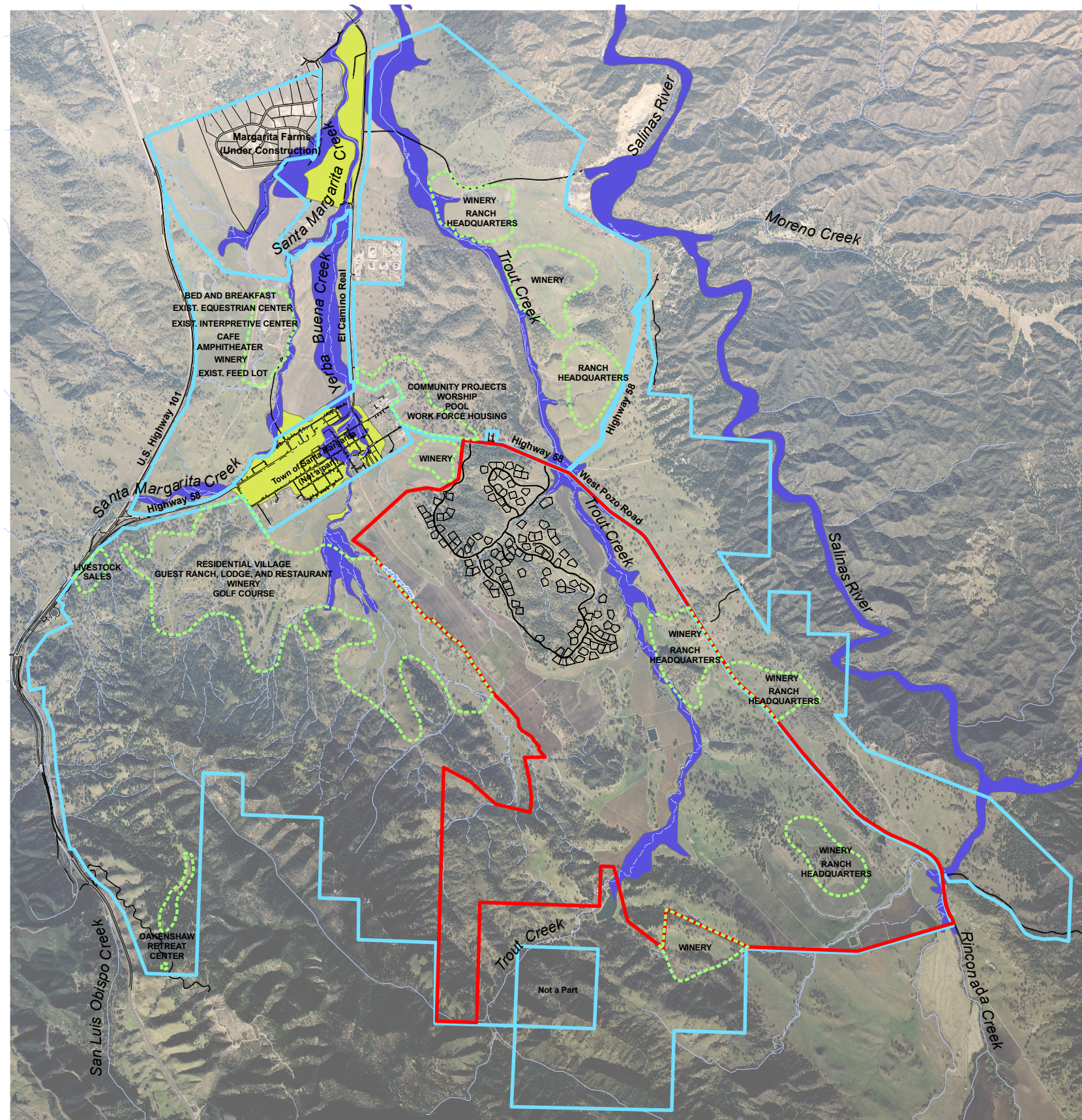
**a. Methodology and Significance Thresholds.** Assessment of impacts is based on review of site information and conditions and County information regarding geologic and drainage issues. Flooding risk was determined using a combination of a Federal Insurance Rate Maps for the area and the County of San Luis Obispo Safety Element maps and watershed information.

In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in any of the following:

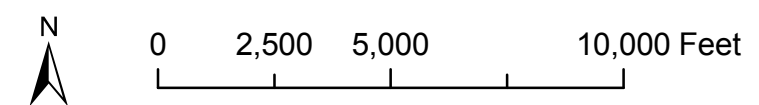
- *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;*
- *Place within a 100-year flood hazard area structures which would impede or redirect flood flows;*
- *Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam;*







- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- - - FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS
- 100-YEAR FLOODPLAIN
- 500-YEAR FLOODPLAIN



Flood Hazard Areas

Source: Federal Emergency Management Agency Q3 Flood Data, May 1996, and EDA Design Professionals, June 2006.







- *Result in inundation by seiche tsunami or mudflow;*
- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;*
- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in flooding on- or off-site;*
- *Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;*
- *Violate Regional Water Quality Control Board water quality standards or waste discharge requirements;*
- *Otherwise substantially degrade water quality; or*
- *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.*

**b. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact D-1**      **During construction, disrupted soil may be subject to erosion, sedimentation, and pollutant discharges. This is a Class III, less than significant impact.**

If grading occurs during the rainy season or in the event of heavy storms, soils from the Agricultural Residential Cluster Subdivision site could be entrained (carried along), eroded, and transported to drainages within the Ranch property. Grading operations are expected to increase erosion and sedimentation within drainages. Uncontrolled discharges of sediment are a potentially significant impact to water quality.

Regulations under the federal Clean Water Act require that a National Pollutant Discharge Elimination System (NPDES) storm water permit be obtained for projects that would disturb greater than one acre during construction. Agricultural Residential Cluster Subdivision development would be subject to this requirement, which would apply to the tract in its entirety and not individual lots by themselves. Acquisition of an NPDES permit is dependent on the preparation of a Storm Water Pollution Prevention Plan (SWPPP) that contains specific actions, termed Best Management Practices (BMPs), to control the discharge of pollutants, including sediment, into the local surface water drainages. BMP methods may include, but would not be limited to, the use of temporary retention basins, straw bales, sand bagging, mulching, erosion control blankets and soil stabilizers. In the State of California, Regional Water Quality Control Boards administer the NPDES permit process. In addition, the Agricultural Residential Cluster Subdivision will be required to comply with County grading and storm water ordinances.

Mitigation Measures. Compliance with the National Pollutant Discharge Elimination System (NPDES) program and compliance with county grading and storm water ordinances would ensure less than significant impacts.

Residual Impacts. Impacts would be less than significant.



**Agricultural Residential Cluster Subdivision Impact D-2**      **The Agricultural Residential Cluster Subdivision would introduce paved and roofed areas and thus has the potential to result in increased peak storm water discharges and volumes of runoff. Impacts are Class II, significant but mitigable.**

The following analysis is based on a drainage and wastewater analysis prepared by Boyle Engineering Corporation (July 2006; refer to Appendix H).

The Agricultural Residential Cluster Subdivision would increase the area covered by impervious surfaces, resulting in potential increases in surface runoff and accelerated erosion. It is estimated that the Agricultural Residential Cluster Subdivision would add approximately 29 acres of impervious surfaces to the site. As proposed, the Agricultural Residential Cluster Subdivision would include a detention structure which would reduce the 50-year post-development storm event to a 2-year pre-development condition for the portion of the site draining to Yerba Buena Creek. This capacity is consistent with requirements of the San Luis Obispo County Department of Public Works. However, runoff to Yerba Buena Creek may overflow the proposed detention structure during a 100-year storm event, since the basin is designed to handle a 50-year storm event. This is a potentially significant impact.

The Agricultural Residential Cluster Subdivision does not propose a detention structure for the portions of the site draining to Trout Creek and the unnamed tributary to Trout Creek. Runoff volume to both of these drainages may significantly increase during all storm events. This would increase downstream flooding. Unless detention storage is provided in the unnamed tributary to Trout Creek Watershed, the proposed Agricultural Residential Cluster Subdivision would increase flooding along Trout Creek at the southern limits of the existing Santa Margarita Community during a 100-year storm event. A substantial portion of the Santa Margarita community is within the 100-year floodplain. Any additional runoff caused in part by the Agricultural Residential Cluster Subdivision would therefore exacerbate existing flooding in the community. Therefore, the proposed Agricultural Residential Cluster Subdivision would result in a significant impact related to off-site flooding.

Detention basins are required to be designed to County standards regarding outflow devices, slopes, emergency overflow, landscaping, and maintenance provisions.

Flooding impacts to Rinconada Creek would be less than significant because the proposed impervious areas are outside the Rinconada Creek watershed.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure G-2(b) (Grading and Erosion Control Plan) in Section 4.6, *Geologic Stability*, would partially reduce impacts. The following additional mitigation measures are also required:

**Agricultural Residential Cluster Subdivision D-2(a)**      **Yerba Buena Drainage System. Runoff from the Agricultural Residential Cluster Subdivision must be detained in on-site detention basins.** The proposed detention structure for the portion of the Agricultural Residential Cluster Subdivision site draining to Yerba Buena creek shall be designed to comply with County criteria (reduction of the 50 year, 10 hour post-development peak flow to 2 year, 10 hour pre-development



conditions). A Drainage Study shall be prepared by a qualified hydrologist to identify detention volumes and release rates for the proposed facilities. The study shall also address flow routing and relative times of concentration in the watershed at the detention facility compared with the existing channel. The detention facility shall be located within an Agricultural Conservation Easement, in an area that does not contain oak trees, special status species or habitat, identified cultural resources, or prime agricultural soils.

The design of all facilities must be reviewed and approved by County Public Works staff.

**Plan Requirements and Timing.** The Drainage Study and plans for the storm drain and detention system shall be designed, approved and constructed as part of the tract improvement plans. The drainage system will be reviewed for compliance with Public Works Department Public Improvement Standards for detention basins. Installation shall be ensured through a bond or performance security provided by the applicant and shall be completed and accepted by the County prior to issuance of building permits. An entity, comprised of homeowners, shall be formed to maintain storm drain systems for the life of the Agricultural Residential Cluster Subdivision. This entity shall also determine and specify long-term maintenance requirements. **Monitoring.** Public Works or Planning and Building shall site inspect to ensure installation of the drainage system prior to issuance of occupancy clearance.

**Agricultural Residential  
Cluster Subdivision  
D-2(b)**

**Trout Creek Drainage System.** Runoff from the Agricultural Residential Cluster Subdivision must be detained in on-site detention basins. Prior to approval of a Land Use Permit, the applicant shall design a detention structure for the portion of the Agricultural Residential Cluster Subdivision site that drains to the unnamed tributary to Trout Creek. This detention structure shall be designed to comply with County criteria (reduction of the 50 year, 10 hour post-development peak flow to 2 year, 10 hour pre-development conditions), as well as reduce the 100-year 10-hour post-development runoff to 100 year 10 hour predevelopment conditions. A Drainage Study shall be prepared to identify detention volumes and release rates for the required facilities. The study should also address flow routing and relative times of concentration in the watershed at the detention facility compared with existing channels. The detention facility shall be located within an Agricultural Conservation Easement, in an area that does not contain oak trees, special status species or habitat, identified cultural resources, or prime agricultural soils.



**Plan Requirements and Timing.** The Drainage Study and plans for the storm drain and detention system shall be **designed**, approved and constructed as part of the tract improvement plans. The drainage system will be reviewed for compliance with Public Works Department Public Improvement Standards for detention basins. Installation shall be ensured through a bond or performance security provided by the applicant and shall be completed and accepted by the County prior to issuance of building permits. An entity, comprised of homeowners, shall be formed to maintain storm drain systems for the life of the Agricultural Residential Cluster Subdivision. This entity shall also determine and specify long-term maintenance requirements. **Monitoring.** Public Works or Planning and Building shall site inspect to ensure installation of the drainage system prior to issuance of occupancy clearance.

**Agricultural Residential  
Cluster Subdivision  
D-2(c)**

**LID-Integrated Management Practices.** Low Impact Development (LID) design technologies shall be employed by individual lot developers to the maximum extent practicable. LID is an alternative site design strategy that uses natural and engineered infiltration and storage techniques to control storm water runoff where it is generated to reduce downstream impacts. The following LID practices shall be implemented, as feasible, to re-establish pre-development runoff conditions:

1. Bioretention cells;
2. Tree boxes to capture and infiltrate street runoff;
3. Vegetated swales, buffers and strips;
4. Roof leader flows directed to planter boxes and other vegetated areas;
5. Permeable pavement;
6. Impervious surface reduction and disconnection;
7. Soil amendments to increase infiltration rates; and
8. Rain gardens, rain barrels, and cisterns.

Only natural fiber, biodegradable materials shall be used.

Since LID is intended to mimic the pre-development regime through both volume and peak runoff rate controls, the flow frequency and duration for the post-development conditions should be identical (to the greatest degree possible) to those for the pre-development conditions.

**Plan Requirements and Timing.** Prior to issuance of building permits, individual lot owners shall submit design plans containing applicable LID design technologies, subject to the review of the Public Works Department. **Monitoring.** Public



Works shall review building plans prior to issuance of building permits and inspect units prior to occupancy clearance.

Residual Impacts. With implementation of the required measures, the Agricultural Residential Cluster Subdivision would result in less than significant impacts related to peak storm water discharges and volumes of runoff.

**Agricultural Residential Cluster Subdivision Impact D-3**      **Portions of the Agricultural Residential Cluster Subdivision are located in a 100-year flood zone. However, no habitable structures would be located in these areas. Impacts related to flood hazard exposure are Class III, less than significant.**

Based on a review of Federal Emergency Management Agency Flood Insurance Rate Maps (Community Panel number: 060304 revised 7/5/82), the eastern reaches of the Agricultural Residential Cluster Subdivision site, just south of the east driveway, would be located within the flood zone associated with Trout Creek (refer to Figure 4.5-1). The east driveway is expected to handle the majority (i.e., approximately 80%) of Agricultural Residential Cluster Subdivision traffic, and the main internal roadway connects to this driveway. However, because none of the proposed Agricultural Residential Cluster Subdivision lots are within the 100-year flood zone, impacts would be less than significant.

Refer to Agricultural Residential Cluster Subdivision Impact D-2 above for a discussion of potential downstream flooding impacts caused by Agricultural Residential Cluster Subdivision development.

Mitigation Measures. No mitigation measures are required.

Residual Impacts. Impacts related to exposure of people to flood hazards would be less than significant.

**Agricultural Residential Cluster Subdivision Impact D-4**      **Due to the intensification of uses proposed on the Agricultural Residential Cluster Subdivision site, there is the potential for storm water transport of pollutants, bacteria, and sediment into downstream facilities. Impacts are Class II, significant but mitigable.**

Development of the Agricultural Residential Cluster Subdivision site with residential uses would be expected to increase the quantities of pollutants potentially entering stream courses with runoff from streets, lawns, and gardens. Therefore, impacts on water quality are expected to be potentially significant but mitigable.

It should be noted that approximately 1,100 acres of the 3,778 acre Agricultural Residential Cluster Subdivision site is currently used for Cattle grazing. The conversion from agricultural to residential use would remove cattle from the Agricultural Residential Cluster Subdivision area, which may thereby decrease the quantity of pathogens (such as coliform bacteria) entering stream courses in the area. However, the proposed Agricultural Residential Cluster Subdivision may also divert cattle grazing operations to other portions of the Ranch, such that grazing is intensified in other portions of the watershed. In such a case, the quantity of



pathogens entering stream courses in the area would not appreciably change compared to pre-project conditions.

Mitigation Measures. The following measure is recommended in addition to Agricultural Residential Cluster Subdivision measures D-2(a) (Yerba Buena Drainage System), D-2(b) (Trout Creek Drainage System), D-2(c) (LID-Integrated Management Practices) and G-2(b) (Grading and Erosion Control Plan) (in Section 4.6, *Geologic Stability*), which would ensure permanent sedimentation/detention basins are installed and control erosion, thereby enabling sediment to settle out of site runoff.

**Agricultural Residential Cluster Subdivision D-4(a)**

**Pollutant Removal Techniques.** In addition to LID-integrated management practices required by Agricultural Residential Cluster Subdivision measure D-2(c), the applicant shall integrate into the Agricultural Residential Cluster Subdivision design other available technologies and techniques to remove pollutants from site runoff prior to entering the drainage courses. Such techniques shall include reduced slope grading, drainage through vegetative zones (e.g., bio-swale) and other options to intercept pollutants being conveyed toward drainage paths. Technological solutions such as gravelly filter blankets or particulate filters (e.g. Fossil Filters) should also be installed as pollutant-removal solutions. Only natural fiber, biodegradable materials shall be used.

**Plan Requirements and Timing.** The applicant shall submit a drainage plan that graphically illustrates the location and design of pollutant-removal systems. Design plans shall be submitted to Planning and Building, Public Works and Environmental Health Services for review and approval prior to issuance of grading permits. **Monitoring.** Planning and Building and Public Works shall ensure installation prior to construction of any structures.

Residual Impacts. Implementation of the above mitigation measures would reduce the potential for storm water transport of pollutants, bacteria, and sediment into downstream facilities. Therefore, water quality impacts would be reduced to less than significant levels.

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**c. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.5.2(b) for a discussion of drainage, erosion and sedimentation impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development Program Impact D-1**

**During construction, disrupted soil may be subject to erosion, sedimentation, and pollutant discharges. This is a Class III, less than significant impact.**



Grading and construction of Future Development Program components is expected to increase erosion and sedimentation to drainages. Uncontrolled discharges of sediment are a potentially significant impact to water quality.

Regulations under the federal Clean Water Act require that a National Pollutant Discharge Elimination System (NPDES) storm water permit be obtained for projects that would disturb greater than one acre during construction. Because no active application currently exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, and the precise size and location of Future Development components are unknown, it is assumed as a reasonable worst-case scenario that components of the Future Development Program would be required to comply with the NPDES program. In addition, the Agricultural Residential Cluster Subdivision will be required to comply with County grading and storm water ordinances. Compliance with County ordinances and the National Pollutant Discharge Elimination System (NPDES) program would ensure less than significant impacts.

Mitigation Measures. Compliance with the National Pollutant Discharge Elimination System (NPDES) program and compliance with county grading and storm water ordinances would ensure less than significant impacts.

Residual Impacts. Impacts would be less than significant.

**Future Development  
Program Impact D-2**

**The Future Development Program would introduce paved and roofed areas and thus has the potential to result in increased peak storm water discharges and volumes of runoff. Impacts are Class II, *significant but mitigable.***

The Future Development Program would increase the area covered by impervious surfaces, resulting in potential increases in surface runoff and accelerated erosion. Because no active application currently exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, and the precise size and location of Future Development components are unknown, it is assumed as a reasonable worst-case scenario that a significant amount of impervious surfaces would be added to the Ranch property. The Future Development Program includes construction of a Community Drainage Facility which is intended to mitigate potential impacts. The location of the facility will be determined with the submittal of a Specific Plan for the first Future Development Program subdivision subsequent to the Agricultural Residential Cluster Subdivision. This facility would help address some downstream flooding problems, but may not address all potential flooding impacts from Future Development Program components. Because the size, location, and design of the community drainage basin have not been defined, the future facility may be inadequate to address drainage and flooding hazards associated with Future Development Program implementation. Impacts are therefore potentially significant.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures D-2(c) (LID-Integrated Management Practices) and G-2(b) (Grading and Erosion Control Plan) in Section 4.6, *Geologic Stability*, would apply to all Future Development Program land uses. In addition, Future Development Program measure D-2(a) (Community Drainage Master Plan) would further reduce impacts. The following mitigation is also required:



**Future Development  
Program D-2(a)**

**Community Drainage Master Plan.** A Community Drainage Master Plan shall be created as part of the required Specific Plan for future development subsequent to the Agricultural Residential Cluster Subdivision. The Master Plan shall address potential improvements (including size and location of local and regional storm water facilities) to address water quality, flooding potential, and erosion control throughout the Ranch property. The Plan shall present a phased implementation strategy to address project-by-project impacts as Future Development Program buildout occurs. Mitigation shall include implementation of drainage basins, channels, or other improvements recommended in the Plan, in accordance with County standards. The Plan shall consider using golf course features as drainage features, including bioswales/filtration areas and detention basins. The Plan shall define a financing mechanism for implementation and annual reporting. The Plan supplement the *Santa Margarita Drainage and Flood Control Study* (County of San Luis Obispo Public Works Department, February 2004), as applicable.

**Plan Requirements and Timing.** Prior to adoption of the Specific Plan subsequent to the Agricultural Residential Cluster Subdivision, the Community Drainage Master Plan shall be submitted for review by Planning and Building and the Public Works Hydraulic Planning Unit to ensure that downstream flooding in the community of Santa Margarita is not worsened by future development. All components of the Plan, including a financing system, shall be implemented prior to issuance of any occupancy permits subsequent to the Agricultural Residential Cluster Subdivision. **Monitoring.** Planning and Building and the Public Works Hydraulic Planning Unit shall review the Plan prior to issuance of grading permits for Future Development Program land uses subsequent to the Agricultural Residential Cluster Subdivision. Planning and Building shall ensure compliance with requirements set forth in the Plan.

Residual Impacts. With implementation of the above-referenced mitigation measures, the Future Development Program would result in less than significant impacts related to peak storm water discharges and volumes of runoff.

**Future Development  
Program Impact D-3**

**Portions of the Future Development Program are located within a 100-year flood zone associated with Trout Creek, the unnamed tributary to Trout Creek, Yerba Buena Creek, Santa Margarita Creek and/or Rinconada Creek. Impacts related to flood hazard exposure to future uses in this area are Class II, significant but mitigable.**





Based on a review of Federal Emergency Management Agency Flood Insurance Rate Maps (Community Panel number: 060304 revised 7/5/82), 100-year flooding from Trout Creek, the unnamed tributary to Trout Creek, Yerba Buena Creek, Santa Margarita Creek and Rinconada Creek would impact several Future Development Program land use locations. Land uses that may be impacted include: a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater and 40,000 square foot winery near the existing Ranch headquarters location; a residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery, and 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop southwest of the community of Santa Margarita; and a Ranch headquarter and two wineries located in the northeast corner of the Ranch property (refer to Figure 4.5-1). Because no application has been filed for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, any of these uses could be located within a 100-year flood zone. Impacts related to flooding would therefore be potentially significant.

Mitigation Measures. The following mitigation measures are required to reduce impacts related to exposure to flood hazards:

**Future Development Program D-3(a)**

**Avoidance of Flood Hazards.** Preferred locations for Future Development Program components shall be in areas outside of the 100-year flood zones for Trout Creek, the unnamed tributary to Trout Creek, Yerba Buena Creek, Santa Margarita Creek and Rinconada Creek. This may require restricted building envelopes for the following Future Development Program land uses: a Bed and Breakfast, café, amphitheater and winery near the existing Ranch headquarters location; a residential village, guest ranch, lodge and restaurant, winery, and golf course southwest of the community of Santa Margarita; and a Ranch headquarter and two wineries located in the northeast corner of the Ranch property. If future development is proposed in flood zone areas, Future Development Program measures D-3(b) (Base Flood Elevation), D-3(c) (Prohibition of Floodwater Displacement) and D-3(d) [Conditional Letter of Map Revision (CLOMR)] shall apply.

**Plan Requirements and Timing.** Flood zones shall be included on building plans for future habitable structures and utilities. Planning and Building shall review these plans prior to approval.

**Monitoring.** Planning and Building shall be responsible for ensuring that all structures are outside 100-year flood hazard areas or are otherwise mitigated. If structures are proposed for location in 100-year flood areas, Planning and Building shall ensure that Future Development Program measures D-3(b), D-3(c), and D-3(d) are applied.

**Future Development Program D-3(b)**

**Base Flood Elevation.** The ground floor elevation of all Future Development Program structures within flood zones shall be constructed at least one foot above the Base Flood Elevation (BFE).



**Plan Requirements and Timing.** Applicants within flood areas shall submit plans to Planning and Building for approval prior to issuance of grading permits. **Monitoring.** Planning and Building and Public Works shall review the plans prior to issuance of grading permits for Future Development Program land uses proposed for location in 100-year flood areas.

**Future Development  
Program D-3(c)**

**Prohibition of Floodwater Displacement.** Prior to issuance of grading permits, applicants within flood areas shall submit plans to the Planning and Building Department and Public Works Department that identify an overland escape route for runoff to ensure that the placement of fill to raise building pads out of the floodplain will not divert runoff onto adjacent properties.

**Plan Requirements and Timing.** Applicants within flood areas shall submit plans to Planning and Building and Public Works for approval prior to issuance of grading permits. **Monitoring.** Planning and Building and Public Works shall review the plans prior to issuance of grading permits for Future Development Program land uses proposed for location in 100-year flood areas.

**Future Development  
Program D-3(d)**

**Conditional Letter of Map Revision (CLOMR).** Without obtaining a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA), development within the 100-year flood plain would not be guaranteed to comply with the National Floodplain Insurance Program (NFIP) requirement that a parcel of land or proposed structure that is to be elevated by fill would not be inundated by the base flood. Prior to approval of grading permits, applicants shall obtain a CLOMR from FEMA.

The CLOMR request shall include detailed flood hazard analyses prepared by a qualified professional engineer, consistent with FEMA requirements. The applicant shall comply with all conditions and requirements of the CLOMR.

**Plan Requirements and Timing.** Applicants within the 100-year floodplain shall submit a copy of the CLOMR prior to issuance of grading permits. **Monitoring.** Planning and Building and Public Works Department shall review the CLOMR documentation prior to approval of improvement plans for grading.

Residual Impacts. Implementation of the above mitigation, in conjunction with County standards and practices, would reduce potential flooding impacts to less than significant levels.



**Future Development  
Program Impact D-4**

**Due to the intensification of uses proposed as part of the Future Development Program, there is the potential for storm water transport of pollutants, bacteria, and sediment into downstream facilities. Impacts are Class II, significant but mitigable.**

The Future Development Program includes 514 dwelling units (402 units in addition to the Agricultural Residential Cluster Subdivision) and the additional following uses: private golf course, club house and pro shop; guest ranch, lodge, and restaurant; 12-room bed and breakfast; cafe; amphitheater; crafts studios, galleries and shops; interpretive center and gift shops; nine wineries with tasting rooms and permitted special events; neighborhood park and swimming pool; five ranch/farm headquarters; one livestock sales yard and café; three places of worship; and a retreat center. This level of development would be expected to increase the quantities of pollutants potentially entering stream courses with runoff from streets, lawns, and gardens. Other activities that may increase pollutants include: motor vehicle operations in the area, pesticide/herbicide/fertilizer uses, human littering, careless material storage and handling, and pavement disintegration. This is a potentially significant but mitigable water quality impact.

The Future Development Program envisions a livestock sales yard for location west of the community of Santa Margarita, adjacent to US 101. Equestrian and livestock facilities are recognized as a source of pollution as defined by the Clean Water Act. Livestock waste, including manure, urine, and bedding, contain nutrients such as phosphorous and nitrogen, and microorganisms such as coliform bacteria. Microorganisms such as bacteria consume organic matter in manure along with the oxygen found in the water and release carbon dioxide. Excess bacteria in water can lead to asphyxiation or suffocation of aquatic animals in the receiving waters downstream.

The Future Development Program also envisions a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop, southwest of the community of Santa Margarita. The golf course would contribute various pollutants to the surface water, including fertilizer, pesticides, and organic wastes. In addition, pesticides (including herbicides) and fertilizers can leach into the underlying groundwater.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures D-2(c) (LID-Integrated Management Practices) and D-4(a) (Pollutant Removal Techniques) would apply to all Future Development Program land uses. Mitigation Measure G-2(b) (Grading and Erosion Control Plan) in Section 4.6, *Geologic Stability*, would also reduce impacts related to sediment in downstream facilities. The following additional mitigation measure is also required to reduce water quality impacts:

**Future Development  
Program D-4(a)**

**Integrated Pest Management Plan.** Prior to issuance of grading permits, an Integrated Pest Management Plan shall be prepared for ongoing operations at the golf course. The Integrated Pest Management Plan should include, but not necessarily be limited to, the following:

- Use of biological, physical, and cultural controls rather than chemical controls.



- Use of insect-resistant cultivars.
- Mechanical weed control to be used wherever and whenever possible as the first choice.
- Establishment of thresholds for the use of fertilizers.
- Determination of the probable cause of an insect/disease problem and correction as necessary (i.e.: soil nutrient problems, irrigation, water quality, plant type, etc.) prior to chemical use.
- Development of thresholds to determine when pesticide use is necessary. Pesticides are to be used only when necessary to cure a problem and in positively identified pre-emergent situations and not as a preventative measure or as a regular, periodic application.
- Fumigation activities to be limited to greens only.
- Use of chemical forms that are the least toxic to non-target organisms (such as the use of a sodium salt if 2,4-D herbicide is used).
- Preferentially, the IPM should not permit the use of 2,4-D at the site and similar toxic chemicals that have a high potential for leaching from the site.
- Chemical controls should preferentially begin with the use of dehydrating dusts (silica gels, diatomaceous earth), insecticidal soaps, boric acid powder, horticultural oils, and pyrethrin-based insecticides.
- Late evening application of pesticides.
- Use of slow release fertilizers.
- Provision of vegetated riparian buffers around natural water features.

The golf course should also obtain Audubon Cooperative Sanctuary Program (ACSP) certification to mitigate storm water runoff impacts from the golf course.

**Plan Requirements and Timing.** The Integrated Pest Management Plan shall be submitted for review and approved by Planning and Building prior to issuance of grading permits for the golf course. All components of the Plan shall be implemented prior to issuance of any occupancy permits.

**Monitoring.** Planning and Building shall review the Plan prior to issuance of grading permits for the golf course. Planning and Building shall ensure compliance with requirements set forth in the Plan.

Residual Impacts. Implementation of the required mitigation measures would reduce the potential for storm water transport of pollutants, bacteria, and sediment into downstream facilities. Therefore, water quality impacts would be reduced to less than significant levels.



**d. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative drainage, erosion, and sedimentation impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.





## 4.6 GEOLOGIC STABILITY

*Agricultural Residential Cluster Subdivision. The Geologic Stability Section is based on a preliminary Geology and Geologic Hazards report prepared for the Agricultural Residential Cluster Subdivision site by Cleath & Associates in October 2003 and review of County geologic and seismic safety information. Based on these studies, the Agricultural Residential Cluster Subdivision is anticipated to result in several potentially significant but mitigable impacts. All or portions of the Agricultural Residential Cluster Subdivision site are subject to potential ground shaking, expansive soil, erosion, settlement, landsliding, liquefaction, and/or groundwater percolation impacts. Potential hazards to the Agricultural Residential Cluster Subdivision can be mitigated by proper engineering design and construction, and for some building sites, with the recommendations of site specific geotechnical investigations accomplished as part of the Building Permit process.*

*Future Development Program. Because no active application currently exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, the assessment of geologic hazards is based on a reasonable worst case scenario with regard to the location of future land uses within anticipated development areas. Buildout of the Future Development Program would result in impacts similar to those resulting from the Agricultural Residential Cluster Subdivision individually. However, Future Development Program land uses are also subject to fault rupture hazards from the Rinconada and Nacimiento Faults. For the purposes of this report, both faults are considered active. Should future development be proposed in areas containing soils hazards, landsliding, and/or liquefaction hazards areas, impacts would be reduced through mitigation requiring avoidance of hazard areas and/or geotechnical methods to reduce the hazard to acceptable levels.*

### 4.6.1 Setting

**a. Geologic Conditions and Topography.** San Luis Obispo County occupies an area of complex geology extending from the Pacific Coast on the west to the San Andreas Rift Zone on the east. The Santa Margarita Ranch property lies within the southern Coast Ranges of San Luis Obispo County, in the Coast Range Geomorphic Province. The Ranch comprises a central alluvial valley complex with low lying hills, bordered on the west by the Santa Lucia Range of higher bedrock mountains, and on the east by the Salinas River. Geologic structure, formed by millions of years of folding and faulting, is oriented predominantly in a northwesterly direction; the northwest draining Yerba Buena, Santa Margarita and Trout Creeks follow this trend.

Thirty-four active and potentially active earthquake producing faults lie within 100 miles of the center of the Santa Margarita Ranch property. Individual earthquakes as large as Magnitude 7.9 have occurred within this distance. Fault rupture of the ground surface is possible on any of these faults with a large enough earthquake and secondary effects such as ground settlement, liquefaction and landsliding can occur.

The Santa Margarita Ranch property consists of varied terrain with the mountainous area on the west side of the Ranch containing the Santa Lucia Mountain ridge and slopes of 50 percent and greater. The predominant interior valleys of the Ranch are sloped at 1 to 9 percent while the Santa Margarita Creek lowlands typically contain slopes less than 5 percent. Elevations across the site range from a high of 1,276 feet along the Santa Lucia ridgeline to 1,020 feet at the north end of the property. At that location, the primary on-site tributary (Trout Creek) drains to the Salinas River, located approximately 1.25 miles north of the Ranch property.



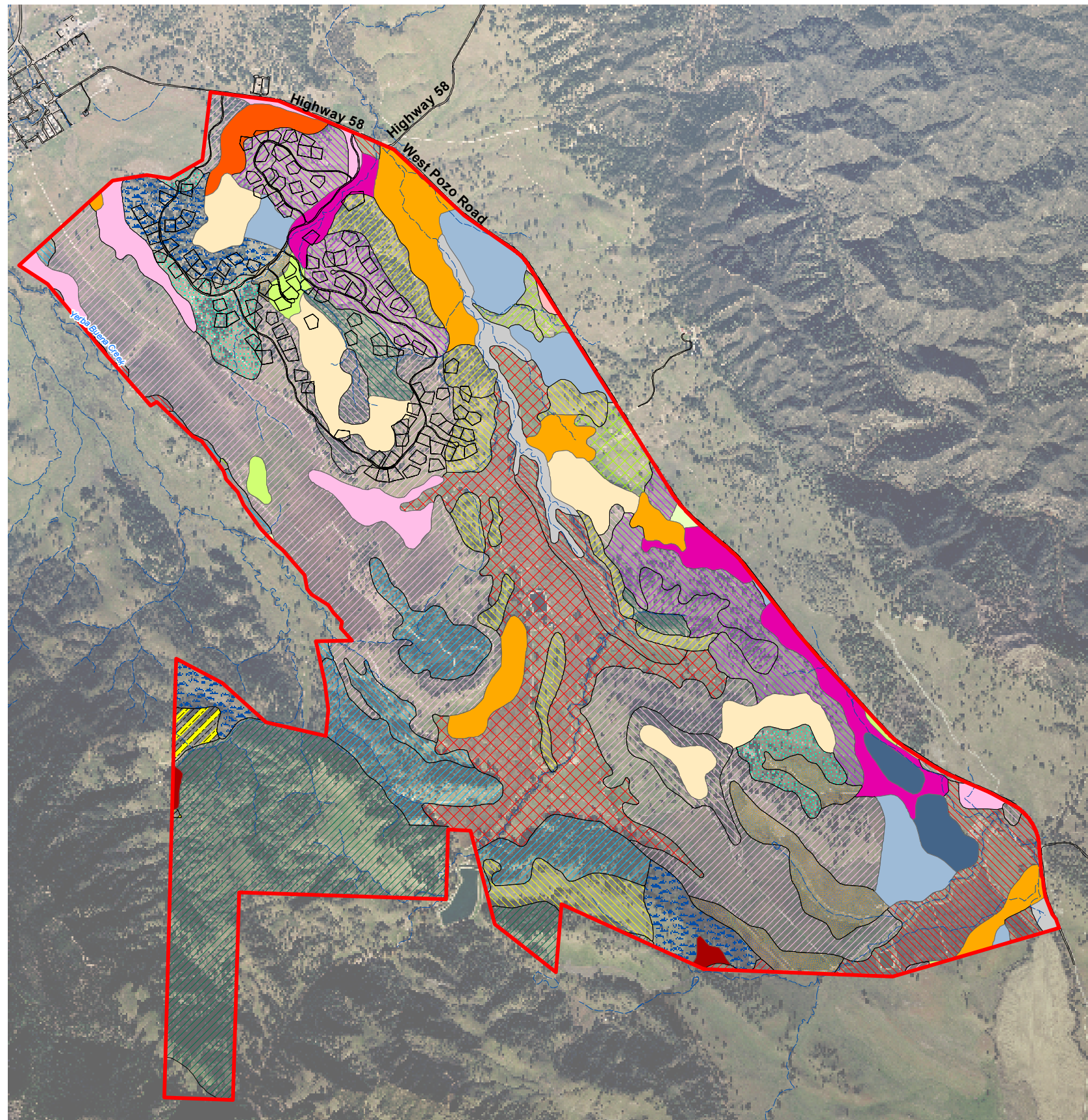
**b. Local Geology.** The 14,000-acre Ranch property includes ten geologic units, ranging in age from the Jurassic Franciscan Formation (mélange) through Pliocene Paso Robles Formation (Hart, 1976). On-site units include the Franciscan mélange, granitic rocks, Toro and Atascadero Formations, Simmler and Vaqueros Formations, Monterey and Santa Margarita Formations, Paso Robles Formation, and older and younger alluvium. These units have a wide range of physical properties with older basement rocks found in the higher elevations being generally more resistant to weathering and degradation; they are also more highly fractured, and structurally more complex. The intermediate-aged bedrock units flank the ranges and border the alluvial valleys. These units are softer and weather into smoother low lying hills with fewer fractures and exhibit a gentler folding.

Alluvium occupies the lower portions of the valleys and ranges from older uplifted, dissected river terraces and alluvial fans to the most recent stream deposits in the lower elevation flood plains and active river channels. Structurally simple and relatively undisturbed by faulting, these units are semi-consolidated to loose, and generally comprise mixtures of gravel and sand.

**c. Soils.** As mapped by the Natural Resource Conservation Service (NRCS), 54 soil types are located on the Santa Margarita Ranch property. Of these 54 soil types, development under the Agricultural Residential Cluster Subdivision and Future Development Program could occur on 40 soil types (refer to Figures 4.6-1 and 4.6-2; specific soils hazards are shown on Figure 4.6-3). These 40 soil types and selected properties are summarized in Table 4.6-1. Agricultural Residential Cluster Subdivision soils followed by an asterisk (\*) also occur in areas envisioned for development under the Future Development Program.

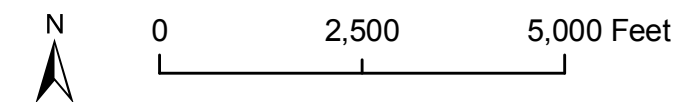






Note: Please refer to Table 4.6-1 for soil properties

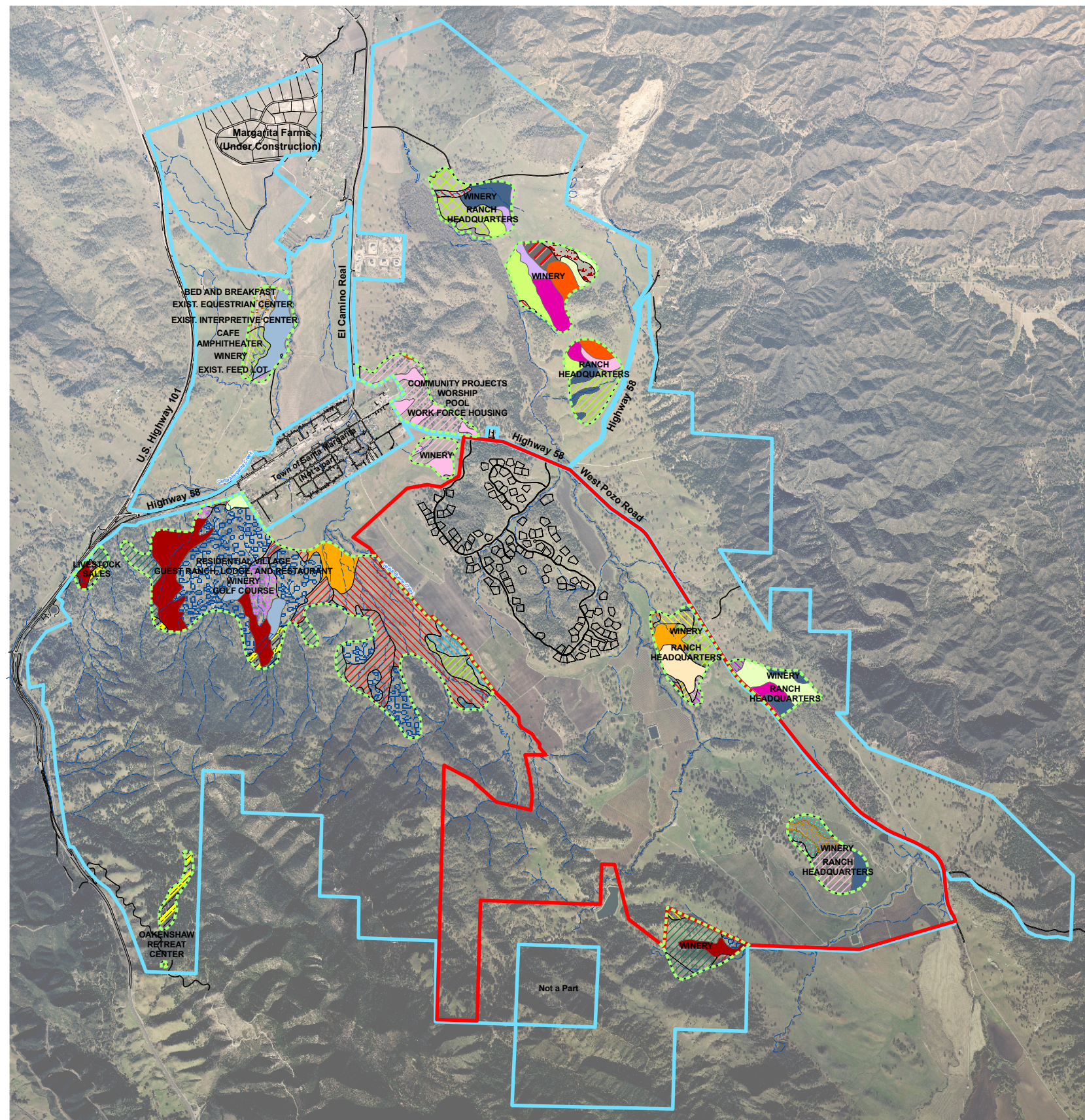
- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- ARBUCKLE FINE SANDY LOAM, 2-9
- ARBUCKLE-POSITAS COMPLEX, 15-30
- ARBUCKLE-POSITAS COMPLEX, 9-15
- ARBUCKLE-POSITAS COMPLEX, 30-50
- ARNOLD-SAN ANDREAS COMPLEX, 30-75
- AYAR AND DIABLO SOILS, 9-15
- AYAR AND DIABLO SOILS, 15-30
- BOTELLA SANDY LOAM, 2-9
- CLEAR LAKE CLAY, NA
- CROPLEY CLAY, 2-9
- DIBBLE CLAY LOAM, 9-15
- ELDER LOAM, 2-9
- GAZOS SHALY CLAY LOAM, 9-30
- GAZOS SHALY CLAY LOAM, 30-50
- HANFORD AND GREENFIELD FINE SANDY LOAMS, 2-9
- HANFORD AND GREENFIELD GRAVELLY SANDY LOAMS, 0-2
- HANFORD AND GREENFIELD GRAVELLY SANDY LOAMS, 2-9
- LINNE-CALODO COMPLEX, 30-50
- LOMPICO-MCMULLIN COMPLEX, 50-75
- MILLSHOLM-DIBBLE CLAY LOAMS, 30-50
- OCEANO LOAMY SAND, 2-9
- RYER CLAY LOAM, 2-9
- SAN ANDREAS SANDY LOAM, 15-30
- SAN ANDREAS-ARUJO SANDY LOAMS, 9-15
- SANTA LUCIA-LOPEZ COMPLEX, 15-50
- SANTA LUCIA-GAZOS COMPLEX, 50-75
- SHIMMON LOAM, 30-50
- SHIMMON-DIBBLE ASSOCIATION, 30-50
- STILL CLAY LOAM, 0-2
- STILL CLAY LOAM, 2-9
- STILL GRAVELLY LOAM, 0-2
- XEROFLUENTS-RIVERWASH ASSOCIATION, NA



Proposed Agricultural  
 Residential Cluster Subdivision Soils







Note: Please refer to Table 4.6-1 for soil properties.  
 No NRCS soil data is available for Oakenshaw Retreat Center or southernmost winery locations. Soil types obtained from 2006 site reconnaissance.

- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS
- ARBUCKLE FINE SANDY LOAM, 2-9
- ARBUCKLE-POSITAS COMPLEX, 15-30
- ARBUCKLE-SAN YSIDRO COMPLEX, 2-9
- ARBUCKLE-POSITAS COMPLEX, 9-15
- ARNOLD-SAN ANDREAS COMPLEX, 30-75
- AYAR AND DIABLO SOILS, 9-15
- BOTELLA SANDY LOAM, 2-9
- CLEAR LAKE CLAY, NA
- CROPLEY CLAY, 2-9
- DIBBLE CLAY LOAM, 9-15
- ELDER LOAM, FLOODED, 0-5
- ELDER LOAM, 2-9
- GAZOS SHALY CLAY LOAM, 9-30
- GAZOS SHALY CLAY LOAM, 30-50
- HANFORD AND GREENFIELD FINE SANDY LOAMS, 0-2
- HANFORD AND GREENFIELD FINE SANDY LOAMS, 2-9
- HANFORD AND GREENFIELD GRAVELLY SANDY LOAMS, 2-9
- LINNE-CALODO COMPLEX, 9-30
- LINNE-CALODO COMPLEX, 30-50
- LOMPICO-MCMULLIN COMPLEX, 50-75
- LOPEZ-SANTA LUCIA FAMILIES ASSOCIATION, 10-70
- MILLSHOLM-DIBBLE CLAY LOAMS, 15-30
- MILLSHOLM-DIBBLE CLAY LOAMS, 30-50
- MILLSHOM-EXCHEQUER-STONYFORD FAM COMPLEX, 30-75
- NACIMIENTO-AYAR COMPLEX, 9-30
- OCEANO LOAMY SAND, 2-9
- PITS, NA
- RINCON CLAY LOAM, 2-9
- SAN ANDREAS SANDY LOAM, 15-30
- SAN ANDREAS-ARUJO SANDY LOAMS, 9-15
- SANTA LUCIA-LOPEZ COMPLEX, 15-50
- SANTA LUCIA-GAZOS COMPLEX, 50-75
- SHIMMON-DIBBLE ASSOCIATION, 30-50
- STILL CLAY LOAM, 0-2
- STILL CLAY LOAM, 2-9
- STILL GRAVELLY LOAM, 0-2
- XEROFLUVENTS-RIVERWASH ASSOCIATION, NA



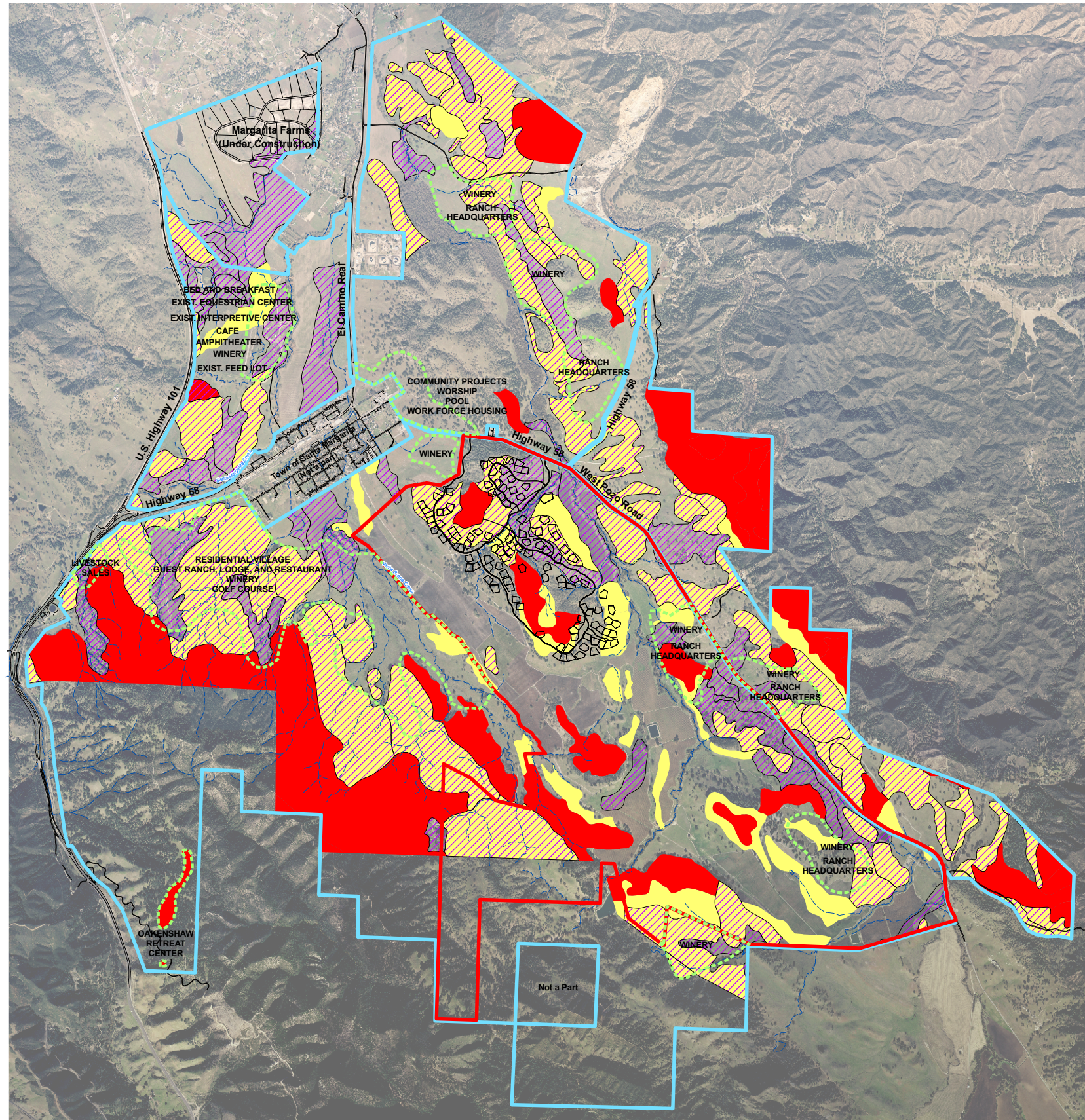
0 2,500 5,000 10,000 Feet

Future Development Program  
Soils









Note: No NRCS soil data is available for Oakenshaw Retreat Center or southernmost winery locations. Soil types obtained from 2006 site reconnaissance.

- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- - - FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS
- VERY HIGH EROSION HAZARD
- HIGH EROSION HAZARD
- HIGH SHRINK-SWELL POTENTIAL



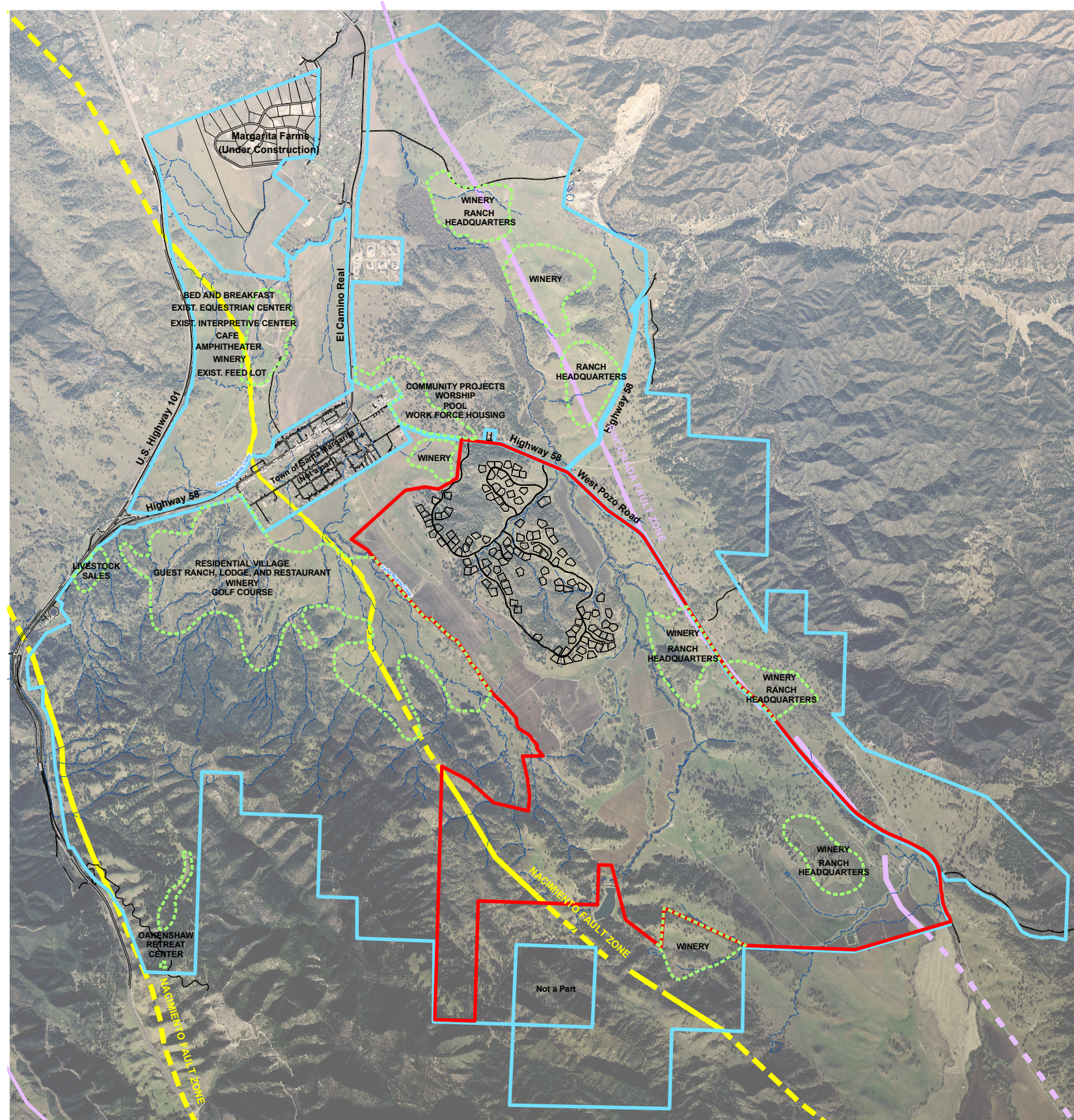
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Soil-Related Hazards



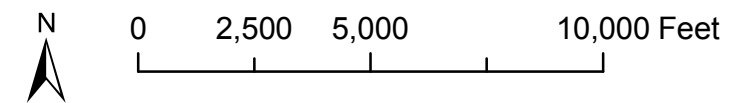






Note: fault zones dashed where inferred

- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS
- NACIMIENTO FAULT ZONE
- RINCONADA FAULT ZONE



Fault Hazards

Figure 4.6-4

Source: SSURGO, 2004, EDA Design Professionals, June 2006.







**Table 4.6-1. Agricultural Residential Cluster Subdivision and Future Development Program Soil Parameters**

Name	Water Holding Capacity	Permeability	Shrink-Swell Potential	Rate of Surface Runoff	Erosion Hazard
<b>Agricultural Residential Cluster Subdivision Soils</b>					
Arbuckle fine sandy loam (2-9% slopes)*	Moderate to High	Moderately Slow	Moderate	Medium	Moderate
Arbuckle-Positas complex (9-15% slopes)*	Moderate to High	Very Slow to Moderately Slow	High	Medium	Moderate
Arbuckle-Positas complex (15-30% slopes)*	Moderate to High	Very Slow to Moderately Slow	High	Rapid	High
Arbuckle-Positas complex (30-50% slopes)	Moderate to High	Moderately Slow	NA	Rapid	High
Arnold-San Andreas complex (30-75% slopes)*	Very Low to Moderate	Moderately Rapid to Rapid	NA	Very Rapid	Very High
Ayar and Diablo soils (9-15% slopes)*	Moderate to Very High	Slow	High	Medium	Moderate
Ayar and Diablo soils (15-30% slopes)	Moderate to Very High	Slow	High	Rapid	High
Botella Sandy loam (2-9% slopes)*	High	Moderately Slow	Moderate	Medium	Moderate
Clear Lake Clay*	Moderate to High	Slow	High	ND	ND
Cropely clay (2-9% slopes)*	High to Very High	Slow	High	Medium	Moderate
Dibble clay loam (9-15% slopes)*	Low to Moderate	Slow	High	Medium	Moderate
Elder loam (2-9% slopes)*	Moderate to High	Moderate	None	Slow	High
Gazos shaly clay loam (9-30% slopes)*	Low to Moderate	Moderately Slow	NA	Rapid	High
Gazos shaly clay loam (30-50% slopes)*	Low to Moderate	Moderately Slow	NA	Rapid	High
Hanford and Greenfield fine sandy loams (2-9% slopes)*	Moderate to High	Moderately Rapid	NA	Medium	Moderate
Hanford and Greenfield gravelly sandy loams (0-2% slopes)*	Low to Moderate	Moderately Rapid	NA	Slow	Slight
Hanford and Greenfield gravelly sandy loams (2-9% slopes)*	Low to Moderate	Moderately Rapid	NA	Medium	Moderate
Linne-Calodo complex (30-50% slopes)*	Very Low to Moderate	Moderately Slow	None	Rapid	High
Lompico-McMullin complex (50-75% slopes)*	Very Low to Moderate	Moderate	NA	Very Rapid	Very High
Millsholm-Dibble clay loams (30-50% slopes)*	Very Low to Moderate	Slow to Moderate	High	Rapid	High
Oceano loamy sand (2-9% slopes)*	Low	Rapid	None	Medium	Moderate
Ryer clay loam (2-9% slopes)	High to Very High	Slow	High	Medium	Moderate
San Andreas sandy loam (15-30% slopes)*	Very Low to Moderate	Moderately Rapid	None	Rapid	High



**Table 4.6-1. Agricultural Residential Cluster Subdivision and Future Development Program Soil Parameters**

Name	Water Holding Capacity	Permeability	Shrink-Swell Potential	Rate of Surface Runoff	Erosion Hazard
San Andreas-Arujo sandy loams (9-15% slopes)*	Very Low to High	Moderately Slow to Moderately Rapid	Moderate	Medium	Moderate
Santa Lucia-Lopez complex (15-30% slopes)*	Very Low to Low	Moderate	NA	Rapid	High
Santa Lucia-Gazos complex (50-75% slopes)*	Very Low to Moderate	Moderately Slow to Moderate	NA	Very Rapid	Very High
Shimmon loam (30-50% slopes)	Low to Moderate	Moderately Slow	None	Rapid	High
Shimmon-Dibble association, steep (30-50% slopes)*	Low to Moderate	Slow to Moderately Slow	High	Rapid	High
Still gravelly loam (0-2% slopes)*	Moderate to High	Moderate	Moderate	Slow	Slight
Still clay loam (0-2% slopes)*	High to Very High	Moderately Slow	Moderate	Slow	Slight
Still clay loam (2-9% slopes)*	High to Very High	Moderately Slow	Moderate	Medium	Moderate
Xerofluvents-Riverwash association*	Very Low	Variable	NA	Medium	Very High
<b>Remaining Future Development Program Soils</b>					
Arbuckle-San Ysidro complex (2-9% slopes)	Moderate to High	Very Slow to Moderately Slow	High	Medium	Moderate
Elder loam, flooded (0-5% slopes)	Moderate to High	Moderate	NA	Slow	Slight
Hanford and Greenfield fine sandy loams (0-2% slopes)	Moderate to High	Moderately Rapid	NA	Slow	Slight
Linne-Calodo complex (9-30% slopes)	Very Low to Moderate	Moderately Slow	NA	Rapid	High
Millsholm-Dibble clay loams (15-30% slopes)	Very Low to Moderate	Slow to Moderate	High	Rapid	High
Nacimiento-Ayar complex (9-30% slopes)	Low to Very High	Slow to Moderately Slow	High	Rapid	High
Pits**	NA	NA	NA	NA	NA
Rincon clay loam (2-9% slopes)	High to Very High	Slow	High	Medium	Moderate

Source: U.S. Department of Agriculture (USDA), Soil Conservation Service (SCS), *Soil Survey of San Luis Obispo County, California, Paso Robles Area*, May 1983.

\* Soil also occurs in the areas envisioned for development under the Future Development Program.

\*\*Pits are excavations from which soil and underlying material have been removed, together with areas of uneven accumulations of waste materials.

**d. Geologic and Seismic Hazards.** Similar to much of California, the Santa Margarita Ranch property is located within a seismically active region. The geologic and seismic hazards relevant to the Agricultural Residential Cluster Subdivision and Future Development Program are described in the impact assessment below.

**Faulting.** The U.S. Geological Survey (USGS) defines active faults as those that have had surface displacement within Holocene time (about the last 11,000 years). Surface displacement



can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts. Potentially active faults are faults that have had surface displacement during the last 1.6 million years. Inactive faults have not had surface displacement within the last 1.6 million years. Several faults are located in the vicinity of the Santa Margarita Ranch (refer to Figure 4.6-4), and are described in the paragraphs below:

*Nacimiento Fault Zone.* Trending northwest to southeast, the Nacimiento Fault is located in the center of the Ranch property, bisecting the community of Santa Margarita (refer to Figure 4.6-4). The Nacimiento Fault Zone separates the soft rocks of the Coastal Franciscan domain on the west from the primary granitic rocks of the Salinian domain on the east. Although the California Geological Survey (CGS) and the County of San Luis Obispo Safety Element consider the Nacimiento Fault inactive, landforms in the Santa Margarita Ranch vicinity suggest geologically young faulting (Lew Rosenberg, County Geologist, Personal Communication, June 16, 2006). In addition, its proximity to the active Oceanic Fault Zone, the source of the 2003 San Simeon earthquake (refer to *West Huasna/Oceanic Fault Zone* discussion below) suggests that the Nacimiento Fault Zone is possibly active (Lew Rosenberg, County Geologist, Personal Communication, June 20, 2006). Therefore, for the purposes of this analysis, the Nacimiento Fault is considered active.

*Rinconada Fault Zone.* Trending northwest to southeast, the Rinconada Fault is located on the eastern edge of the Ranch property, following West Pozo Road south of SR 58 (refer to Figure 4.6-4). The Rinconada Fault is zoned as potentially active under the California Alquist-Priolo Earthquake Fault Zoning Act. However, according to the San Luis Obispo County Geologist, studies for the Santa Ysabel Ranch (Paso Robles) and the Chicago Grade landfill (Templeton) show features that suggest Holocene (last 11,000 years) movement on the Rinconada Fault (Lew Rosenberg, County Geologist, Personal Communication, June 20, 2006). In addition, the fault is a seismic source in the U.S. Geological Survey/California Geological Survey Probabilistic Seismic Hazard Model and is estimated to be capable of generating a maximum credible earthquake (MCE) of approximately 7.5. Therefore, for the purposes of this analysis, the Rinconada Fault is considered active.

*San Andreas Fault.* The San Andreas Fault, which is the most likely source of a major earthquake in California, is located 29 miles east of the Santa Margarita Ranch, along the eastern border of San Luis Obispo County. The San Andreas Fault is the primary surface boundary between the Pacific and the North American plates. There have been numerous historic earthquakes along the San Andreas Fault, and it generally poses the greatest earthquake risk to California. The San Andreas Fault is likely capable of producing a Maximum Credible Earthquake (MCE) of magnitude Mw 8.25.

*West Huasna/Oceanic Fault Zone.* The West Huasna/Oceanic Fault Zone trends north-northwest for approximately 100 kilometers along coastal central California. The fault extends from approximately the Santa Maria River on the south to San Simeon on the north. Seismologists have agreed that this fault zone was the source of the earthquake that shook the area on December 22, 2003.

The December 2003 earthquake, commonly known as the San Simeon earthquake, measured 6.5 on the Richter scale. The event was located 11 kilometers northeast of San Simeon, and 39



kilometers west-northwest of Paso Robles, where the brunt of the damage occurred. The strong shaking during the main-shock reached 47% of the force of gravity at the Templeton Hospital grounds. The shallow but powerful earthquake uplifted the Santa Lucia Mountains and triggered a vigorous aftershock sequence.

*Los Osos Fault.* The Los Osos Fault is located approximately 10 miles southwest of the Ranch property. The Los Osos Fault is generally northwest trending and exhibits a complex history of both strike-slip and reverse displacement. The Los Osos Fault Zone is divided into four distinct segments based upon differences in behavioral characteristics (recency of activity and slip rate), spatial coincidence with topographic sub-blocks of the San Luis Range, separation of fault traces, intersection with structures, and geomorphic expression. The segments are, from the northwest to the southeast, the Estero Bay, Irish Hills, Lopez Reservoir, and Newsom Ridge segments. The Irish Hills segment is active and is included in the Alquist-Priolo zoning by the State of California.

*Hosgri Fault.* The Hosgri Fault extends from San Simeon to an ocean shelf two miles west of Point Buchon, and then trends toward the Point Sal area. The Hosgri Fault is located approximately 22 miles southwest of the site. The fault is active. A Maximum Credible Earthquake of magnitude 7.5 and a Maximum Probable Earthquake of magnitude 6.4 are associated with the fault.

Ground Shaking and Surface Rupture. Faults generally produce damage in two ways: ground shaking and surface rupture. Seismically induced ground shaking covers a wide area and is greatly influenced by the distance of the site to the seismic source, soil conditions, and depth to groundwater. Surface rupture is limited to very near the fault. The Rinconada Fault and the southern extension of the Nacimiento Fault are located on the Ranch property (refer to Figure 4.6-4). The Future Development Program envisions several land uses on or adjacent to these mapped fault traces. Both faults are considered active for the purpose of this analysis, and therefore pose a high fault rupture hazard to potential future land uses. Other hazards associated with seismically induced ground shaking include earthquake-triggered landslides and tsunamis. Tsunamis and seiches are associated with ocean surges and inland water bodies, respectively. Neither of these hazards would affect the Agricultural Residential Cluster Subdivision or Future Development Program.

Expansive Soils. Agricultural Residential Cluster Subdivision and Future Development Program soils generally have high clay content (refer to Table 4.6-1). During periods of water saturation, these soils tend to expand. During dry periods, the soils tend to shrink. These volume changes with moisture content can cause cracking of structures built on expansive soils. As described by the NRCS (1983), the expansion potential (shrink-swell potential) of on-site soils ranges from low to high. Therefore, areas characterized by high shrink-swell potential would be a geologic hazard on the Ranch property. As shown in Figure 4.6-3, these areas occur throughout the Ranch, particularly along the eastern and western edges of the property.

Erosive Soils. Soil erosion is the removal of soil by water and wind. The rate of erosion is estimated from four soil properties: texture, organic matter content, soil structure, and permeability. Other factors that influence erosion potential include the amount of rainfall and wind, the length and steepness of the slope, and the amount and type of vegetative cover. The soil types mapped for the Santa Margarita Ranch range from low to very high erosiveness.



Areas with high or very high erosion hazards are generally located in steeper areas of the Ranch, including the eastern and western edges of the property (refer to Figure 4.6-3).

Subsidence and Settlement. Subsidence involves deep seated settlement due to the withdrawal of fluid (oil, natural gas, or water). Settlement is the downward movement of the land surface resulting from the compression of void space in underlying soils. Seismically induced settlement occurs in loose to medium dense unconsolidated soil above groundwater. These soils compress (settle) when subject to seismic shaking. The settlement can be exacerbated by increased loading, such as from the construction of buildings. Settlement can also result solely from human activities including improperly placed artificial fill, and structures built on soils or bedrock materials with differential settlement rates.

Slope Stability and Landslides. Landslides result when the driving forces that act on a slope (i.e., the weight of the slope material, and the weight of objects placed on it) are greater than the slope's natural resisting forces (i.e., the shear strength of the slope material). Slope instability may result from natural processes, such as the erosion of the toe of a slope by a stream, or by ground shaking caused by an earthquake. Slopes can also be modified artificially by grading, or by the addition of water or structures to a slope. Development that occurs on a slope can substantially increase the frequency and extent of potential slope stability hazards. Areas susceptible to landslides are typically characterized by steep, unstable slopes in weak soil/bedrock units which have a record of previous slope failure. There are numerous factors that effect the stability of the slope, including: slope height and steepness, type of materials, material strength, structural geologic relationships, ground water level, and level of seismic shaking. According to the San Luis Obispo County Safety Element, landslide risk ranges from low to high throughout the Santa Margarita Ranch. Due to gentler slopes that occur north of SR 58/El Camino Real, landslide potential is generally low throughout the northern portions of the Future Development Program. Low landslide risk also occurs east of the community of Santa Margarita and west of West Pozo Road. The majority of the Agricultural Residential Cluster Subdivision site is located in this low hazard area, although portions of the site are categorized with a moderate landslide potential due to the presence of unstable formations and relatively steep topography. Within the portion of the Ranch property west of the Agricultural Residential Cluster Subdivision area and southwest of the community of Santa Margarita, the landslide hazard is generally high (refer to Figure 4.6-5).

Due to the presence of unstable formations and relatively steep topography in portions of the Agricultural Residential Cluster Subdivision and Future Development Program sites, landslides are a potential hazard for both the Agricultural Residential Cluster Subdivision and Future Development Program.

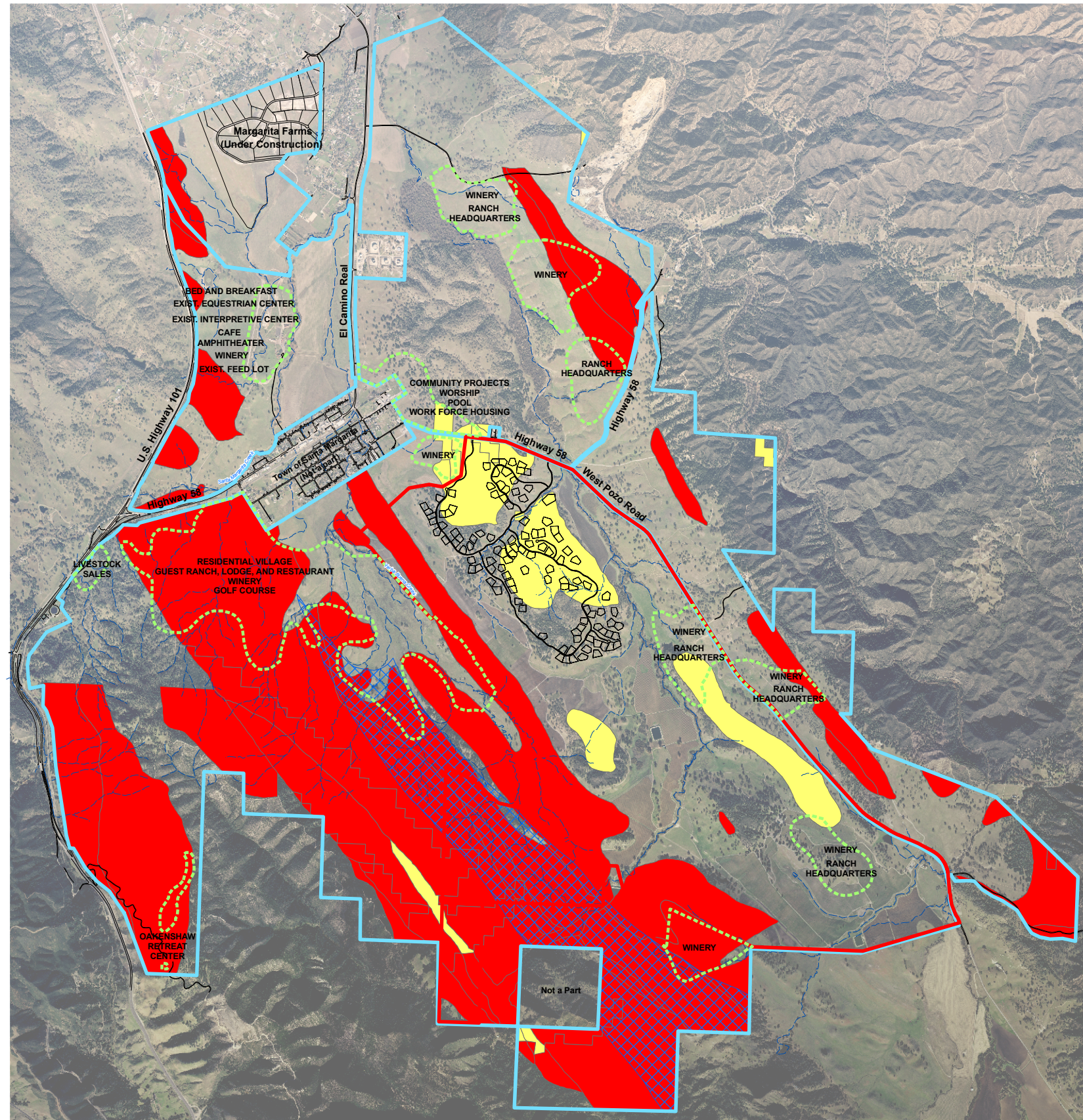
Liquefaction. Liquefaction is defined as the sudden loss of soil strength due to a rapid increase in soil pore water pressure resulting from seismic ground shaking. Liquefaction potential is dependent on such factors as soil type, depth to ground water, degree of seismic shaking, and the relative density of the soil. When liquefaction of the soil occurs, buildings and other objects on the ground surface may tilt or sink, and lightweight buried structures (such as pipelines) may float toward the ground surface. Liquefied soil may be unable to support its own weight or that of structures, which could result in loss of foundation bearing or differential settlement. Liquefaction may also result in cracks in the ground surface followed by the emergence of a sand-water mixture.



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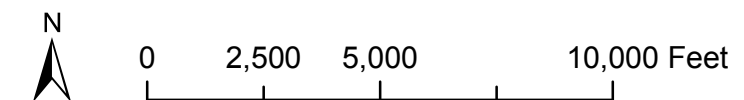






Note: No NRCS soil data is available for Oakenshaw Retreat Center or southernmost winery locations. Soil types obtained from 2006 site reconnaissance.

- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- ⋯ FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS
- HIGH LANDSLIDE POTENTIAL
- MODERATE LANDSLIDE POTENTIAL
- ▣ GEOLOGIC STUDY AREA COMBINING DESIGNATION



Landslide Potential







According to the San Luis Obispo County Safety Element, the majority of the Santa Margarita Ranch property maintains a low potential for liquefaction. However, portions of the Agricultural Residential Cluster Subdivision and Future Development Program sites are underlain by sediments with a moderate to high liquefaction potential (refer to Figure 4.6-6). Due to the presence of unconsolidated alluvial material and shallow groundwater, liquefaction is a geologic hazard throughout the Ranch property.

Geologic Study Area. Portions of the Ranch property are designated as a Geologic Study Area (GSA) under the Salinas River Area Plan. The Geologic Study Area (GSA) combining designation is applied to areas where geologic and soil conditions could present new developments and their users with potential hazards to life and property (San Luis Obispo County Code, Section 22.14.070). The designation applies to a northwesterly trending band that extends from the southern boundary of the Future Development Program to approximately ½ mile south of the community of Santa Margarita (refer to Figure 4.6-5). The designation does not apply to any portion of the Agricultural Residential Cluster Subdivision site. Development located within the GSA combining designation would require compliance with Section 22.14.070 of the San Luis Obispo County Code (Geologic Study Area Standards), including the preparation of a Geology and Soils Report and recommended building techniques, site preparation measures, or setbacks necessary to reduce risks to life and property from seismic damage, landslide, groundwater and liquefaction to insignificant levels.

#### **4.6.2 Impact Analysis**

**a. Methodology and Significance Thresholds.** In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in any of the following:

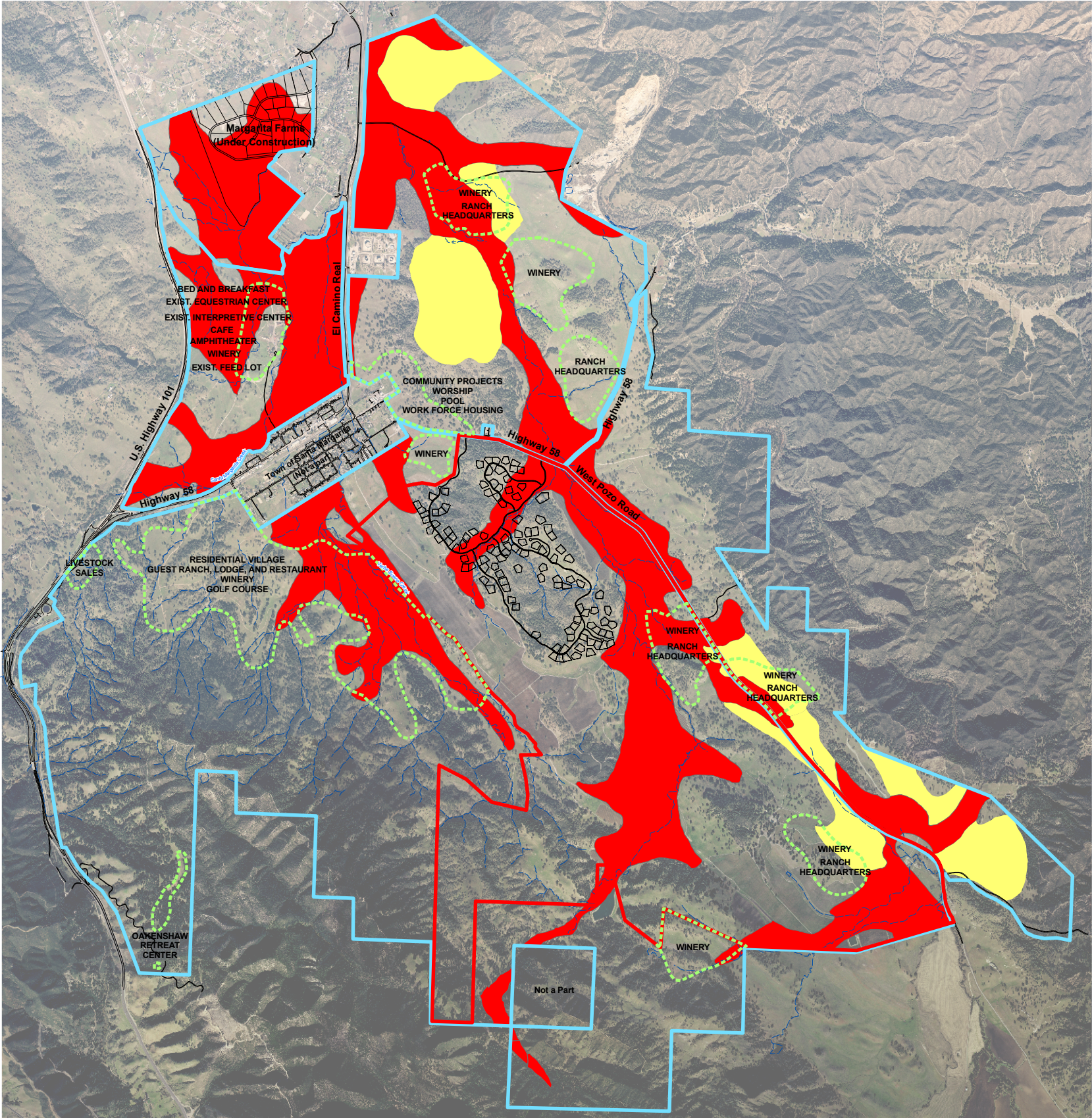
- *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides;*
- *Result in substantial soil erosion or the loss of topsoil;*
- *Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;*
- *Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property; or*
- *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.*



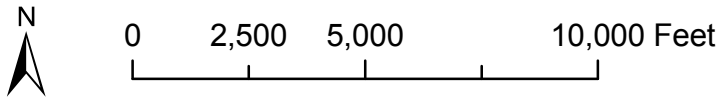
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- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- - - FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS
- HIGH LIQUEFACTION POTENTIAL
- MODERATE LIQUEFACTION POTENTIAL



Liquefaction Potential

Source: SSURGO, 2004, and EDA Design Professionals, June 2006.





**b. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact G-1**      **Due to the presence of active and potentially active faults in the vicinity of the proposed Agricultural Residential Cluster Subdivision, the site and surrounding area is subject to strong ground shaking. Ground shaking has the potential to cause fill material to settle, destabilize slopes, and cause physical damage to structures, property, utilities and road access. This is a Class II, significant but mitigable impact.**

The proposed Agricultural Residential Cluster Subdivision is located directly between the Rinconada and Nacimiento Fault Zones, and approximately 29 miles from the San Andreas Fault. The Los Osos Fault is located within 10 miles of the Agricultural Residential Cluster Subdivision site.

The Rinconada Fault is located approximately 2,100 feet east of the proposed residential development, and the southern reaches of the Nacimiento Fault pass approximately 3,100 feet west of the nearest proposed home site (refer to Figure 4.6-4). Both faults are considered active for the purposes of this analysis. Although both of these faults are located near the Santa Margarita Ranch, surface rupture hazard on the Agricultural Residential Cluster Subdivision site (defined as the physical displacement of surface deposits in response to an earthquake's seismic waves) would be unlikely. It is estimated that the maximum surface displacement that may result from seismic activity on the Rinconada or Nacimiento Fault Zones would be 3 feet and 1 foot wide, respectively (San Luis Obispo County Seismic Safety Element, 1974). No development is proposed within this distance to the fault zones. However, due to the proximity of these and other fault zones, the proposed Agricultural Residential Cluster Subdivision development could experience strong ground motion from future local and regional earthquake events.

Besides the direct physical damage to structures caused by ground shaking, marginally stable landslides, slopes, and inadequately compacted fill material could move and cause additional damage. Gas, water, and electrical lines could be ruptured due to groundshaking, or broken during movement of earth caused by the earthquake, which could affect public safety. Impacts related to seismic ground shaking would be potentially significant.

Mitigation Measures. The philosophy in the Uniform Building Code is to prevent structural collapse and thereby mitigate safety issues. By definition, significant structural damage is acceptable in Code-conforming structures; although it has been found by experience that single-family, wood-frame structures properly built to the latest building codes generally perform well in response to strong ground shaking where ground failure is not involved. The following mitigation measure is required:

**Agricultural Residential Cluster Subdivision G-1(a)**      **UBC Compliance.** Above-ground structures shall be designed and built according to the latest UBC Seismic Zone 4 standards.

**Plan Requirements and Timing.** Final project plans submitted to Planning and Building shall have a note printed on the plans which specify UBC Seismic Zone 4 standards for all above-



ground structures. Building plans submitted in an application for a Building Permit shall include documentation that these standards are met. Final project plans shall be submitted that include the required design specifications prior to approval of the Land Use Permit. Building plans that meet UBC Zone 4 standards shall be provided to the Building Division prior to issuance of Building Permits. **Monitoring.** Prior to issuance of grading permits, Planning and Building staff shall review project plans and verify that the UBC Seismic Zone 4 requirements are printed on the plans. Building Division staff shall verify that UBC standards are met prior to issuance of Building Permits. Building inspectors shall conduct site inspections to assure that construction occurs consistent with approved plans.

Residual Impacts. Through Code-conformance and proper engineering design and construction as monitored by Planning and Building, ground shaking hazards would be less than significant.

**Agricultural Residential Cluster Subdivision Impact G-2**      **Soils on the Agricultural Residential Cluster Subdivision site have the potential to present soil-related hazards (expansive soils, erosive soils, settlement) to structures, utilities, and roadways on the Agricultural Residential Cluster Subdivision site. This is a Class II, significant but mitigable impact.**

*Expansive Soils.* Expansive soils have a clay content and mineralogy that renders them susceptible to volume increase upon absorption of water and volume decrease upon drying. Repeated cycles of wetting and drying of expansive soils can cause severe distress to roadways, foundations, and concrete flatwork.

Of the 32 soils mapped on the Agricultural Residential Cluster Subdivision site, 10 have high shrink-swell potential: Arbuckle Positas Complex (9-15% and 30-50% slopes); Ayar and Diablo soils (9-15% and 15-30% slopes); Clear Lake clay; Cropely clay (2-9% slopes); Dibble clay loam (9-15% slopes); Millsholm-Dibble clay loams (30-50% slopes); Ryer clay loam (2-9% slopes); and Shimmon-Dibble association, steep (30-50% slopes). Proposed lots that may be located on these soils include: Lots 1 through 24, 26 through 28, 30 through 40, 43 through 57, 63 through 67, and 69 through 71 (refer to Figure 4.6-3). Structures and facilities constructed on these soils, as well as occupants of the proposed structures, could be exposed to hazards related to expansive soils. Impacts related to expansive soils would be potentially significant.

*Erosive Soils.* According to the NRCS soils mapping for the Agricultural Residential Cluster Subdivision site, the areas proposed for development are underlain by 16 soils which are characterized with high to very high erosion potential: Arbuckle-Positas complex (15-30% and 30-50% slopes); Arnold-San Andreas complex (30-75% slopes); Ayar and Diablo soils (15-30% slopes); Elder loam (2-9% slopes); Gazos shaly clay loam (9-30% and 30-50% slopes); Linne-Calodo complex (30-50% slopes); Lompico-McMullin complex (50-75% slopes); Millsholm-Dibble clay loams (30-50% slopes); San Andreas sandy loam (15-30% slopes); Santa Lucia-Lopez complex (15-30% slopes); Santa Lucia-Gazos complex (50-75% slopes); Shimmon loam (30-50% slopes); Shimmon-Dibble association, steep (30-50% slopes); and Xerofluvents-Riverwash



association. Proposed lots that may be located on these soils include: Lots 1, 9 through 17, 19 through 24, 26 through 28, 30 through 40, 46 and 47, 50 through 54, 64 through 71, 79, 87, 89 through 91, 94, 97 through 101, 104 through 106, 111, 112, and 115 (refer to Figure 4.6-3). Structures and facilities constructed on these soils, as well as occupants of the proposed structures, could be exposed to hazards related to erosion. Impacts related to erosion would be potentially significant.

*Settlement.* The San Luis Obispo County Safety Element states that seismic-related settlement may be a hazard for structures located on alluvium in low-lying areas. Younger alluvium occurs on low-lying areas near Yerba Buena, Santa Margarita and Trout Creeks. Lots located near these streams, including Lots 1, 21, 43, 44, 56 through 61, 63 through 66, 71 through 73, 81, 83, 87 and 88, may be subject to potential settlement hazards.

Mitigation Measures. The following mitigation measures are required:

**Agricultural Residential  
Cluster Subdivision  
G-2(a)**

**Soils/Foundation Report.** Upon implementation of the proposed Agricultural Residential Cluster Subdivision, individual property developers proposing development within the areas identified as having a high shrink-swell potential, high to very high erosion hazard and/or potential for settlement shall submit a soils/foundation report as part of the application for any proposed Building Permit(s). To reduce the potential for foundation cracking, one or more of the following shall be implemented and/or as recommended by a qualified engineer:

1. Use continuous deep footings (i.e., embedment depth of 3 feet or more) and concrete slabs on grade with increased steel reinforcement together with a pre-wetting and long-term moisture control program within the active zone.
2. Removal and recompaction of loose soils.
3. Removal of the highly expansive material and replacement with non-expansive compacted import fill material.
4. The use of specifically designed drilled pier and grade beam system incorporating a structural concrete slab on grade supported approximately 6 inches above the expansive soils.
5. Chemical treatment with hydrated lime to reduce the expansion characteristics of the soils.
6. Where necessary, construction on transitional lots shall include over excavation to expose firm sub-grade, use of post tension slabs in future structures, or other geologically acceptable method.

**Plan Requirements and Timing.** The required report shall be provided along with any future building plans and shall evaluate soil engineering properties and provide foundation design recommendations. Any future project applicant shall notify the Building Department prior to commencement of grading. The soils/foundation report shall be provided to the Planning and





Building Department for review and approval prior to issuance of Building Permits. **Monitoring.** Engineering staff shall review and approve the required report (and the foundation design) prior to issuance of a Building Permit. Building inspectors shall make site inspections to assure implementation of approved plans. Grading inspectors shall monitor technical aspects of any grading activities.

**Agricultural Residential  
Cluster Subdivision  
G-2(b)**

**Grading and Erosion Control Plan.** A grading and erosion control plan that minimizes erosion, sedimentation and unstable slopes shall be prepared and implemented by the applicant or representative thereof, prior to issuance of tract-wide Grading Permits. It must include the following:

- a. Methods such as retention basins, drainage diversion structures, spot grading, silt fencing/coordinated sediment trapping, straw bales, and sand bags shall be used to minimize erosion on slopes and siltation into Yerba Buena, Santa Margarita and Trout Creeks (including the unnamed tributary to Trout Creek) during grading and construction activities.
- b. Grading shall be prohibited within 100 feet of Trout Creek and within 50-feet of the unnamed tributary to Trout Creek, wetlands, and waters of the U.S. [refer to Agricultural Residential Cluster Subdivision measure B-4(a) (Wetland and Riparian Protection) in Section 4.3, *Biological Resources*].
- c. Graded areas shall be revegetated within 4 weeks of grading activities with deep-rooted, native, drought-tolerant species to minimize slope failure and erosion potential. If determined necessary by Planning and Building, irrigation shall be provided. Geotextile binding fabrics shall be used if necessary to hold slope soils until vegetation is established.
- d. Temporary storage of construction equipment and equipment washing areas shall be limited to a minimum of 100 feet from Trout Creek and 50-feet from the unnamed tributary to Trout Creek, wetlands, and waters of the U.S.
- e. After construction of tract improvements, exposed areas shall be stabilized to prevent wind and water erosion, using methods approved by the Planning and Building Department Grading Division and the Air Pollution Control District (APCD). These methods may include the importation of topsoil to be spread on the ground surface in areas having soils that can be transported by the wind and/or the mixing of the highly erosive sand with finer-grained materials (silt or clay) in sufficient quantities to prevent its ability to be transported by wind. The topsoil or silt/clay mixture is to be used to stabilize the existing soil to



- prevent its ability to be transported by wind. At a minimum, six inches of topsoil or silt/clay/sand mixture is to be used to stabilize the wind-erodible soils.
- f. Landscaped areas adjacent to structures shall be graded so that drainage is away from structures.
  - g. Irrigation shall be controlled so that overwatering does not occur. An irrigation schedule shall be reviewed and approved by Planning and Building prior to issuance of grading permits.
  - h. Grading on slopes steeper than 5:1 shall be designed to minimize surface water runoff.
  - i. Fills placed on slopes steeper than 5:1 shall be properly benched prior to placement of fill.
  - j. Brow ditches and/or berms shall be constructed and maintained above all cut and fill slopes, respectively.
  - k. Cut and fill benches shall be constructed at regular intervals.
  - l. Retaining walls shall be installed to stabilize slopes where there is a 10-foot or greater difference in elevation between buildable lots.
  - m. The applicant shall limit excavation and grading to the dry season of the year (typically April 15 to November 1, allowing for variations in weather) unless a Planning and Building Department approved erosion control plan is in place and all measures therein are in effect.
  - n. The applicant shall post a bond with the County and hire a Planning and Building -qualified geologist or soils engineer prior to issuance of grading permits, and to ensure that erosion is controlled and mitigation measures are properly implemented.

**Plan Requirements and Timing.** The grading and erosion control plan shall be submitted for review and approval to Planning and Building prior to issuance of grading permits for tract improvements. This condition shall be noted on grading plans. The applicant shall notify Planning and Building prior to commencement of grading. Components of the grading and erosion control plan shall be implemented throughout all grading activities. Components of the grading and erosion plans shall be implemented prior to issuance of grading permits.

**Monitoring.** Building inspectors shall make site inspections to assure implementation of approved plans. Grading inspectors shall monitor technical aspects of the grading activities.

Residual Impacts. Properly designed and constructed foundations and implementation of a grading and erosion control plan would adequately mitigate the potential for structural problems caused by soil-related hazards, thereby reducing impacts to a less than significant level.



**Agricultural Residential Cluster Subdivision Impact G-3**      **The Agricultural Residential Cluster Subdivision area contains several steep slopes and is subject to moderate landslide potential. Landsliding has the potential to damage and destroy structures, roadways and other improvements as well as to alter or block drainage channels, causing further damage and erosion. Soil slumping can damage or destroy structures and lead to erosion problems. These are Class II, *significant but mitigable* impacts.**

The Agricultural Residential Cluster Subdivision area is hilly with the ridges trending north-south and reaching elevations of 1,276 feet with dissecting valleys draining out to Trout Creek at an elevation of about 1,020 feet. Steeper slopes are present near the center of the proposed Agricultural Residential Cluster Subdivision site. As discussed in Section 4.6.1(d) above, landslide risk is generally low throughout the Agricultural Residential Cluster Subdivision site. However, a moderate landslide hazard designation is identified for those areas near the center of the site where steeper slopes occur (Figure 4.6-5). Landsliding has the potential to damage and destroy structures, roadways and other improvements as well as to deflect and block drainage channels, causing further damage and erosion. Proposed lots that may be located in moderate landslide hazard areas include: Lots 1, 5 through 19, 36 through 38, 40, 43 through 70, 74 through 78, and 87 (refer to Figure 4.6-5). These impacts would be potentially significant.

Debris flows typically form in response to local intense rainfall in steep swale areas that are filled with saturated, fine-grained soils. Portions of the Agricultural Residential Cluster Subdivision site, because of relatively steep topography, have a moderate debris flow potential. These impacts would be potentially significant.

Overall, impacts related to slope stability would be potentially significant.

Mitigation Measures. Mitigation Measure D-2(c) in Section 4.5, *Drainage, Erosion, and Sedimentation*, which prohibits grading on slopes greater than 30%, would reduce impacts related to slope stability. The following mitigation measure is required:

**Agricultural Residential Cluster Subdivision G-3(a)**      **Agricultural Residential Cluster Subdivision Lot Geotechnical Investigations and Practices.** Each Agricultural Residential Cluster Subdivision lot shall be inspected to ensure a low risk of landslides or soil slumping. Geotechnical engineering measures, such as shoring soils of any landslide areas shall be required to ensure that the slope will not be destabilized during the grading activity. Remedial measures during grading may include the removal of the slump or debris slide from the top to the toe of slope.

In accordance with the applicable building codes, Agricultural Residential Cluster Subdivision lot investigations shall be performed prior to construction in areas determined to have a moderate or higher landslide hazard (as seen in Figure 4.6-5). Investigations and practices shall include the following:



- a) Prior to issuance of any building permits, a qualified geotechnical engineer and/or engineering geologist shall prepare thorough Agricultural Residential Cluster Subdivision lot geologic/geotechnical studies, and a slope stability analysis which shall incorporate lot-specific recommendations. The slope stability analysis shall at a minimum meet the requirements of CDMG 1997 (Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117). In addition, the stability analysis shall meet the requirements of the County Planning and Building Department.
- b) During grading, engineering geologists and geotechnical engineers shall confirm preliminary findings reported in the preliminary studies.
- c) All applicable recommendations of final geologic and geotechnical investigations prepared for the Agricultural Residential Cluster Subdivision shall be implemented. These recommendations may include: avoidance of or setbacks from historic landslide deposits or areas susceptible to a potential for landslides; the restriction of grading in areas with landslide hazards; drainage improvements to ensure potential landslide areas do not become saturated; excavating standard keyways and benches in a stair-step configuration; water addition or drying-out as needed to bring soils to an acceptable moisture content; limitations on cut and fill slope gradients; and/or removal and backfilling or potential landslide areas.

**Plan Requirements and Timing.** Preliminary geologic and geotechnical reports shall be submitted for review and approval by Planning and Building prior to approval of building permits. During construction, a County geologist shall review and field-verify preliminary geologic and geotechnical reports. Final geologic and geotechnical reports shall be submitted for review and approval by Planning and Building prior to issuance of grading permits. Grading and building plans shall be submitted for review and approval by Planning and Building prior to issuance of grading and building permits. **Monitoring.** Building inspectors shall site inspect during grading and prior to occupancy clearance to ensure compliance with approved plans.

Residual Impacts. Implementation of the above mitigation measure would reduce impacts from potential landsliding and debris flows to less than significant levels.



**Agricultural Residential Cluster Subdivision Impact G-4**      **Seismic activity could produce sufficient ground shaking which may result in liquefaction of soils near on-site streams. Agricultural Residential Cluster Subdivision lots located in these areas could be subject to high liquefaction hazards. This is a Class II, significant but mitigable, impact.**

According to the San Luis Obispo County Safety Element, the potential for liquefaction in most of the proposed Agricultural Residential Cluster Subdivision site is low due to the presence of near-surface bedrock material. However, the soil and groundwater characteristics near on-site streams could create a liquefaction hazard that could damage structures. Yerba Buena Creek flanks the area proposed for residential development to the west, while Trout Creek flanks the Agricultural Residential Cluster Subdivision property to east. An unnamed tributary to Trout Creek flows east-west through the center of the Agricultural Residential Cluster Subdivision, between proposed Phase I and Phase II development. Proposed lots that may be located near these streams and therefore be subject to high liquefaction potential include: Lots 2 through 7, 19 through 21, 23 through 25, 35, 43, 44, 66, 71, 72 and 82 through 84 (refer to Figure 4.6-6). Impacts are significant but mitigable (Class II).

Mitigation Measures. The following mitigation measure is required:

**Agricultural Residential Cluster Subdivision G-4(a)**      **Reduction of Liquefaction Potential.** Appropriate techniques to minimize liquefaction potential shall be prescribed by an engineering geologist and implemented by the applicant prior to issuance of Building Permits. Suitable measures to reduce liquefaction impacts shall include one or more of the following as recommended by a qualified engineer: specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the ground characteristics. All on-site structures shall comply with applicable methods of the Uniform Building Code [refer to Agricultural Residential Cluster Subdivision measure G-1(a) (UBC Compliance)].

**Plan Requirements and Timing.** The applicant shall notify Planning and Building of specific methods to reduce liquefaction potential, as recommended by a qualified engineering geologist, prior to commencement of grading. Measures to reduce liquefaction shall be implemented prior to issuance of Building Permits. **Monitoring.** Planning and Building staff shall review and approve the required report prior to issuance of the Building Permit. Building inspectors shall make site inspections to assure implementation of approved plans. Grading inspectors shall monitor technical aspects of the grading activities.

Residual Impacts. Implementation of the above mitigation measure would reduce impacts from potential liquefaction to a less than significant level.



**Agricultural Residential Cluster Subdivision Impact G-5**      **The surface materials in the central portion of the Agricultural Residential Cluster Subdivision site allow for percolation of groundwater and may result in seepage into building foundations. This is a Class II, significant but mitigable, impact.**

Of the 32 soils mapped on the Agricultural Residential Cluster Subdivision site, seven have moderately rapid to rapid permeability: Arnold-San Andreas complex (30-75% slopes), Hanford and Greenfield fine sandy loams (2-9% slopes), Hanford and Greenfield gravelly sandy loams (0-2% slopes and 2-9% slopes), Oceano loamy sand (2-9% slopes), San Andreas sandy loam (15-30% slopes), and San Andreas-Arujo sandy loams (9-15% slopes). Highly permeable soils allow percolation of surface water to the surface material-bedrock contact, which can accumulate and flow along the contact until it surfaces in locations where the surface material is either very shallow or nonexistent. This has the potential to cause seepage into foundations, which can cause damage to structures. Ponding water and surficial water flow can cause erosion on the Agricultural Residential Cluster Subdivision site. In addition, as mentioned under Agricultural Residential Cluster Subdivision Impact G-3, percolation of leach fields can reduce the compaction in the soil which could increase the potential for a landslide. Development on Lots 17, 24 through 26, 29, 30, 40, 58, 68, 72 through 84, 88, 91 through 97, and 101 through 115 would be located on these permeable soils. Impacts related to groundwater percolation would be potentially significant.

Mitigation Measures. The following mitigation measure is required:

**Agricultural Residential Cluster Subdivision G-5(a)**      **Subdrains.** An engineering geologist or a soils engineer shall observe construction activities to review the potential for subsurface water on Lots 17, 24 through 26, 29, 30, 40, 58, 68, 72 through 84, 88, 91 through 97, and 101 through 115. As determined necessary by a qualified engineer, subdrains shall be installed within foundations, soft soils, or roadways, to alleviate ponding of water.

**Plan Requirements and Timing.** An engineering geologist or soils engineer shall review subsurface water during construction and report to Planning and Building. Subdrains shall be installed as necessary prior to occupancy clearance. **Monitoring.** During and following construction, Planning and Building staff shall review installation of subdrains and surface water on proposed lots.

Residual Impacts. Implementation of the above mitigation measure would reduce impacts from subsurface water to a less than significant level.

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**c. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.6.2(b)



for a discussion of geologic stability impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development  
Program Impact G-1**

**Due to the presence of active faults in the vicinity of the property and the active Rinconada and Nacimiento Faults located on the Ranch property, the Future Development Program is subject to strong ground shaking and fault rupture hazards. This is a Class II, *significant but mitigable* impact.**

The Rinconada Fault is located approximately 2,100 feet east of the proposed Agricultural Residential Cluster Subdivision development, running along the eastern edge of the Ranch property. Land uses envisioned for this area include four wineries and four Ranch headquarters (refer to Figure 4.6-4). Associated structures, utilities, and roadways could potentially be located directly atop the Rinconada Fault trace. Each winery may include an on-site tasting room, gift shop, and Bed & Breakfast. Each Ranch headquarter could include a two-story, 5,000 square foot residence on a 2.5-acre lot. A total of 60 farm support residential units would be split between the five headquarter sites. The Rinconada Fault is considered active for the purpose of this analysis and is capable of generating a maximum credible earthquake (MCE) of approximately 7.5. Impacts related to surface rupture from the Rinconada Fault Zone would be potentially significant.

The Nacimiento Fault Zone is located approximately 3,100 feet west of the Agricultural Residential Cluster Subdivision development, bisecting the community of Santa Margarita in the west-central portion of the Ranch property. Land uses envisioned for location near the Nacimiento Fault trace include: a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater and 40,000 square foot winery near the existing Ranch headquarters location; and a residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery, and 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop southwest of the community of Santa Margarita (refer to Figure 4.6-4). Because no application has been filed for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, any of these uses could be located directly atop or immediately adjacent to the Nacimiento Fault trace, which is considered active for the purpose of this analysis. Impacts related to surface rupture from the Nacimiento Fault Zone would be potentially significant.

In addition to the potential for surface rupture, Future Development Program land uses could experience strong ground motion from future local and regional earthquake events due to the proximity of the on- and off-site fault zones [refer to Section 4.6.1(d)]. Besides the direct physical damage to structures caused by ground shaking, marginally stable landslides, slopes, and inadequately compacted fill material could move and cause additional damage. Gas, water, and electrical lines could be ruptured due to groundshaking, or broken during movement of earth caused by the earthquake, which could affect public safety. Impacts related to seismic groundshaking would be potentially significant.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure G-1(a) (UBC Compliance) would apply to all above-ground structures. The following additional mitigation measures are also required to reduce surface rupture hazards:





**Future Development  
Program G-1(a)**

**Fault Location Investigations.** Prior to site plan approval for any land use located near a mapped fault trace, a subsurface geologic or geotechnical investigation shall be conducted by a qualified engineer in the area proposed for development. As part of the investigation, a special fault investigation shall be initiated in accordance with the State Alquist-Priolo Special Studies Zone Guidelines, to determine and/or confirm exact locations of the Rinconada or Nacimiento Faults.

**Plan Requirements and Timing.** The special fault investigation shall be performed prior to site plan approval. **Monitoring.** Planning and Building shall review the special fault investigation prior to site plan approval.

**Future Development  
Program G-1(b)**

**Building Envelope Setbacks.** Based on the results of the special fault investigation, all habitable structures and utilities shall be located at least 50 feet from the Rinconada or Nacimiento Fault trace.

**Plan Requirements and Timing.** The setbacks shall be included within the building plans for future habitable structures. Planning and Building shall review these plans prior to approval. **Monitoring.** Planning and Building shall be responsible for ensuring that all structures meet the setback requirement.

Residual Impacts. Through Code-conformance, implementation of setbacks, and proper engineering design and construction, ground shaking and surface rupture hazards would be less than significant.

**Future Development  
Program Impact G-2**

**Soils within the Ranch property have the potential to present soil-related hazards (expansive soils, erosive soils, settlement) to Future Development Program structures, utilities, and roadways. This is a Class II, significant but mitigable impact.**

*Expansive Soils.* As shown in Figure 4.6-3, portions of the Ranch property are underlain with soils with a high shrink-swell potential. Of the soils mapped in areas envisioned for development, 11 have high shrink-swell potential. In addition to those discussed under Agricultural Residential Cluster Subdivision Impact G-2, these include: Arbuckle-San Ysidro complex (2 - 9% slopes); Millsholm-Dibble Clay loams (15-30% slopes); Nacimiento-Ayar complex (9-30% slopes); and Rincon clay loam (2-9% slopes). Future Development Program land uses that may be located on these soils include: a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater and 40,000 square foot winery near the existing Ranch headquarters location; a residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery, and 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop, southwest of the community of Santa Margarita; six wineries and five ranch headquarters located along the eastern portion of the Ranch property; and a livestock sales yard (refer to Figure 4.6-3). Each winery could include a 40,000 square foot structure and an additional 6,000 square foot retail component. The winery located west of



West Pozo Road, south of the proposed Agricultural Residential Cluster Subdivision lots, could include an 80,000 square foot structure. Each ranch headquarter could include a two-story, 5,000 square foot residence on a 2.5-acre lot. A total of 60 farm support residential units would be split between all five headquarter sites. Structures and facilities constructed in these locations, as well as occupants and patrons of the structures, could be exposed to hazards related to expansive soils. Impacts related to expansive soils would be potentially significant.

*Erosive Soils.* As shown in Figure 4.6-3, portions of the Ranch property are underlain with soils with a high to very high erosion hazard. Of the soils mapped in areas envisioned for development, 15 have high or very high erosion hazard. In addition to those discussed under Agricultural Residential Cluster Subdivision Impact G-2, these include: Linne-Calodo complex (9-30% slopes); Millsholm-Dibble clay loams (15-30% slopes); and Nacimiento-Ayar complex (9-30% slopes). Future Development Program land uses that may be located on these soils include: a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater and 40,000 square foot winery near the existing Ranch headquarters location; a residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery, and 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop, southwest of the community of Santa Margarita; six wineries and five ranch headquarters located along the eastern portion of the Ranch property; a livestock sales yard; and a retreat center (refer to Figure 4.6-3). Each winery could include a 40,000 square foot structure and an additional 6,000 square foot retail component. The winery located west of West Pozo Road, south of the proposed Agricultural Residential Cluster Subdivision lots, could include an 80,000 square foot structure. Each Ranch headquarter could include a two-story, 5,000 square foot residence on a 2.5-acre lot. A total of 60 farm support residential units would be split between all five headquarter sites. Structures and facilities constructed on these soils, as well as occupants of the proposed facilities, could be exposed to hazards related to erosion. Impacts related to erosion would be potentially significant.

*Settlement.* The San Luis Obispo County Safety Element states that seismic-related settlement may be a hazard for structures located on alluvium in low-lying areas. Younger alluvium occurs on low-lying areas near Yerba Buena, Santa Margarita and Trout Creeks. Future Development Program land uses that may be located in these areas include: a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater and 40,000 square foot winery near the existing Ranch headquarters location; a residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery, and 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop, southwest of the community of Santa Margarita; two Ranch headquarters and two wineries located in the northeastern corner of the Future Development Program property; and one winery/ranch headquarter located west of West Pozo Road, south of the proposed Agricultural Residential Cluster Subdivision lots. Impacts related to settlement would be potentially significant.

Mitigation Measures. The following mitigation measure is required:

**Future Development Program G-2(a)**

**Avoidance of Soil Hazards.** Preferred locations for Future Development Program components shall be in areas of low to moderate soil-related hazards. This may require restricted building envelopes for all Future Development Program land uses except the winery located adjacent to the southeast edge of



the community of Santa Margarita and the park and community pool, worship centers, and work force housing envisioned east of the community of Santa Margarita. If future development is proposed in areas containing expansive soils, a high or very high erosion hazard, and/or potential for settlement, Agricultural Residential Cluster Subdivision measures G-2(a) (Soils/Foundation Report) and G-2(b) (Grading and Erosion Control Plan) shall apply.

**Plan Requirements and Timing.** Soil hazards shall be included on building plans for future habitable structures and utilities. Planning and Building shall review these plans prior to approval.  
**Monitoring.** Planning and Building shall be responsible for ensuring that all structures are outside high soil hazard areas or are otherwise mitigated. If structures are proposed for location in areas containing expansive soils and/or a high erosion hazard, Planning and Building shall ensure that Agricultural Residential Cluster Subdivision measures G-2(a) (Soils/Foundation Report) and G-2(b) (Grading and Erosion Control Plan) are applied.

Residual Impacts. Avoidance of soil-related hazards would ensure less than significant impacts. Should avoidance be infeasible, properly designed and constructed foundations and implementation of a grading and erosion control plan would adequately mitigate the potential for structural problems caused by soil-related hazards, thereby reducing impacts to a less than significant level.

**Future Development  
Program Impact G-3**

**The Ranch property contains many steep slopes and is subject to moderate to high landslide potential. Landsliding has the potential to damage and destroy structures, roadways and other improvements, as well as to alter or block drainage channels, causing further damage and erosion. Soil slumping can damage or destroy structures and lead to erosion problems. This is a Class II, significant but mitigable impact.**

Slopes vary throughout the Santa Margarita Ranch. The mountainous area on the west side of the property contains the Santa Lucia Mountain ridge with slopes of 50 percent and greater while the foothills exhibit slopes of 25 percent to 50 percent. The predominant interior valleys of the property have slopes of 1 to 9 percent while the Santa Margarita Creek lowlands typically contain slopes less than 5 percent. Debris flow is a concern where alluvial or thick colluvial units are on slopes greater than 10 percent. These flows often begin at the heads of gullies where greater thicknesses are present on steeper slopes, and local perched groundwater may collect.

Due to gentler slopes that occur north of SR 58/El Camino Real, landslide potential is generally low throughout the northern reaches of the Santa Margarita Ranch. However, as shown in Figure 4.6-5, portions of the Ranch property experience a moderate to high landslide potential. West of the Agricultural Residential Cluster Subdivision, southwest of the community of Santa Margarita, landslide hazard is generally high. In addition, some moderate to high landslide



potential occurs throughout the eastern and southern reaches of the Ranch property. Future Development Program land uses that may be located in areas of moderate landslide potential include: three wineries and two ranch headquarters located along the eastern portion of the Ranch property near West Pozo Road; and a 5-acre park and community pool, three 20,000 square foot worship centers, and 50 units of work force housing east of the community of Santa Margarita (refer to Figure 4.6-5). Future Development Program land uses that may be located in areas of high landslide potential include: a residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery, and 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop, southwest of the community of Santa Margarita; four wineries and three ranch headquarters located along the eastern and southern portions of the Ranch property; and a retreat center. Each winery could include a 40,000 square foot structure and an additional 6,000 square foot retail component. The winery located west of West Pozo Road, south of the proposed Agricultural Residential Cluster Subdivision lots, could include an 80,000 square foot structure. Each Ranch headquarter could include a two-story, 5,000 square foot residence on a 2.5-acre lot. A total of 60 farm support residential units would be split between all five headquarter sites. Due to the presence of unstable formations and relatively steep topography in portions of the property, landslides are a potential hazard.

Debris flows typically form in response to local intense rainfall in steep swale areas that are filled with saturated, fine-grained soils. Portions of the southern half of the Ranch, because of relatively steep topography, have a moderate debris flow potential. These impacts would be potentially significant.

Overall, impacts related to landslides and debris flows would be potentially significant.

Mitigation Measure. The following mitigation is required:

**Future Development  
Program G-3(a)**

**Avoidance of Landslide Hazards.** Preferred locations for Future Development Program land uses shall be in areas of low landslide potential. If development is proposed in areas with moderate or high landslide potential, Agricultural Residential Cluster Subdivision measure G-3(a) (Agricultural Residential Cluster Subdivision Lot Geotechnical Investigations and Practices) shall apply.

**Plan Requirements and Timing.** Landsliding hazard areas shall be included on building plans for future habitable structures and utilities. Planning and Building shall review these plans prior to approval. **Monitoring.** Planning and Building shall be responsible for ensuring that all structures are located outside landslide hazard areas or are otherwise mitigated. If structures are proposed for location in areas containing moderate to high landslide potential, Planning and Building shall ensure that Agricultural Residential Cluster Subdivision measure G-3(a) (Agricultural Residential Cluster Subdivision Lot Geotechnical Investigations and Practices) is applied.



Residual Impacts. With implementation of the above measure, impacts from potential slope stability hazards would be less than significant.

**Future Development  
Program Impact G-4**

**Seismic activity could produce sufficient ground shaking which may result in liquefaction of soils near streams on the Ranch property. Future development located in these areas could be subject to high liquefaction hazards. This is a Class II, significant but mitigable, impact.**

According to the San Luis Obispo County Safety Element, the potential for liquefaction on most of the Ranch property is low due to the presence of near-surface bedrock material. However, the soil and groundwater characteristics near streams throughout the Ranch property could create a liquefaction hazard that could damage structures. Streams located on the Ranch property include: Trout Creek (northeastern portion of the Ranch property); an unnamed tributary to Trout Creek (between Phase 1 and Phase 2 of the Agricultural Residential Cluster Subdivision); Yerba Buena Creek (near the center of the Ranch property, west of the Agricultural Residential Cluster Subdivision); and Rinconada Creek (southeastern portion of the Ranch property).

As shown in Figure 4.6-6, portions of the Ranch property experience a moderate to high liquefaction potential. Future Development Program land uses that may be located in areas of moderate to high liquefaction potential include: a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater and 40,000 square foot winery near the existing Ranch headquarters location; a residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery, and 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop, southwest of the community of Santa Margarita; and six wineries and four ranch headquarters located throughout the Ranch property. Each winery could include a 40,000 square foot structure and an additional 6,000 square foot retail component. The winery located west of West Pozo Road, south of the proposed Agricultural Residential Cluster Subdivision lots, could include an 80,000 square foot structure. Each Ranch headquarter could include a two-story, 5,000 square foot residence on a 2.5-acre lot. A total of 60 farm support residential units would be split between all five headquarter sites. In addition, the extreme western edge of the area envisioned for development of a 5-acre park and community pool, three worship centers, and work force housing east of the community of Santa Margarita; and the extreme western edge of the winery envisioned north of the Agricultural Residential Cluster Subdivision contain high liquefaction potential.

Due to the presence of unconsolidated alluvial material and shallow groundwater, liquefaction is a potentially significant hazard.

Mitigation Measures. The following mitigation measure is required:

**Future Development  
Program G-4(a)**

**Avoidance of Liquefaction Hazards.** Preferred locations for Future Development Program land uses shall be in areas of low liquefaction potential. Should development be proposed within this area, Agricultural Residential Cluster Subdivision measure G-4(a) (Reduction of Liquefaction Potential) shall apply.



**Plan Requirements and Timing.** Liquefaction potential shall be included on building plans for future habitable structures and utilities. Planning and Building shall review these plans prior to approval. **Monitoring.** Planning and Building shall be responsible for ensuring that all structures are located outside liquefaction hazard areas or are otherwise mitigated. If structures are proposed for location in areas containing moderate to high liquefaction potential, Planning and Building shall ensure that Agricultural Residential Cluster Subdivision measure G-5(a) (Reduction of Liquefaction Potential) is applied.

Residual Impacts. With implementation of the above measure, impacts from potential liquefaction would be less than significant.

**Future Development  
Program Impact G-5**

**Future Development Program land uses could be located on surface materials which allow for percolation of groundwater, resulting in seepage into building foundations. This is a Class II, significant but mitigable, impact.**

As discussed under Agricultural Residential Cluster Subdivision Impact G-5, highly permeable surface deposits which allow percolation of surface water to the surface material-bedrock contact may cause seepage into foundations. Should any of the Future Development Program land uses be located on highly permeable surface deposits, the damage caused to structures would be potentially significant.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure G-5(a) (Subdrains) would apply to all future land uses. No additional mitigation is required.

Residual Impacts. With implementation of the required measure, impacts related to subsurface water would be less than significant.

**d. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative geologic impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.



## 4.7 LAND USE

*Agricultural Residential Cluster Subdivision. The proposed Agricultural Residential Cluster Subdivision site is composed of grazing land and irrigated vineyards. Agricultural Residential Cluster Subdivision construction may cause temporary disturbance to adjacent properties; however, construction-related land use compatibility impacts would be temporary and would be mitigated through implementation of measures provided in Sections 4.8, Noise, 4.2, Air Quality, and 4.13, Visual Resources, of this EIR. Therefore, with mitigation, noise, dust, and visual nuisances from construction of the Agricultural Residential Cluster Subdivision site are not significant. In addition, residential development on the Agricultural Residential Cluster Subdivision project site (as a cluster subdivision) has been anticipated in the County General Plan. Impacts related to General Plan Consistency would be Class III, less than significant. An evaluation of the consistency of the proposed Agricultural Residential Cluster Subdivision with applicable County policies and programs is provided in Appendix C (Policy Consistency).*

*Future Development Program. Because no active application currently exists for the Future Development Program other than the Agricultural Residential Cluster Subdivision, the assessment of land use impacts is based on a reasonable worst case scenario with regard to future land uses. Buildout of the Future Development Program would result in similar construction-related impacts as the Agricultural Residential Cluster Subdivision alone. In addition, because the Future Development Program incorporates all of the allowed and required land uses outlined in the Land Use Ordinance Salinas River Rural Area Standards [Section 22.104.040(A)(3)(a)], impacts related to General Plan consistency would be Class III, less than significant.*

*Impacts related to agricultural conversion and alteration of visual character are described in Sections 4.1, Agricultural Resources, and 4.13, Visual Resources, respectively.*

### 4.7.1 Setting

**a. Setting.** The Santa Margarita Ranch property is located in the County of San Luis Obispo, which occupies approximately 3,300 square miles of both urban and rural land uses. Specifically, the Ranch property lies in an unincorporated rural area surrounding the community of Santa Margarita. Recent urban development has been limited in the community of Santa Margarita and vicinity. The community of Santa Margarita had an estimated population of 1,279 residents in 1995 (Salinas River Area Plan). In contrast, the 2005 population was estimated at approximately 1,325 residents. This represents an annual growth rate of 0.35%. The proposed Agricultural Residential Cluster Subdivision includes 3,778 acres near the middle of the Ranch, southeast of the community of Santa Margarita, while the Future Development Program occurs in various locations throughout the balance of the 14,000-acre property. Existing ranch facilities (+/- 50,000 square feet of building coverage), activities and land uses include an equestrian center, private narrow gauge railroad, vineyard(s), private 3,400 foot airstrip, farmland, eight-acre cattle feedlot, agricultural roads, trails, several homes along with agricultural accessory structures, historic structures, water wells, numerous ponds and reservoirs, and various above and underground utilities. The Santa Margarita Ranch has been historically utilized for grazing and crop production since the late 1700's.





The entire 14,000-acre Santa Margarita Ranch property is bordered to the north by agriculture, rural lands, residential suburban uses, including those within the Garden Farms community, and commercial retail development. Agriculture, rural lands, single-family residences, agricultural accessory structures, quarries, and portions of the Salinas River border the site to the east. To the south, agriculture, recreational, and open space uses exist, as well as trails and the Los Padres National Forest. To the west are agricultural uses, rural lands and residences. The proposed Agricultural Residential Cluster Subdivision area is located near the center of the Ranch, southeast of the community of Santa Margarita, and is bordered by Pozo Road/Highway 58 to the north, Pozo Road to the east, and agricultural uses, vineyards and/or livestock grazing, and dry farming to the south and west. Table 2-2 (in Section 2.0, *Project Description*) summarizes the existing land use characteristics of the property.

**b. Regulatory Setting.** The County Land Use Ordinance and County General Plan Land Use Element regulate land use planning in the County of San Luis Obispo. The requirements and restrictions of each of these regulatory documents that apply to the proposed Agricultural Residential Cluster Subdivision are described in Appendix C (*Policy Consistency*). Policy consistency issues associated with the Future Development Program would be addressed through the required Specific Plan and through individual development project review. The Agricultural Residential Cluster Subdivision area is designated and zoned Agricultural (AG) with Flood Hazard and Geologic Study Area combining designations. The remainder of the Ranch Property is designated and zoned Agricultural (AG) and Rural Residential (RR) with Flood Hazard, Geologic Study Area, Historic Site, and Sensitive Resource Area combining designations. Areas north of the Ranch are designated in the General Plan as Agriculture, Rural Lands, Residential Suburban, and Commercial Retail. Areas south of the Ranch are designated in the general Plan as Agriculture, Recreation, and Open Space. Areas east and west of the Ranch are designated in the General Plan as Agriculture and Rural Lands.

#### **4.7.2 Impact Analysis**

**a. Methodology and Significance Thresholds.** Land use impacts were assessed based upon the level of physical impact anticipated in the various issues that can affect compatibility (noise, air quality, visual resources). These thresholds are augmented by those contained in Sections 4.8, *Noise*, 4.2, *Air Quality*, and 4.13, *Visual Resources*, which are issues that relate directly to land use compatibility.

In addition, in accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in the any of the following:

- *Physically divide an established community;*
- *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; and/or*
- *Conflict with any applicable habitat conservation plan or natural community conservation plan.*



**b. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact LU-1**      **Construction activity associated with the Agricultural Residential Cluster Subdivision would create temporary noise, air quality, and visual impacts due to the use of construction equipment and generation of fugitive dust and debris. These effects could cause nuisances at adjacent properties and disrupt agricultural activity. However, these impacts would be temporary in nature and are Class II, significant but mitigable.**

The use of construction equipment and generation of fugitive dust during Agricultural Residential Cluster Subdivision construction, including implementation of off-site transportation improvements, would increase localized noise levels and result in a temporary reduction in local air quality. In addition, the generation of debris during construction may result in temporary impacts to visual resources. The nearest sensitive receptors to the Agricultural Residential Cluster Subdivision are single family homes and Santa Margarita Elementary School within the community of Santa Margarita, located approximately 2,000 feet northwest of the Agricultural Residential Cluster Subdivision site. However, due to the proposed phasing of the Agricultural Residential Cluster Subdivision, newly developed residences may be occupied while remaining phases are constructed. Construction activity may therefore cause temporary annoyance to immediately adjacent residential uses as well.

As discussed in greater detail in Section 4.8, *Noise*, construction-related noise impacts are potentially significant. However, Agricultural Residential Cluster Subdivision measures N-1(a) (Construction Hours), N-1(b) (Construction Noise Attenuation) and N-1(c) (Construction Equipment) would ensure less than significant impacts. Similarly, as discussed in greater detail in Section 4.2, *Air Quality*, construction-related air quality impacts are significant but mitigable. Agricultural Residential Cluster Subdivision measures AQ-2(a) [Application of Best Available Control Technology for Construction Equipment (CBACT)], AQ-2(b) (Dust Control), AQ-2(c) (Cover Stockpiled Soils), AQ-2(d) (Dust Control Monitor), and AQ-2(e) (Active Grading Areas) would reduce impacts to a less than significant level. Therefore, the impact of noise and dust from construction of the Agricultural Residential Cluster Subdivision is not considered significant. Construction-related visual resource impacts are significant but mitigable. Agricultural Residential Cluster Subdivision measure AES-1(g) (Clear Excess Debris) would reduce impacts to a less than significant level.

Mitigation Measures. No mitigation measures are required beyond those identified in Sections 4.8, *Noise*, 4.2, *Air Quality*, and 4.13, *Visual Resources*.

Residual Impacts. Temporary land use compatibility conflicts related to construction activity would be less than significant.

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**c. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.7.2(b)



for a discussion of land use impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development  
Program Impact LU-1**

**Construction activity associated with the Future Development Program would create temporary noise, air quality, and visual resource impacts due to the use of construction equipment and generation of fugitive dust. These effects could cause nuisances at adjacent properties and disrupt agricultural activity. However, these impacts would be temporary in nature and are Class II, *significant but mitigable*.**

The use of construction equipment and generation of fugitive dust during construction of Future Development Program land uses, including off-site transportation improvements, would increase localized noise levels and result in a temporary reduction in local air quality. In addition, the generation of debris during construction may result in temporary impacts to visual resources. The nearest sensitive receptors to Future Development Program land uses are the residences located in the communities of Santa Margarita and Margarita Farms, Santa Margarita Elementary School, and scattered rural residences located in the vicinity of the Ranch property. Sensitive uses located on the Ranch property include one single-family residence and three farm support quarters located on the Ranch headquarter parcel, and four private cabins located in the hillsides in the southern portion of the Ranch. The Future Development Program envisions a residential village, guest ranch, lodge, restaurant, winery, and golf course southeast of the community of Santa Margarita. As a reasonable worst-case scenario from a noise impact perspective, any of these uses may directly abut the community, resulting in construction 50 feet from existing residential receptors. The Future Development Program also envisions a community pool, three worship centers, and work force housing east of the community. Construction of these facilities may occur as close as 50 feet from existing residences along the eastern edge of Santa Margarita and the Santa Margarita Elementary School property, located at 22070 H Street.

The Future Development Program also envisions a bed and breakfast, café, amphitheater, and winery at the existing Ranch headquarters parcel, which currently supports one single family residence and three farm support quarters. In addition, the Future Development Program envisions a winery and Ranch headquarters in the southern portion of the Santa Margarita Ranch, near an existing farm support quarters. Therefore, construction of these Future Development Program land uses may occur adjacent to noise-sensitive land uses.

As discussed in greater detail in Section 4.8, *Noise*, construction-related noise impacts are potentially significant. However, Agricultural Residential Cluster Subdivision measures N-1(a) (Construction Hours), N-1(b) (Construction Noise Attenuation), and N-1(c) (Construction Equipment) would apply to all construction of Future Development Program land uses within 1,600 feet of a sensitive receptor, thereby ensuring less than significant impacts. Similarly, as discussed in greater detail in Section 4.2, *Air Quality*, construction-related air quality impacts are significant but mitigable. Agricultural Residential Cluster Subdivision measures AQ-2(a) {Application of Best Available Control Technology for Construction Equipment (CBACT)}, AQ-2(b) (Dust Control), AQ-2(c) (Cover Stockpiled Soils), AQ-2(d) (Dust Control Monitor), and AQ-2(e) (Active Grading Areas) would apply to all construction of Future Development Program land uses, thereby reducing impacts to a less than significant level. Therefore, the impact of



noise and dust from construction of Future Development Program land uses is not considered significant. Construction-related visual resource impacts are significant but mitigable. Agricultural Residential Cluster Subdivision measure AES-1(g) (Clear Excess Debris) would reduce impacts to a less than significant level.

Mitigation Measures. No mitigation measures are required beyond those identified in Sections 4.8, *Noise*, 4.2, *Air Quality*, and 4.13, *Visual Resources*.

Residual Impacts. Temporary land use compatibility conflicts related to construction activity would be less than significant.

**Future Development  
Program Impact LU-2**

**Buildout of the Future Development Program would result in a substantial new concentration of population and the loss of a substantial area of open land. However, the Future Development Program incorporates requirements for agricultural preservation, residential development, and non-residential land uses as outlined in the San Luis Obispo County Land Use Ordinance Salinas River Rural Area Standards. Future Development Program land uses have therefore been anticipated in the County General Plan. Impacts would be Class III, less than significant.**

The San Luis Obispo County Land Use Ordinance Salinas River Rural Area Standards outline requirements for agricultural preservation, residential development, and non-residential land uses in the Santa Margarita Ranch area. The Future Development Program incorporates these requirements.

Buildout in accordance with the Future Development Program would result in a total of 514 dwelling units (402 units in addition to the Agricultural Residential Cluster Subdivision) and the following additional uses: private golf course, club house and pro shop; guest ranch, lodge, and restaurant; 12-room bed and breakfast; cafe; amphitheater; crafts studios, galleries and shops; interpretive center and gift shops; nine wineries with tasting rooms and permitted special events; neighborhood park and swimming pool; five ranch/farm headquarters; one livestock sales yard and café; three places of worship; and a retreat center (refer to Figure 2-9 in Section 2.0, *Project Description*).

The 514 residential units in the Future Development Program represent the balance of 550 units (including 50 affordable units) allowable under the General Plan for the Santa Margarita Ranch area. According to the San Luis Obispo County Land Use Ordinance Salinas River Rural Area Standards, residential areas shall be clustered with the first priority to be an extension of the community of Santa Margarita, or within open space surroundings such as adjacent to park land, agriculture or a golf course (Land Use Ordinance Section 22.104.040.A.4.b). The Future Development Program envisions a residential village southwest of the community of Santa Margarita, surrounding a potential private golf course site. Additional housing is envisioned directly east of Santa Margarita near a future park/community pool site.

If an application is made for a Specific Plan and it is adopted, the Land Use Ordinance Salinas River Rural Area Standards [Section 22.104.040(A)(3)(a)] outlines requirements for both



permanent and temporary agricultural preservation throughout portions of the Santa Margarita Ranch. Permanent protection of 8,400 acres would be required. Interim protection of 3,600 acres would be accomplished with 40-year term Williamson Act contracts. Of the 8,400 acres required for permanent protection, 3,633 acres are proposed as part of the Agricultural Residential Cluster Subdivision.

Buildout of the Future Development Program would result in the conversion of up to 2,025 acres (approximately 14.5%) of the 14,000-acre site from agricultural and vacant land to suburban and other uses. The Land Use Ordinance Salinas River Rural Area Standards outline both required and optional non-residential uses on the Santa Margarita Ranch property, to be included in a future Specific Plan. The Future Development Program incorporates all of the allowed and required land uses outlined in the Land Use Ordinance, as well as additional uses. Therefore, the Future Development Program would be consistent with the County General Plan and Land Use Ordinance, subject to preparation of a future Specific Plan. Refer to Section 4.1, *Agricultural Resources*, and 4.13, *Visual Resources*, for a discussion of impacts related to agricultural conversion and change of visual character, respectively.

Mitigation Measures. No mitigation measures are required.

Residual Impacts. Impacts are less than significant.

**d. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative land use impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.



## 4.8 NOISE

*Agricultural Residential Cluster Subdivision.* Construction of the Agricultural Residential Cluster Subdivision would generate nuisance noise levels at existing sensitive receptors. Later phases of construction would also expose occupants of previous phases to nuisance noise. These short-term impacts are significant but mitigable. Long-term traffic generated by the Agricultural Residential Cluster Subdivision would increase noise levels at existing receptors located adjacent to roadways in the Santa Margarita Ranch vicinity. This impact is Class I, significant and unavoidable. Proposed residences on the Agricultural Residential Cluster Subdivision site would be exposed to less than significant noise levels from existing and future roadway traffic, air traffic and railroad operations due to the distances between these noise sources and the proposed residential units.

*Future Development Program.* Because no active application exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, the assessment of noise impacts is based on a reasonable worst case scenario with regard to the location of future land uses within anticipated development areas. Buildout of the Future Development Program would result in construction-related impacts and long-term traffic generation impacts similar to those resulting from the Agricultural Residential Cluster Subdivision individually. In addition, impacts related to exposure to air traffic and private railroad operational noise would be similarly less than significant. However, due to the potential proximity of Future Development Program land uses to noise generated from area roadways and the Union Pacific Railroad line, traffic and railroad noise impacts are significant but mitigable.

### 4.8.1 Setting

**a. Overview of Sound Measurement.** Sound is technically described in terms of its loudness (amplitude) and frequency (pitch). The standard unit of measurement of the intensity 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.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is judged to be twice as loud; a sound 20 dBA higher four times as loud, and so forth. Everyday sounds normally range from 30 dB (very quiet) to 100 dB (very loud). In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes are generally not perceived. Noise levels typically attenuate at a rate of 6 dBA per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance.

In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. Several rating scales have been developed to account for the known effects of noise on people. Based on these effects, the observation has been made that the potential for noise to impact people is dependent on the total acoustical energy content of the noise. A number of noise scales have been developed to



account for this factor. These scales include the Equivalent Noise Level (Leq), the Day Night Noise Level (Ldn) and the Community Noise Equivalent Level (CNEL).

Leq is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. Leq is the “energy” average noise level during the time period of the sample. Leq can be measured for any time period, but is typically measured for 15 minutes, 1 hour, or 24 hours.

Ldn is a 24-hour, time-weighted average noise level. Time-weighted refers to the fact that noise which occurs during certain sensitive time periods is penalized for occurring at these times. In the Ldn scale, those events that take place during the night (10 p.m. to 7 a.m.) are penalized by 10 dB. This penalty was selected to attempt to account for increased human sensitivity to noise during the quieter period of day, where sleep is the most probable activity.

CNEL is similar to the Ldn scale except that it includes an additional 5 dBA penalty for events that occur during the evening (7 p.m. to 10 p.m.) time period. Thus, both the Ldn and CNEL noise measurements represent a 24-hour average of A-weighted noise levels with Ldn providing a nighttime adjustment and CNEL providing both an evening and nighttime adjustment.

Intermittent or occasional noise such as that associated with stationary noise sources is not of sufficient volume to exceed community noise standards that are based on a time averaged scale such as the Ldn scale. To account for intermittent noise, the Percent Noise Level (L%) scale is used. The Percent Noise Level is the level exceeded a percentage of the time during the measurement period. Noise Ordinances are typically specified in terms of the percent noise levels. Ordinances are designed to protect people from noise sources such as music, machinery and vehicular traffic on private property.

Noise has been defined as unwanted sound and is known to have several adverse effects on people. From these known effects of noise, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. These criteria are based on such known impacts of noise on people as hearing loss, speech interference, sleep interference, physiological responses and annoyance.

**b. Land Use Compatibility.** The State Office of Noise Control has established guidelines to provide the community with a noise environment deemed to be generally acceptable. Figure 4.8-1 depicts ranges of noise exposure levels considered compatible with various types of land uses. Where a land use is denoted as "normally acceptable" for the given noise environment, the highest noise level in that range should be considered the maximum desirable for conventional construction that does not incorporate any special acoustic treatment. The acceptability of noise environments classified as "conditionally acceptable" or "normally unacceptable" will depend on the anticipated amount of time that will normally be spent outside the structure and the acoustic treatment to be incorporated in structural design.

With regard to noise-sensitive residential uses, the recommended exterior noise limits are 60 dBA CNEL for single family residences and 65 dBA CNEL for multi-family residences. Community noise exposure levels over 70 dB are normally not acceptable for residential, school, library, hospitals and other noise sensitive uses. The recommended maximum interior





noise level is 45 dBA CNEL, which could normally be achieved using standard construction techniques if exterior noise levels are within the levels described above.

**c. Sensitive Receptors.** Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, guest lodging, libraries, and churches are most sensitive to noise intrusion and therefore have more stringent noise exposure targets than manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance.

The only existing sensitive receptor located on the Agricultural Residential Cluster Subdivision site is a farm support unit located near the southern boundary of the site, near the intersection of Las Pilitas Road and West Pozo Road. Existing sensitive uses located on the Ranch property include one single-family residence and three farm support quarters located on the Ranch headquarters parcel, and four private cabins located in the hillsides in the southern portion of the property. Off-site, residences, the school, library and park in the community of Santa Margarita, as well as residences in Margarita Farms and scattered rural residences located in the vicinity of the Ranch property are sensitive receptors.

**d. Existing Conditions.** Major sources of noise in the County identified in the General Plan Noise Element include: roadways, airports, railroads, and stationary sources such as agricultural operations, construction, and commercial and industrial facilities. The existing sources of noise in the vicinity of the Ranch include noise generated from vehicle traffic along area roadways, the operation of the private air strip on the Ranch property, the Union Pacific Railroad (UPRR), and adjacent agriculture and mining operations.

Rincon Consultants, Inc. staff monitored average noise levels at 13 locations on the Ranch property in April 2006 during the peak traffic hours of 7:30-8:30 am and 5:30-6:30 pm on weekdays. Noise levels were taken over 20 minute sample periods. Noise metering was performed using the Larson-Davis Model 720 Type 2 Integrating Sound Level Meter. The noise measurement results are presented in Table 4.8-1, in terms of the equivalent noise levels (Leq), and maximum noise levels (Lmax).

**Table 4.8-1. Existing Noise Measurements**

Site	Location	Noise Sources	Distance Between Noise Source and Noise Meter	Leq	Lmax
1	Northeastern portion of the Agricultural Residential Cluster Subdivision, near proposed Lot 6	Traffic on SR 58 and West Pozo Road.	450 Feet	46.6	61.3
2	West of Site 1, near proposed Lot 40	Traffic on SR 58 and West Pozo Road.	1,930 Feet	44.1	52.0
3	Southern portion of the Agricultural Residential Cluster Subdivision, near proposed Lot 87	Traffic on SR 58 and West Pozo Road.	2,500 Feet	38.7	55.1
4	South of the Agricultural Residential Cluster Subdivision lots, on a Future Development Program potential	Traffic on West Pozo Road	50 Feet	57.0	76.0



**Table 4.8-1. Existing Noise Measurements**

Site	Location	Noise Sources	Distance Between Noise Source and Noise Meter	Leq	Lmax
	winery/Ranch headquarters location				
5	North of Highway 58, northeast of West Pozo Road, on a Future Development Program potential Ranch headquarters location	Traffic on SR 58	50 Feet	60.8	80.6
6	East of the community of Santa Margarita, near the Future Development Program land use location that includes a 5-acre park and swimming pool, three worship centers, and work force housing	Traffic on SR 58.	50 Feet	59.3	75.4
7	North of the community of Santa Margarita	Traffic on El Camino Real	50 Feet	66.3	82.5
8	North of the community of Santa Margarita	Traffic on El Camino Real and an industrial oil tank storage facility.	275 Feet from Road, 50 Feet from Industrial	51.8	58.8
9	South of the community of Santa Margarita, south of the UPRR tracks	Passing train (including whistle)	50 Feet	85.5	110.5
10	Near Highway 101, south of SR 58, on the Future Development Program potential livestock sales yard location	Traffic on Highway 101	50 Feet	75.1	86.7
11	Northern portion of the Ranch property, adjacent to Highway 101	Traffic on Highway 101	50 Feet	73.6	90.7
12	On the existing Ranch headquarters parcel, approximately 2,680 feet east of Highway 101	Traffic on Highway 101	2,680 Feet	48.2	66.4
13	Within the community of Santa Margarita	Traffic on El Camino Real (SR 58).	50 Feet	68.0	84.2

*Roadway Noise.* Existing and future traffic noise levels were quantified using the California Vehicle Noise Emission Levels (Caltrans, January 1987), standard noise modeling equations derived from the Federal Highway Administration STAMINA2 noise model, and traffic volumes provided by Fehr & Peers for this EIR (refer to Appendix I for noise model results; refer to Appendix J for technical traffic calculations).

Highway 101 and State Route (SR) 58 are the primary traffic corridors near the Santa Margarita Ranch, and are consequently the major noise contributors. Highway 101 traverses the western edge of the Ranch property, while SR 58 extends eastbound from Highway 101 through the community of Santa Margarita. The existing 60 dBA CNEL contour from Highway 101 ranges from 736 to 1,624 feet from the centerline. The existing 60 dBA CNEL contour from SR 58 ranges from 103 to



151 feet from the centerline. Areas adjacent to these roads are exposed to lower noise levels than modeled where there are intervening structures, vegetation and/or topography.

The other area roadways that currently carry sufficient traffic to produce audible noise at a substantial distance include El Camino Real, Estrada Avenue, and West Pozo Road. El Camino Real is a north-south roadway connecting Santa Margarita with Atascadero. Within Santa Margarita, El Camino Real becomes SR 58 and is oriented in an east-west direction, connecting Santa Margarita with Highway 101. Estrada Avenue is a north-south, two-lane local street in Santa Margarita that extends from El Camino Real and turns into West Pozo Road to the south. West Pozo Road is a two-lane local street connecting Santa Margarita and the town of Pozo. It extends from Estrada Avenue in the northwest to Pozo in the southeast, bisecting the eastern portion of the Ranch property. The existing 60 dBA CNEL contour for El Camino Real ranges from 145 to 155 feet from centerline (see Table 4.8-2). The existing 60 dBA CNEL contour from Estrada Avenue is approximately 123 feet from centerline, and from West Pozo Road is approximately 59 feet from centerline (see Table 4.8-2).

Wilhelmina Avenue is a north-south, two-lane local street in the western portion of the community of Santa Margarita. It extends from El Camino Real in the north to I Street in the south. Wilhelmina Avenue currently carries a relatively small amount of vehicle traffic, and therefore does not produce audible noise at a substantial distance. The existing 60 dBA CNEL contour for Wilhelmina Avenue is approximately 47 feet from centerline (see Table 4.8-2).

Table 4.8-2 shows data relative to the existing roadway traffic noise for major streets and highways in the vicinity of the Ranch property, expressed as the distance to CNEL contours from centerline of the roadway.

**Table 4.8-2. Existing Traffic Noise Levels**

Roadway Segment	Traffic (ADT)	Distance to CNEL Contour from Centerline (feet)		
		70 dB	65 dB	60 dB
<b>Four-Lane Highway</b>				
Highway 101 north of SR 58	19,750	350	754	1,624
Highway 101 south of SR 58	22,060	159	342	736
<b>Two-Lane Highway</b>				
El Camino Real north of Estrada Avenue	4,300	28	67	145
West Pozo Road between J Street and West Driveway (SR 58)	3,000	RW	48	103
West Pozo Road southeast of SR 58	1,000	RW	RW	59
SR 58 northeast of West Pozo Road	1,900	RW	38	114
<b>Local Roadway</b>				
El Camino Real between Wilhelmina Avenue and Maud Avenue	5,490	35	72	155
El Camino Real between Pinal Avenue and Estrada Avenue	5,300	34	70	151
Estrada Avenue south of El Camino Real	3,900	RW	57	123
Wilhelmina Avenue between El Camino Real and I Street	740	RW	RW	47

*RW: Noise contour falls within roadway right-of-way.*

*Source: Traffic volumes from Fehr & Peers (June 2006).*

*\*\* Actual noise levels may be lower due to intervening topography and vegetation.*

*Air Strip Operations.* One private air strip is located on the Ranch property, trending north-south approximately 750 feet west of the existing Ranch headquarter facilities. The air strip consists of one 3,400 foot long runway and is used approximately three times per week. Sound levels were measured during landing and take off of two aircraft at the airstrip on October 23,



2006 (45 dB.com Acoustics Consulting, 2006). The two aircraft represented a range of engine power for single-engine propeller aircraft; a Stearman biplane with a radical engine of around 250 horsepower and a Piper Cherokee with a Lycoming 180 horsepower engine. The report found that the added sound level from occasional aircraft operations at the Santa Margarita Ranch airstrip represents a small addition to noise contours, and does not exceed San Luis Obispo County Noise Ordinance standards.

*Railroad Operations.* The Union Pacific Railroad (UPRR) runs parallel to Highway 101, south of State Route 58, where it curves eastward to follow El Camino Real through the community of Santa Margarita. Noise Measurement Site 9 recorded noise from a passing train. The noise measurement was taken approximately 50 feet from the railroad centerline, and registered a maximum noise level (Lmax) of 110.5 dBA and an average noise level (Leq) of 85.5 dBA. According to the San Luis Obispo County Noise Element, the 60 dB CNEL (24-hour, time-weighted average) contour extends 383 to 572 feet from the centerline, depending on the distance from grade crossing (refer to Table 4.8-8).

*Agricultural Operations.* Agricultural operations produce noise associated with wind machines, diesel engines, aerial application aircrafts (crop dusters), bird frightening devices, tractors, and water pumps. Many of these noise sources are related to seasonal operations. Agricultural operations currently on the Ranch property include vineyards and grazing land, which are scattered throughout the Ranch property (refer to Figure 4.1-4 in Section 4.1, *Agricultural Resources*). Grazing operations are not expected to generate substantial noise levels. Noise generated from equipment and water pumps associated with the vineyards on the Ranch property can occasionally be heard at off-site receptors.

*Mining Operations.* The Southern Pacific Milling Company operates a sand and gravel quarry just outside of the Ranch property boundary, at the northeastern corner of the Santa Margarita Ranch, approximately two miles northeast of Santa Margarita. Noises associated with mining operations include explosive rock blasting and truck hauling. Because noises associated with rock blasting are temporary in nature, and because the mining operation is relatively remote relative to sensitive land uses in the vicinity, this is not considered a substantial source of noise in the area. However, noises associated with truck hauling affect the overall noise levels on area roadways (Table 4.8-2).

## **4.8.2 Impact Analysis**


**a. Regulatory Policies.** The County of San Luis Obispo General Plan Noise Element contains goals, policies and implementation measures for the compatibility of sensitive land uses with noise. The purpose of these goals, policies and implementation measures is to reduce the various potential effects of noise on people. The Noise Element sets maximum allowable noise exposure from both transportation and stationary sources. These maximum levels are listed in Tables 4.8-3 and 4.8-4 below.





LAND USE	EXTERIOR NOISE EXPOSURE					
	LDN or CNEL, dB					
	55	60	65	70	75	80
Residential (except temp. dwellings & Res acc. uses), Pub Assembly & Entertainment (except meeting halls)	Acceptable	Acceptable	Conditionally Acceptable	Conditionally Acceptable	Unacceptable	Unacceptable
Bed and Breakfast Facilities, Hotels and Motels	Acceptable	Acceptable	Conditionally Acceptable	Conditionally Acceptable	Unacceptable	Unacceptable
Schools - Preschool to Secondary, College and University, Specialized Education and Training; Libraries and Museums, Hospitals, Nursing and Personal Care, Meeting Halls, Churches	Acceptable	Acceptable	Conditionally Acceptable	Conditionally Acceptable	Unacceptable	Unacceptable
Outdoor Sports and Recreation	Acceptable	Acceptable	Acceptable	Conditionally Acceptable	Unacceptable	Unacceptable
Offices	Acceptable	Acceptable	Conditionally Acceptable	Conditionally Acceptable	Unacceptable	Unacceptable

This figure indicates whether mitigation is required.

**INTERPRETATION**

 **ACCEPTABLE**  
 (no mitigation required)  
 Specified land use is satisfactory.

 **CONDITIONALLY ACCEPTABLE**  
 (mitigation required)  
 Use should be permitted only after careful study and inclusion of mitigation measures as needed to satisfy policies of the Noise Element.

 **UNACCEPTABLE**  
 (mitigation may not be feasible)  
 Development is usually not feasible in accordance with the goals of the Noise Element.

Source: County of San Luis Obispo Noise Element, 1992; Figure 3-1.



**Table 4.8-3. Maximum Allowable Noise Exposure: Transportation Noise Sources**

Land Use	Outdoor Activity Areas <sup>1</sup>	Interior Spaces	
	CNEL, dBA	CNEL, dBA	Leq, dBA <sup>2</sup>
Residences, Hotels and Motels, Hospitals, and Nursing and Personal Care	60 <sup>3</sup>	45	--
Public Assembly and Entertainment	--	--	35
Offices	60 <sup>3</sup>	--	45
Churches, Meeting Halls, Schools, Libraries and Museums	--	--	45
Outdoor Sports and Recreation	70	--	--

<sup>1</sup> Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

<sup>2</sup> As determined for a typical worst-case hour during periods of use.

<sup>3</sup> For other than residential uses, where an outdoor activity area is not proposed, the standard shall not apply. Where it is not possible to reduce noise in outdoor activity areas to 60 dB CNEL or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 65 dB CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

**Table 4.8-4. Maximum Allowable Noise Exposure: Stationary Noise Sources<sup>1</sup>**

	Daytime (7 a.m. to 10 p.m.)	Nighttime <sup>2</sup> (10 p.m. to 7 a.m.)
Hourly Leq, dBA	50	45
Maximum Level, dBA	70	65
Maximum Level, dBA – Impulsive Noise	65	60

<sup>1</sup> As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.

<sup>2</sup> Applies only where the receiving land use operates or is occupied during nighttime hours.

**b. Methodology and Significance Thresholds.** Existing and future traffic noise levels were quantified using the California Vehicle Noise Emission Levels (Caltrans, January 1987), standard noise modeling equations derived from the Federal Highway Administration STAMINA2 noise model, and traffic volumes provided by Fehr & Peers for this EIR. Noise model data is provided in Appendix I to this EIR.

For purposes of this EIR, an impact is significant if Agricultural Residential Cluster Subdivision and/or Future Development Program implementation would expose existing and future sensitive receptors to noise levels exceeding County standards. Pursuant to the State CEQA Guidelines, potentially significant impacts would result if the Agricultural Residential Cluster Subdivision or Future Development Program would result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
- A substantial permanent increase in ambient noise levels above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, or in the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.



**c. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact N-1**      **Construction of the Agricultural Residential Cluster Subdivision would generate nuisance noise levels at the nearest sensitive receptors. Later phases of construction would also expose occupants of previous phases of subdivision development to nuisance noise levels. This is a Class II, significant but mitigable impact.**

Nearby noise-sensitive land uses, including residential neighborhoods in the community of Santa Margarita, would be exposed to temporary noise during construction of the proposed Agricultural Residential Cluster Subdivision, including construction of off-site transportation improvements. The main sources of noise would be the heavy machinery used in grading, excavation and clearing the site, and truck trips to and from the site.

The operation of heavy equipment during construction of the subdivision would result in temporary increases in noise in the immediate vicinity of the Agricultural Residential Cluster Subdivision site. However, this would be a temporary activity and would not impact sensitive receptors in the long term. The highest noise levels would generally occur during excavation and foundation development, which involve the use of such equipment as backhoes, bulldozers, shovels, and front-end loaders. In addition, construction vehicles traveling on local roadways can generate substantial noise levels that affect adjacent receptors. As depicted in Table 4.8-5, average noise levels associated with the use of heavy equipment at construction sites can range from about 65 to 88 dBA at a distance of 50 feet from the source, depending upon the types of equipment in operation and the phase of construction.

**Table 4.8-5 Typical Noise Level Ranges at Construction Sites**

Construction Phase	Average Noise Level at 50 Feet	
	Minimum Required Equipment On-Site	All Pertinent Equipment On-Site
Ground Clearing	83 dBA	83 dBA
Excavation	75 dBA	88 dBA
Foundations	81 dBA	81 dBA
Erection	65 dBA	81 dBA
Finishing and Cleanup	72 dBA	88 dBA

*Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the U.S. Environmental Protection Agency, 1971.*

The nearest sensitive receptors to the Agricultural Residential Cluster Subdivision are single family homes and Santa Margarita Elementary School within the community of Santa Margarita, located approximately 2,000 feet northwest of the Agricultural Residential Cluster Subdivision site. Assuming a 6 dB reduction for every doubling of the distance from the equipment, at 1,600 feet the noise level is estimated to be about 54 dBA CNEL, below County exterior noise standards for residential and school uses. Therefore, at 2,000 feet, the average sound level would not exceed the County's noise standards for residential use, and is not expected to impact sensitive receptors.





However, due to the proposed phasing of the Agricultural Residential Cluster Subdivision, newly developed residences may be occupied while remaining phases are constructed. If these newly developed residences are closer than 50 feet to the construction activity, they may experience temporary construction noise levels greater than 88 dBA. Therefore, noise levels generated during all phases of construction are potentially significant, although these impacts would be temporary.

Mitigation Measures. The following mitigation measures are required:

**Agricultural Residential  
Cluster Subdivision  
N-1(a)**

**Construction Hours.** Hours of construction noise which will cross a property line shall be limited to the hours between 7 a.m. and 7 p.m. on weekdays and 8 a.m. to 5 p.m. on weekends.

**Plan Requirements and Timing.** Signs stating these restrictions shall be provided by the developer and posted on-site. Signs shall be placed prior to beginning of and throughout grading and construction activities. Violations may result in suspension of permits. **Monitoring.** Planning and Building staff shall spot check and respond to complaints.

**Agricultural Residential  
Cluster Subdivision  
N-1(b)**

**Construction Noise Attenuation.** For all construction activity on the Agricultural Residential Cluster Subdivision site, additional noise attenuation techniques shall be employed as needed to ensure that noise remains within levels allowed by the County of San Luis Obispo noise standards. The following measures shall be incorporated into contract specifications to reduce the impact of construction noise.

- All construction equipment shall have properly maintained sound-control devices. No equipment shall have an unmuffled exhaust.
- Contractors shall implement appropriate additional noise attenuation techniques including, but not limited to, sitting the stationary construction equipment away from residential areas to the extent possible, and notifying adjacent residents in advance of construction work.

**Plan Requirements and Timing.** Noise attenuation techniques shall be submitted to the Planning and Building Department for review and approval. **Monitoring.** Planning and Building staff shall perform site inspections to ensure compliance.

**Agricultural Residential  
Cluster Subdivision  
N-1(c)**

**Construction Equipment.** Stationary construction equipment that generates noise that exceeds 60 dBA CNEL at the boundaries of adjacent residential properties shall be baffled. All construction equipment powered by internal combustion engines shall be properly muffled and maintained. Unnecessary idling of internal combustion engines shall be prohibited. Whenever



feasible, electrical power shall be used to run air compressors and similar power tools.

**Plan Requirements and Timing.** An equipment area with appropriate acoustical shielding shall be designated on building and grading plans. Equipment and shielding shall remain in the designated location throughout construction activities.

**Monitoring.** Planning and Building staff shall perform site inspections to ensure compliance.

Residual Impacts. Implementation of the above mitigation measure would reduce construction noise impacts to a less than significant level.

**Agricultural Residential Cluster Subdivision Impact N-2** Long-term traffic generated by the Agricultural Residential Cluster Subdivision would incrementally increase noise levels at existing receptors located adjacent to roadways in the Santa Margarita Ranch vicinity. The effect of this noise on off-site sensitive receptors in the area is a Class I, *significant and unavoidable, impact.*

Implementation of the Agricultural Residential Cluster Subdivision would increase human activity and related noise in the Santa Margarita vicinity, primarily due to increased vehicular traffic. Table 4.8-6 shows the estimated noise levels along roadways in the vicinity that would experience increases in noise due to traffic generated by the Agricultural Residential Cluster Subdivision. The estimated traffic for conditions with and without the Agricultural Residential Cluster Subdivision was used to calculate these noise levels.

**Table 4.8-6. Current and Projected Noise Levels along Agricultural Residential Cluster Subdivision Area Roadways**

Roadway Segment	Nearest Existing Sensitive Receptor	Existing Noise Level (dBA CNEL) at this Distance	Existing + Agricultural Residential Cluster Subdivision	Change (dBA)	Threshold Exceeded? (60 dBA CNEL)
<b>Four-Lane Highway</b>					
Highway 101 north of SR 58	2,680 feet	59.0	59.0	0.0	No
Highway 101 south of SR 58	200 feet	70.7	70.8	0.1	Yes
<b>Two-Lane Highway</b>					
El Camino Real north of Estrada Avenue	40 feet	68.4	68.6	0.2	Yes
West Pozo Road between J Street and West Driveway (SR 58)	30 feet	65.4	66.8	1.4	Yes
West Pozo Road southeast of SR 58	1,500 feet	43.7	43.7	0.0	No
SR 58 northeast of West Pozo Road	100 feet	58.2	58.3	0.1	No
<b>Local Roadway</b>					
El Camino Real between Wilhelmina Avenue and Maud Avenue	30 feet	68.1	68.6	0.5	Yes
El Camino Real between Pinal Avenue and Estrada Avenue	30 feet	64.8	65.4	0.6	Yes
Estrada Avenue south of El Camino Real	30 feet	63.5	64.5	1.0	Yes



**Table 4.8-6. Current and Projected Noise Levels along Agricultural Residential Cluster Subdivision Area Roadways**

Roadway Segment	Nearest Existing Sensitive Receptor	Existing Noise Level (dBA CNEL) at this Distance	Existing + Agricultural Residential Cluster Subdivision	Change (dBA)	Threshold Exceeded? (60 dBA CNEL)
Wilhelmina Avenue between El Camino Real and I Street	20 feet	54.5	54.5	0.0	No

*Note: Year 2006 ambient roadway noise levels and traffic parameters assumed to determine them are described in Appendix I.  
 Source: Traffic volumes from Fehr & Peers (June 2006)*

As shown in Table 4.8-6, six of the ten studied roadway segments in the Santa Margarita Ranch area would exceed the County’s threshold of 60 dBA CNEL at the nearest sensitive receptor under the existing + Agricultural Residential Cluster Subdivision conditions. Impacts are potentially significant.

Noise from Highway 101 south of SR 58 would reach 70.8 dBA CNEL at 200 feet from the centerline. Sensitive uses within this distance include one single-family residence south of SR 58. Residences in the community of Margarita Farms would experience noise levels of 68.6 dBA CNEL at approximately 40 feet from the centerline of El Camino Real north of Estrada Avenue. Noise from West Pozo Road between J Street and West Driveway (SR 58) would reach 66.8 dBA CNEL at 30 feet from the centerline, where residences in the community of Santa Margarita are located.

Noise from local roadways in the Santa Margarita area, including El Camino Real between Wilhelmina Avenue and Maud Avenue, El Camino Real between Pinal Avenue and Estrada Avenue, and Estrada Avenue south of El Camino Real including the realignment of Estrada Avenue (SR 58) near J Street, would also exceed the County’s threshold. Sensitive uses within this distance include residences in the community of Santa Margarita. Impacts are Class I, *significant and unavoidable*.

Mitigation Measures. The implementation of structural measures (e.g., sound walls, solid core doors, and/or double paned windows) would be infeasible due to physical, economic, or other constraints, and would rely upon the cooperation of off-site property owners, which cannot be assured. Therefore, no feasible measures are available that would mitigate impacts to existing sensitive receptors.

Residual Impacts. Impacts would remain Class I, *significant and unavoidable*.

**Agricultural Residential Cluster Subdivision Impact N-3**      **The Agricultural Residential Cluster Subdivision would not place sensitive receptors in areas exposed to nuisance noise levels. Class III, less than significant, impacts would result.**

According to San Luis Obispo County Noise Element Policy 3.3.2, new development of noise-sensitive land uses is not permitted in areas exposed to existing or projected future levels of noise from transportation noise sources which exceed 60 dB CNEL. Table 4.8-7 shows the estimated existing and projected noise levels at Agricultural Residential Cluster Subdivision lots



nearest to area roadways. The estimated traffic for conditions with and without the Agricultural Residential Cluster Subdivision was used to calculate these noise levels.

**Table 4.8-7. Current and Projected Noise Levels at proposed Agricultural Residential Cluster Subdivision Lots**

Roadway Segment	Nearest Proposed Lot	Existing Noise Level (dBA) at this Distance	Existing + Agricultural Residential Cluster Subdivision	Change (dBA)	Threshold Exceeded? (60 dB CNEL)
West Pozo Road between J Street and West Driveway (SR 58)	400 feet (Lots 8 & 9)	54.2	55.5	1.3	No
West Pozo Road southeast of SR 58	1000 feet (Lot 1)	45.4	45.5	0.1	No

*Note: Year 2006 ambient roadway noise levels and traffic parameters assumed to determine them are described in Appendix I. Source: Traffic volumes from Fehr & Peers (June 2006)*

Noise levels shown in Table 4.8-7 indicate that proposed Agricultural Residential Cluster Subdivision lots located nearest area roadways would experience noise levels below the County threshold. Therefore, impacts are less than significant and no mitigation is required.

Mitigation Measures. No mitigation is required.

Residual Impacts. Impacts would be less than significant.

**Agricultural Residential Cluster Subdivision Impact N-4**     **The Agricultural Residential Cluster Subdivision will likely be exposed to noise generated by aircraft flying overhead. Although these events could produce periodic noise levels greater than 60 dBA, the 24-hour CNEL noise levels at the proposed residential properties would not exceed the County CNEL threshold of 60 dBA. This is a Class III, less than significant impact.**

A private air strip is located on the Santa Margarita Ranch, trending north-south approximately 750 feet west of the existing Ranch headquarter facilities. The air strip consists of one 3,400 foot long runway and is used approximately three times per week. The Agricultural Residential Cluster Subdivision site is located approximately 1.3 miles southeast of this facility. As discussed in Section 4.8.1(c), sound levels were measured during landing and take off of two aircraft at the airstrip (45 dB.com Acoustics Consulting, 2006). According to the report, the added sound level from occasional aircraft operations at the Santa Margarita Ranch airstrip would not exceed 60 dBA over a one-hour period. The County regulates noise over a 24 hour period [CNEL, refer to Section 4.8.1(a)]. Because of the distance to the air strip and the infrequent use by air craft, 24-hour noise levels at the Agricultural Residential Cluster Subdivision would not exceed the 60 dBA CNEL standard. Therefore, impacts are less than significant.

Refer to Section 4.9, *Public Safety*, for a discussion of potential safety impacts resulting from air strip operations.



Mitigation Measures. Because the Agricultural Residential Cluster Subdivision would not expose future residents to aircraft noise that exceeds 60 dBA CNEL, mitigation is not required.

Residual Impacts. Impacts are less than significant without mitigation.

**Agricultural Residential Cluster Subdivision Impact N-5**      **The Agricultural Residential Cluster Subdivision would place additional sensitive receptors in the vicinity of the Union Pacific Railroad (UPRR), exposing future residents to periodic nuisance noise levels. However, the 24-hour CNEL noise levels at the proposed residential properties would not exceed the County threshold of 60 dBA CNEL. This is a Class III, less than significant impact.**

Agricultural Residential Cluster Subdivision development would place new sensitive receptors in the vicinity of the existing UPRR railroad. According to noise measurements taken on the Ranch, the 60 dBA (Lmax) contour from the UPRR can reach up to 3.2 miles at maximum (i.e. during train whistle blowing) [refer to *Railroad Operations* discussion in Section 4.8.1(c) and Table 4.8-1]. The nearest proposed residential lots (Lots 35 and 39) would be located over 3,000 feet from the UPRR right-of-way. At this distance, the northernmost Agricultural Residential Cluster Subdivision lots would experience a maximum noise level (Lmax) of approximately 74.9 dBA from railroad operations. Although noise levels would temporarily exceed 60 dBA, the County regulates noise over a 24 hour period [CNEL, refer to Section 4.8.1(a)]. Table 4.8-8 shows data relative to the existing railroad noise in the vicinity of the Ranch property, expressed as the distance to CNEL contours from center of the track.

**Table 4.8-8. Existing Railroad Noise Levels**

CNEL Contour Values	Distance (Feet) from Center of Track	
	Beyond 1,000' from Grade Crossing	Within 1,000' of Grade Crossing
70 dB	82	123
65 dB	178	265
60 dB	383	572

*Based on a hypothetical operational scenario consisting of 10 freight and 4 passenger trains per day.*

*Source: San Luis Obispo County Noise Element*

*Note: Contour distances were converted from Ldn to CNEL using standard noise modeling equations derived from the Federal Highway Administration STAMINA2 noise model*

Three grade crossings are located in the Santa Margarita Ranch vicinity: Estrada Avenue, Encina Avenue, and Wilhelmina Avenue. Because the Agricultural Residential Cluster Subdivision would be within 1,000 feet of these crossings (linearly), noise levels exceeding 60 dBA CNEL would be experienced within approximately 572 feet of the railroad. The Agricultural Residential Cluster Subdivision would not place sensitive receptors within this contour. Therefore, impacts are less than significant.

Mitigation Measures. Because the Agricultural Residential Cluster Subdivision would not expose future residents to railroad noise that exceeds 60 dBA CNEL, mitigation is not required.

Residual Impacts. Impacts are less than significant without mitigation.



**d. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.8.2(b) for a discussion of noise impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development Program Impact N-1**

**Construction of the Future Development Program land uses could generate nuisance noise levels at the nearest sensitive receptors. Later phases of construction would also expose occupants of previous phases of Future Development Program implementation to nuisance noise levels. This is a Class II, *significant but mitigable* impact.**

Nearby noise-sensitive land uses would be exposed to temporary noise during construction of the Future Development Program land uses and construction of off-site transportation improvements. The nearest sensitive receptors to Future Development Program land uses are the residences located in the communities of Santa Margarita and Margarita Farms, Santa Margarita Elementary School located at 22070 H Street in Santa Margarita, and scattered rural residences located in the vicinity of the Ranch property. Sensitive uses located on the Ranch property include one single-family residence and three farm support quarters located on the Ranch headquarters parcel, and four private cabins located in the hillsides in the southern portion of the Ranch. The Future Development Program envisions a residential village, guest ranch, lodge, restaurant, winery, and golf course southeast of the community of Santa Margarita. As a reasonable worst-case scenario from a noise impact perspective, any of these future uses may directly abut the community, resulting in construction near existing residential receptors. The Future Development Program also envisions a community pool, three worship centers, and work force housing east of the community. Construction of these facilities may occur as close as 50 feet from existing residences along the eastern edge of Santa Margarita and the Santa Margarita Elementary School property, located at 22070 H Street.

The Future Development Program also envisions a bed and breakfast, café, amphitheater, and winery at the existing Ranch headquarters parcel, which currently supports one single family residence and three farm support quarters. In addition, the Future Development Program envisions a winery and Ranch headquarters in the southern portion of the Santa Margarita Ranch, near an existing farm support quarters unit. Therefore, construction of these Future Development Program land uses may occur adjacent to noise-sensitive land uses.

As discussed in Section 4.8.2(b) above, noise levels typically attenuate at a rate of 6 dBA per doubling of distance from point sources such as heavy machinery. The noise from Future Development Program construction could reach up to 79 dBA 100 feet from the noise source and 88 dBA 50 feet from the noise source when grading equipment would be in operation. This is a temporary but potentially significant impact.

Since the Future Development Program land uses would be implemented in phases over time, newly developed residences, churches, or other sensitive receptors may be occupied while subsequent Future Development Program land uses are constructed. If these newly developed



sensitive receptors are located closer than 1,600 feet from the construction activity, they may experience temporary construction noise levels that exceed thresholds. This would be a potentially significant impact, although these impacts would be temporary.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures N-1(a) (Construction Hours), N-1(b) (Construction Noise Attenuation), and N-1(c) (Construction Equipment) would apply to all construction of Future Development Program land uses within 1,600 feet of a sensitive receptor. No additional mitigation measures are required.

Residual Impacts. With implementation of recommended mitigation measures, construction noise impacts would be less than significant.

**Future Development Program Impact N-2** Long-term traffic generated by the Future Development Program would incrementally increase noise levels at existing receptors located adjacent to roadways in the Santa Margarita Ranch vicinity. The effect of this noise on off-site sensitive receptors in the area is a Class I, significant and unavoidable, impact.

Implementation of the Future Development Program would increase human activity and related noise in the Santa Margarita vicinity, primarily due to increased vehicular traffic. Table 4.8-9 shows the estimated noise levels along roadways in the vicinity that would experience increases in noise due to traffic generated by the Future Development Program.

**Table 4.8-9. Cumulative Noise Increases Along Area Roadways**

Roadway Segment	Nearest Sensitive Receptor	Existing Noise Level (dBA) at this Distance	General Plan Buildout + Future Development Program	Change (dBA)	Threshold Exceeded? (60 dBA)
<b>Four-Lane Highway</b>					
Highway 101 north of SR 58	2,680 feet	59.0	60.8	1.8	Yes
Highway 101 south of SR 58	200 feet	70.7	72.9	2.2	Yes
<b>Two-Lane Highway</b>					
El Camino Real north of Estrada Avenue	40 feet	68.4	71.4	3.0	Yes
West Pozo Road between J Street and West Driveway (SR 58)	30 feet	65.4	69.6	4.1	Yes
West Pozo Road southeast of SR 58	1,500 feet	43.7	46.9	3.2	No
SR 58 northeast of West Pozo Road	100 feet	58.2	60.7	2.5	Yes
<b>Local Roadway</b>					
El Camino Real between Wilhelmina Avenue and Maud Avenue	30 feet	68.1	72.5	4.5	Yes
El Camino Real between Pinal Avenue and Estrada Avenue	30 feet	64.8	68.5	3.7	Yes
Estrada Avenue south of El Camino Real	30 feet	63.5	67.1	3.6	Yes
Wilhelmina Avenue between El Camino Real and I Street	20 feet	54.5	65.7	11.2	Yes

Note: Year 2006 ambient roadway noise levels and traffic parameters assumed to determine them are described in Appendix I.  
 Source: Traffic volumes from Fehr & Peers (June 2006)





As shown in Table 4.8-9, nine of the ten studied roadway segments in the Santa Margarita Ranch area would exceed the County's threshold of 60 dBA CNEL at the nearest sensitive receptor under the General Plan Buildout + Future Development Program conditions. Three of these roadways would exceed 70 dBA CNEL at the nearest sensitive receptors. Impacts are potentially significant.

Noise from Highway 101 north of SR 58 would reach 60.8 dBA CNEL at 2,680 feet from the centerline, while noise from Highway 101 south of SR 58 would reach 72.9 dBA CNEL at 200 feet from the centerline. Sensitive uses within this distance include one single-family residence and three farm support quarters located on the Ranch headquarters parcel and one single family residence south of SR 58. Residences in the community of Margarita Farms would experience noise levels of 71.4 dBA CNEL at approximately 40 feet from the centerline of El Camino Real north of Estrada Avenue. Noise from West Pozo Road between J Street and West Driveway (SR 58) would reach 69.6 dBA CNEL at 30 feet from the centerline, where residences in the community of Santa Margarita are located. In addition, a single family residence located approximately 100 feet from the centerline of SR 58 northeast of West Pozo Road would experience noise levels of 60.7 dBA CNEL.

Local roadways in the Santa Margarita area, including El Camino Real between Wilhelmina Avenue and Maud Avenue, El Camino Real between Pinal Avenue and Estrada Avenue, Estrada Avenue south of El Camino Real, and Wilhelmina Avenue between El Camino Real and I Street, would also exceed the County's threshold. Sensitive receptors are located between 20 and 30 feet from the centerlines of these roadways, and include residences, Santa Margarita Elementary School, and Santa Margarita Community Park. It should be noted that noise levels at residences along Wilhelmina Avenue would increase by approximately 11.2 dBA, due largely to the expected use of this roadway as a primary access point to Future Development Program land uses envisioned southwest of the community of Santa Margarita (refer to Figure 2-9 in Section 2.0, *Project Description*).

Mitigation Measures. Although structural measures such as solid berms (e.g., sound walls), solid core doors, and/or double paned windows could reduce noise levels at existing receptors in the Santa Margarita Ranch vicinity, the implementation of structural measures would be infeasible due to physical, economic, or other constraints, and would rely upon the cooperation of off-site property owners, which cannot be assured. Therefore, no feasible measures are available that would mitigate impacts to existing sensitive receptors.

Residual Impacts. Impacts would remain Class I, *significant and unavoidable*.

**Future Development  
Program Impact N-3**

**The Future Development Program would place sensitive receptors in areas exposed to nuisance noise levels. This is a Class II, *significant but mitigable*, impact.**

According to San Luis Obispo County Noise Element Policy 3.3.2, new development of noise-sensitive land uses is not permitted in areas exposed to existing or projected future levels of noise from transportation noise sources which exceed 60 dB CNEL. Because no active application exists for the Future Development Program other than the Agricultural Residential Cluster Subdivision, the assessment of noise impacts is based on a reasonable worst case scenario with regard to the future location of future land uses within anticipated development



areas. Table 4.8-10 shows the estimated existing and projected noise levels at Future Development Program sensitive receptors.

**Table 4.8-10. Current and Projected Noise Levels at Future Development Program Land Use Locations**

Future Sensitive Receptors	Major Roadway Noise Source	Distance to Roadway, feet*	Existing Noise Level (dBA) at this Distance**	General Plan Buildout + Future Development Program**	Distance to 60 dBA Contour Line, feet**
Bed & Breakfast	Highway 101 north of SR 58	1,625	61.1	63.0	2,939
Residential village, guest ranch, lodge	Highway 101 south of SR 58	625	65.8	67.9	883
Work force housing, three places of worship, park	El Camino Real north of Estrada Avenue	20	71.4	74.4	173
Ranch Headquarter	West Pozo Road southeast of SR 58	20	62.4	65.6	332

*Note: Year 2006 ambient roadway noise levels and traffic parameters assumed to determine them are described in Appendix I.*

*\* Distances represent conservative estimates that apply to outdoor use areas. Structures may be located at a greater distance.*

*\*\* Actual noise levels may be lower due to intervening topography and vegetation.*

*Source: Traffic volumes from Fehr & Peers (June 2006)*

Noise levels shown in Table 4.8-10 indicate that all Future Development Program sensitive land uses would experience noise levels above the County threshold of 60 dBA CNEL. These land uses are discussed in detail below.

*Bed & Breakfast.* The Future Development Program envisions a Bed & Breakfast, café, amphitheater, and winery located on the existing Ranch headquarter parcel, north of the community of Santa Margarita and approximately 1,625 feet east of Highway 101. The Bed & Breakfast would be considered a sensitive receptor [refer to Section 4.8.1(b)]. As shown in Table 4.8-10, the 60 dBA contour from Highway 101 north of SR 58 would extend 2,939 feet from the centerline after buildout of the Future Development Program. At a distance of 1,625 feet (as a reasonable worst case scenario), the Bed & Breakfast could experience noise levels up to 63.0 dBA.

*Residential Village, Guest Ranch, and Lodge.* The Future Development Program envisions a residential village, guest ranch, lodge, restaurant, winery, and golf course located southwest of the community of Santa Margarita and approximately 625 feet east of Highway 101. The residences, guest ranch, and lodge would be considered sensitive receptors [refer to Section 4.8.1(b)]. As shown in Table 4.8-10, the 60 dBA contour from Highway 101 south of SR 58 would extend 883 feet from the centerline after buildout of the Future Development Program. At a distance of 625 feet (as a reasonable worst case scenario), these sensitive uses could experience noise levels up to 67.9 dBA.

*Work Force Housing, Three Places of Worship, and Park.* The Future Development Program envisions a 5-acre park and community pool, three worship centers, and 50 units of work force



housing located east of the community of Santa Margarita. All of these uses would be considered sensitive receptors [refer to Section 4.8.1(b)]. As shown in Table 4.8-10, the 60 dBA contour from El Camino Real north of Estrada Avenue would extend 173 feet from the centerline after buildout of the Future Development Program. At a distance of 20 feet (as a reasonable worst case scenario), these sensitive uses could experience noise levels up to 74.4 dBA.

*Ranch Headquarter.* The Future Development Program envisions two wineries and two ranch headquarters located south of the Agricultural Residential Cluster Subdivision and adjacent to West Pozo Road. Each ranch headquarter could include a single family residence, which is considered a sensitive receptor [refer to Section 4.8.1(b)]. As shown in Table 4.8-10, the 60 dBA contour from West Pozo Road southeast of SR 58 would extend 91 feet from the centerline after buildout of the Future Development Program. At a distance of 20 feet (as a reasonable worst case scenario), these sensitive uses could experience noise levels up to 71.3 dBA.

**Conclusion.** The Future Development Program would place sensitive receptors in areas exposed to existing and future nuisance noise levels. Impacts would be significant but mitigable.

Mitigation Measures. The following mitigation measures are required:

**Future Development Program N-3(a)**

**Avoidance of Roadway Noise Nuisance.** Preferred locations for Future Development Program components shall be in areas outside of projected 60 dBA noise contours. If future development is proposed in areas within the 60 dBA CNEL noise contour for area roadways, Future Development Program measure N-3(b) (Reduction of Nuisance Noise) shall apply.

**Plan Requirements and Timing.** Detailed site plans displaying projected noise contours shall be included in the Specific Plan (or within individual plans, as applicable) for review by Planning and Building prior to approval. **Monitoring.** Planning and Building shall be responsible for ensuring that all sensitive receptors are outside high noise nuisance areas or are otherwise mitigated. If sensitive receptors are proposed for location in areas within the 60 dBA CNEL noise contour for area roadways, Planning and Building shall ensure that Future Development Program measure N-3(b) (Reduction of Nuisance Noise) is applied.

**Future Development Program N-3(b)**

**Reduction of Nuisance Noise.** For any noise sensitive development proposed within projected 60 dBA noise contours, a site-specific acoustical study shall be conducted. This study shall contain recommendations to mitigate any noise levels that exceed the County's standard of 60 dBA CNEL. Because no application has been filed subsequent to the Agricultural Residential Cluster Subdivision, the specific attenuation methods cannot be definitively determined. Options could include one or



more of the following approaches:

- Construction of a berm or wall;
- Design of individual homes such that structures block the line-of-sight from useable backyards to the noise source;
- For homes with backyards not blocked by intervening structures, backyard fencing of sufficient height to block line-of sight to the noise source;
- Placement of windows and balconies away from the noise source, as applicable;
- Within residences, bathrooms and kitchens should be located toward the noise source, while bedrooms should be located away from the noise source; or
- Development should follow normal construction practices and Uniform Building Code requirements. Use of noise reducing building materials, such as double paned windows, shall be used to further reduce indoor noise levels by insulating against outdoor noise sources.

**Plan Requirements and Timing.** Acoustical studies shall be submitted for review and approved by Planning and Building prior to approval of building permits. The design of noise barriers and sensitive structures shall be examined by an approved noise consultant, to determine if they provide sufficient mitigation to comply with Noise Element standards related to outdoor noise exposure. **Monitoring.** Planning and Building staff shall review and approve the required report prior to issuance of a Building Permit. Building inspectors shall make site inspections to assure implementation of approved plans.

Residual Impacts. Impacts would be less than significant. It should be noted that the construction of sound attenuation devices may create aesthetic impacts that may be undesirable and may affect the rural character of the area. To mitigate this potential secondary impact to the degree feasible, the following measure is recommended:

**Future Development  
Program N-3(b)**

**Sound Wall Design.** Long expanses of walls or fences shall be interrupted with offsets and provided with accents to prevent monotony. Landscape pockets and pedestrian access through walls should be provided. Whenever possible, a combination of elements shall be used, including solid fences, walls, and landscaped berms.

**Plan Requirements and Timing.** Sound wall designs shall be submitted to Planning and Development for review and approval prior to issuance of building permits. **Monitoring.** Planning and Development will review the designs prior to issuance of building permits and spot check implementation of sound walls prior to issuance of occupancy permits.



**Future Development  
Program Impact N-4**

**Receptors included in the Future Development Program would likely be exposed to runway noise generated by aircraft flying overhead. Although these periodic events could produce periodic noise levels greater than 60 dBA, the 24-hour CNEL noise levels at these receptors would not exceed the County CNEL threshold of 60 dBA. This is a Class III, *less than significant* impact.**

A private air strip is located on the Santa Margarita Ranch, trending north-south approximately 750 feet west of the existing Ranch headquarter facilities. The air strip consists of one 3,400 foot long runway and is used approximately three times per week. The Future Development Program envisions a bed and breakfast, café, amphitheater, and winery on the Ranch headquarter parcel, adjacent to the private air strip. In addition, land uses envisioned southwest of the community of Santa Margarita, including a residential village, guest ranch, lodge, restaurant, winery, and golf course, would be located 0.8 miles south of the air strip. As discussed in Section 4.8.1(c), sound levels were measured during landing and take off of two aircraft at the airstrip (45 dB.com Acoustics Consulting, 2006). According to the report, the added sound level from occasional aircraft operations at the Santa Margarita Ranch airstrip would not exceed 60 dBA over a one-hour period. The County regulates noise over a 24 hour period [CNEL, refer to Section 4.8.1(a)]. Because of the infrequent use of the air strip, 24-hour noise levels at Future Development Program land uses would not be expected to exceed the 60 dBA CNEL standard. Therefore, impacts are less than significant.

Refer to Section 4.9, *Public Safety*, for a discussion of potential safety impacts resulting from air strip operations.

Mitigation Measures. Because the Future Development Program would not expose future residents to aircraft noise that exceeds 60 dBA CNEL, mitigation is not required.

Residual Impacts. Impacts are less than significant without mitigation.

**Future Development  
Program Impact N-5**

**The Future Development Program would place additional receptors in the vicinity of the Union Pacific Railroad (UPRR), exposing future residents to noise levels exceeding County noise standards. This is a Class II, *significant but mitigable*, impact.**

Several of the Future Development Program conceptual land use locations abut the UPRR right-of-way (refer to Figure 2-9 in Section 2.0, *Project Description*). Land uses envisioned in these locations include: a residential village, guest ranch, lodge, restaurant, winery, and golf course; a livestock sales yard; work force housing, three places of worship, and a neighborhood park and swimming pool. Because no application has been filed subsequent to the Agricultural Residential Cluster Subdivision, the exact locations of these future land uses are unknown. Therefore, as a reasonable worst case scenario, any of these land uses could be located within 50 feet of the railroad tracks. At this distance, sensitive receptors would experience a maximum noise level (L<sub>max</sub>) of approximately 110.5 dBA from railroad operations (i.e. during train whistle blowing) (refer to *Railroad Operations* discussion in Section 4.8.1(c) and Table 4.8-1).



Although noise levels would temporarily exceed 60 dBA, the County regulates noise over a 24 hour period [CNEL, refer to Section 4.8.1(a)]. Because Future Development Program land uses would be within 1,000 feet of grade crossings (linearly), noise levels exceeding 60 dBA CNEL would be experienced within approximately 572 feet of the railroad (refer to Table 4.8-8 under Agricultural Residential Cluster Subdivision Impact N-5). Without sufficient mitigation, impacts to development within this contour could be significant.

Mitigation Measures. The following mitigation measures are required:

**Future Development Program N-5(a)**

**Avoidance of Railroad Noise Nuisance.** Preferred locations for noise-sensitive Future Development Program components shall be outside of the 60 dBA CNEL contour line (572 feet from the centerline of the railroad). This may require restricted building envelopes for the residential village, guest ranch, lodge, work force housing, places of worship, and neighborhood park. If future development of noise sensitive uses is proposed in within the 60 dBA CNEL contour, Planning and Building shall ensure that Future Development Program measure N-3(b) (Reduction of Nuisance Noise) is applied.

**Plan Requirements and Timing.** Detailed site plans displaying distances to the UPRR right-of-way shall be included in the Specific Plan (or within individual plans, as applicable) for review by Planning and Building prior to approval.

**Monitoring.** Planning and Building shall be responsible for ensuring that all structures are outside of the 60 dBA CNEL contour line or are otherwise mitigated. If noise sensitive uses are proposed for location within the 60 dBA CNEL contour, Planning and Building shall ensure that Future Development Program measure N-3(b) (Reduction of Nuisance Noise) is applied.

Residual Impacts. Avoidance of nuisance noise levels would ensure less than significant impacts. Should avoidance be infeasible, implementation of barrier methods and/or residential building design intended to reduce indoor and outdoor noise levels would mitigate nuisance noise experienced by future sensitive receptors, thereby reducing impacts to less than significant levels.

**Future Development Program Impact N-6**

**Sensitive receptors included in the Future Development Program would likely be exposed to noise generated by the existing private hobby railroad that operates sporadically in the northern portion of the Ranch. Although these periodic events could produce periodic noise levels greater than 60 dBA, the 24-hour CNEL noise levels at these receptors would not exceed the County CNEL threshold of 60 dBA. This is a Class III, less than significant impact.**



A private hobby railroad track is located in the northern portion of the Santa Margarita Ranch property, near the existing Ranch headquarter facilities. The hobby train engines generate track and whistle noise. The Future Development Program envisions a bed and breakfast, café, amphitheater, and winery on the Ranch headquarter parcel, adjacent to the private railroad. According to a noise study conducted by David Lord (Lord, June 13, 2005), whistle noise from the private railroad reaches approximately 72 dBA approximately 800 feet from the source. Although noise levels would temporarily exceed 60 dBA, the County regulates noise over a 24 hour period [CNEL, refer to Section 4.8.1(a)]. Because of the infrequent use of the private railroad, 24-hour noise levels at Future Development Program land uses would not be expected to exceed the 60 dBA CNEL standard. Therefore, impacts are less than significant.

Mitigation Measures. Because the Future Development Program would not expose future residents to private railroad noise that exceeds 60 dBA CNEL, mitigation is not required.

Residual Impacts. Impacts are less than significant without mitigation.

**Future Development Program Impact N-7**

**The Future Development Program includes nine wineries that would hold special events throughout the year and an amphitheater. Noise generated during special events and at the amphitheater, including amplified music, would not significantly affect off-site receptors due to the distance between receptors and anticipated noise sources, and existing County special event permitting requirements. This is a Class III, *less than significant* impact.**

The nine wineries envisioned as part of the Future Development Program would each hold up to 42 special events per year, including six events with 1,000 people, six events with 500 people, six events with 300 people, ten events with 200 people, and fourteen events with 100 people. Special events generate noise from general activity, vehicle traffic, and amplified music. The Future Development Program wineries nearest to future sensitive receptors include the winery envisioned off West Pozo Road between the community and proposed Agricultural Residential Cluster Subdivision and the winery envisioned in the existing Ranch headquarters area. The Ranch headquarters area does not contain existing sensitive receptors and is not envisioned to contain future sensitive receptors. The winery envisioned off West Pozo Road between the community and proposed Agricultural Residential Cluster Subdivision could be as close as 200 feet from Future Development Program sensitive receptors, including workforce housing and churches, or as close as 700 feet from the nearest existing residential receptor in the community of Santa Margarita. Other envisioned wineries would be located more than 1,000 feet from receptors. According to a noise study conducted by David Lord (Lord, June 13, 2005), amplified music, which is expected to generate the highest noise levels during special events, reaches approximately 120 dBA at a 200 watt speaker. Since noise at “soft” sites (defined as a site containing acoustically “soft” ground that absorbs the sound energy, such as a vegetated hillside) attenuates at a rate of 7.5 dBA per doubling of distance, amplified music would produce temporary noise levels up to 82.5 dBA at approximately 200 feet from the source. Although noise levels would temporarily exceed 60 dBA, the County regulates noise over a 24 hour period [CNEL, refer to Section 4.8.1(a)]. When averaged over a 24 hour period, special events noise would not exceed County noise thresholds. In addition, nuisance noise from special events is regulated through the County’s permitting process for commercial outdoor





entertainment events (County Code Section 6.56). Violations of the terms of the commercial outdoor entertainment event license could result in revocation of the license. Due to the relatively infrequent noise generated by special events, the distance between receptors and envisioned special event locations, and existing County oversight programs for outdoor events, noise generated by special events on the property would be less than significant. Therefore, impacts are less than significant.

Mitigation Measures. Because the Future Development Program would not expose receptors to noise levels that exceed County thresholds, mitigation is not required.

Residual Impacts. Impacts are less than significant without mitigation.

**d. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this section included regional growth outside the vicinity, consistent with the traffic projections provided in Section 4.12, *Transportation and Circulation*. Therefore, cumulative agricultural impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.



## 4.9 PUBLIC SAFETY

*Agricultural Residential Cluster Subdivision.* The Agricultural Residential Cluster Subdivision would result in less than significant (Class III) impacts with respect to potential exposure to residual quantities of presently-banned agricultural chemicals. Impacts related to exposure to contaminants from truck and railway accidents involving hazardous materials would also be Class III, less than significant. The Agricultural Residential Cluster Subdivision would introduce residential uses into a high fire hazard area and potentially expose residents to hazards related to air safety. Impacts with respect to exposure to water treatment chemicals used for Agricultural Residential Cluster Subdivision water storage would be Class II, significant but mitigable. Impacts related to exposure to valley fever would be Class II, significant but mitigable.

*Future Development Program.* Because no active application exists for the Future Development Program other than the Agricultural Residential Cluster Subdivision, the assessment of public safety impacts is based on a reasonable worst case scenario with regard to the location of future land uses within anticipated development areas. Due to the extent of development envisioned in the Future Development Program, buildout of the program would result in a potentially significant public safety hazards related to hazardous material exposure, risk of upset, water treatment chemicals, land use conflicts, errant golf balls, and exposure to valley fever. Impacts are significant but mitigable (Class II).

Refer to Sections 4.7, Geologic Stability, 4.5, Drainage, Erosion, and Sedimentation, and 4.10, Public Services, for discussions of safety issues related to seismic/geologic hazards, flood hazards, and fire hazards, respectively.

### 4.9.1 Setting

**a. Historical and Existing Use of Agricultural Chemicals.** The Santa Margarita Ranch is currently zoned and operating under an agricultural land use designation, with the exception of a rural residential land use designation in the Margarita Farms area. The Santa Margarita Ranch has been historically utilized for grazing and crop production since the late 1700s. Crops such as winegrapes and olives were cultivated in the Ranch Headquarters area (north of the community of Santa Margarita) and herds of horses, cattle and sheep were grazed on the surrounding rangelands. The area has been in continuous agricultural production since the Spanish Period and has been used historically for commercial horse, cattle, and sheep grazing and for the cultivation of commercial dryland hay, dryland grain, Sudan grass, seed, winegrapes, and pasture crops. An existing vineyard (the Cuesta Ridge Vineyard) is located in the southern portion of the Ranch. The remainder of the Ranch, including the areas proposed for Agricultural Residential Cluster Subdivision development, is currently used for cattle grazing.

A variety of chemicals are used as pesticides, herbicides, and nutrients on agricultural crops in San Luis Obispo County. The dryland farming of grains and vineyards include the use of a variety of chemical herbicides, pesticides and nutrients. The chemicals that may be used for the on-site agricultural fields include the seasonal use of restricted material herbicides to control weeds prior to planting grain. Pesticides used could include seasonal use of restricted material herbicides to control weeds species. In addition, pesticides used may include various rodent control agents used underground directly in burrows.



**b. Hazardous Materials.** The Ranch vicinity contains several activities which involve the use of hazardous materials. The Unocal Oil Company operates a petroleum pump station located on the east side of El Camino Real, approximately midway between the communities of Santa Margarita and Garden Farms. This facility includes four open top floating tanks and two fixed roof tanks for heavier crude. Serving the petroleum pump station is a set of parallel, 8-inch pipelines which link the station to Avila Bay and the Shandon booster station. One line carries 28,000 barrels of oil per day and the other line carries between 18,000 and 25,000 barrels of oil per day (Unocal, 1991). These pipelines traverse east-west across the northern end of the Ranch property, roughly 500 feet north of the existing Ranch headquarters.

The Southern Pacific Milling Company operates a sand and gravel quarry, crushing facility, and asphalt batch plant northeast of the Santa Margarita Ranch, approximately two miles northeast of the community of Santa Margarita. Potential hazards associated with the quarry include fugitive dust emissions from daily plant operations, noise generated from facility operations and transport, and traffic hazards associated with mining trucks. Impacts related to fugitive dust and noise generation are discussed in Sections 4.2, *Air Quality*, and 4.8, *Noise*, respectively.

**c. Air Safety.** One private air strip is located on the Ranch, trending north-south approximately 750 feet west of the existing Ranch headquarter facilities. Safety hazards associated with private air strips are principally related to the risk of an aircraft accident. Personal use airports (defined as an airport limited to the noncommercial activities of an individual owner or family and occasional invited guests) are regulated by Federal Aviation Administration (FAA) regulations (Title 14 of the CFR) and are administered at the state level by the Caltrans Division of Aeronautics.

Neither the FAA nor Caltrans regulate land use adjacent to private airports. However, Part 77 of 14 CFR regulations requires FAA agency notification when there is a change in land use that would involve the development of structures and roadways adjacent to the facility. The criterion for notification depends on the height of proposed structures relative to the location of the runway. Upon request of an airstrip property owner, the FAA will conduct an airspace safety review to ensure that building height to distance from airstrip runway ratios comply with FAA and Caltrans safety requirements. State regulations (CCR Title 21, Division 2.5, Chapter 2) pertaining to personal-use airports contains the following minimum standards, found in Article 5, §3560: the runway length and width must be adequate to enable aircraft to operate safely, considering airport location and the performance data of the most demanding aircraft to utilize the airport; the ends of each runway be at least 200 feet from the airport property line; and the distance from the runway centerline to the property line of another owner must be at least 50 feet. In addition, Article 2, §3530 of Chapter 2, presents the permit requirements for maintaining and using a personal-use airport. These permit requirements include requirements for both airplanes and helicopters, and include distance requirements for operation of airstrips within boundaries of K-12 public and private schools.

**d. Highway Accidents.** U.S. Highway 101 and State Route 58 are major transportation routes that traverse the Ranch property. Trucks commonly carry a variety of hazardous materials, including gasoline and various crude oil derivatives, and other chemicals known to cause human health problems. When properly contained, these materials present no hazard to the community. But in the event of an accident, such materials may be released, either in liquid or gas form. In the case of some chemicals (such as chlorine), highly toxic fumes may be carried



far from the accident site. Traffic accidents involving large trucks hauling hazardous materials on the highways passing by the Ranch could result in a public safety hazard.

**e. Railroad Accidents.** The Union Pacific Railroad (UPRR) runs parallel to U.S. Highway 101 south of State Route 58, where it curves eastward to follow El Camino Real through the community of Santa Margarita. The Agricultural Residential Cluster Subdivision site is located approximately 500 feet south of the UPRR line, although the development area would be located over 3,000 feet from the UPRR right-of-way. Trains commonly carry a variety of hazardous materials, which may present a hazard to the community in the event of a derailment.

The Federal Railroad Administration administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system. Regulations pertaining to the transport of hazardous materials on railroads include specialized training, container sealing and movement, labeling, and emergency response. While railroad accidents related to hazardous materials spills are rare, railroad accidents are a possibility. Specifically, development potential along the railroad tracks would increase the potential for exposure to hazardous materials.

Safety is also a concern where railroad tracks are adjacent to development and there are no barriers that would prevent trespassing on the tracks. Trespassers can be hurt on the tracks or by passing trains or equipment. According to the Federal Railroad Administration Office of Safety Analysis, there have been five trespasser casualties (deaths or injuries) in San Luis Obispo County since the year 2000 (U.S. Department of Transportation Federal Railroad Administration, 2005). Four of those incidents resulted in deaths.

**f. Chemical Storage.** Improper storage or use of various chemicals, including chlorine-based products, buffers, soda ash, and other chemicals, could result in a release or direct contact by the public. Community swimming pools, water treatment associated with water storage tanks, and golf course and agricultural activities require the storage of such chemicals. In addition, the use of pesticides in the vicinity of non-agricultural development can result in the exposure of people to chemicals. Refer to Section 4.1, *Agricultural Resources*, for a discussion of potential agricultural chemical hazards.

**g. Naturally Occurring Asbestos.** Serpentine rock is a source of naturally-occurring asbestos. Asbestos is a known carcinogen and inhalation of asbestos may result in the development of lung cancer or mesothelioma. Serpentine rock is known to occur in the southwest corner of the Santa Margarita Ranch property, adjacent to U.S. Highway 101. In addition, undocumented serpentine rock may occur in other portions of the Ranch property where development is proposed and/or envisioned. Refer to Section 4.2, *Air Quality*, for a discussion of potential impacts related to naturally occurring asbestos.

**h. Valley Fever.** Valley fever (*Coccidioidomycosis*) is an infectious disease caused by the fungus *Coccidioides immitis*. Infection is caused by inhalation of spores that have become airborne when dry, dusty soil or dirt is disturbed by wind, construction, farming, or other activities. The valley fever fungus is typically found at the base of hillsides in undisturbed soil, especially around rodent burrows, Native American ruins, and burial grounds. It usually grows in the top few inches of soil, but can grow down to 12 inches. The fungus does not survive well



in highly populated areas because there is usually not enough undisturbed soil for the fungus to grow. In addition, the fungus is not likely to be found in soil that has been or is being cultivated and fertilized because human-made fertilizers, such as ammonium sulfate, enhance the growth of the natural microbial competitors of the valley fever fungus. Infection is most frequent during summers that follow a rainy winter or spring, especially after wind and dust storms. Valley fever infection is common only in arid and semiarid areas of the Western Hemisphere. In the United States, it is mostly found from southern California to southern Texas.

Valley fever is spread through the air, particularly when soil containing the valley fever fungus is disturbed by construction, natural disasters, or wind. People can breathe in the spores and get valley fever; it is not spread from person to person. Approximately 60 percent of infected persons have no symptoms and do not seek medical attention. The remaining 40 percent develop a spectrum of illness ranging from mild to moderate flu-like symptoms to pneumonia. About 0.5 percent of valley fever-infected persons may develop disseminated disease, where the infection spreads to other areas of the body. For example, meningitis is a rare but particularly serious manifestation of disseminated valley fever.

Individuals most vulnerable to valley fever are agricultural workers, construction and road workers, and archaeologists because they are exposed to the soil where the fungus might be just below the surface. Exposure to wind storms or recently disrupted soils (i.e., resulting from major earthquakes or construction) may increase the chances of infection. Infections can occur in persons without occupational exposure. Of those without an occupational risk of contracting the disease, the most susceptible are those with suppressed immune systems. Domestic animals are also susceptible to valley fever. Dogs are especially susceptible due to their proximity to the ground and often need long-term therapy with antifungal medication.

An estimated 50,000 to 100,000 persons develop symptoms of valley fever each year in the United States, with 35,000 new infections per year in California alone (<http://www.dhpe.org/infect/valley.html>). According to the San Luis Obispo County Public Health Department, there were over 90 cases of valley fever reported between October 2006 and January 2007 in San Luis Obispo County, compared to 113 for all of 2005 (San Luis Obispo County Public Health Department, Public Health Department Notice, January 9, 2007). This is a statistically significant increase (Public Health Department Notice, January 9, 2007).

**i. Hazardous Materials Records Review.** Rincon conducted a search of available hazardous materials records using Environmental Data Resources, Inc. Two hazardous materials sites were identified adjacent to the Ranch property and one hazardous materials site was identified within the boundaries of the Santa Margarita Ranch. K Kidd Transportation, located off-site at 17259 Walnut Street in the community of Margarita Farms, was listed as a Resource Conservation and Recovery Act (RCRA) and Facility Index System (FINDS) site. Mike Cole Farms, located just east of the Ranch at 6835 Calf Canyon Hwy (SR 58), was listed as a RCRA and FINDS site. La Panza Ranch, located on-site near the intersection of SR 58 and West Pozo Road, was listed as an Historic Underground Storage Tank (HIST UST) site. These sites did not release hazardous materials that could migrate to the Santa Margarita Ranch property. No release sites are reported to be present within the boundaries of the Agricultural Residential Cluster Subdivision.



A review of the EDR orphan list records also identified 42 sites that, due to poor or inadequate address information, cannot be plotted. Of these 42 sites, only one site has been identified as a release site. Kaiser Sand & Gravel, located near El Camino Real northeast of the northern portion of the Ranch property, was listed as LUST, Cortese, EMI, and CA WDS site. The site is assumed to be associated with the Southern Pacific Milling Company sand and gravel quarry, which is located northeast of the Santa Margarita Ranch; approximately two miles northeast of the community of Santa Margarita [refer to Section 4.9.1(b) above]. Due to the location of this facility over 1,250 feet from the nearest envisioned land use and the nature of the remaining listings as non-release sites, the orphan sites are not expected to impact the Santa Margarita Ranch property.

**Table 4.9-1. EDR Listing Summary of Sites in the Vicinity of the Santa Margarita Ranch**

Site Name	Site Address	Relative Location	Database Reference*
Mike Cole Farms	6835 Calf Canyon Hwy Santa Margarita, CA	Just east of the Ranch property, north of Agricultural Residential Cluster Subdivision site	RCRA-SQG, FINDS
La Panza Ranch	SR 58 / West Pozo Road Santa Margarita, CA	On the Ranch property, east of Agricultural Residential Cluster Subdivision site	HIST UST
Santa Margarita Elementary School	22070 H Street Santa Margarita, CA	Adjacent, within Santa Margarita	HAZNET, FINDS
Pacific Bell	9315 Encina Avenue Santa Margarita, CA	Adjacent, within Santa Margarita	RCRA-SQG, FINDS
Pacific Beverage Company	22255 El Camino Real Santa Margarita, CA	Adjacent, within Santa Margarita	HAZNET, LUST, Cortese, SWEEPS, UST
Pintor's Tire & Fuel	22301 El Camino Real Santa Margarita, CA	Adjacent, within Santa Margarita	FINDS, UST
Whitaker Contractors	22985 El Camino Real Santa Margarita, CA	Adjacent, within Santa Margarita	HAZNET
K Kidd Transportation	17259 Walnut Street Atascadero, CA	Adjacent, within the community of Margarita Farms	RCRA-SQG, FINDS
UNOCAP Santa Margarita Pump Station/Conoco Phillips, Santa Margarita NDPL	18781 El Camino Real Atascadero, CA	Adjacent, north of Future Development Program	AST, HAZNET, CHMIRS, FINDS, RCRA-LQG, EMI, ERNS

\* AST Above Ground Storage Tank  
 CHMIRS California Hazardous Material Incident Report System  
 Cortese - Public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration  
 EMI Emissions Inventory  
 ERNS Emergency Response Notification System  
 FINDS Facility Index System  
 HAZNET Data extracted from copies of hazardous waste manifests received each year by the Department of Toxic Substances Control (DTSC).  
 HIST UST Historical Underground Storage Tank  
 LUST Leaking Underground Storage Tank  
 RCRA-LQG Resource Conservation and Recovery Act, Large Quantity Generators  
 RCRA-SQG Resource Conservation and Recovery Act, Small Quantity Generators  
 SWEEPS Statewide Environmental Evaluation and Planning System.  
 UST Underground Storage Tank

The Pacific Beverage Company, located at 22255 El Camino Real, was listed as a HAZNET, LUST, Cortese, SWEEPS, and UST site in the EDR database. A diesel gasoline leak was detected in this location in 1994. The site was remediated and the case was closed in 1995. Due to the



location of the LUST site in the community of Santa Margarita and the case having received a closed status, the property would not be expected to impact the Agricultural Residential Cluster Subdivision or Future Development Program.

Due to the nature of the remaining listings as non-release sites, the specified properties would not be expected to impact development under either the Agricultural Residential Cluster Subdivision or Future Development Program.

#### **4.9.2 Impact Analysis**

**a. Methodology and Significance Thresholds.** Assessment of impacts is based on: 1) review of site information and conditions; 2) review of technical studies prepared for the project site; and 3) review of the County of San Luis Obispo Safety Element, and other County information regarding safety issues.

In accordance with State CEQA Guidelines, the proposed Agricultural Residential Cluster Subdivision and Future Development Program would result in a potentially significant impact related to hazards and hazardous materials if it would:

- *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;*
- *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;*
- *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school;*
- *Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;*
- *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area;*
- *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/or*
- *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.*

The San Luis Obispo County APCD does not have specific formal thresholds of significance for valley fever. However, the following factors may indicate a project's potential to create valley fever effects, which may create a significant hazard to the public:

- *Where the top 12 inches of soil would be disturbed;*
- *In areas with dry, alkaline, sandy soils;*
- *In virgin, undisturbed, non-urban areas;*
- *In windy areas;*
- *Where archaeological resources probably or known to exist in the area (Native American midden sites);*



- *When special events (i.e., fairs or concerts) and motorized activities (motocross track, All Terrain Vehicle activities) occur on unvegetated soil;*
- *Non-native populations are working (i.e., out-of-area construction workers).*

The likelihood that the valley fever fungus may be present increases with the number of the above factors applicable to the project or project site.

Hazards related to wildland fires are discussed in Section 4.10, *Public Services*. Hazards related to pesticide use near residential land uses are discussed in Section 4.1, *Agricultural Resources*. Hazards related to railroad crossings and pedestrian and bicycle conflicts with automobiles are addressed in Section 4.12, *Transportation and Circulation*.

#### **b. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact S-1**      **Due to the presence of current and historic agricultural practices on the Agricultural Residential Cluster Subdivision site, on-site soils may contain contaminants that could pose a risk to health. However, site disturbance would not occur in an area of historical croplands. Impacts would be Class III, less than significant.**

The historical use of portions of the Santa Margarita Ranch for agricultural production may have resulted in undocumented residual quantities of presently-banned agricultural chemicals on the Agricultural Residential Cluster Subdivision site. The use and storage of agricultural chemicals within the Ranch could result in releases of contaminants that could cause adverse health effects. However, agricultural practices other than grazing have been confined to the southern portions of the Agricultural Residential Cluster Subdivision site, where disturbance is not proposed. As discussed in Section 4.1, *Agricultural Resources*, the northern portion of the property (where site disturbance for proposed residences, roadways, and utility lines would occur) is composed primarily of grazing land. In addition, slopes in this area are relatively steep, resulting in further constraints to agricultural production. The likelihood that future residents and construction/maintenance workers could be exposed to residual agricultural chemicals in on-site soils is minor. Impacts are less than significant.

Mitigation Measures. No mitigation is required.

Residual Impacts. Impacts would be less than significant.

**Agricultural Residential Cluster Subdivision Impact S-2**      **Highway and railway accidents that involve hazardous materials could potentially create a public safety hazard by exposing people to contaminants. Due to the distance between transportation corridors and proposed development, as well as regulations already in place, impacts would be Class III, less than significant.**

U.S. Highway 101 and State Route 58 are major transportation routes near the Agricultural Residential Cluster Subdivision site. Trucks commonly carry a variety of hazardous materials, including gasoline and various crude oil derivatives, and other chemicals known to cause





human health problems. In the event of an accident, such materials may be released, resulting in a public safety hazard. Due to the distance of Highway 101 from the proposed Agricultural Residential Cluster Subdivision development (approximately 1 ¼ miles), accidents on this route pose no risk to proposed development. State Route 58 abuts the Agricultural Residential Cluster Subdivision site to the north. However, the proposed lots nearest SR 58 (Lots 6 through 9) would be located over 625 feet from this roadway. The distance between major area roadways and the proposed Agricultural Residential Cluster Subdivision would prevent future residents from being exposed to toxic chemicals in the event of an accident, whether in liquid or gas form. Impacts would be less than significant.

The transport of hazardous materials on the Union Pacific Railroad (UPRR) rail corridor that traverses the Santa Margarita Ranch area is also not prohibited. Under authority delegated by the Secretary of Transportation, the Federal Railroad Administration administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the United States rail transportation system, including shipments transported to and from international organizations. Regulations pertaining to the transport of hazardous materials on railroads include specialized training, container sealing and movement, labeling, and emergency response. While railroad accidents related to hazardous materials spills are rare, railroad accidents are a possibility. Specifically, development potential along the railroad tracks would increase the potential for exposure to hazardous materials. However, implementation of existing federal, state, and local regulations pertaining to the use, containment, and transport of hazardous materials would minimize the possibility of an accident. In addition, proposed lots nearest the UPRR (Lots 35 and 39) would be located approximately 3,000 feet south this rail corridor. Regulations already in place and the distance between the UPRR line and development areas will render impacts associated with exposure to hazardous materials less than significant.

Mitigation Measures. No mitigation is required.

Residual Impacts. Compliance with applicable federal, state and local laws will ensure less than significant impacts.

**Agricultural Residential Cluster Subdivision Impact S-3**      **Two water storage tanks are proposed to be constructed to serve the Agricultural Residential Cluster Subdivision. The potential public safety impact associated with failure of the water storage tanks is Class II, significant but mitigable.**

Two water storage tanks would be built with a capacity of 188,000 gallons each to serve the proposed Agricultural Residential Cluster Subdivision. Both tanks will be located atop a hill near the center of Phase II Agricultural Residential Cluster Subdivision development, approximately 250 feet east of Lot 77 and 500 feet south of lot 68. In the event of tank failure, water stored in the tanks would flow predominantly westward, potentially inundating Lots 76 through 79. In addition, water may potentially flow eastward, depending on exact siting of proposed storage tank. In the event of easterly flow, lots 68 and 61 may be impacted as well.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure AES-1(d) (Bury Water Tanks) in Section 4.12, *Visual Resources*, calls for the proposed water tanks to be placed below grade to reduce their visual profile. This measure would incrementally reduce



hazards associated with potential water tank failure. The following additional mitigation measure is required:

**Agricultural Residential Cluster Subdivision S-3(a)**

**Property Protection.** Properties located adjacent to the tank area shall be protected in the event of tank failure. This protection shall include a berm or diversionary structure that can withstand the force of water flowing against it, as determined by a qualified engineer. Future property owners of lots 76 through 79, 61 and 68 shall be informed of the potential risk of property damage and a notice shall be recorded on the property Title describing the risk of tank failure.

**Plan Requirements and Timing.** This measure shall be completed prior to the issuance of a Phase II land use permit.  
**Monitoring.** Planning and Building staff will verify that a diversion structure is provided before development of the water tank can occur.

Residual Impacts. With implementation of the above measures, impacts related to potential water tank failure hazards would be less than significant.

**Agricultural Residential Cluster Subdivision Impact S-4**

**The Agricultural Residential Cluster Subdivision includes land uses that may involve the use, transport, or storage of limited quantities of hazardous chemicals. Residential land uses would not be expected to use chemicals in quantities that would pose a significant health risk if properly used. However, the potential public safety impact associated with the use, transport and/or storage of water tank treatment chemicals would be a Class II, *significant but mitigable* impact.**

Phase II of the Agricultural Residential Cluster Subdivision includes the installation of two water storage tanks. Treatment of the water inside the storage tanks would require the use of chemicals such as chlorine-based products, buffers, soda ash, and other chemicals. In addition, residential development would introduce landscaping and associated landscape maintenance chemicals such as fertilizers, pesticides, and herbicides. Improper storage or use of these and other chemicals could result in a release or direct contact by workers or the public. These impacts are *significant but mitigable* (Class II).

Mitigation Measures. The following mitigation measures are required:

**Agricultural Residential Cluster Subdivision S-4(a)**

**Chemical Storage.** All chemicals are to be stored in a locked and labeled enclosure. The enclosure shall be properly placarded in accordance to County of San Luis Obispo Fire Department requirements. Emergency telephone numbers shall be properly displayed in and near the chemical storage areas. Material Safety Data Sheets shall be kept within the enclosure in a location accessible to all who handle the chemicals. All chemicals shall be used in a manner consistent with their purpose. Personnel who

handle chemicals shall be trained in their proper use, storage, and disposal.

**Plan Requirements and Timing.** This measure shall be completed prior to the issuance of a Phase II occupancy permits.  
**Monitoring.** County of San Luis Obispo Fire Department shall site inspect prior to issuance of occupancy permits. The Fire Department shall site-inspect annually to ensure compliance with required measures.

Residual Impacts. With implementation of the above measure, impacts related to chemical storage would be less than significant.

**Agricultural Residential Cluster Subdivision Impact S-5**      **The proposed Agricultural Residential Cluster Subdivision is located 1.3 miles southeast of a private air strip. Aircraft overflight areas present a potential for aircraft accidents that could result in personal injury or property damage. These impacts would be considered Class III, less than significant.**

A private air strip is located on the Santa Margarita Ranch, trending north-south approximately 750 feet west of the existing Ranch headquarter facilities. The air strip consists of one 3,400 foot long runway and is used approximately three times per week. The Agricultural Residential Cluster Subdivision site is located approximately 1.3 miles southeast of this facility. Safety hazards associated with private air strips are principally related to the risk of an aircraft accident.

Personal use airports are regulated by Federal Aviation Administration (FAA) and are administered at the state level by the Caltrans Division of Aeronautics. Pursuant to compliance with applicable FAA policies and regulations, impacts would be less than significant.

Refer to Section 4.8, *Noise*, for a discussion of noise impacts resulting from air strip operations.

Mitigation Measures. Beyond compliance with applicable FAA policies and regulations, no mitigation measures are required.

Residual Impacts. Impacts would be less than significant.

**Agricultural Residential Cluster Subdivision Impact S-6**      **Large-scale grading and excavation operations during Agricultural Residential Cluster Subdivision development could expose construction workers and other individuals to valley fever. Impacts are Class II, significant but mitigable.**

The Agricultural Residential Cluster Subdivision site contains dry soils, is relatively undisturbed and in a non-urban area, and contains known archaeological resources [refer to Section 4.9.2(a)]. In addition, the San Luis Obispo County Public Health Department has identified a statistically significant increase in valley fever cases in San Luis Obispo County (Public Health Department Notice, January 9, 2007). As a result, valley fever spores have the potential to occur on the site.



Impacts would occur during large-scale grading and excavation operations, particularly during summers that follow a rainy winter or spring, or during and immediately after wind and dust storms. These activities could expose construction workers and others to valley fever spores, if present in soil within the Agricultural Residential Cluster Subdivision area. Construction of the proposed Agricultural Residential Cluster Subdivision would result in a potentially significant health impact related to valley fever.

Mitigation Measures Agricultural Residential Cluster Subdivision measures AQ-2(b) (Dust Control), AQ-2(d) (Dust Control Monitor), and AQ-2(e) (Active Grading Areas) would minimize dust generation, thereby minimizing exposure to valley fever, should it be present.

Residual Impacts. With implementation of the above measures, impacts related to valley fever would be less than significant.

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**c. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.9.2(b) for a discussion of public safety impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development Program Impact S-1**

**Development in accordance with the Future Development Program would occur in areas historically used for agricultural production with soils that could contain residual quantities of presently-banned agricultural chemicals. The exposure of future site construction workers and residents to these contaminants is a Class II, *significant but mitigable* impact.**

The historical use of portions of the Santa Margarita Ranch for agricultural production may have resulted in undocumented residual quantities of presently-banned agricultural chemicals. According to the agricultural study prepared for the Agricultural Residential Cluster Subdivision and Future Development Program, various crops, including winegrapes and olives, have historically been cultivated in the Ranch Headquarters area (north of the community of Santa Margarita). The Future Development Program envisions a Bed and Breakfast, café, amphitheater and winery at this location. In addition, two of the five ranch/farm headquarters would be located on or adjacent to existing agricultural production (refer to Figure 2-9 in Section 2.0, *Project Description*). The Future Development Program land use location southwest of the community of Santa Margarita, which is envisioned to include a residential village, guest ranch, lodge, restaurant, winery, and golf course, borders existing agricultural production to the southeast.

Several Future Development Program land uses may be located in areas historically used for agriculture. Future residents, visitors, and construction/maintenance workers could be exposed to residual agricultural chemicals. Impacts are potentially significant unless mitigated.

Areas envisioned for future development could also potentially contain contaminants associated with undocumented on- or off-site hazardous materials releases. Rincon conducted



a search of available hazardous materials records using Environmental Data Resources, Inc. Two hazardous materials sites were identified adjacent to the Ranch property and one hazardous materials site was identified within the boundaries of the Santa Margarita Ranch. K Kidd Transportation, located off-site at 17259 Walnut Street in the community of Margarita Farms, was listed as a Resource Conservation and Recovery Act (RCRA) and Facility Index System (FINDS) site. Mike Cole Farms, located just east of the Ranch property at 6835 Calf Canyon Hwy (SR 58), was listed as a RCRA and FINDS site. La Panza Ranch, located on-site near the intersection of SR 58 and West Pozo Road, was listed as an Historic Underground Storage Tank (HIST UST) site. These sites did not release hazardous materials that could migrate to the Santa Margarita Ranch property. In addition, the off-site petroleum pump station and on-site petroleum pipelines have the potential to contaminate soils on the Ranch property. Improper handling and disposal of contaminated soils would result in a health risk to people which would be a potentially significant impact unless mitigation is incorporated.

Groundwater depths throughout the Ranch property vary (between 35 and 150 from the surface; Hopkins, 2006). Should groundwater be encountered, and if it is contaminated, there is the potential release of contaminants onto areas envisioned for future development. This would be a potentially significant impact.

Mitigation Measures. The following measures are required:

**Future Development  
Program S-1(a)**

**Soil and Groundwater Assessment.** Prior to construction of any of the Future Development Program conceptual land use areas historically used for agriculture, a soil and groundwater assessment shall be completed by a registered soils engineer or soils remediation specialist to determine the presence or absence of regulated contaminants within the area of development. This assessment shall target agricultural chemicals that may have been used in the historically farmed portions of the Ranch property and contamination associated with the off-site petroleum pump station and on-site pipelines. If soil or groundwater sampling indicates the presence of any contaminant in quantities not in compliance with applicable laws, the Regional Water Quality Control Board (RWQCB) and Department of Toxic Substances Control (DTSC) shall be contacted by the project applicant to determine any necessary remediation efforts. Soils and/or groundwater shall be remediated in compliance with applicable laws. Site assessments that result in the need for soil excavation are required to include: an assessment of air resource impacts and health impacts associated with excavation activities; identification of any applicable local standards that may be exceeded by the excavation activities, including dust and noise levels; transportation impacts from the removal or remediation activities; and risk of upset management practices shall employed if an accident occurs on or off the site. A copy of applicable remediation certification from RWQCB and/or DTSC, or written confirmation that a certification is not required shall



be submitted to Planning and Building prior to issuance of a building permit.

**Plan Requirements and Timing.** The results of preliminary soil and groundwater tests shall be submitted for review and approved by Planning and Building prior to approval of any future building permits. **Monitoring.** Building inspectors shall site inspect during grading and prior to occupancy clearance to ensure compliance with the required measures.

**Future Development  
Program S-1(b)**

**Potential Discovery of Groundwater.** In the event that groundwater is encountered during grading or construction, all grading or construction work in the vicinity of the groundwater will be halted. The groundwater shall be tested for TPH and VOC, and be screened for common industrial groundwater pollutants using EPA testing method 8260b. If one or more pollutants are found in unsafe concentrations, the water shall be treated to a concentration below RWQCB standards, by a County approved registered environmental assessor or environmental engineer in consultation with RWQCB before the water can be released into the watershed. Such testing can occur in advance of grading activities to preclude the possibility of watershed contamination.

**Plan Requirements and Timing.** During construction, a qualified specialist shall review and field-verify the results of the required testing of any groundwater should it be encountered during construction activities. **Monitoring.** Building inspectors shall site inspect during grading and prior to occupancy clearance to ensure compliance with the required measures.

**Future Development  
Program S-1(c)**

**Screening of Imported Fill Material.** Prior to issuance of building permits, a soils engineering study and hazardous materials report of all imported fill materials shall be prepared by a qualified professional and submitted to the County Engineer for review. The soils engineer study and hazardous materials report shall demonstrate that all imported fill materials maintain engineering properties that are suitable for site development, and are free from contaminants that exceed threshold health and public safety levels.

**Plan Requirements and Timing.** During construction, a qualified specialist shall review and field-verify the results of the required screening of all imported fill material during construction activities. **Monitoring.** Building inspectors shall site inspect during grading and prior to occupancy clearance to ensure compliance with the required measures.



Residual Impacts. With implementation of the above measures, hazardous materials impacts would be less than significant.

**Future Development  
Program Impact S-2**

**Highway and railway accidents pose a direct threat to public safety at crossings and along transportation corridors. Accidents involving hazardous materials could potentially create a public safety hazard by exposing people to contaminants. Due to the potential proximity of transportation corridors to Future Development Program components, this is a Class II, significant but mitigable impact.**

As discussed under Agricultural Residential Cluster Subdivision Impact S-2, hazardous materials may be transported on U.S. Highway 101, State Route 58, and the Union Pacific Railroad (UPRR) rail corridor. Development in accordance with the Future Development Program may directly abut one or more of these transportation corridors.

The California Public Utilities Commission (CPUC) is responsible for safety oversight for all railroads and highway/rail crossings. Historically, the UPRR and the CPUC have been advocates of closing railroad crossings as opposed to permitting new ones. The UPRR has little incentive to approve new crossings and/or right-of-way agreements due to liability issues.

Accidents on these transportation corridors could create public safety hazards. Impacts would be Class II, *significant but mitigable*.

*Area Roadways.* Highway 101 traverses the western edge of the Ranch property. The livestock sales yard may be located adjacent to this Highway, although it would be located at a higher elevation than the roadway (refer to Figure 2-9 in Section 2.0, *Project Description*). The portion of the Future Development Program envisioned for development of a residential village, guest ranch, lodge, restaurant, winery, and golf course is located approximately 625 feet east of Highway 101 in its westernmost reaches (refer to Figure 2-9 in Section 2.0, *Project Description*). The Future Development Program trail is also envisioned adjacent to US 101 from the southernmost Ranch boundary to SR 58, abutting the Highway in some locations. North of the community of Santa Margarita, land uses envisioned for development on the existing Ranch Headquarters site (including a Bed & Breakfast, café, amphitheater, and winery) would be located between 1,625 and 2,500 feet east of Highway 101.

State Route 58 (SR 58) is a two-lane highway that extends eastbound from Highway 101 to the Kern County line. The portion of the Future Development Program envisioned for development of a residential village, guest ranch, lodge, restaurant, winery, and golf course is located approximately 62.5 feet south of SR 58 at its closest point (refer to Figure 2-9 in Section 2.0, *Project Description*). The Future Development Program trail is also envisioned adjacent to SR 58 from US 101 to the eastern edge of the community of Santa Margarita. Additional uses that may abut SR 58, east of the community of Santa Margarita, include a 5-acre park with swimming pool, three places of worship, and 50 work force housing units (refer to Figure 2-9 in Section 2.0, *Project Description*). One winery may be located approximately 125 feet south of SR 58, between the community of Santa Margarita and the proposed Agricultural Residential Cluster Subdivision project.



As discussed in Section 4.9.2(b) above, traffic accidents involving large trucks hauling hazardous materials on these roadways could result in a public safety hazard. Although standard accident and hazardous materials recovery procedures may reduce hazards to some extent, due to the proximity of potential future development to Highway 101 and State Route 58, impacts are potentially significant.

*Union Pacific Railroad.* Future Development Program components may also be located near the Union Pacific Railroad (UPRR) rail corridor. Land uses envisioned for development southwest of the community of Santa Margarita (including a residential village, guest ranch, lodge, restaurant, winery, and golf course) would be located as close as approximately 62.5 feet south of the UPRR rail corridor (refer to Figure 2-9 in Section 2.0, *Project Description*). Other land uses that may be located adjacent to the UPRR corridor include the livestock sales yard, a 5-acre park with swimming pool, three places of worship, 50 work force housing units, and portions of the Future Development Program trail (refer to Figure 2-9 in Section 2.0, *Project Description*).

Safety is also a concern where railroad tracks are adjacent to development and there are no barriers that would prevent trespassing on the tracks. The Future Development Program trail would be located adjacent to the tracks from US 101 to the eastern edge of Santa Margarita. The trail would cross the UPRR tracks approximately ½ mile south of the Highway 101/SR 58 interchange. In other locations, there may be temptation for pedestrians to cross the railroad tracks where a designed crossing is not in place. Trespassers can be hurt on the tracks or by passing trains or equipment. Due to the proximity of potential future development to the UPRR, impacts related to rail safety are potentially significant.

As discussed in Section 4.9.2(b) above, trains commonly carry a variety of hazardous materials, which may present a hazard to the community in the event of a derailment. Although standard accident and hazardous materials recovery procedures may reduce hazards to some extent, due to the proximity of potential future development to the UPRR impacts are potentially significant.

Mitigation Measures. Transport of hazardous materials on Highway 101, Highway 58 and the UPRR corridor will be required to comply with all federal, state, and local laws pertaining to the handling of hazardous materials. In addition, the following measure is also required:

**Future Development Program S-2(a)**

**Transportation Corridor Safety Plan.** As part of the Specific Plan for future development on the property (or within individual development plans as applicable), a transportation corridor safety plan shall be prepared and shall include a detailed evaluation of safety impacts associated with Future Development Program land uses located in proximity to the UPRR rail line, Highway 101 and SR 58. At a minimum, the Transportation Corridor Safety Plan shall consider the following measures:

- Required setbacks between transportation corridors (including UPRR, Highway 101 and SR 58) and Future Development Program structures, pathways, and public use areas., in accordance with County, Caltrans, UPRR, and





- CPUC standards.
- Identification of a safe and accessible pedestrian/ bicycle/equestrian crossing where the Future Development Program trail crosses the UPRR. This crossing shall be designed to allow pedestrians, bicyclists, and equestrians to safely travel across the tracks. The crossing shall be reviewed by County Parks and Recreation, UPRR and CPU.
  - Identification of signage that directs people to the pedestrian/bicycle/ equestrian railroad crossing in obvious and appropriate locations along the railroad right-of-way near future development.
  - Fencing and vegetative screening between future development and adjacent railroad tracks. Coordination with the UPRR and the County is required to determine the appropriate height and type of fencing. This fencing can be integrated with barriers that are required to meet noise attenuation standards (See impact N-4 in Section 4.9, *Noise*).
  - Location of the trail as far away from the active rail line and highways as possible, and maintenance or creation of a height separation between the trail and transportation corridors.
  - Identification of emergency response access and practices in the event of a railway or highway accident or hazardous materials release.
  - Public disclosure of potential hazards to trail users, occupants and residents of Future Development Program land uses.

**Plan Requirements and Timing.** The required Transportation Corridor Safety Plan shall be included in the Specific Plan (or within individual plans, as applicable) for review by Planning and Building prior to approval. All safety features shall be implemented prior to the opening of the trail for public use and occupancy clearance for Future Development Program land uses in proximity to transportation corridors, as applicable.

**Monitoring.** Planning and Building will review the Specific Plan (or individual development plans) prior to issuance of grading permits. Prior to issuance of occupancy permits, Planning and Building staff shall verify implementation of approved plans. County Parks and Recreation will review trail plans and safety features prior to issuance of grading permits for the trail.

Residual Impacts. With implementation of the above measure, impacts related to transportation corridor safety would be less than significant.

**Future Development  
Program Impact S-3**

**The Future Development Program includes land uses that may involve the use, transport, or storage of limited quantities of hazardous chemicals. The potential public safety impact**



**associated with these chemicals would be a Class II, *significant but mitigable* impact.**

The Future Development Program envisions a community swimming pool east of the community of Santa Margarita, north of El Camino Real. Certain chemicals would be routinely used to maintain the quality of water within the swimming pool. These chemicals include chlorine-based products, buffers, soda ash, and other chemicals. The Future Development Program additionally envisions a private golf course southeast of the community of Santa Margarita, south of El Camino Real. Maintenance of the golf course would require the use of landscape maintenance chemicals such as fertilizers, pesticides, and herbicides. In addition, landscaping associated with residential and commercial development would similarly use landscape maintenance chemicals. Improper storage or use of these and other chemicals could result in a release or direct contact by workers or the public. These impacts are *significant but mitigable* (Class II).

Mitigation Measures. Agricultural Residential Cluster Subdivision measure S-4(a) (Chemical Storage) would apply to the Future Development Program land uses as well. No additional mitigation is required.

Residual Impacts. With implementation of the required measure, impacts related to chemical storage would be less than significant.

**Future Development Program Impact S-4      Development may result in traffic safety hazards due to conflicts between proposed uses and existing off-site mining operations and on-site agricultural operations. This is a Class II, *significant but mitigable*, impact.**

Active agricultural lands are located throughout the Ranch property and vicinity. In addition, the Southern Pacific Milling Company operates a sand and gravel quarry just outside of the Ranch property, at the northeastern corner of the Santa Margarita Ranch, approximately two miles northeast of Santa Margarita. Residential and commercial uses, pursuant to the Future Development Program, may result in potential conflicts with the existing agricultural and mining operations.

The Future Development Program would result in increased traffic along SR 58, El Camino Real, and West Pozo Road, as well as new roadways and local roadways within the Santa Margarita Ranch community (refer to Section 4.12, *Transportation and Circulation*). The increased use of these roadways could result in conflicts with farm equipment and quarry vehicles that use these roadways. In addition, Future Development Program-generated traffic would travel at greater speeds than agricultural and mining traffic, thereby further increasing the likelihood of traffic safety conflicts. Conflicts between farm and quarry vehicles and equipment and project-generated traffic are a potentially significant impact.

Mitigation Measures. The following mitigation measure is required:

**Future Development Program S-4(a)      Farm and Quarry Equipment Pull-Outs.** To reduce potential vehicle conflicts, pullouts shall be provided on shared roadways where necessary, as determined by the County Public Works



Department. Where pullouts are not feasible, additional shoulder width shall be provided along El Camino Real north of the community of Santa Margarita, SR 58 east of Santa Margarita, and West Pozo Road.

**Plan Requirements and Timing.** The County Public Works Department shall determine locations and parameters for truck pullouts and/or shoulder width upon application for the first Future Development Program non-agricultural uses. Future applicants shall identify required measures on site plans.

**Monitoring.** County Public Works shall review site plans for consistency with requirements, as determined by the Department, prior to issuance of building permits for the first Future Development Program non-agricultural uses.

Residual Impacts. With implementation of the above measure, impacts related to traffic safety conflicts would be less than significant.

**Future Development Program Impact S-5**

**Future Development Program components would be located in the vicinity of a private air strip. Aircraft overflight areas present a potential for aircraft accidents that could result in personal injury or property damage. With compliance with Federal Aviation Administration (FAA) safety requirements, these impacts would be considered Class III, less than significant.**

A private air strip is located on the Santa Margarita Ranch, trending north-south approximately 750 feet west of the existing Ranch headquarter facilities. The air strip consists of one 3,400-foot-long paved runway and is currently used for incoming and outgoing flights approximately six times per week. The Future Development Program envisions a bed and breakfast, café, amphitheater, and winery on the Ranch headquarter parcel, adjacent to the private air strip. In addition, land uses envisioned southwest of the community of Santa Margarita, including a residential village, guest ranch, lodge, restaurant, winery, and golf course, would be located 0.8 miles south of the air strip. Safety hazards associated with private air strips are principally related to the risk of an aircraft accident.

Personal use airports are regulated by Federal Aviation Administration (FAA) and are administered at the state level by the Caltrans Division of Aeronautics. Compliance with applicable FAA policies and regulations would ensure less than significant safety-related impacts. In addition, Part 77 of 14 Code of Federal Regulations requires FAA agency notification when there is a change in land use that would involve the development of structures and roadways adjacent to the facility. The criterion for notification depends on the height of proposed structures relative to the location of the runway. As applicable, Future Development Program land uses located on the Ranch headquarter parcel may require FAA notification and review. With this safety review, impacts would be less than significant.

Refer to Section 4.8, *Noise*, for a discussion of noise impacts resulting from air strip operations.



Mitigation Measures. Beyond compliance with applicable FAA policies and regulations, including FAA notification and review (as applicable), no mitigation measures are required.

Residual Impacts. Impacts would be less than significant.

**Future Development  
Program Impact S-6**

**The Future Development Program envisions a golf course southwest of the community of Santa Margarita, south of El Camino Real. The proximity of existing and future residential and commercial uses to the future golf course could result in hazards related to errant golf balls. This is a Class II, *significant but mitigable, impact.***

Errant golf balls occur during the normal course of golf activities. The golf course envisioned under the Future Development Program would be located adjacent to the southwestern edge of the community of Santa Margarita, near existing residences. In addition, the Future Development Program envisions a residential village, guest ranch, lodge, and restaurant near the future golf course. The proximity of such uses to the golf course could result in property damage and/or safety hazards related to errant golf balls. Existing and future residents and occupants would be exposed to some level of potential hazard from errant golf balls.

Mitigation Measures. The following mitigation measures are required:

**Future Development  
Program S-6(a)**

**Fairway Orientation.** The envisioned golf course shall be designed to orient fairways away from existing and future residential lots, resort, and restaurant uses.

**Plan Requirements and Timing.** The future applicant shall submit golf course design plans depicting fairway orientation in relation to surrounding land uses to Planning and Building for review prior to issuance of grading permits. **Monitoring.**

Planning and Building shall review golf course design plans prior to issuance of grading permits.

**Future Development  
Program S-6(b)**

**Disclosure of Errant Golf Ball Hazard.** Upon the transfer of real property and execution of leases on properties surrounding the potential golf course, the transferor will be required to deliver to the prospective transferee a written disclosure statement that shall make all prospective property owners and renters aware that although potential impacts or discomforts associated with errant golf balls may be lessened by the golf course design, some level of nuisance would remain. This notification will be required to include disclosure of potential property damage and health hazards nuisances associated with errant golf balls.

**Plan Requirements and Timing.** The written disclosure statement shall be provided to all future residents and occupants by the transferor upon the transfer of real property and execution



of leases. **Monitoring.** Planning and Building staff will verify that the written disclosure statements have been provided prior to issuance of occupancy permits.

Residual Impacts. With implementation of the above measures, impacts related to errant golf balls would be less than significant.

**Future Development  
Program Impact S-7**

**Large-scale grading and excavation operations during construction of Future Development Program land uses could expose construction workers and other individuals to valley fever. Impacts are Class II, significant but mitigable.**

As noted under Agricultural Residential Cluster Subdivision Impact S-6, the San Luis Obispo County Public Health Department has identified a statistically significant increase in valley fever cases in San Luis Obispo County (Public Health Department Notice, January 9, 2007). In addition, the Santa Margarita Ranch contains dry soils, is relatively undisturbed and non-urban, and contains known archaeological resources. As a result, valley fever spores have the potential to occur on the Ranch [refer to Section 4.9.2(a)].

Impacts would occur during large-scale grading and excavation operations, particularly during summers that follow a rainy winter or spring, or during and immediately after wind and dust storms. These activities could expose construction workers and others to valley fever spores, if present in soil within Future Development Program conceptual land use locations. Impacts are potentially significant.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures AQ-2(b) (Dust Control), AQ-2(d) (Dust Control Monitor), and AQ-2(e) (Active Grading Areas) would apply to all Future Development Program land uses. These measures would minimize dust generation, thereby minimizing exposure to valley fever, should it be present.

Residual Impacts. With implementation of the above measures, impacts related to valley fever would be less than significant.

**d. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative public safety impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.



## **4.10 PUBLIC SERVICES AND UTILITIES**

*Agricultural Residential Cluster Subdivision. The Agricultural Residential Cluster Subdivision would result in potentially significant, but mitigable (Class II) impacts with respect to defensible space (safety), and schools. Impacts related to providing law enforcement would be less than significant, based on the requirement that the applicant provide funding to offset potential service impacts. The Agricultural Residential Cluster Subdivision would introduce residential uses into a high fire hazard area and would burden CDF/County Fire Department services. This would be a Class II, significant but mitigable, impact. Waste generated during Agricultural Residential Cluster Subdivision construction and occupancy would be disposed of at the Chicago Grade Landfill, approximately eight miles north of the community of Santa Margarita. Prior to implementation of any recycling programs, the Agricultural Residential Cluster Subdivision would result in the generation of 110 tons per year (604 pounds per day) of solid waste. Class II significant but mitigable impacts would result. Impacts to the Santa Margarita Library would be Class III, less than significant, with the payment of library fees.*

*Future Development Program. Because no active application exists for the Future Development Program, the assessment of public services and utilities impacts is based on a reasonable worst case scenario with regard to the location of future land uses within anticipated development areas. Buildout of the Future Development Program would result in impacts similar to those resulting from the Agricultural Residential Cluster Subdivision alone. However, students generated by the additional residential components (beyond the Agricultural Residential Cluster Subdivision) would necessitate the installation of one additional classroom at Santa Margarita Elementary School. Impacts would be reduced through mitigation requiring buildout date notification, to assist in the district's long-range planning efforts. Impacts to the Santa Margarita Library would be Class III, less than significant, with the payment of library fees.*

*Impacts related to recreation are discussed in Section 4.10, Recreation.*

### **4.10.1 Law Enforcement**

**a. Setting.** Police services in the Santa Margarita Ranch area are provided by the San Luis Obispo County Sheriff's Department. The sheriff station that would be the first responder to the area is the North Station, located at 356 North Main Street, in the City of Templeton, approximately 17 miles north of the Santa Margarita Ranch. The station's area of responsibility consists of 1,400 square miles and provides service to the unincorporated communities of Shandon, San Miguel, Santa Margarita, California Valley, and Heritage Ranch. Calls for service, crime trends, and population figures are used to measure the adequacy of the Department's response in the area. The station is staffed with a commander, two sergeants, four senior deputies, approximately 18 patrol deputies, one rural crime deputy, and two legal clerks (Randy Johnson, Crime Prevention, Oral Communication, February 28, 2006). The Department is currently understaffed. Emergency response times for the Templeton North Station are dependent on where the patrol vehicles are in relation to a call, as well as the nature of the call. The estimated average response time to the Agricultural Residential Cluster Subdivision and Future Development Program is 20-30 minutes (Patrick Hedges, Sheriff-Coroner, Written Communications, February 21, 2006).



**b. Impact Analysis.**

**1. Methodology and Significance Thresholds.** Information on current population to deputy ratios and service demands was collected through the San Luis Obispo County Sheriff's Department. The proposed Agricultural Residential Cluster Subdivision and Future Development Program would result in potentially significant impacts if they would result in substantial adverse physical impacts associated with provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

**2. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact PS-1**     **The Agricultural Residential Cluster Subdivision would increase the population by approximately 302 residents. This may incrementally increase demands on the San Luis Obispo County Sheriff's Department. However, upon payment of public facility fees as a condition of project approval, the Agricultural Residential Cluster Subdivision would not substantially affect the personnel, equipment or organization of the Sheriff's Department. This is a Class III, less than significant impact.**

The current department ratio of the number of deputies to population is currently approximately 0.64 deputies per 1,000 citizens, which does not satisfy the department's goal of one deputy per 1,000 citizens (Patrick Hedges, February 21, 2006). The number of residents generated by the Agricultural Residential Cluster Subdivision was calculated by using the department's population generation factor of 2.7 people per unit for the 112 single-family units. Using this method, the proposed Agricultural Residential Cluster Subdivision would generate an estimated 302 residents. This population increase would result in the need for additional department service. However, responding to additional service calls would not significantly compromise response time goals, upon payment of public facility fees. As a condition of project approval, the applicant will be required to pay this fee at the time each building permit is issued.

Mitigation Measures. Beyond the required fees described in the impact statement, no additional mitigation measures are required.

Residual Impacts. Impacts would be less than significant.

**Agricultural Residential Cluster Subdivision Impact PS-2**     **The Agricultural Residential Cluster Subdivision lacks sufficient defensible space features that could result in impacts related to public safety at the site. Such safety concerns would be a Class II, significant but mitigable impact.**

The County requires new developments to employ defensible space concepts into site design and building specifications (e.g., appropriate setbacks, adequate lighting of walkways and parking lots, and the use of burglary-resistant hardware and fixtures in buildings). Because plans are



not yet available in sufficient detail, the proposed Agricultural Residential Cluster Subdivision does not contain such features. This could result in a relative decrease in public safety and associated increase in police department service calls. This would be a potentially significant impact.

Mitigation Measures. The following mitigation measure is required:

**Agricultural Residential Cluster Subdivision PS-2(a)**

**Defensible Space Features.** The applicant shall implement defensible space features, including security lighting, in common areas, subject to the review and approval of the Sheriff's Department. In addition, individual lot developers shall incorporate structural defensible space features, including burglary-resistant hardware, into individual building plans.

**Plan Requirements and Timing.** The applicant shall submit revised site plans depicting defensible space features to the County Sheriff's Department for review. These features shall be installed prior to occupancy clearance. **Monitoring.** The Sheriff's Department shall ensure compliance prior to occupancy clearance.

Residual Impacts. Implementation of the above mitigation measure would reduce impacts to a less than significant level.

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**3. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.10.1(b)(2) for a discussion of law enforcement impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development Program Impact PS-1**

**The Future Development Program would increase the population by approximately 1,388 residents. This may incrementally increase demands on the San Luis Obispo County Sheriff's Department. However, upon payment of public facility fees as a condition of approval of future development, the Future Development Program would not substantially affect the personnel, equipment or organization of the Sheriff's Department. This is a Class III, less than significant impact.**

As discussed in Section 4.10.1(b)(2) above, the current department ratio of the number of deputies does not meet the department's goal of one deputy per 1,000 citizens (Patrick Hedges, February 21, 2006). The Sheriff's Department is understaffed, with calls for service increasing (Patrick Hedges, February 21, 2006).





Buildout in accordance with the Future Development Program would result in a total of 514 dwelling units (402 units in addition to the Agricultural Residential Cluster Subdivision) and an associated population increase of 1,388 persons. This represents an approximate 104.8% increase in the existing population of the Santa Margarita community of approximately 1,325. This population increase would result in the need for additional department service. However, responding to additional service calls would not significantly compromise response time goals, upon payment of public facility fees. As a condition of project approval, the applicant will be required to pay this fee at the time each building permit is issued.

Mitigation Measures. Beyond the required fees described in the impact statement, no additional mitigation measures are required.

Residual Impacts. Impacts would be less than significant.

**Future Development Program Impact PS-2**

**The Future Development Program currently lacks sufficient defensible space features that could result in impacts related to public safety. Such safety concerns would be a Class II, significant but mitigable impact.**

At the time of development permit application, developers would be required to employ defensible space concepts into site design and building specifications (e.g., appropriate setbacks, adequate lighting of walkways and parking lots, and the use of burglary-resistant hardware and fixtures in buildings). A lack of defensible space features would result in a potentially significant impact.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure PS-2(a) (Defensible Space Features) would apply to all Future Development Program land uses. No additional mitigation is required.

Residual Impacts. With implementation of the required measure, impacts would be less than significant.

**4. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative police protection impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.

#### **4.10.2 Fire Protection**

**a. Setting.** Fire services in the Santa Margarita Ranch area are provided by the California Department of Forestry and Fire Protection (CDF)/San Luis Obispo County Fire



Department. The fire station that would provide first response to the Agricultural Residential Cluster Subdivision and Future Development Program is the Parkhill Fire Station (Station #40) located at 6140 Parkhill Road, approximately 3.2 miles northeast of the Agricultural Residential Cluster Subdivision site. Currently there is a 10 to 15 minute response time from this fire station to the Santa Margarita area (Robert Lewin, Fire Marshall, San Luis Obispo County Fire Department, Personal Communication, June 29, 2006). The Santa Margarita Volunteer Fire Department would provide mutual aid to the Ranch property from the station located at 22375 G Street, near the center of the community of Santa Margarita. However, the Agricultural Residential Cluster Subdivision and Future Development Program are outside of their jurisdiction. The Parkhill Fire Station is staffed with two professional firefighters and a volunteer force of up to 15 year round (Robert Lewin, Fire Marshall, San Luis Obispo County Fire Department, Written Communication, June 12, 2006). During the fire season, two additional fire engines are staffed with three professional fire fighters and a firefighting bulldozer is staffed with a third additional professional fire fighter (Robert Lewin, Fire Marshall, San Luis Obispo County Fire Department, Written Communication, June 12, 2006).

Several recent historical fires have occurred in the vicinity, including the Las Pilitas Fire, which burned about 75,000 acres in 1985, the Highway 41 Fire, which burned about 49,000 acres in 1994, and the Highway 58 Fire, which burned about 107,000 acres in 1996.

According to the San Luis Obispo County Safety Element, the Santa Margarita Ranch property is in a zone of high to very high fire hazard. The majority of the property, including the entire Agricultural Residential Cluster Subdivision site, is located in a high fire hazard severity zone (SLO County Safety Element, 1999). The southwestern portion of the Ranch property, in the Santa Lucia Mountains, is designated a very high fire hazard severity zone. This designation is due primarily to the chaparral vegetation and steep slopes in this portion of the program site (SLO County Safety Element, 1999). Vegetation types throughout the remainder of the Ranch property, including oak and pine forest, oak savannah, open grasslands, chaparral and riparian areas, are also highly susceptible to generation of wildland fire. The topography of the Ranch varies, ranging from gently to moderately sloping areas to deeply incised drainage channels. The intermixing of native vegetation, steep slopes, and difficult access conditions have produced a Wildland Urban Interface (WUI) in the Santa Margarita area, resulting in an increased risk of wildfire-related hazards (SLO County Safety Element, 1999).

## **b. Impact Analysis.**

**1. Methodology and Significance Thresholds.** Information on current service demands and available staff and equipment was collected through the County Fire Department. All plans as submitted to the County by the applicant were reviewed.

The Agricultural Residential Cluster Subdivision and Future Development Program would result in potentially significant impacts if they would result in substantial adverse physical impacts associated with provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.



According to the Uniform Fire Code, access roads must have an unobstructed by parking minimum width of 20 feet, and maximum allowable grades are 16%. Cul-de-sac diameters must equal at minimum, 80 feet in diameter, with a turning radius that meets County standards. Two means of access are required unless development is considered fire safe to the extent that occupants may shelter in place.

## **2. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact PS-3**      **The Agricultural Residential Cluster Subdivision would increase the number of residents served by the CDF/County Fire Department and is located within a high fire hazard area. The Agricultural Residential Cluster Subdivision may substantially affect the personnel, equipment or organization of the Fire Department which could impede emergency access to the proposed residences. This would be a Class II, significant but mitigable, impact.**

The introduction of Agricultural Residential Cluster Subdivision residents into a high fire hazard area would be a potentially significant impact. According to the San Luis Obispo County Safety Element, the Agricultural Residential Cluster Subdivision would introduce residents into an area that has a high potential for wildland fire hazards, thereby increasing the burden on fire protection services. The fire hazard potential of an area is determined by the relative amounts of fuel loading, fire weather, and slope. Fuel loading refers to the age, type, and density of vegetation in an area. The fire weather index considers the number of hot, dry days. Slope refers to the topography of an area, which may hinder access for fire fighting efforts. Slope is also important because fire travels faster on steep slopes.

The Agricultural Residential Cluster Subdivision site is located in an area that may present emergency access difficulty due to the distance of the site from the nearest fire station. Primary access to the Agricultural Residential Cluster Subdivision site will be provided by an existing access road (hereafter the east driveway), located approximately 750 feet west of the Calf Canyon Road (SR 58)/West Pozo Road intersection. Phase Two of the development includes the addition of a secondary access point from Highway 58. The site access from the east driveway would be located approximately 3.2 miles from the County/CDF Parkhill Fire Station (Station #40). The Santa Margarita Volunteer Fire Department would provide mutual aid to the site from the station located at 22375 G Street in the community of Santa Margarita, approximately 1.7 miles from the east driveway access point to the Agricultural Residential Cluster Subdivision. However, the Agricultural Residential Cluster Subdivision is outside of their jurisdiction. Both access roads would be gated. The estimated average response time to the Agricultural Residential Cluster Subdivision area is 10 minutes (Robert Lewin, Fire Marshall, Personal Communication, June 29, 2006). Development of the Agricultural Residential Cluster Subdivision site with the proposed residential uses would incrementally increase demand for fire protection and emergency response services beyond current conditions. In addition, the Agricultural Residential Cluster Subdivision would be located outside the acceptable response time radius of the nearest Fire station.

The development area is located near moderately sloped (30% slope) hills which are directly to the southwest. Such development would not be substantially at risk from rapid fire movement



because of the relatively low fuel load (grasses as opposed to dense brush) and the generally downhill location of the development relative to the hill (fire generally travels more quickly uphill than down). In addition, the development area would remove grassland that otherwise may be a fire hazard.

As conditions of approval, the proposed project would be required to maintain a specific gallon per minute fire flow to firefighters during an emergency based on Public Works and the Fire Department specifications. Fire flow is defined as the amount of water required, above and beyond domestic needs, to extinguish a fire in a structure and which shall be available during peak water demand periods. The applicant would be required to comply with the most recent Uniform Fire Code and implement County fire protection standards as a condition of project approval. The design of driveways is required to meet County standards to ensure adequate emergency access to the site. The proposed road system is required to allow unhindered Fire Department access and maneuvering during emergencies. In addition, the placement of fire hydrants is required to be designed with the guidance of the Fire Department.

The proposed Agricultural Residential Cluster Subdivision would introduce residents into a high fire hazard area, thereby increasing the burden on fire protection services. The introduction of Agricultural Residential Cluster Subdivision residents into a fire hazard area would be a potentially significant impact.

Mitigation Measures. The CDF/San Luis Obispo County Fire Department estimates that the Agricultural Residential Cluster Subdivision would represent an incremental contribution to the need for an additional fire station in the vicinity of the community of Santa Margarita. Construction of an additional fire station involves land acquisition, building construction and furnishings, as well as being equipped with a new engine and other required vehicles. An additional two professional fire fighters would also be required to staff this facility at all times in order to maintain the County's service standard (Robert Lewin, Fire Marshall, Personal Communication, June 29, 2006).

In accordance with CDF/San Luis Obispo County Fire Department recommendations, the following mitigation measures are required:

**Agricultural Residential  
Cluster Subdivision  
PS-3(a)**

**Fire Station.** The applicant shall provide for the construction of a new CDF/San Luis Obispo County Fire Station to be located near the Agricultural Residential Cluster Subdivision site either through the dedication of land or through the payment of in lieu fees, as determined in consultation with the Public Works Department and CDF/San Luis Obispo County Fire Department.

**Plan Requirements and Timing.** Prior to issuance of occupancy permits for the Agricultural Residential Cluster Subdivision development, the applicant shall dedicate land to be used for the future construction of a CDF/San Luis Obispo County Fire Station or shall pay in lieu fees to fund such construction, in consultation with the County Public Works Department and CDF/San Luis Obispo County Fire Department. **Monitoring.**



Public Works and the Fire Department shall review the offer for dedication or payment of in lieu fees prior to the issuance of occupancy permits.

**Agricultural Residential  
Cluster Subdivision  
PS-3(b)**

**On-Site Fire Protection.** Road widths and circulation, as well as the placement of fire hydrants and installation of automatic sprinkler systems, shall be designed with the guidance of the Fire Department. A road system that allows unhindered Fire Department access and maneuvering during emergencies shall be provided. Specifically, the following measures are required:

- Agricultural Residential Cluster Subdivision roads must be an all weather surface at least 20 feet in width, unobstructed by parking. Cul-de-sacs and turnouts must be to Fire Department standards. As the on-site roads are proposed to be a private system, there must be on-going, legally binding provisions in effect to maintain the roads to Fire Department approval.
- Road grades on all roads shall not exceed 16%, per the Uniform Fire Code.
- House numbers and street signs shall be lighted to County standards so that emergency vehicles including police and ambulances can locate residences in the event of any emergency.
- All fire apparatus access roads and driveways shall be designed and maintained to support the imposed loads of 20 tons at 25 mph, and shall be provided with a surface so as to provide all-weather driving capabilities and maintain 90% compaction.

**Plan Requirements and Timing.** Prior to issuance of grading permits, the applicant shall submit revised plans subject to the review and approval by CDF/County Fire Department which illustrate the roadways and site access, and the placement of fire hydrants throughout the site. Primary access shall be installed during initial grading, and hydrants shall be installed prior to occupancy clearance. **Monitoring.** The Fire Department shall ensure compliance prior to occupancy clearance.

**Agricultural Residential  
Cluster Subdivision  
PS-3(c)**

**Fire/Vegetation Management Plan.** The applicant shall prepare and submit a Fire/Vegetation Management Plan to the Fire Department that will meet the following requirements:

- The plan must set forth requirements to assure ongoing



protection of all structures and roads, both prior to and after lot sales.

- The plan shall require 100 feet of clearance from chaparral brush to structures throughout the development, and 30 feet of clearance from grasslands to structures throughout the development.
- Vegetation within the first 30 feet of all structures must be strictly irrigated and controlled, with specific shrub species eliminated. No conifer (except Monterey pine, single specimen), eucalyptus, juniper, cypress, pampas grass, acacia, or palm trees shall be allowed within the 100-foot zone. Coastal live oak (*Quercus* sp.), California sycamore, Toyon and shrubs/trees approved by the County Fire Department will be acceptable within the 100-foot zone as well as the 30-foot zone.
- The plan shall outline vegetation management standards within the 30-foot buffer zone, such as:
  - Grasses and groundcovers shall be maintained at no more than 18 inches in height on slopes that require erosion control measures. Grasses shall be mowed elsewhere.
  - Trees must be limbed up to one third of their height to a maximum of 10 feet.
  - Flammable native shrubs shall not be planted or allowed to grow in continuous masses. Small clusters will be allowed as long as the minimum space between clusters is observed.
- The Fire/Vegetation Management Plan must clearly state exactly what management practices must be accomplished, date of annual compliance, and responsibility for cost of compliance.
- The plan must also include a Wildland Emergency Response check list (approved by County Fire Department) to be made available to all residents.

**Plan Requirements and Timing.** A Fire/Vegetation Management Plan shall be submitted to the Fire Department and Public Works Department for review and approval prior to issuance of grading permits. **Monitoring.** The Fire Department shall inspect to verify landscaping is in compliance with the plan



and shall monitor landscape maintenance annually.

**Agricultural Residential  
Cluster Subdivision  
PS-3(d)**

**Structural Safeguards.** Upon implementation of the Agricultural Residential Cluster Subdivision, individual property developers shall provide the following structural safeguards:

- *Class A Roofs.* All Agricultural Residential Cluster Subdivision structures shall have non-wood Class A roofs, with the ends of tile blocked, spark arresters visible from the street, proper vent screens, and non-combustible gutters and down spouts. No combustible paper in or on attic insulation shall be allowed.
- *Design of Accessory Features.* Decks, gazebos, patio covers, and fences, must not overhang slopes and must be of one-hour fire retardant construction. Front doors shall be solid core, minimally 1 ¾ inch thick. Garage doors shall be noncombustible.
- *Power Lines.* All new power lines shall be installed underground in order to prevent fires caused by arcing wires.
- *Fire Walls.* Structures along the perimeter or exposed to internal open space areas shall have one hour rated exterior fire walls, with exteriors walls being more than 2 inches thick, and must not contain vinyl or plastic window frames or rain gutters or down spouts.

**Plan Requirements and Timing.** Where appropriate, all of the structural safeguards described above shall be graphically depicted on grading and building plans submitted prior to land use permit approval. Measures shall be installed prior to occupancy. **Monitoring.** Fire Department inspectors shall inspect the site prior to issuance of the occupancy permit for each phase and annually to ensure compliance.

Residual Impacts. With implementation of the above measures, impacts on fire protection services would be less than significant. Since the location of the fire station has not been determined, impacts associated with implementation of the fire station would be too speculative to evaluate at this time. Environmental impacts associated with construction of a future fire station would be evaluated in a separate environmental document prepared pursuant to the California Environmental Quality Act (CEQA).



**3. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.10.2(b)(2) for a discussion of fire protection impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development Program Impact PS-3**

**The Future Development Program would increase the number of residents and occupants served by the CDF/County Fire Department and is located within in a high to very high fire hazard area. The increase may substantially affect the personnel, equipment or organization of the Fire Department which could impede emergency access to the proposed residences. This would be a Class II, *significant but mitigable*, impact.**

According to the San Luis Obispo County Safety Element, the majority of the Ranch property is located in a high fire hazard area, while the southwestern portion of the Ranch property, in the Santa Lucia Mountains, is designated a very high fire hazard severity zone. This designation is due primarily to the chaparral vegetation and steep slopes in this portion of the program site (SLO County Safety Element, 1999). The Future Development Program would introduce residents and occupants into the area, thereby increasing the burden on fire protection services.

Similar to the Agricultural Residential Cluster Subdivision alone, Future Development Program land uses may experience emergency access difficulty due to the distance from the nearest fire station. The estimated average response time to Future Development Program components is 15 minutes (Robert Lewin, Fire Marshall, Personal Communication, June 29, 2006). In addition, buildout of the Future Development Program would increase demand for fire protection and emergency response services over current conditions.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure PS-3(a) (Santa Margarita Ranch Fire Station) requires the dedication of land for a new CDF/San Luis Obispo County Fire Station in the Santa Margarita Ranch area. The construction and staffing of a fire station in this area would improve response times to Future Development Program land uses to 5 minutes (Robert Lewin, Fire Marshall, Personal Communication, June 29, 2006). However, because this measure requires the dedication of land only, Future Development Program land uses may be constructed prior to construction and operation of the station. Therefore, the introduction of Future Development Program residents and occupants into a high to very high fire hazard area would be a potentially significant impact. Therefore, Agricultural Residential Cluster Subdivision measures PS-3(b) (On-Site Fire Protection), PS-3(c) (Fire/Vegetation Management Plan), and PS-3(d) (Structural Safeguards) would similarly apply to the Future Development Program. No additional mitigation is required.

Residual Impacts. With implementation of the required measures, impacts related to fire protection services would be less than significant.

**4. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore,





cumulative fire protection impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.

### 4.10.3 Schools

**a. Setting.** The Atascadero Unified School District (AUSD) provides elementary, junior high, and high school services to the Santa Margarita area. Santa Margarita Elementary School (grades K-6), located at 22070 H Street in the community of Santa Margarita, Atascadero Junior High School (grades 7-8), located at 6501 Lewis Avenue in Atascadero, and Atascadero High School (grades 9-12), located at One High School Hill in Atascadero, would accommodate students from the Agricultural Residential Cluster Subdivision and Future Development Program.

Table 4.10-1 shows current enrollments and capacities within these schools. As shown in Table 4.10-1, Santa Margarita Elementary School, Atascadero Junior High School, and Atascadero High School maintain surplus enrollment capacity. Santa Margarita Elementary School has an enrollment of 291 students and Atascadero Junior High School has an enrollment of 705 students. Atascadero High School serves grades nine through twelve and has a current enrollment of 1,644 students.

Operating revenue provided to school districts is funded by local property tax revenue accrued at the state level and then allocated to each school district based on the average daily student attendance. However, physical improvements to accommodate new students come primarily from assessed fees on development projects since state funding for capital improvements typically lags behind enrollment growth.

**Table 4.10-1. Current Enrollment and Capacities of Schools in Atascadero Unified School District**

<b>School</b>	<b>Operating Capacity</b>	<b>Current Enrollment</b>	<b>% Capacity Utilization</b>
Santa Margarita Elementary School	358	291	81%
Atascadero Junior High School	1,086	705	65%
Atascadero High School	1,824	1,644	90%

*Source:* James L. Stecher, Superintendent, Atascadero Unified School District, Written Communication, February 27, 2006 and March 6, 2006.

### **b. Impact Analysis**

**1. Methodology and Significance Thresholds.** Pursuant to the State CEQA Guidelines, the Agricultural Residential Cluster Subdivision and Future Development Program would result in potentially significant impacts if they would result in substantial adverse physical impacts associated with provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could



cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives. Therefore, the evaluation of school impacts under CEQA is limited to those effects with the potential to result in physical impacts, such as the need for construction of new classrooms or placement of portable classrooms.

The need for new classrooms is evaluated based on the maximum student per classroom loading standards of the AUSD. Student generation rates from residential units were provided by the school district and used to estimate the number of students generated by the Agricultural Residential Cluster Subdivision and the Future Development Program.

**2. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact PS-4**      **The Agricultural Residential Cluster Subdivision would generate an estimated total of 48 elementary, junior high and high school students. Students generated by the Agricultural Residential Cluster Subdivision would not increase students at Santa Margarita Elementary School, Atascadero Junior High School, or Atascadero High School beyond the designated capacity. Impact to schools is Class III, less than significant.**

Table 4.10-2 describes the projected student enrollment at Santa Margarita Elementary School, Atascadero Junior High School, and Atascadero High School, based on student generation factors, estimated residential development, residential absorption, fertility rates, cohort survival factors, and inter-district transfers. The AUSD utilizes a student generation factor of 0.2177 per dwelling unit for elementary and secondary education levels. The elementary level includes kindergarten through sixth grade; the secondary level includes seventh through twelfth grades.

**Table 4.10-2 Atascadero Unified School District Generation Factors and Student Generation**

<b>Grade Level</b>	<b>Generation Factor</b>	<b>Number of Students Generated from 112 single family units</b>
Elementary (grades K-6)	0.2177	24
Secondary (grades 7-12)	0.2177	24
<b>Total</b>		<b>48</b>

*Source:* James L. Stecher, Superintendent, Atascadero Unified School District, Written Communication, February 27, 2006.

The AUSD generation factors indicate that a total of 48 students will be generated from the Agricultural Residential Cluster Subdivision. Table 4.10-3 shows the capacity utilization with the proposed Agricultural Residential Cluster Subdivision.



**Table 4.10-3. Post-Agricultural Residential Cluster Subdivision Student Enrollment of Atascadero Unified School District**

Atascadero Unified School District	Operating Capacity	Current Enrollment	Current % Capacity Utilization	Students Generated from the Agricultural Residential Cluster Subdivision	Enrollment with the Agricultural Residential Cluster Subdivision	% Capacity Utilization with Project
Santa Margarita Elementary School	358	291	81%	24	315	88%
Atascadero Junior High School	1,086	705	65%	8	713	66%
Atascadero High School	1,824	1,644	90%	16	1,660	91%

Source: James L. Stecher, Superintendent, Atascadero Unified School District, Written Communication, Feb. 27, 2006 and Mar. 6, 2006.

Based on current AUSD loading standards, Santa Margarita Elementary School, Atascadero Junior High School, and Atascadero High School could accommodate students generated by the Agricultural Residential Cluster Subdivision.

Implementation of the Agricultural Residential Cluster Subdivision would require payment of full development fees to the Atascadero Unified School District. These fees would contribute funding for new school facilities for the students potentially generated by the Agricultural Residential Cluster Subdivision. Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization."

Mitigation Measures. The applicable State-mandated school impact fees would be collected at the time of building permit issuance. No mitigation beyond this standard requirement is required.

Residual Impacts. Impacts would be less than significant.

**3. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.10.3(b)(2) for a discussion of school impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development Program Impact PS-4**

**The Future Development Program would generate an estimated 224 elementary, middle and high school students. Students generated by the residential components of the Future Development Program would result in overcrowded conditions at Santa Margarita Elementary School. Impacts to this school are Class II, significant but mitigable.**



Table 4.10-4 describes the projected student enrollment at Santa Margarita Elementary School, Atascadero Junior High School, and Atascadero High School that may result from buildout of the Future Development Program. As discussed in Section 4.10.3(b)(2) above, the AUSD utilizes a student generation factor of 0.2177 per dwelling unit for elementary and secondary education levels.

**Table 4.10-4 Atascadero Unified School District Generation Factors and Student Generation**

Grade Level	Generation Factor	# of Students Generated from residential units
Agricultural Residential Cluster Subdivision		
Elementary (grades K-6)	0.2177	24
Secondary (grades 7-12)	0.2177	24
Remaining Future Development Program Residential Uses		
Elementary (grades K-6)	0.2177	88
Secondary (grades 7-12)	0.2177	88
<b>Total</b>		<b>224</b>

Source: James L. Stecher, Superintendent, Atascadero Unified School District, Written Communication, February 27, 2006.

The AUSD generation factors indicate that a total of 224 students will be generated from buildout of the Future Development Program. Table 4.10-5 shows the capacity utilization with the Future Development Program.

**Table 4.10-5. Post-Future Development Program Student Enrollment of Atascadero Unified School District**

Atascadero Unified School District	Operating Capacity	Current Enrollment	Current % Capacity Utilization	Students Generated from the Future Development Program	Enrollment with the Future Development Program	% Capacity Utilization with Project
Santa Margarita Elementary School	358	291	81%	112	403	113%
Atascadero Junior High School	1,086	705	65%	37	742	68%
Atascadero High School	1,824	1,644	90%	75	1,719	94%

Source: James L. Stecher, Superintendent, Atascadero Unified School District, Written Communication, February 27, 2006 and March 6, 2006.

Based on current AUSD loading standards, Atascadero Junior High School and Atascadero High School could accommodate students generated by the Future Development Program. However, Santa Margarita Elementary School would require two additional classrooms to accommodate students generated by the Future Development Program.

Mitigation Measures. Agricultural Residential Cluster Subdivision conditions of approval would also apply to all Future Development Program land uses. The following additional mitigation measure is also required to reduce impacts to schools:

**Future Development Program PS-4(a)**

**Buildout Date Notification.** Any project applicant pursuant to the Future Development Program, subsequent to the Agricultural Residential Cluster Subdivision, shall work



cooperatively with the Atascadero Unified School District regarding the timeframe of expected project completion, primarily for the purpose of notifying the district in advance to assist in their long-range planning efforts.

**Plan Requirements and Timing.** Applicants under the Future Development Program will notify the Atascadero Unified School District of the project timeline in advance to assist in their long-range planning effort. **Monitoring.** Planning and Development shall ensure the applicant notifies the Atascadero Unified School District prior to approval of planning entitlements.

Residual Impacts. Compliance with applicable conditions of approval and the above mitigation measure would reduce impacts to a less than significant level.

**4. Cumulative Impacts.** Cumulative development in the Santa Margarita vicinity is projected to decrease enrollment in the Atascadero Unified School District. The capacity utilization of Santa Margarita Elementary School, Atascadero Junior High School and Atascadero High School under cumulative conditions is described in Table 4.10-6.

**Table 4.10-6. Cumulative Projected Student Enrollment of Atascadero Unified School District**

Atascadero Unified School District	Operating Capacity	Current Enrollment	Projected Enrollment, 2010	Students Generated from Future Development Program buildout	Enrollment with Future Development Program Plus Cumulative Development	% Capacity Utilization (Cumulative)
Santa Margarita Elementary School	358	291	291*	112	403	113%
Atascadero Junior High School	1,086	705	653	37	690	64%
Atascadero High School	1,824	1,644	1,547	75	1,622	89%

*Source: John Rodgers, Superintendent, Atascadero Unified School District, Written Communication, October 10, 2006 and Jackie Martin, Assistant Superintendent of Business Services, Atascadero Unified School District, Oral Communication, October 11, 2006.*

*\* Projections are not available for individual Elementary Schools. Enrollment is assumed to be constant over time due to the built-out nature of the community.*

As shown in Table 4.10-6, enrollment at Atascadero Junior High School and Atascadero High School is projected to decrease under the cumulative condition. These schools could accommodate students generated by the Agricultural Residential Cluster Subdivision and Future Development Program in addition to cumulative development.

According to the Atascadero Unified School District, overall elementary-level enrollment in the District is projected to decrease by approximately 17% between 2005 and 2010 (John Rodgers, Superintendent, Atascadero Unified School District, Written Communication, October 10, 2006). However, projections are not available for individual elementary schools. As a reasonable worst case scenario given the built-out nature of the community served by the school, baseline 2010 enrollment at Santa Margarita Elementary School is assumed to remain constant.



Therefore, enrollment at Santa Margarita Elementary School is projected to incrementally increase under cumulative conditions. Measures to reduce these impacts include requiring the full development fees that may be charged to a developer and notification to the school districts. Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees on a project-by-project basis would fully mitigate the costs incurred by an enrollment increase from residential projects. With implementation of full development fees, cumulative impacts to schools would be less than significant.

#### **4.10.4 Solid Waste**

**a. Setting.** Through a franchise agreement with the County, a private Company (Mid-State Solid Waste and Recycling) is responsible for solid waste collection service in the Santa Margarita Ranch area. Solid waste is collected and disposed of at the Chicago Grade Landfill, located approximately eight miles north of the community of Santa Margarita, on Homestead Road in Templeton. The landfill is a Class III facility owned and operated by Chicago Grade Landfill, Inc. The landfill accepts agricultural, asbestos, construction/demolition, contaminated soil, dead animals, food wastes, green materials, industrial, metals, mixed municipal, and tire waste. The landfill has a remaining capacity of 1,833,176 cubic yards (as of January 2004) and a permitted peak throughput of 500 tons per day with a permitted traffic volume of 240 vehicles per day Sunday through Friday and 280 vehicles on Saturday (Jeff Hackett, California Integrated Waste Management Board, Email Correspondence, May 9, 2006). On average, approximately 273 tons per day are accepted at the Chicago Grade Landfill (Jeff Hackett, California Integrated Waste Management Board, Email Correspondence, July 24, 2006).

This landfill is estimated to have sufficient capacity until 2018 (California Integrated Waste Management Board, SWIS Database, 2006). However, the proposed Chicago Grade Landfill Expansion Development Plan would increase the disposal footprint of the Chicago Grade Landfill from 44.3 acres to 82.74 acres and increase the permitted facility boundary from 45.4 acres to 189 acres (Jeff Hackett, California Integrated Waste Management Board, Email Correspondence, May 9, 2006). The proposed landfill expansion would extend the estimated lifespan of the facility to the year 2045. No change in the daily or annual intake of solid waste or vehicle limits is proposed as part of the landfill expansion.

Existing development within unincorporated San Luis Obispo County generated an estimated 225,918 tons of solid waste in 2000, of which an estimated 72,294 tons (32%) was generated by residential uses and 153,624 tons (68%) was generated by nonresidential uses (CIWMB, May 8, 2006). Residential waste in the County is primarily composed of organic materials (e.g., food, yard waste) and paper products. Solid waste data specific to the community of Santa Margarita is not available.

#### **b. Impact Analysis**

**1. Methodology and Significance Thresholds.** Solid waste generated by the Agricultural Residential Cluster Subdivision and Future Development Program was estimated using rates from the California Integrated Waste Management Board (CIWMB) Solid Waste Characterization Database (May 8, 2006). The California Integrated Waste Management Act of 1989 (AB 939, Chapter 1095) required that net solid waste disposal be reduced 50 percent by the



year 2000. To achieve this, each county and city was required to develop a Source Reduction and Recycling Element (SRRE) that provides strategies for achieving the reductions required by the California Integrated Waste Management Act of 1989. The Agricultural Residential Cluster Subdivision and Future Development Program would have a potentially significant impact if they are not served by a landfill with sufficient permitted capacity to accommodate the solid waste disposal needs. In addition, the Agricultural Residential Cluster Subdivision and Future Development Program would have a potentially significant impact if they did not comply with federal, state, and local statutes and regulations related to solid waste.

## **2. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact PS-5**      **The proposed Agricultural Residential Cluster Subdivision would generate approximately 112 tons of solid waste per year. The solid waste disposal services and landfill that would serve the Agricultural Residential Cluster Subdivision have adequate capacity to accommodate the waste generated by the Agricultural Residential Cluster Subdivision. However, the Agricultural Residential Cluster Subdivision would result in the use of part of the limited remaining capacity of the landfill. Therefore, solid waste generation would be a Class II, significant but mitigable impact.**

Solid waste generation from residential projects is a function of the number of homes, household size, and per capita waste generation. The California Integrated Waste Management Board (CIWMB) estimates that residential uses in the County generate an average of 0.37 tons per resident per year (CIWMB, Solid Waste Characterization Database, May 8, 2006). Based on a factor of 2.7 persons per dwelling unit, the 112-unit Agricultural Residential Cluster Subdivision would be expected to generate approximately 302 residents. Therefore, prior to implementation of any recycling programs, at buildout the proposed Agricultural Residential Cluster Subdivision would generate approximately 604 pounds per day or 112 tons per year of waste. This amount of solid waste generated represents a small percentage (i.e., 0.1%) of the permitted daily waste acceptance (i.e., 500 tons per day) and remaining capacity (i.e., 1,833,176 cubic yards) at the landfill, but would nevertheless hasten the utilization of the remaining capacity at the landfill.

Agricultural Residential Cluster Subdivision implementation would not result in any change to service in the area or any significant changes to the disposal operations. The proposed Agricultural Residential Cluster Subdivision would not create the need for any special solid waste disposal handling and would therefore comply with all statutes and regulations related to solid waste. However, Agricultural Residential Cluster Subdivision construction and occupancy would hasten the utilization of the remaining Chicago Grade Landfill capacity, which would be a potentially significant impact.

Mitigation Measures. To promote solid waste reduction and recycling, the following mitigation measures are required:



**Agricultural Residential  
Cluster Subdivision  
PS-5(a)**

**Construction Solid Waste Minimization.** During the construction phases of the Agricultural Residential Cluster Subdivision, the following mitigation measures shall be implemented to reduce solid waste generation to the maximum extent feasible:

- Prior to construction, the contractor shall arrange for construction recycling service with a waste collection provider. Roll-off bins for the collection of recoverable construction materials shall be located on-site. The applicant, or authorized agent thereof, shall arrange for pick-up of recycled materials with a waste collection provider or shall transport recycled materials to the appropriate service center. Wood, concrete, drywall, metal, cardboard, asphalt, soil, and land clearing debris may all be recycled.
- The contractor shall designate a person to monitor recycling efforts and collect receipts for roll-off bins and/or construction waste recycling. All subcontractors shall be informed of the recycling plan, including which materials are to be source-separated and placed in proper bins.
- The contractor shall use recycled materials in construction wherever feasible.
- The above construction waste recycling measures shall be incorporated into the construction specifications for the contractor.

**Plan Requirements and Timing.** The applicant shall submit a Construction Solid Waste Minimization Plan to the Planning Department and Public Works Department for review and approval prior to issuance of the Land Use Permit. **Monitoring.** The Planning Department shall site inspect as required under the monitoring plan.

**Agricultural Residential  
Cluster Subdivision  
PS-5(b)**

**Recycling Plan.** A long term plan for recycling shall be developed by the applicant with specific collection goals for each recyclable material category and a method to track quantities of materials. The goal shall be a 50% waste stream diversion. The applicants shall provide this plan prior to final occupancy. The plan shall include, at a minimum upon concurrence of the Public Works Department, the following items:

- Description of all activities which shall reduce solid waste





generation by a minimum of 50%;

- Methodology for monitoring activities for program effectiveness/efficiency;
- Compilation and provision of quarterly diversion updates/reports to the County 30 days after the end of each calendar quarter listing the amount of wastes disposed and recycled by tons;
- Listing of solid waste/recycling/service providers utilized to provide recycling/composting/waste reduction programs; and
- Annual evaluation of program submitted to the Public Works Department.

**Plan Requirements and Timing.** The recycling plan shall be submitted by the applicant for review and approval to the Planning and Building Department and Public Works Department prior to final occupancy. **Monitoring.** Planning and Building shall review the recycling plan prior to issuance of building permits and inspect units prior to occupancy clearance.

Residual Impacts. With implementation of the above measures, impacts related to solid waste generation would be less than significant.

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**3. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.10.4(b)(2) for a discussion of solid waste impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development Program Impact PS-5**

**The Future Development Program would generate approximately 1,121.6 tons of solid waste per year, from residential and commercial uses. The solid waste disposal services and landfill that would serve the Future Development Program have adequate capacity to accommodate the waste generated by the Future Development Program. However, the Future Development Program would result in the use of part of the limited remaining capacity of the landfill. Therefore, solid waste generation would be a Class II, significant but mitigable impact.**

Solid waste generation from residential uses is a function of per person waste generation. Construction activities and new residents generated by the Future Development Program



would produce solid waste beyond existing conditions. The California Integrated Waste Management Board (CIWMB) estimates that residential uses in the County generate an average of 0.37 tons per resident per year (CIWMB, Solid Waste Characterization Database, May 8, 2006). Based on a factor of 2.7 persons per dwelling unit, the 514 residential units associated with Future Development Program buildout would be expected to generate approximately 1,388 residents. Therefore, potential residential uses would generate approximately 2,814 pounds of solid waste per day or 513.6 tons of solid waste per year.

Commercial use solid waste generation is based on a per employee generation factor. The California Integrated Waste Management Board (CIWMB) estimates that nonresidential uses in the County generate an average of 9.8 pounds of waste per employee per day (CIWMB, Solid Waste Characterization Database, 2006). Using a factor of 500 building square feet per worker for commercial uses, the estimated 157,250 square feet of commercial/retail development would generate an estimated 315 jobs (refer to Table 2-5 in Section 2.0, *Project Description*). In addition, the livestock sales yard is assumed to generate ten jobs, while each of the three places of worship is assumed to generate five jobs. Therefore, the Future Development Program is estimated to generate a total of 340 new jobs. Therefore, the commercial components of the Future Development Program would generate approximately 3,332 pounds of waste per day or 608 tons per year, prior to implementation of any recycling programs. Therefore, a total of 6,146 pounds of waste per day or 1,121.6 tons of waste per year will be generated by all uses (commercial and residential) in the Future Development Program. Based on the Chicago Grade Landfill conversion factor of 1,400 pounds of waste per cubic yard, this would amount to 1,602 cubic yards per year (Jeff Hackett, California Integrated Waste Management Board, Email Correspondence, July 24, 2006). This amount of solid waste generated represents a relatively small percentage (i.e., 0.09%) of the landfill's remaining capacity.

Future Development Program implementation would not result in any change to service in the area or any significant changes to the disposal operations. The Future Development Program would not create the need for any special solid waste disposal handling and would therefore comply with all statutes and regulations related to solid waste. However, Future Development Program construction and occupancy would hasten the utilization of the remaining Chicago Grade Landfill capacity, which would be a potentially significant impact.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures PS-5(a) (Construction Solid Waste Minimization) and PS-5(b) (Recycling Plan) would also apply to Future Development Program land uses. The following additional mitigation measure is also required to reduce impacts related to solid waste generation:

**Future Development Program PS-5(a)**

**Non-Residential Recycling.** All Future Development Program commercial development shall include mixed office paper, cardboard, scrap metal, newspaper, glass and plastic bottles, and metal cans (aluminum and steel) recycling receptacles.

**Plan Requirements and Timing.** A non-residential recycling plan shall be submitted for review and approval to the Planning and Building Department and Public Works Department prior to final occupancy. **Monitoring.** Planning and Building shall



review the recycling plan prior to issuance of building permits and inspect units prior to occupancy clearance.

Residual Impacts. With implementation of the above measures, impacts related to solid waste generation would be less than significant.

**4. Cumulative Impacts.** Cumulative buildout of the area would increase solid waste generation, thereby reducing the lifespan of the Chicago Grade landfill that serves the area. This landfill is estimated to have sufficient capacity until 2018 (California Integrated Waste Management Board, SWIS Database, 2006). However, the proposed Chicago Grade Landfill Expansion Development Plan would increase the disposal footprint of the Chicago Grade Landfill from 44.3 acres to 82.74 acres and increase the permitted facility boundary from 45.4 acres to 189 acres (Jeff Hackett, California Integrated Waste Management Board, Email Correspondence, May 9, 2006). The proposed landfill expansion would extend the estimated lifespan of the facility to the year 2045, although no change in the daily or annual intake of solid waste or vehicle limits is proposed.

The Agricultural Residential Cluster Subdivision and Future Development Program would contribute approximately 2,361 tons of waste per year to the Chicago Grade Landfill. Based on the Chicago Grade Landfill conversion factor of 1,400 pounds of waste per cubic yard, this would amount to 3,373 cubic yards per year, or 0.18% of the landfill's remaining capacity (Jeff Hackett, California Integrated Waste Management Board, Email Correspondence, July 24, 2006). This amount of solid waste would not be sufficient to require an expansion of the existing facilities beyond that which is already proposed. Therefore, the contribution of the Agricultural Residential Cluster Subdivision and Future Development Program to cumulative solid waste impacts would be less than significant.

#### **4.10.5 Libraries**

**a. Setting.** The community of Santa Margarita is served by the Santa Margarita Library, a branch of the San Luis Obispo City-County Library. The library is located at 9630 Murphy Avenue in Santa Margarita and is open from 12:00 noon to 6:00 pm Tuesday through Thursday. The Santa Margarita Library has been serving the community since 1923 in various locations, and moved to its current location in 1996.

The Santa Margarita Library primarily serves residents within the community of Santa Margarita, although library staff indicate that residents from surrounding areas, including Atascadero and Templeton, also utilize the library (Debra Jurey, Branch Manager, Personal Communication, August 23, 2007). Approximately 1,325 people reside in the primary service area. The library structure is 900 square feet and houses approximately 10,300 items (Melody Mullis, San Luis Obispo City-County Library Administration, Personal Communication, August 23, 2007). Library staffing includes two part time employees equaling 0.875 full-time positions, five volunteers, and 14 members of the Friends of the Library organization (Debra Jurey, August 23, 2007).

The San Luis Obispo City-County Library uses a planning ratio of 0.7 square feet of library space per capita for communities with less than 10,000 residents (Melody Mullis, August 23,



2007). This ratio is used to evaluate the library's ability to accommodate the library service area's current and projected population. Using this ratio, the 900 square foot library is presently designed to accommodate a service area that would include approximately 1,286 persons. This indicates that the library is not large enough to accommodate the existing service area population of approximately 1,325, requiring an additional 28 square feet to accommodate the existing service area population. However, it should be noted that this standard does not address changing technologies that allow for a wide dispersal of information through other means, including the Internet. As personal computers become less expensive and more powerful, access to information will continue to improve.

## **b. Impact Analysis**

**1. Methodology and Significance Thresholds.** The Agricultural Residential Cluster Subdivision and Future Development Program would have a significant impact on public library facilities and services if it would substantially interfere with the operations of an existing public library facility, or would put additional demands on a public library facility that is currently overcrowded, such that additional facility construction may be required.

### **2. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact PS-6**     **The Santa Margarita Library is undersized to serve the increase in population associated with Agricultural Residential Cluster Subdivision buildout. Payment of required library fees as a condition of approval would ensure Class III, *less than significant*, impacts to the community library.**

The 900 square foot library is presently designed to accommodate a service area that would include approximately 1,286 persons. The current population of the existing service area is approximately 1,325 people. Using the San Luis Obispo City-County Library's planning ratio of 0.7 square feet of library space per capita, a 928 square foot library would be required to serve the existing population of the Santa Margarita Library service area.

Implementation of the proposed Agricultural Residential Cluster Subdivision would result in a total of 112 dwelling units and an associated population increase of 302 persons (based upon a population generation factor of 2.7 persons per unit). This population increase would bring the total population of Santa Margarita (and the library service area) to approximately 1,627 persons. Based on the San Luis Obispo City-County Library's planning ratio of 0.7 square feet of library per capita, the Santa Margarita Library would require an additional 239 square feet of space to serve this increased population.

According to the San Luis Obispo County Public Facilities and Financing Plan for Unincorporated Area Facilities (Revised June 24, 2006), the cost of providing additional library facilities necessary to maintain established standards is currently \$172 per resident. As a condition of project approval, the applicant will be required to pay this fee at the time each building permit is issued.

Mitigation Measures. Beyond the required fees described in the impact statement, no additional mitigation measures are required.



Residual Impacts. Impacts would be less than significant.

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**3. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.10.5(b)(2) for a discussion of library impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development  
Program Impact PS-6**

**The Santa Margarita Community Library is undersized to serve the increase in population associated with Future Development Program buildout. Payment of required library fees as a condition of approval would ensure Class III, *less than significant*, impacts to the community library.**

As discussed in Section 4.10.5(b)(2) above, the existing 900 square foot library is undersized to serve the current service area population. Buildout in accordance with the Future Development Program would result in a total of 514 dwelling units (402 units in addition to the Agricultural Residential Cluster Subdivision) and an associated population increase of 1,388 persons. This population increase would bring the total population of Santa Margarita (and the library service area) to approximately 2,713 persons. Based on the San Luis Obispo City-County Library's planning ratio of 0.7 square feet of library per capita, the Santa Margarita Library would require an additional 999 square feet of space to serve this increased population.

According to the San Luis Obispo County Public Facilities and Financing Plan for Unincorporated Area Facilities (Revised June 24, 2006), the cost of providing additional library facilities necessary to maintain established standards is \$172 per resident and \$67 per employee. As a condition of project approval, the applicant will be required to pay this fee at the time each building permit is issued.

Mitigation Measures. Beyond the required fees described in the impact statement, no additional mitigation measures are required.

Residual Impacts. Impacts would be less than significant.

**4. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, library impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.



## 4.11 RECREATION

*Agricultural Residential Cluster Subdivision.* Currently there is a deficiency in parkland and recreational facilities in the Santa Margarita community. The Agricultural Residential Cluster Subdivision would generate an increase in residents and would contribute to this deficiency by adding a need for additional parkland. However, the applicant would be required to pay County Park Impact Fees, resulting in a Class III, less than significant impact.

*Future Development Program.* The Future Development Program would generate additional demand for parkland. The Future Development Program, in addition to paying County Park Impact Fees, would include a multi-purpose trail, community park and swimming pool, and golf course. Although the Future Development Program includes the dedication of 5 acres of parkland, including a community swimming pool, Future Development Program residential development that may occur prior to implementation of the parks and recreational facilities could burden existing community recreational facilities. This would be a Class II, significant but mitigable impact. Although the Future Development Program would include a multi-purpose trail, it does not provide public trails that would fully implement the Juan Bautista de Anza Historic Trail through the property. This is a Class II, significant but mitigable, impact related to parks and recreation.

### 4.11.1 Setting

**a. Existing Recreation Facilities.** Parks and recreational resources are important to identify and evaluate because they provide an important measure of the physical quality of life in a community. Such resources enhance the community's aesthetic qualities, the health of the community's environment, and residents' perceptions and enjoyment of the region. Parks provide opportunities for active and passive recreation, while Natural Areas provide places for nature appreciation and resource protection.

One park currently exists in the community of Santa Margarita. Santa Margarita Community Park, a 2-acre facility, is located at the northwest corner of Estrada Road and H Street. The park includes group and individual picnicking, play equipment, restrooms, parking, and open play areas.

Other recreation opportunities located in town include Santa Margarita Elementary School, which provides sports fields and children's play equipment, equestrian facilities located at the southern end of the Ranch, and tennis facilities located at the community library site. These facilities are not official County recreational uses; however, they provide recreational opportunities to area residents.

Santa Margarita residents additionally have access to the Santa Margarita Lake Regional Park, a County park facility. Santa Margarita Lake Regional Park is located approximately 8 miles southeast of Santa Margarita and provides boating, camping, play equipment, picnicking, fishing, and trails.

Figure 4.11-1 identifies the locations of public parks and recreation facilities in the Santa Margarita area. An inventory of public parks and recreational facilities in Santa Margarita is provided in Table 4.11-1.



**Table 4.11-1. Public Park & Recreational Facilities in the Community and Vicinity**

Facility	Amenities	Acreeage	Location
<b>CURRENT COMMUNITY PARKS AND RECREATIONAL FACILITIES</b>			
Santa Margarita Community Park	Group and individual picnicking, play equipment, restrooms, parking, open play area, and BBQ pit.	2.0	Northwest corner of Estrada Road and H Street.
Santa Margarita Elementary School	Basketball courts, handball courts, sports fields, and children's play equipment.	N/A	21900 H Street, Santa Margarita
Tennis Facilities	Tennis courts	N/A	Santa Margarita Community Library
<b>COUNTY PARKS IN THE VICINITY</b>			
Santa Margarita Lake Regional Park	Boating, camping, play equipment, picnicking, fishing, and trails.	7,122*	Pozo Road, 8 miles east of Santa Margarita
<b>Total Acreeage</b>		7,614	

Source: San Luis Obispo County Parks Department.

\* This acreage cannot be applied toward Quimby Act parks to population ratio for the community of Santa Margarita.

Note: Santa Margarita Community Park and Santa Margarita Lake Regional Park are San Luis Obispo County park facilities

**Bike Routes.** Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths (Class I facilities) are paved pathways for use by bicycles that are separated from roadways. Bike lanes (Class II facilities) are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes (Class III facilities) are designated with signs only. Bike lanes are provided on El Camino Real north of Estrada Avenue. Bicycle routes are designated on Wilhelmina Avenue, I Street, West Pozo Road east of Calf Canyon Highway, and U.S. 101 south of SR 58 (refer to Figure 4.12-2 in Section 4.12, *Transportation and Circulation*).

**Trails.** Several hiking, cycling, and equestrian trails are located in the Santa Margarita vicinity. The East Cuesta Ridge trail is 15-miles long, beginning north of San Luis Obispo and ending near Atascadero (San Luis Obispo Parks Open Space & Trails Foundation). The trail is open to hikers and cyclists. Several trails are also located in the La Panza Range, east of Santa Margarita, and in the Santa Lucia Wilderness, southwest of Santa Margarita.

**b. Recreation Standards.** The Quimby Act gives the legislative body of a city or county the authority, by ordinance, to require the dedication of land or payment of in-lieu fees, or a combination of both, for park and recreational purposes as a condition of approval of a tract map or parcel map. The existing Quimby Act parks to population ratio requirement in the County is 3 acres of parkland per 1,000 residents. The current population in the County of San Luis Obispo is 260,727 (Department of Finance, October 2005). However, at General Plan build-out, the County population is expected to reach 420,766 (State of California Governor's Office of Planning and Research, "City and County Information," 2000). Therefore, at buildout the County should have approximately 1,262 acres of parkland. The County has roughly 1,112 acres of neighborhood and community parkland (Jan Di Leo, Written Communication, November 2004). In addition, the County has roughly 12,000 acres of Natural Areas. The County currently not meeting the 3 acres of neighborhood and community parkland per 1,000 population standard as set out by the newly adopted Parks and Recreation Element.

The population of Santa Margarita is approximately 1,325 residents. The community currently has 2 acres of parkland, or approximately 1.5 acres of neighborhood and community parkland



area per 1,000 residents. This is below the County's standard of 3 acres of neighborhood and community parkland per 1,000 residents. At General Plan build-out, which includes 550 additional single-family residences, the population of Santa Margarita will reach approximately 2,551. Based on the standard of three acres per 1,000 residents, Santa Margarita should have approximately 7.7 acres of neighborhood and community parkland at buildout. The community of Santa Margarita therefore would not meet is the County's parkland standard at full buildout of the General Plan. The 5-acre community park envisioned as part of the Future Development Program would lower this deficiency to approximately 0.7 acres.

#### **4.11.2 Impact Analysis**

**a. Methodology and Significance Thresholds.** In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in the any of the following:

- *The project would 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*
- *The project includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.*

The County has a standard requirement of three acres of neighborhood and community parkland per 1,000 residents. Impacts are significant if a development project causes the County to contain less than three acres of neighborhood and community parkland per 1,000 residents, or otherwise result in inconsistencies with the Quimby Act and the adopted Parks and Recreation Element. In addition, impacts are significant if the Agricultural Residential Cluster Subdivision or the Future Development Program would 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 if the Agricultural Residential Cluster Subdivision or the Future Development Program would include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

#### **b. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

<b>Agricultural Residential Cluster Subdivision Impact R-1</b>	<b>The proposed implementation of 112 single-family housing units in the Agricultural Residential Cluster Subdivision would generate demand for parkland. The applicant would be required to pay parkland in-lieu fees in the amount established by County Ordinance. With payment of these fees, the applicant would offset the additional demand for parkland. Impacts would be Class III, less than significant.</b>
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Based on the County's standard factor of 2.7 persons per dwelling unit, the 112-unit Agricultural Residential Cluster Subdivision development would be expected to generate an additional 302 residents. Based on the County standard of 3 acres of parkland and open space per 1,000 residents, the project would generate a need for 0.9 acres of parkland.





The applicant is required to pay an in-lieu public parks fee. Payment of in-lieu park fees would result in funding equivalent to the provision of neighborhood and community parks in accordance with State Quimby Act standards and as required by the County. Following implementation of these project features and payment of Quimby Act park fees, the Agricultural Residential Cluster Subdivision would result in a less than significant impact.

Mitigation Measures. No mitigation measures are required.

Residual Impacts. Impacts would be less than significant. Refer to Section 4.12, *Transportation and Circulation*, Agricultural Residential Cluster Subdivision Impact T-4 for a discussion of pedestrian access impacts related to the proposed private pedestrian pathway between the subdivision and existing community.

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**c. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.11.2(b) for a discussion of recreation impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development Program Impact R-1**

**The implementation of 514 residential units in the Future Development Program would generate demand for parkland. Although the Future Development Program includes the dedication of 5 acres of parkland, including a community swimming pool, Future Development Program residential development that may occur prior to implementation of the parks and recreational facilities could burden existing community recreational facilities. This would be a Class II, significant but mitigable impact.**

The Future Development Program would generate an estimated 1,388 additional residents. Based on the County parkland standard, the Future Development Program would generate a need for 4.2 additional acres of parkland. The Future Development Program currently includes a 5-acre community park, swimming pool and a golf course. The golf course would be private and therefore would not contribute to County parkland requirements. Nonetheless, the 5-acre community park would fulfill these requirements. Because no application has been filed for development other than the Agricultural Residential Cluster Subdivision, the timing of development pursuant to the Future Development Program cannot be determined at this time. Therefore, residential development may occur prior to development of the 5-acre community park and swimming pool. During this interim period prior to construction of the community park, Future Development Program residents could overburden existing community recreational facilities. This is a potentially significant impact.

Construction of recreational facilities may result in impacts to agriculture, biological resources, cultural resources, water resources, and visual resources. These impacts are described in the



appropriate sections of this EIR. In addition, safety issues related to errant golf balls are discussed in Section 4.9, *Public Safety*.

Mitigation Measures. The following mitigation measure is required:

**Future Development  
Program R-1(a)**

**Community Park Implementation Timing.** The Specific Plan shall specify that the 5-acre community park and swimming pool shall be constructed prior to residential development pursuant to the Future Development Program, subsequent to the Agricultural Residential Cluster Subdivision.

**Plan Requirements and Timing.** The Specific Plan shall specify the phasing of the community park and swimming pool in advance of residential development. The community park's acreage and design shall be reviewed and approved by County Parks prior to the issuance of improvement plans or the final map for new residential development proposed under the Specific Plan. The applicant shall provide an adequate bond/security for completion of the proposed community park and the associated recreation. Prior to occupancy of any of the residential units proposed under the Specific Plan, the park's construction shall be reviewed and approved by County Parks.

**Monitoring.** Planning and Building shall review the Specific Plan for compliance prior to adoption of the Specific Plan, and County Parks shall ensure parkland and recreation is adequately constructed prior to occupancy of any new Specific Plan residential development.

Residual Impacts. Impacts would be less than significant.

**Future Development  
Program Impact R-2**

**The Future Development Program would include a multi-purpose trail. However, the Future Development Program does not provide public trails that would fully implement the Juan Bautista de Anza Historic Trail through the property. This is a Class II, significant but mitigable, impact related to parks and recreation.**

The Future Development Program includes the provision of a public hiking and equestrian trail. As shown in Figure 2-9 (in Section 2.0, *Project Description*), the Future Development Program trail generally follows the east side of Highway 101 from the southern boundary of the Ranch property, curving eastward at Highway 58 toward the community of Santa Margarita. This trail would connect the community of Santa Margarita to East Cuesta Ridge Trail, and implement a portion of Juan Bautista de Anza Trail, in accordance with the County Trails Plan. However, the Future Development Program does not identify trail connections that would complete the Juan Bautista de Anza Historic Trail through the property, as identified in the County Trails Plan.

Construction of the envisioned trail within the trail concept study area may result in impacts to agriculture, biological resources, cultural resources, water resources, and visual resources.



These impacts are described in the appropriate sections of this EIR. However, since the precise location of the trail within the trail concept study area has not been determined, precise environmental impacts associated with the trail would be too speculative to address at this time. Environmental impacts associated with implementation of such improvements would be evaluated in separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA) as part of the Specific Plan or individual development review process, as applicable, for future development on the property.

Mitigation Measures. The following mitigation measure is required:

**Future Development  
Program R-2(a)**

**Trail Connections.** As part of the Specific Plan for future development on the Ranch property and in accordance with the County's adopted Parks and Recreation Element, the applicant shall dedicate right-of-way for the County's implementation of the Juan Bautista de Anza Historic Trail between the eastern terminus of the envisioned Future Development Program trail concept study area and the trail easements in the northern portion of the property, on the Margarita Farms subdivision site, and any other trail alignments identified in the Parks and Recreation Element. The precise trail alignments and features shall be determined in consultation with the County Parks and Recreation Department. The trail shall be implemented in accordance with County standards concurrently with the start of construction.

**Plan Requirements and Timing.** The required trail connection shall be included in the Specific Plan for future Development on the Ranch property. Right-of-way shall be dedicated and the trail shall be implemented in accordance with County standards prior to issuance of grading permits for the first Specific Plan land use development. **Monitoring.** Planning and Building shall review the Specific Plan prior to adoption and verify trail implementation prior to issuance of grading permits for the first Specific Plan land use development.

Residual Impacts. Impacts related to provision of the trail connection would be beneficial. It should be noted that secondary impacts associated with construction of the trail connection (e.g., biological resources impacts, visual impacts) would vary depending on the ultimate location of the trail alignment. Since the precise location of the trail within the trail concept study area has not been determined, precise environmental impacts associated with the trail would be too speculative to address at this time. Environmental impacts associated with implementation of such improvements would be evaluated in separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA) as part of the Specific Plan or individual development review process, as applicable, for future development on the property.



**d. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative recreation impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.





## 4.12 TRANSPORTATION AND CIRCULATION

*The following section, based on a traffic and circulation study prepared by Fehr & Peers, Inc. (refer to Appendix J for technical calculations), analyzes the potential traffic and circulation impacts associated with the Agricultural Residential Cluster Subdivision and Future Development Program.*

*Agricultural Residential Cluster Subdivision. The Agricultural Residential Cluster Subdivision is expected to generate 1,154 average daily trips (88 AM peak hour and 119 PM peak hour trips). Although this would not result in exceedances of roadway or intersection level of service (LOS) standards, with the exception of the US 101/SR 58 interchange northbound off-ramp, the Agricultural Residential Cluster Subdivision will add traffic to locations with existing hazards and operational problems, including the SR 58 90-degree curve, US 101/SR 58 interchange, and limited sight distance along Estrada Avenue. Implementation of proposed mitigation measures would improve hazards and deficiencies. However, due to uncertainty regarding Caltrans approval of facilities within State jurisdiction and uncertainty regarding right of way acquisition, Class I, significant and unavoidable, impacts would result. Site access to the Agricultural Residential Cluster Subdivision may result in an inadequate stopping site distance, resulting in Class II, significant but mitigable, impacts. Mitigation requiring the relocation of the proposed west driveway would ensure less than significant impacts. The Agricultural Residential Cluster Subdivision may generate parking demands in excess of the proposed parking supply, which would be a Class III, less than significant, impact. The project applicant would be required to implement two off-street spaces per residential unit in accordance with County Land Use Ordinance Section 22.18.050(C). In addition, conflicts between automobiles and bicycles and between automobiles and pedestrians may result from increased traffic in the study area. This is a Class II, significant but mitigable impact.*

*Future Development Program. Because no active application exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, the assessment of traffic and circulation impacts is based on a reasonable worst case scenario with regard to the location of future land uses within anticipated development areas, trip distribution, and site access. The Future Development Program would result in the addition of 8,137 average daily weekday trips (655 AM peak-hour and 818 PM peak-hour trips) to the study-area roadways and intersections. This would cause two local roadway segments, four U.S. 101 mainline segments, all four U.S. 101/SR 58 interchange ramps, and four intersections to operate at unacceptable levels of service during peak hours. Implementation of proposed mitigation measures would partially reduce impacts. However, due to uncertainty regarding Caltrans approval of facilities within State jurisdiction, impacts would be Class I, significant and unavoidable. The Future Development Program may also result in inadequate site access and/or internal circulation conflicts. This would generate a Class I, significant and unavoidable, impact. Although the Future Development Program may generate parking demands in excess of future parking supply, compliance with County parking standards would ensure Class III, less than significant impacts. Lastly, the addition of traffic generated by the Future Development Program may result in conflicts with pedestrians and bicyclists, as well as increase demand for transit services. Impacts are Class II, significant but mitigable.*

### 4.12.1 Setting

Regional access to the Agricultural Residential Cluster Subdivision site and Future Development Program area is provided by US Highway 101 and State Route 58 (SR 58). Local access is provided by El Camino Real, Estrada Avenue, West Pozo Road, and Wilhelmina Avenue.



**a. Roadway Network.** Figure 4.12-1 shows the roadway network in the vicinity of the Agricultural Residential Cluster Subdivision and Future Development Program. The following text provides a brief discussion of the system components.

**U.S. Highway 101** is a regional roadway that traverses through San Luis Obispo County, continuing north to San Francisco and south to Los Angeles. Within the study area, U.S. 101 is a four-lane freeway with an interchange with State Route 58. South of the immediate study area, U.S. 101 is a divided highway with at-grade intersections.

**State Route 58** is an east-west, two-lane street/highway that connects U.S. 101 to I-5 and SR 99 in Kern County. Within the study area, SR 58 links the community of Santa Margarita to U.S. 101. The section of SR 58 east of Santa Margarita becomes winding and narrow through the Caliente Range mountains. The following roadways are designated as SR 58: El Camino Real (from U.S. 101 to Estrada Avenue), Estrada Avenue (from El Camino Real to West Pozo Road), West Pozo Road (from Estrada Avenue to Calf Canyon Highway), and Calf Canyon Highway (East of West Pozo Road).

**El Camino Real** is a north-south roadway connecting Santa Margarita with Atascadero. Within Santa Margarita, El Camino Real is oriented in an east-west direction and contains one lane in each direction between U.S. 101 and Estrada Avenue. East of Estrada Avenue, El Camino Real curves into a north-south orientation and contains one lane in each direction.

**Estrada Avenue** is a north-south, two-lane local street in Santa Margarita that extends from El Camino Real and turns into West Pozo Road to the south.

**West Pozo Road** is an east-west, two-lane local street connecting Santa Margarita and the town of Pozo. This roadway extends from Estrada Avenue in the west to Pozo in the east.

**Wilhelmina Avenue** is a north-south, two-lane local street in Santa Margarita extending from El Camino Real at its northern terminus to I Street to the south.

**b. Roadway and Intersection LOS Methodologies.** The operations of roadway facilities are described with the term level of service (LOS). LOS is a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver. Six levels are defined, from LOS A with the best operating conditions to LOS F with the worst operating conditions (Table 4.12-1). The County of San Luis Obispo has adopted LOS C as the minimum standard for rural roadway operations. Caltrans strives to maintain operations at the LOS C/D threshold on state-operated facilities in the study area, which include U.S. 101 and SR 58.

**Table 4.12-1. Level of Service Definitions**

LOS	Delay (Seconds per Vehicle)	Definition
A	< 10.0	Conditions of free unobstructed flow, no delays and all signal phases sufficient in duration to clear all approaching vehicles.
B	10.1 – 20.0	Conditions of stable flow, very little delay, a few phases are unable to handle all approaching vehicles.
C	21.1 – 35.0	Conditions of stable flow, delays are low to moderate, full use of peak direction signal phases is experienced.



**Table 4.12-1. Level of Service Definitions**

LOS	Delay (Seconds per Vehicle)	Definition
D	35.1 – 55.0	Conditions approaching unstable flow, delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period.
E	55.1 – 80.0	Conditions of unstable flow, delays are significant, signal phase timing is generally insufficient, congestion exists for extended duration throughout the peak period.
F	> 80.0	Conditions of forced flow, travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal.

**Two-Lane Highways.** Four of the study area roadway segments (El Camino Real north of Estrada Avenue, SR 58 between J Street and West Project Driveway, West Pozo Road south of SR 58, and SR 58 east of West Pozo Road) were evaluated using the two-lane highway analysis methodology described in Chapter 20 of the *2000 Highway Capacity Manual (2000 HCM)*. The percent time-spent-following was calculated using the HCS+ analysis software and is correlated to an LOS designation for ramp junctions as shown in Table 4.12-2. Although these roadway segments are local roads, the two-lane highway methodology was selected because the segments contain two lanes, have relatively high posted speed limits, and have rural characteristics (relatively low volumes and few access points). According to the *2000 HCM*, percent time-spent-following is defined as the average percentage of travel time vehicles spend traveling in platoons behind slower vehicles due to their inability to pass.

Two-lane highway facilities are separated into two classes. Class I facilities have higher speeds and more direct routes where mobility is more critical, and LOS is defined by both time-spent-following and average travel speed. Class II facilities have slower travel speeds and primarily serve shorter trips where travel time is less important, and LOS is defined only in terms of percent time-spent-following without consideration of average travel speed. El Camino Real is evaluated as a Class I facility. SR 58 and West Pozo Road are evaluated as Class II facilities. The LOS criteria for Class I and Class II two-lane highway segments are presented in Table 4.12-2.

**Table 4.12-2. Two-Lane Highway Level of Service Definitions**

LOS	Class I	Class II
	Percent Time-Spent-Following	Percent Time-Spent-Following
A	≤ 35	≤ 40
B	35.1 to 50	40.1 to 55
C	50.1 to 65	55.1 to 70
D	65.1 to 80	70.1 to 85
E	> 80	> 85

Source: *Highway Capacity Manual*, Transportation Research Board, 2000.

**Local Roadways.** Four of the study area roadway segments (El Camino Real between Wilhelmina Avenue and Maud Avenue, El Camino Real between Pinal Avenue and Estrada Avenue, Estrada Avenue south of El Camino Real, and Wilhelmina Avenue between El Camino Real and I Street) were evaluated by comparing the measured daily volume to threshold volumes as based on the *2000 HCM*. Table 4.12-3 presents threshold volumes for various roadway types. These threshold volumes include adjustments for divided and undivided facilities and for roadways with left-turn lanes. The threshold volumes are approximate and serve as a general guide for determining if a roadway is below or over capacity.





**Table 4.12-3. Daily Traffic Volume (Local Roadway) Level of Service Definitions**

Roadway Type	Maximum Daily Volume				
	LOS A	LOS B	LOS C	LOS D	LOS E
2-Lane Arterial (with left-turn lane)	11,000	12,500	14,500	16,000	18,000
2-Lane Arterial (no left-turn lane) <sup>1</sup>	5,000	6,250	7,750	10,000	11,250
2-Lane Collector/Local Street <sup>1</sup>	3,500	4,750	6,000	6,750	8,500

Source: Highway Capacity Manual, Transportation Research Board, 2000.

<sup>1</sup> Threshold volumes are the average of the range presented in the South County Traffic Model Update Draft Final Report prepared by Omni-Means, as derived from the 2000 HCM. This accounts for the nonstandard design features of some roads in the study area, such as narrow lane widths and dirt shoulders.

**Freeway Segments.** Freeway segment operations were evaluated using the methodology contained in Chapter 21 of the 2000 HCM. The density is calculated using the HCS+ analysis software and is correlated to an LOS designation for both mainline segments and ramp junctions as shown in Table 4.12-4.

**Table 4.12-4. Density-Based (Freeway) Level of Service Definitions**

LOS	Mainline Density <sup>1</sup>	Ramp Junction Density <sup>1</sup>
A	≤ 11.0	≤ 10.0
B	11.1 to 18.0	10.1 to 20.0
C	18.1 to 26.0	20.1 to 28.0
D	26.1 to 35.0	28.1 to 35.0
E	35.1 to 45.0	> 35.0
F	> 45.0	Demand exceeds capacity.

Note:

<sup>1</sup> Measured in vehicles per mile per lane.

Source: Highway Capacity Manual, Transportation Research Board, 2000.

**Unsignalized Intersections.** Operations of the unsignalized study intersections (e.g., stop-sign controlled) were evaluated using the methodology contained in Chapter 17 of the 2000 HCM and the SYNCHRO software program. LOS ratings for stop-sign controlled intersections are based on the average control delay expressed in seconds per vehicle. At two-way or side street-controlled intersections, the control delay is calculated for each movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. For all-way stop-controlled locations, a weighted average delay for the entire intersection is presented. Table 4.12-5 summarizes the relationship between delay and LOS for unsignalized intersections.

**Table 4.12-5. Unsignalized Intersection Level of Service Definitions Using Average Control Delay**

LOS	Description	Average Control Delay Per Vehicle (Seconds)
A	Little or no delay.	≤ 10.0
B	Short traffic delays.	10.1 to 15.0
C	Average traffic delays.	15.1 to 25.0
D	Long traffic delays.	25.1 to 35.0
E	Very long traffic delays.	35.1 to 50.0
F	Extreme traffic delays with intersection capacity exceeded.	> 50.0

Source: Highway Capacity Manual, Transportation Research Board, 2000.



**c. Existing Roadway Conditions Relative to Thresholds.** The results of the LOS analysis for existing roadway conditions are presented in Tables 4.12-6(a) through 4.12-6(c) (refer to Section 4.12.1(b) for a discussion of LOS methodologies). The traffic counts on local roadways were conducted by Fehr & Peers, Inc. in April 2006. The traffic counts reported on U.S. 101 were obtained from the *Caltrans Traffic Volumes on the State Highway Systems (2004)* website. Figure 4.12-1 shows the existing daily traffic volumes at the study area roadway locations. The traffic data is shown in the Technical Appendix for the traffic report, in Appendix J.

**Table 4.12-6(a). Existing Conditions: Two-Lane Highway Levels of Service**

Roadway Segment	Class Designation	Peak Hour	Percent Time-Spent-Following	LOS
El Camino Real north of Estrada Avenue	I	AM	37.4	B
		PM	31.7	B
West Pozo Road (SR 58) between J Street and West Driveway	II	AM	45.5	B
		PM	45.9	B
West Pozo Road southeast of Calf Canyon Highway (SR 58)	II	AM	30.2	A
		PM	28.5	A
Calf Canyon Highway (SR 58) northeast of West Pozo Road	II	AM	51.0	B
		PM	46.3	B

**Table 4.12-6(b). Existing Conditions: Local Roadway Levels of Service**

Roadway Segment	Roadway Type	Volume <sup>1</sup>	LOS
El Camino Real (SR 58) between Wilhelmina Avenue and Maud Avenue	2-Lane Arterial (no left-turn lane)	5,490	B
El Camino Real (SR 58) between Pinal Avenue and Estrada Avenue	2-Lane Arterial (no left-turn lane)	5,300	B
Estrada Avenue (SR 58) south of El Camino Real	2-Lane Arterial (no left-turn lane)	3,900	A
Wilhelmina Avenue between El Camino Real and I Street	2-Lane Collector/Local Street	740	A

<sup>1</sup> Average daily traffic.

**Table 4.12-6(c). Existing Conditions: U.S. 101 Mainline Levels of Service**

Travel Direction	Segment	Peak Hour	Density (vehicles per mile per lane)	LOS
Northbound	South of SR 58	AM	9.1	A
		PM	22.7	C
	North of SR 58	AM	9.1	A
		PM	21.1	C
Southbound	North of SR 58	AM	19.3	C
		PM	12.3	B
	South of SR 58	AM	21.6	C
		PM	12.6	B

As shown in Tables 4.12-6(a) through 4.12-6(c), all study area roadways (including two-lane highways, local roadway segments, and mainline freeway segments) currently operate at acceptable levels of service (above County's LOS C and Caltrans' LOS C/D standards) during both the AM and PM peak hours.



*U.S. 101 Ramps.* Existing peak hour ramp operations were evaluated utilizing the existing peak hour ramp traffic volumes shown on Figure 4.12-5. Table 4.12-7 presents the existing conditions' ramp merge/diverge peak hour LOS at the four study interchange locations in the vicinity of the study area.

**Table 4.12-7. Existing Conditions: U.S. 101 Ramp at SR 58 Junction Levels Of Service**

Travel Direction	Ramp	Merge/Diverge	Peak Hour	Density (vehicles per mile per lane)	LOS
Northbound	SR 58	Diverge (Off-ramp)	AM	13.2	B
			PM	28.3	D
		Merge (On-ramp)	AM	11.9	B
			PM	24.0	C
Southbound	SR 58	Diverge (Off-ramp)	AM	23.6	C
			PM	15.8	B
		Merge (On-ramp)	AM	24.3	C
			PM	15.3	B

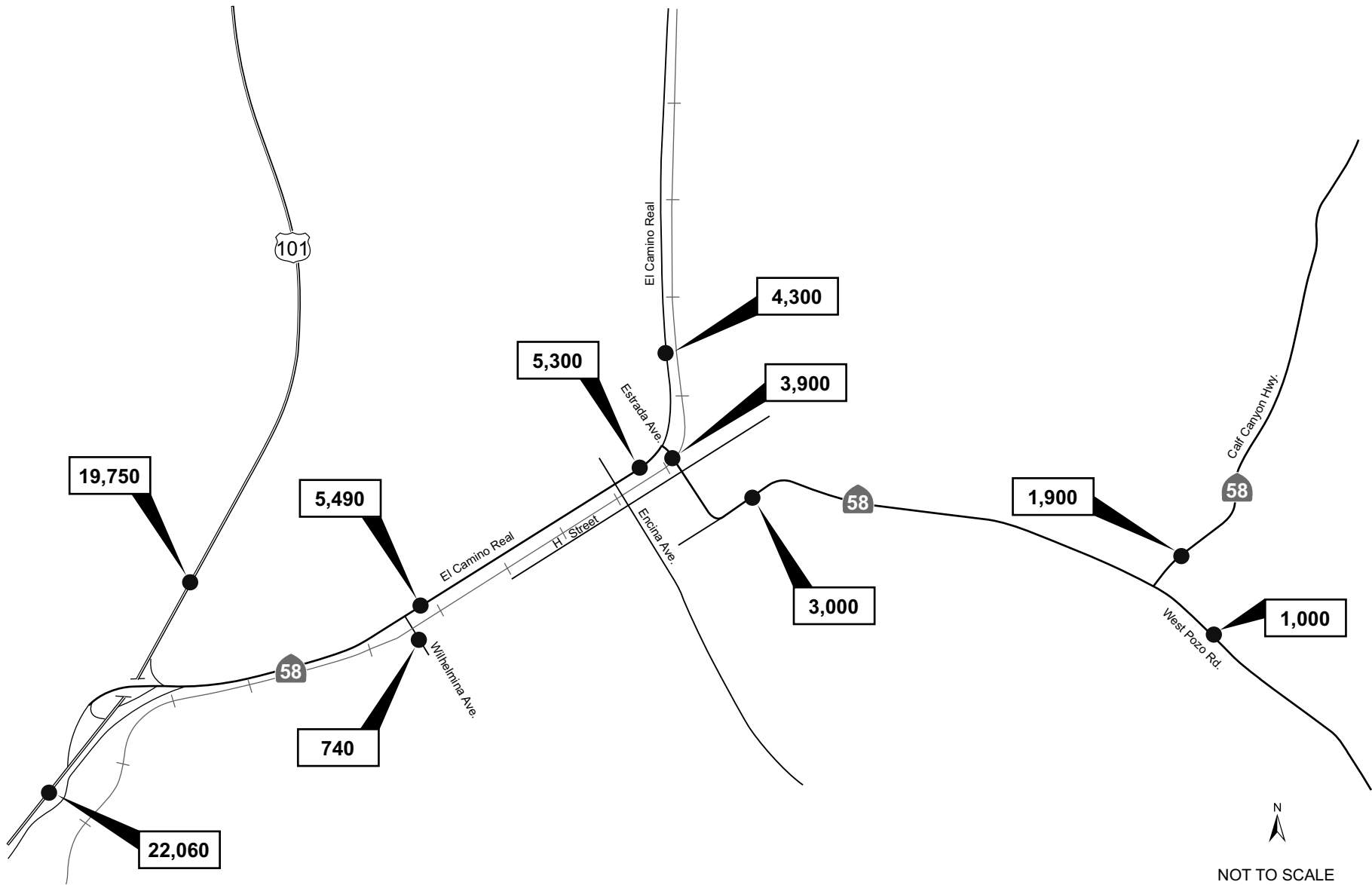
As shown in Table 4.12-7, the merge and diverge ramp operations at the U.S. 101/SR 58 interchange, except for the northbound off-ramp during the PM peak hour, are projected to operate at acceptable levels of service (above Caltrans' LOS C/D threshold ) during the AM and PM peak hours.

Although the ramp junction on eastbound SR 58 from northbound U.S. 101 may have originally been planned as a freeway-to-freeway connection, this ramp junction operates as a freeway-to-arterial roadway connection because of the design speed of eastbound SR 58. The design of this ramp junction was compared to current Caltrans design standards as noted in the field observations discussion (see subsection "f" under 4.12.1).

**d. Existing Intersection Operations Relative to Thresholds.** Existing intersection lane configurations and peak-hour turning movement volumes were used to calculate the LOS for the key intersections during the AM and PM peak hours. The results of the LOS analysis for existing conditions are presented in Table 4.12-8. Figure 4.12-2 shows the existing AM and PM peak hour traffic volumes at the study-area intersections. Peak hour intersection counts for this study were conducted by Fehr & Peers in April 2006.

As shown in Table 4.12-8, all study intersections currently operate at acceptable levels of service (above County's LOS C and Caltrans LOS C/D standards) during both peak hours.

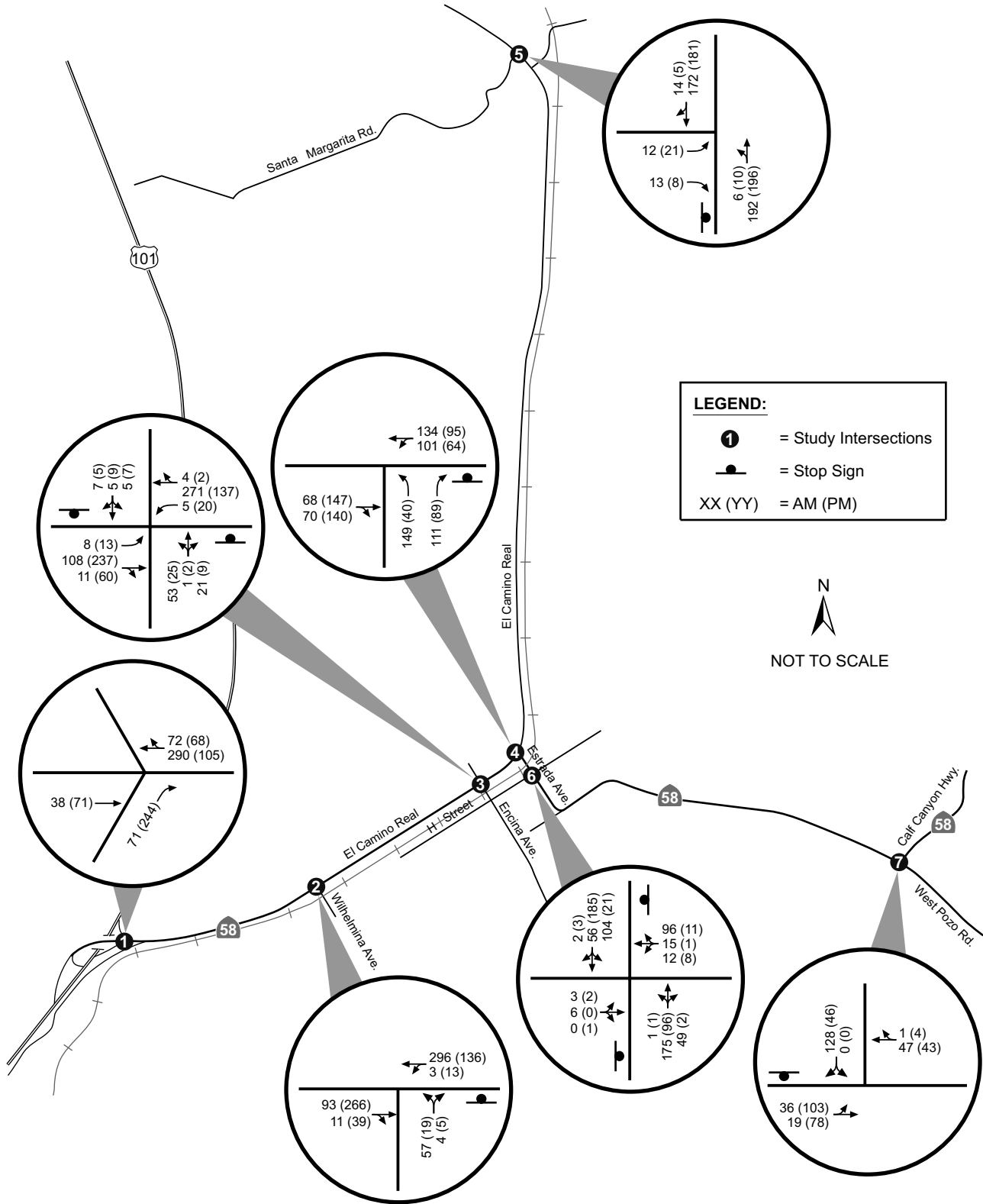




Existing Street Network and Average Daily Traffic Volumes

Figure 4.12-1

Source: Fehr & Peers, 2006.



Existing Intersection Peak-Hour Volumes

Figure 4.12-2

Source: Fehr & Peers, 2006.

**Table 4.12-8 Existing Conditions: Study Area Intersections**

Intersection	Peak Hour	Intersection Control	Delay	LOS
U.S. 101 Northbound Ramps and State Route 58	AM PM	Uncontrolled	8.9 10.1	A B
El Camino Real (SR 58) and Wilhelmina Avenue	AM PM	Side Street Stop	12.2 11.7	B B
El Camino Real (SR 58) and Encina Avenue	AM PM	Side Street Stop	12.8 13.0	B B
El Camino Real (SR 58) and Estrada Avenue	AM PM	Side Street Stop	13.8 11.0	B B
El Camino Real and Santa Margarita Road	AM PM	Side Street Stop	10.4 11.0	B B
Estrada Avenue (SR 58) and H Street	AM PM	Side Street Stop	15.6 10.7	C B
Calf Canyon Hwy (SR 58) and West Pozo Road	AM PM	Side Street Stop	9.2 8.8	A A
West Pozo Road (SR 58) and West Driveway	AM PM	Future Intersection		
West Pozo Road (SR 58) and East Driveway	AM PM	Future Intersection		

- Whole intersection weighted average control delay expressed in seconds per vehicle using methodology described in the 2000 HCM. For side street stop controlled intersections, total control delay for the worst movement is presented.
- For side street stop-controlled intersections, LOS for the worst movement is shown. LOS calculations conducted using the Synchro analysis software package.

**e. Collision Rates.** Collision data for SR 58 and US 101 in Santa Margarita were provided by Caltrans for a 36-month period spanning from August 2002 through July 2005. The SR 58 corridor, between US 101 and post mile 6.20 (east of the town of Santa Margarita), has a collision rate nearly double the statewide average for equivalent roadway facilities. The collision rates at certain study intersections within the corridor exceed the statewide average, with the El Camino Real/Estrada Avenue intersection having a collision rate three times higher than the statewide average. A total of six (6) collisions were reported for the 90-degree curve on SR 58 at J Street over a three-year period.

US 101, between post miles 37.34 and 38.14 (south and north of SR 58, respectively), has a collision rate slightly above the statewide average for equivalent roadway facilities. The collisions rates at certain ramp junctions with SR 58 exceed the statewide average, with the southbound and northbound on-ramp junctions having a rate three times higher than the statewide average.

**f. Field Observations and Existing Operational Issues.** Field observations of the study intersections and roadway segments were conducted during the morning and afternoon peak periods in March 2006. The intersections were observed to operate generally at the calculated levels of service for each peak period. No substantial congestion was noted on any of the roadway segments. However, existing operational issues were noted at several locations as discussed below.

**U.S. 101 Southbound Off-Ramp to SR 58.** Southbound US 101 is configured with a short diverge taper of approximately 250 feet and vehicles exiting the freeway must negotiate a short radius curve that is posted for 15 mph immediately after exiting the mainline. This design causes southbound US 101 vehicles to slow down on the mainline section or brake rapidly within a short distance to negotiate the off-ramp.



**U.S. 101 Northbound Off-Ramp to SR 58.** The SR 58/US 101 Northbound Off-ramp intersection has no traffic control devices. Vehicles exiting the US 101 northbound off-ramp meet eastbound SR 58 traffic at an incline that limits sight distance, and the merge area is only 150 feet long. According to section 504.4 of the Caltrans *Highway Design Manual (HDM)*, the required merge area for vehicles traveling on a two-lane highway at 50 mph is 400 feet.

**El Camino Real (SR 58) and Estrada Avenue.** The intersection of El Camino Real (SR 58) and Estrada Avenue was observed to operate at good levels of service during both peak hours. An average queue of 2 to 3 vehicles was observed on Estrada Avenue during either peak hour. Westbound left-turn vehicles from El Camino Real to southbound Estrada Avenue occasionally delay southbound through vehicles since the westbound approach includes only one lane. Because El Camino Real is at a lower elevation than Estrada Avenue (Estrada Avenue is located on the outside of the super-elevated curve on El Camino Real), vehicles on Estrada Avenue encroach into the intersection to increase their sight distance before turning onto El Camino Real. In addition, vehicles on Estrada Avenue are not visible to drivers on El Camino Real due to the grade of the road.

**El Camino Real (SR 58) west of Pinal Avenue.** Observations showed that pedestrians cross El Camino Real west of Pinal Avenue without using the crosswalks striped at the El Camino Real/Pinal Avenue intersection. Vehicles in both directions on El Camino Real stop mid-block between intersections and are parked on the shoulder. Drivers and passengers then cross mid-block to access the retail stores. Over 30 pedestrians were observed crossing mid-block during both the AM and PM peak-hour.

**El Camino Real (SR 58) from Estrada Avenue to Pozo Road.** Up to 10 bicyclists were observed to bike along SR 58 from Estrada Avenue to Pozo Road during both peak-hours. Since bicycle lanes are not provided on this stretch of SR 58, bicyclists use the narrow shoulders or the travel lanes. Vehicles are forced to encroach into the opposing travel lane to pass bicyclists.

**Estrada Avenue and H Street.** Santa Margarita Elementary School is located on H Street east of Estrada Avenue. School crossing guards direct students across the north leg of the intersection during the morning drop-off and afternoon pick-up periods. An existing crest on Estrada Avenue, south of H Street, limits sight distance for pedestrians crossing Estrada Avenue and for vehicles turning in and out of H Street. According to the school crossing guards, northbound Estrada Avenue vehicles speed over the crest and must come to an abrupt stop for pedestrians or side street turning movements. The school crossing guards mentioned several near collisions due to this problem.

**Estrada Avenue south of J Street.** Estrada Avenue transitions into a 90-degree curve south of J Street. Except for a 15 mile per hour (mph) warning sign, no additional warnings signs or physical barriers are in place. Vehicles have to slow considerably to navigate through this curve.

**g. Pedestrian and Bicycle Facilities.** Existing pedestrian and bicycle facilities are shown in Figure 4.12-3. Pedestrian facilities include sidewalks, crosswalks, and pedestrian signals at signalized intersections. Sidewalks are not provided on West Pozo Road adjacent to the Agricultural Residential Cluster Subdivision site. Sidewalks are provided on El Camino Real through portions of downtown Santa Margarita. Sidewalks are also provided near the elementary school on the north side of H Street east of Estrada Avenue. A pedestrian bridge



over Yerba Buena Creek is located on J Street west of Estrada Avenue. The intersection of El Camino Real and Encina Avenue has marked crosswalks. There are no signalized intersections in the study area.

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths (Class I facilities) are paved pathways for use by bicycles that are separated from roadways. Bike lanes (Class II facilities) are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes (Class III facilities) are designated with signs only. Bike lanes are provided on El Camino Real north of Estrada Avenue. Bicycle routes are designated on Wilhelmina Avenue, I Street, West Pozo Road east of Calf Canyon Highway, and U.S. 101 south of SR 58.

**h. Transit Service.** The San Luis Obispo Regional Transit Authority (RTA) operates regional bus service in San Luis Obispo County (refer to Figure 4.12-3).

**RTA Route 9** provides intercity fixed-route service between San Luis Obispo, Santa Margarita, Atascadero, Templeton, and Paso Robles, with limited service to San Miguel. Service north from Santa Margarita operates Monday through Friday from 6:59 AM to 8:59 PM with a total of 14 trips, Saturdays from 9:36 AM to 6:36 PM with a total of four trips and Sundays from 9:36 AM to 5:36 PM with a total of three trips. Service south from Santa Margarita operates Monday through Friday from 7:01 AM to 7:01 PM with a total of 13 trips, Saturdays from 8:30 AM to 5:30 PM with a total of four trips, and Sundays from 8:30 AM to 4:30 PM with a total of three trips. This is the only fixed-route bus service in Santa Margarita.

**Runabout** provides countywide ADA paratransit service for qualified individuals within  $\frac{3}{4}$  mile of the fixed-route bus service. The service span in Santa Margarita is approximately equal to that of RTA Route 9.

**Amtrak** provides daily passenger rail service along the Union Pacific railroad (UPRR) tracks through Santa Margarita. The Coast Starlight operates once daily south to Los Angeles and north to the San Francisco Bay Area and Seattle. The nearest stations are in the City of San Luis Obispo to the south and City of Paso Robles to the north.

#### **4.12.2 Impact Analysis**

**a. Methodology and Significance Thresholds.** In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in any of the following:

- *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);*
- *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;*
- *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;*
- *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);*





- *Result in inadequate emergency access;*
- *Result in inadequate parking capacity; or*
- *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).*

**San Luis Obispo County.** In addition to the CEQA impact guidelines, any adverse transportation and circulation impacts are significant if they result in an inconsistency with the thresholds identified in the County of San Luis Obispo General Plan. The following are impact thresholds maintained by the County:

*Roadway Segments.* Evaluation of arterial roadway segments reflects planning-level conditions along a street, whereas analysis of the intersections reflects detailed conditions of the arterial. Typically, poor operating conditions on an arterial are due to constraints at the intersections, and can be mitigated at the intersection. Therefore, if an arterial roadway segment analysis shows poor operating conditions, but individual intersections operate within acceptable standards, the mitigation measures defer to the intersection. For County roadway segments, degradation in the level of service from an acceptable level (LOS C or better) to an unacceptable level (LOS D, E, or F) is a significant impact. For segments already operating at LOS D, E, or F without the project, the addition of any project traffic to that location is a significant impact.

*Unsignalized Intersections.* A significant impact at an unsignalized intersection is defined to occur when the addition of project traffic:

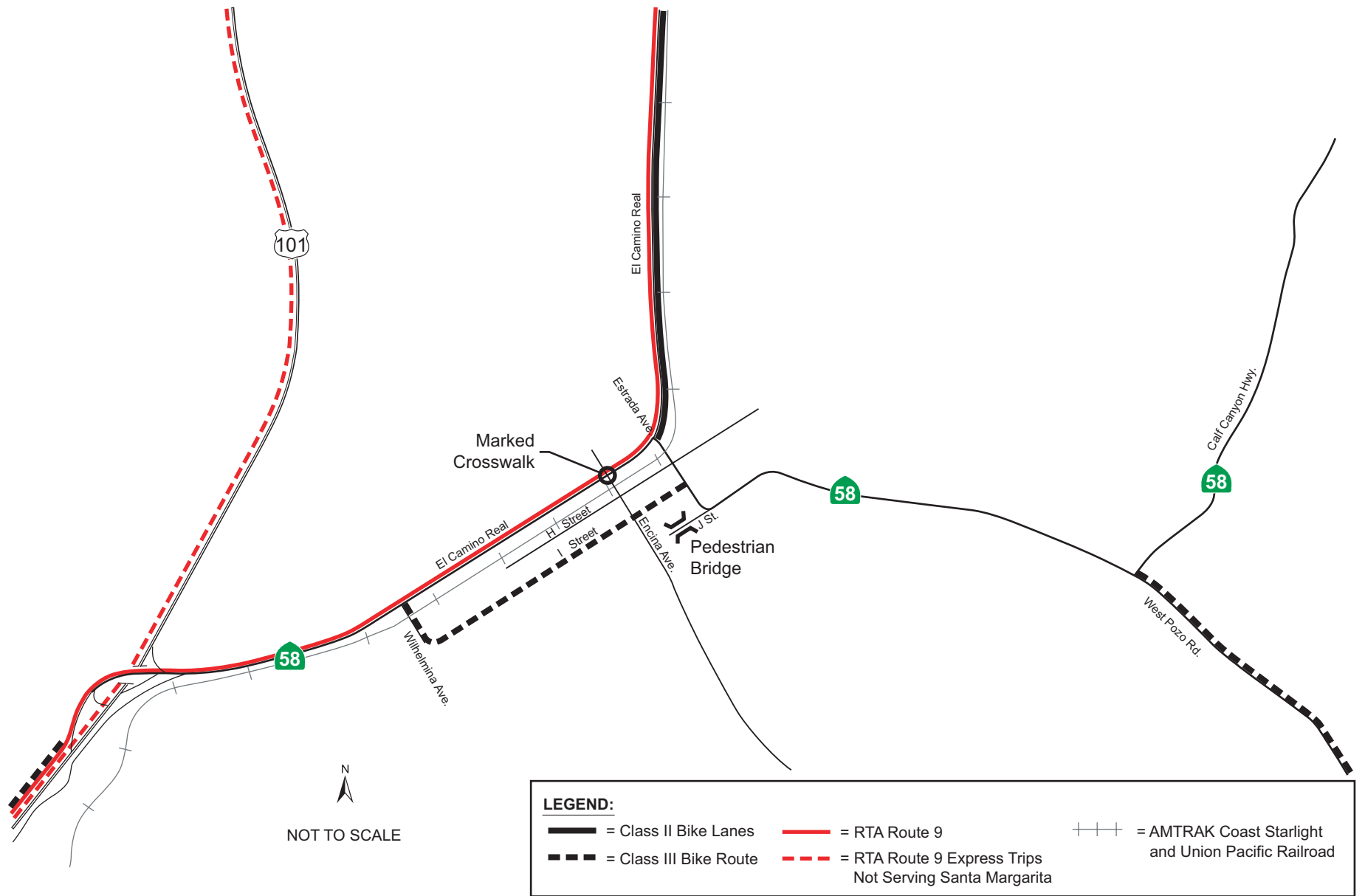
- *Causes intersection operations to deteriorate from an acceptable level (LOS C or better) to an unacceptable level (LOS D, E, or F) and satisfies the peak-hour signal warrant from the Manual on Uniform Traffic Control Devices (MUTCD).*
- *Exacerbates unacceptable operations (LOS D, E, or F) and satisfies the peak-hour signal warrant from the Manual on Uniform Traffic Control Devices (MUTCD).*

**Caltrans.** For Caltrans' facilities (intersections, roadway segment, freeway segments, and freeway ramp junctions), a degradation in the level of service from an acceptable level (LOS C/D threshold or better) to an unacceptable level (LOS D, E, or F) is a significant impact. **For Caltrans facilities already operating at unacceptable levels (LOS D, E, or F) without the project, the addition of any project traffic to that location is a significant impact.**

**Bicycle and Pedestrian Impacts.** An impact to pedestrians and bicyclists would be considered significant if implementation of the proposed project would conflict with existing or planned bicycle facilities or would generate pedestrian and bicycle demand without providing adequate and appropriate facilities for safe non-motorized mobility.

**Transit Impacts.** Impacts to transit would be considered significant if the proposed project would conflict with existing or planned transit facilities or would generate potential transit trips and would not provide adequate facilities for pedestrians and bicyclists to access transit routes and stops.





Existing Pedestrian, Bicycle, and Transit Facilities

Figure 4.12-3

Source: Fehr & Peers, 2006.



**b. Agricultural Residential Cluster Subdivision-Generated Traffic Volumes.** The Agricultural Residential Cluster Subdivision would consist of 112 single-family homes. Table 4.12-9 shows that the Agricultural Residential Cluster Subdivision would generate 1,154 average daily trips, 88 AM peak hour trips, and 119 PM peak hour trips. These forecasts are based on Single Family Residential land use trip generation rates published in the Institute of Transportation Engineers Trip Generation Report (Institute of Transportation Engineers, 7th Edition, 2003).

**Table 4.12-9 Agricultural Residential Cluster Subdivision Trip Generation**

Use	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
<b>Trip Rates (per dwelling unit)</b>							
Single-Family Residential	10.30	0.20	0.59	0.79	0.67	0.39	1.06
<b>Trip Estimates</b>							
Single-Family Residential (112 d.u.)	1,154	22	66	88	75	44	119

Source: Trip Generation (Institute of Transportation Engineers, 7th Edition 2003).

The directions of approach and departure for Agricultural Residential Cluster Subdivision traffic were estimated based on the existing travel patterns in the area and the relative locations of employment centers and other attractions such as schools, parks, and retail areas. Figure 4.12-4 illustrates the major directions of approach and departure that form the trip distribution pattern for the Agricultural Residential Cluster Subdivision. Figure 4.12-5 illustrates the assignment of Agricultural Residential Cluster Subdivision traffic to the study-area roadway and intersection network.

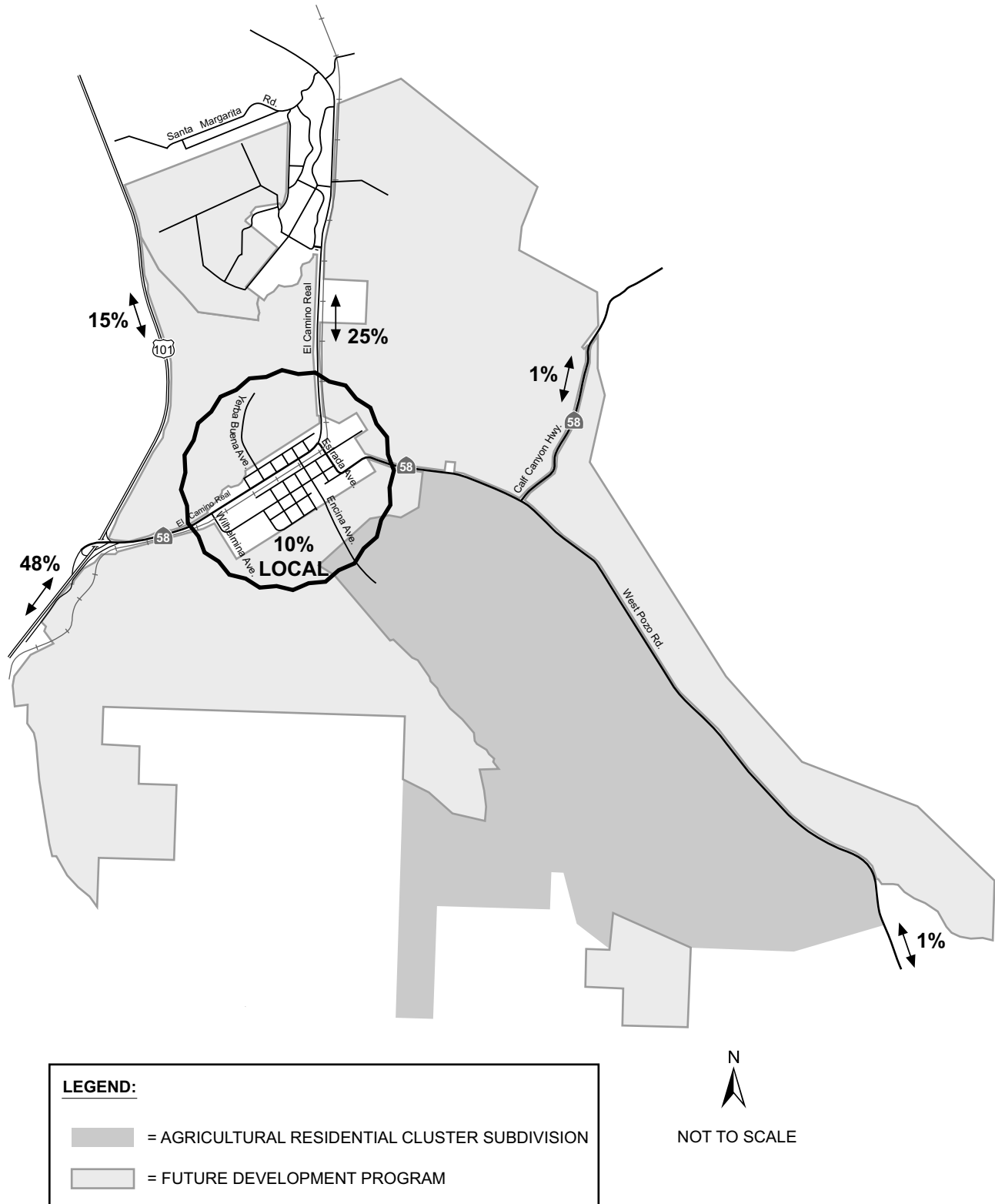
**c. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.** The following section reviews the impacts of the Agricultural Residential Cluster Subdivision assuming the forecasted *Existing + Agricultural Residential Cluster Subdivision* volumes shown in Figures 4.12-6 and 4.12-7.

**Agricultural Residential Cluster Subdivision Impact T-1**

**Development of the Agricultural Residential Cluster Subdivision would result in the addition of 1,154 average daily trips (88 AM peak hour and 119 PM peak hour trips) to study-area roadways and intersections. Although this would not result in exceedances of roadway or intersection LOS standards, with the exception of the US 101/SR 58 interchange northbound off-ramp, the Agricultural Residential Cluster Subdivision will add traffic to locations with existing hazards and deficiencies. Implementation of proposed mitigation measures would improve hazards and deficiencies. However, due to uncertainty regarding Caltrans approval of facilities within State jurisdiction, Class I, significant and unavoidable, impacts would result.**

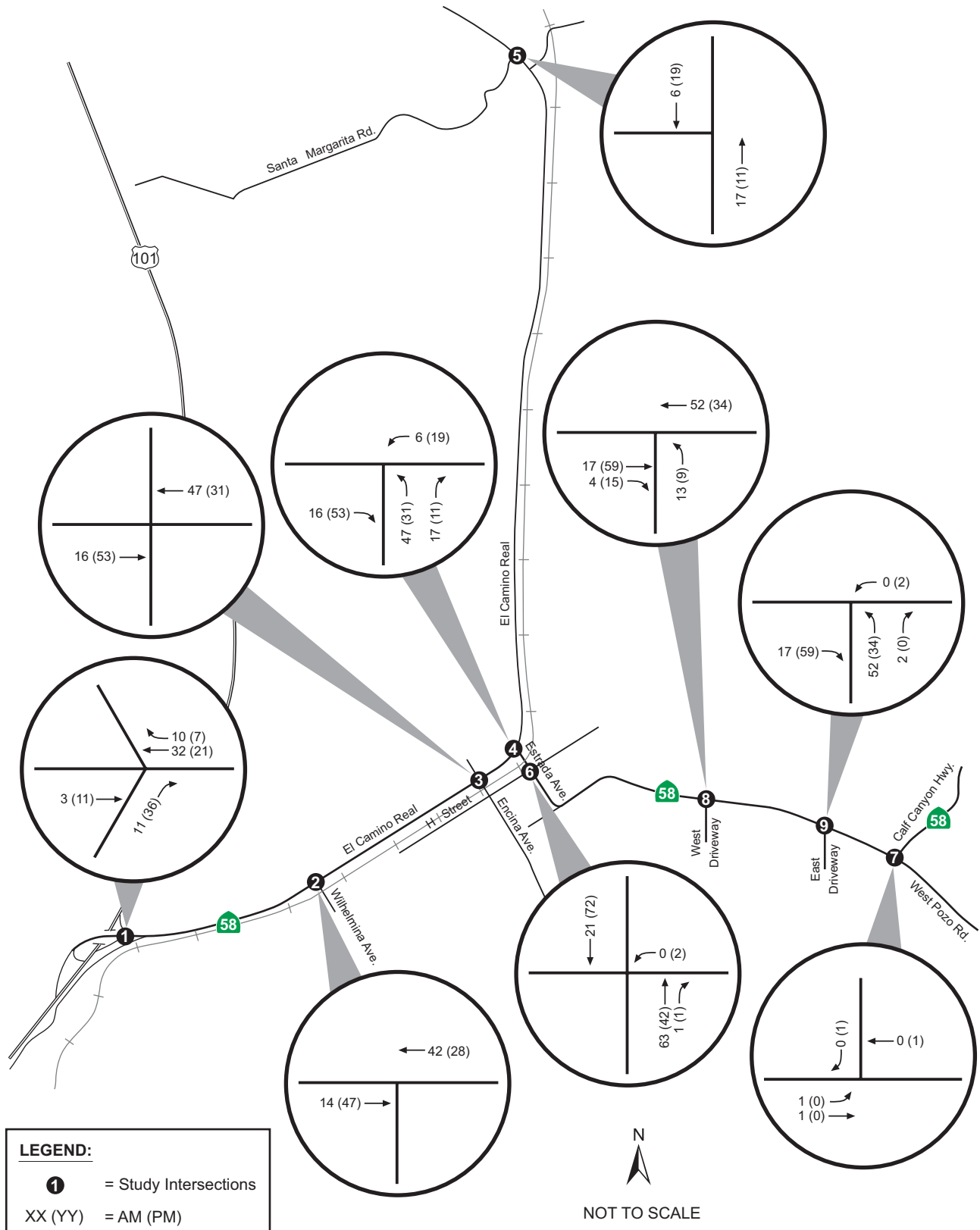
**Existing + Agricultural Residential Cluster Subdivision Roadway Operations.** *Existing + Agricultural Residential Cluster Subdivision* daily roadway segment traffic operations have been quantified utilizing roadway ADT-based LOS thresholds presented in Tables 4.12-2 through 4.12-4 and the projected daily traffic volumes with implementation of the Agricultural Residential Cluster Subdivision. Tables 4.12-10(a) through 4.12-10(c) present the projected daily traffic volumes and a summary of the *Existing + Agricultural Residential Cluster Subdivision* roadway segment LOS conditions.





Residential Trip Distribution

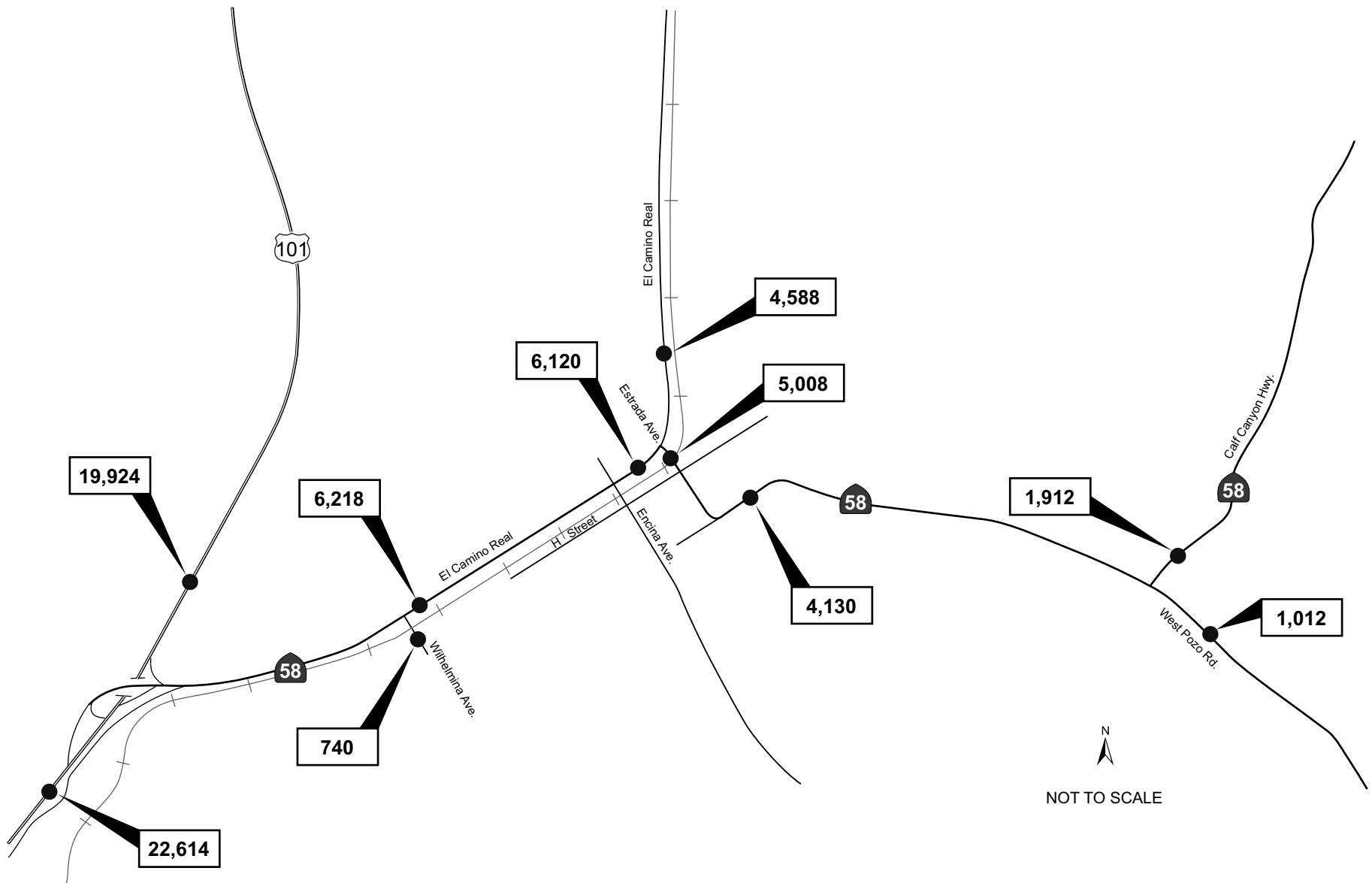
Figure 4.12-4



Proposed Agricultural Residential Cluster Subdivision  
 Trip Assignment

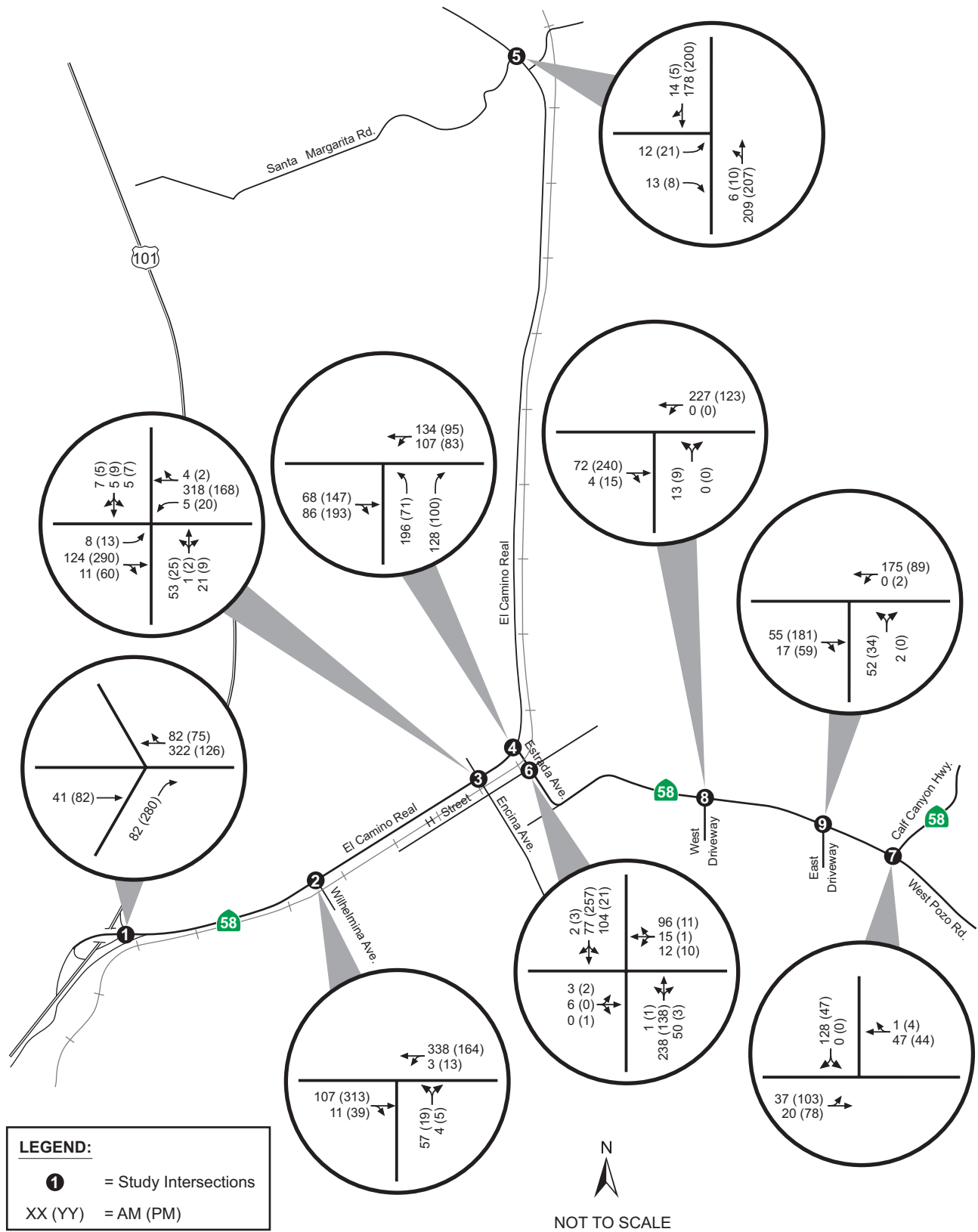
Figure 4.12-5

Source: Fehr & Peers, 2006.



Existing + Agricultural Residential Cluster Subdivision  
Average Daily Traffic Volumes

Source: Fehr & Peers, 2006.



Existing + Agricultural Residential Cluster Subdivision  
 Intersection Peak-Hour Traffic Volumes

Figure 4.12-7

Source: Fehr & Peers, 2006.



**Table 4.12-10(a). Existing + Agricultural Residential Cluster Subdivision  
 Two-Lane Highway Levels of Service**

Roadway Segment	Class Designation	Peak Hour	Existing		Existing + Agricultural Residential Cluster Subdivision	
			PTSF <sup>1</sup>	LOS	PTSF <sup>1</sup>	LOS
El Camino Real north of Estrada Avenue	I	AM	37.4	B	39.4	C
		PM	31.7	B	33.7	B
West Pozo Road (SR 58) between J Street and West Driveway	II	AM	45.5	B	50.6	B
		PM	45.9	B	53.2	B
West Pozo Road southeast of Calf Canyon Highway (SR 58)	II	AM	30.2	A	30.3	A
		PM	28.5	A	28.6	A
Calf Canyon Highway (SR 58) northeast of West Pozo Road	II	AM	51.0	B	51.1	B
		PM	46.3	B	46.4	B

<sup>1</sup> PTSF = Percent time-spent-following.

**Table 4.12-10(b). Existing + Agricultural Residential Cluster Subdivision  
 Local Roadway Levels of Service**

Roadway Segment	Roadway Type	Existing		Existing + Agricultural Residential Cluster Subdivision	
		Volume <sup>1</sup>	LOS	Volume <sup>1</sup>	LOS
El Camino Real (SR 58) between Wilhelmina Avenue and Maud Avenue	2-Lane Arterial (no left-turn lane)	5,490	B	6,218	B
El Camino Real (SR 58) between Pinal Avenue and Estrada Avenue	2-Lane Arterial (no left-turn lane)	5,300	B	6,120	B
Estrada Avenue (SR 58) south of El Camino Real	2-Lane Arterial (no left-turn lane)	3,900	A	5,008	A
Wilhelmina Avenue between El Camino Real and I Street	2-Lane Collector/Local Street	740	A	740	A

<sup>1</sup> Average daily traffic.

**Table 4.12-10(c). Existing + Agricultural Residential Cluster Subdivision  
 U.S. 101 Mainline Levels of Service**

Travel Direction	Segment	Peak Hour	Existing		Existing + Agricultural Residential Cluster Subdivision	
			Density <sup>1</sup>	LOS	Density <sup>1</sup>	LOS
Northbound	South of SR 58	AM	9.1	A	9.2	A
		PM	22.7	C	23.0	C
	North of SR 58	AM	9.1	A	9.2	A
		PM	21.1	C	21.1	C
Southbound	North of SR 58	AM	19.3	C	19.4	C
		PM	12.3	B	12.4	B
	South of SR 58	AM	21.6	C	21.9	C
		PM	12.6	B	12.8	B

<sup>1</sup> Measured in vehicles per mile per lane.

As shown in Tables 4.12-10(a) through 4.12-10(c), all roadway segments are projected to operate at acceptable LOS with the addition of traffic generated by the Agricultural Residential Cluster



Subdivision. However, the addition of Agricultural Residential Cluster Subdivision traffic will contribute to existing operational problems on SR 58 near J Street. As discussed in Section 4.12.1(e), SR 58 transitions into a 90-degree curve south of J Street. Except for a 15 mile per hour (mph) warning sign, no additional warning signs or physical barriers are in place. As indicated in the Existing Conditions section, a total of six (6) collisions were reported over a three-year period. These collisions include the following types and number of incidents: head-on collision (2), side-swipe collision (2), broad-side collision (1), and hitting a fixed object (1). As shown on Figure 4.12-6, the addition of traffic by the Agricultural Residential Cluster Subdivision is projected to significantly increase the daily volumes (43 percent) on SR 58, east of the 90-degree curve, from 3,000 to 4,130 vehicles. Therefore, impacts are potentially significant and mitigation is required.

**Existing + Agricultural Residential Cluster Subdivision Freeway Ramp Operations.** Table 4.12-11 presents the projected daily traffic volumes and a summary of the *Existing + Agricultural Residential Cluster Subdivision* freeway ramp segment LOS conditions.

**Table 4.12-11. Existing + Agricultural Residential Cluster Subdivision  
 U.S. 101 at SR 58 Ramp Junction Levels of Service**

Travel Direction	Merge/Diverge	Peak Hour	Existing		Existing + Agricultural Residential Cluster Subdivision	
			Density <sup>1</sup>	LOS	Density <sup>1</sup>	LOS
Northbound	Diverge (Off-ramp)	AM	13.2	B	13.3	B
		PM	28.3	D	28.7	D
	Merge (On-ramp)	AM	11.9	B	12.0	B
		PM	24.0	C	24.0	C
Southbound	Diverge (Off-ramp)	AM	23.6	C	23.7	C
		PM	15.8	B	15.9	B
	Merge (On-ramp)	AM	24.3	C	24.6	C
		PM	15.3	B	15.5	B

<sup>1</sup> Measured in vehicles per mile per lane.

As shown in Table 4.12-11, the merge and diverge ramp operations at the U.S. 101/SR 58 interchange are projected to operate at acceptable levels of service with the addition of Agricultural Residential Cluster Subdivision traffic to existing roadway volumes, with the exception of the northbound off-ramp, which is projected to continue to operate below the Caltrans LOS D standard. The Agricultural Residential Cluster Subdivision development will increase the existing AM and PM peak-hour volumes on the US 101 northbound off-ramp by 15 percent.

The addition of Agricultural Residential Cluster Subdivision traffic will contribute to existing operational problems at the U.S. 101 southbound off-ramps to SR 58. Currently this ramp is configured with a short diverge taper of approximately 250 feet, and vehicles exiting the freeway must negotiate a short radius curve that is posted for 15 mph immediately after exiting the mainline. This design causes southbound US 101 vehicles to slow down on the mainline section or brake rapidly within a short distance to negotiate the off-ramp. This existing design does not meet current Caltrans standards. According to Figure 504.2A of the HDM, 590 feet of deceleration length is required for exit ramps with a radius of less than 300 feet. Section 504.3 of the HDM also requires the minimum ramp design speed to meet or exceed the design speed of the facility for which the through movement is provided. The southbound off-ramp posted speed of 15 mph is below the design speed across the overpass (estimated to be 35 mph). The



existing design does not meet Caltrans standards, and the addition of Agricultural Residential Cluster Subdivision traffic will exacerbate the existing operational problems. Therefore, impacts are potentially significant and mitigation is required.

**Existing + Agricultural Residential Cluster Subdivision Intersection Operations.** *Existing + Agricultural Residential Cluster Subdivision* AM and PM peak hour intersection traffic operations are presented in Table 4.12-12 and Figure 4.12-7. The *Existing + Agricultural Residential Cluster Subdivision* traffic volumes were generated by superimposing the Agricultural Residential Cluster Subdivision generated traffic volumes on the observed existing traffic volumes.

**Table 4.12-12. Existing + Agricultural Residential Cluster Subdivision Intersection Levels Of Service**

Intersection	Peak Hour	Intersection Control	Existing		Existing + Agricultural Residential Cluster Subdivision	
			Delay	LOS	Delay	LOS
U.S. 101 Northbound Ramps and State Route 58	AM	Uncontrolled	8.9	A	8.9	A
	PM		10.1	B	10.5	B
El Camino Real (SR 58) and Wilhelmina Avenue	AM	Side Street Stop	12.2	B	13.0	B
	PM		11.7	B	12.5	B
El Camino Real (SR 58) and Encina Avenue	AM	Side Street Stop	12.8	B	13.8	B
	PM		13.0	B	14.2	B
El Camino Real (SR 58) and Estrada Avenue	AM	Side Street Stop	13.8	B	16.3	C
	PM		11.0	B	12.3	B
El Camino Real and Santa Margarita Road	AM	Side Street Stop	10.4	B	10.6	B
	PM		11.0	B	11.2	B
Estrada Avenue (SR 58) and H Street	AM	Side Street Stop	15.6	C	17.4	C
	PM		10.7	B	11.7	B
Calf Canyon Highway (SR 58) and West Pozo Road	AM	Side Street Stop	9.2	A	9.2	A
	PM		8.8	A	8.8	A
West Pozo Road (SR 58) and West Driveway	AM	Side Street Stop	Future Intersection		10.7	B
	PM		Future Intersection		11.1	B
West Pozo Road (SR 58) and East Driveway	AM	Side Street Stop	Future Intersection		10.5	B
	PM		Future Intersection		10.7	B

- Whole intersection weighted average control delay expressed in seconds per vehicle using methodology described in the 2000 HCM. For side street stop controlled intersections, total control delay for the worst movement is presented.
- For side street stop controlled intersections, LOS for the worst movement is shown. LOS calculations conducted using the SYNCHRO analysis software package.

As shown in Table 4.12-12, all of the study intersections are projected to operate at acceptable levels (above County’s LOS C and Caltrans’ LOS C/D threshold standards) with implementation of the Agricultural Residential Cluster Subdivision. However, the addition of Agricultural Residential Cluster Subdivision will contribute traffic to locations with existing operational issues and to locations that do not meet current Caltrans or County design standards.

As discussed in Section 4.12.1(e), The El Camino Real/Estrada Avenue intersection has a crest in the center of the intersection that limits the sight distance for northbound vehicles to turn onto El Camino Real. A total of six (6) collisions were reported at this location over a three-year period. The types of collision for each incident were as follows: driving under influence (1), rear-end (1), side-swipe (1), and hitting a fixed object (3).



A review of the northbound (Estrada Avenue) queues indicate that the northbound left-turns are projected to queue back to the railroad tracks during the AM peak hour.

A review of the westbound left-turns from El Camino Real to Estrada Avenue was conducted to determine if a dedicated westbound left-turn lane is warranted. According to *Manual on Uniform Traffic Control Devices (MUTCD) 2003 California Supplement*, protected left-turn phasing is not warranted based on the projected volumes (product of westbound left-turns and conflicting through volume do not exceed 100,000). Other conditions such as collisions (5 or more left-turn collisions in 12-month period), delay, and miscellaneous factors (impaired sight distance due to horizontal or vertical curvature) should be considered according to the MUTCD CA supplement. The collision history does not indicate a problem with left-turns and the redesign of the intersection, as indicated above, would improve sight distance. The left-turn volume warrants from the Intersection Channelization Design Guide (Transportation Research Board, 1985) also indicate that a westbound left-turn lane is not warranted under Existing or Project Conditions (refer to Appendix J for technical calculations).

According to Chapter 5 of the Institute of Transportation Engineers (ITE) Transportation and Land Development Manual, right-turn lanes should be considered when right-turn volumes exceeds 350 vehicles per hour per lane. The eastbound right-turn volume does not exceed 350 vehicles for either peak hour and a right-turn lane is not recommended based on this guideline.

Vehicles turning left or right from Estrada Avenue onto El Camino Real have a sight distance of approximately 450 feet to the west and over 500 feet to the east. The *Highway Design Manual* (Caltrans, Fifth Edition) requires a minimum stopping sight distance of 310 feet for a 40 mph design speed and a minimum of 590 feet for a 60 mph design speed. Vehicles have to encroach into the intersection to access SR 58.

The intersection of Estrada Avenue and H Street experiences limited sight distance due to an existing crest on Estrada Avenue, in the vicinity of Santa Margarita Elementary School. Northbound vehicles travel over the crest and immediately arrive at H Street. Field measurements indicate that the stopping sight distance for northbound Estrada Avenue vehicles is approximately 225 feet which corresponds to a design speed of 30 mph. Vehicles are currently exceeding the 30 mph speed limit and may not have sufficient time and pavement to come to a complete stop if pedestrians are crossing Estrada Avenue at H Street to travel to Santa Margarita Elementary School or to Santa Margarita Park. The Flashing Beacon at School Crossings warrant (Section 4K.103 from MUTCD 2003 CA Supplement) is satisfied under Project Conditions. The vehicular volume exceeds 140 vehicles and the school age pedestrians exceed 40 pedestrians for each of 2 hours and the critical approach speed exceeds 35 mph with no other controlled crossing nearby. The majority of Agricultural Residential Cluster Subdivision project traffic will travel through this intersection, thus increasing the number of drivers experiencing the existing sight distance deficiency.

As indicated on Figure 4.12-4, approximately 10 percent of traffic generated from the residential development would have local destinations within Santa Margarita. Of these trips, a small percentage was assigned to travel to the elementary school. Even if 100 trips (50 inbound & 50 outbound) from the Agricultural Residential Cluster Subdivision were assigned to the school during the AM peak-hour, the level of service rating would not degrade to an unacceptable level. The mitigation measure at the Estrada Street/H Street intersection is not anticipated to change since the mitigation measure [Agricultural Residential Cluster Subdivision measure T-



1(e)] addresses existing roadway design deficiencies (limited sight distance at the intersection). The school traffic that is associated with dismissal of classes occurs in the early afternoon before the evening commute period (4:00 to 6:00 PM).

The forecast traffic volumes at the intersection of El Camino Real/Wilhelmina Avenue will capture traffic that uses I Street as a shortcut to bypass El Camino Real. The existing El Camino Real/Wilhelmina Avenue intersection volumes do not suggest that a substantial amount of traffic uses I Street as a shortcut. Fewer than 60 vehicles, in each direction, currently turn to/from Wilhelmina Avenue to El Camino Real during each peak hour. Therefore, even with additional congestion on El Camino Real as a result of traffic generated by the Agricultural Residential Cluster Subdivision, “cut-through” traffic on I Street would not result in unacceptable levels of service at I Street intersections.

Under *Existing + Agricultural Residential Cluster Subdivision* conditions, the Agricultural Residential Cluster Subdivision is expected to significantly impact these intersections by adding traffic to locations with existing hazards and deficiencies. Impacts are potentially significant and mitigation is required.

Mitigation Measures. The following mitigation measures are required:

**Agricultural Residential Cluster Subdivision T-1(a)**

**SR 58 South of J Street.** To mitigate the project’s impacts to the two 90-degree curves on SR 58 near J Street, the following improvements are required:

1. four foot shoulders and/or bike lanes in accordance with Widen both sides of SR 58 (from El Camino Real to the Agricultural Residential Cluster Subdivision eastern site access) to provide County standards.
2. Install radar feedback signs and advisory speeds on each approach to the 90-degree on SR 58 near J Street.

As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and associated approval from Caltrans would be required if the cost of the improvements exceeds three million dollars.

**Plan Requirements and Timing.** Improvements shall be installed prior to occupancy clearance. The applicant shall construct and implement the alternate improvements under a Caltrans encroachment permit or Project Study Report.

**Monitoring.** Caltrans and the County of San Luis Obispo shall site inspect to ensure installation of improvements prior to occupancy clearance.

**Agricultural Residential Cluster Subdivision T-1(b)**

**U.S. 101 Northbound Off-Ramp to SR 58.** The applicant shall lengthen the deceleration length from 140 feet to 250 feet from the US 101 mainline to the northbound off-ramp to mitigate the



Agricultural Residential Cluster Subdivision's impact to the ramp junction.

In addition, the applicant shall reconstruct the area where the northbound U.S. 101 off-ramp merges with eastbound SR 58 to provide 400 feet of merging distance to meet Caltrans' current design standards. Since the park-and-ride facility is located adjacent to the northbound off-ramp, reconfiguration of the parking lot and access to a nearby frontage road is required. The applicant shall include designs for the revised park and ride and frontage road access in the permit with Caltrans. A field assessment indicates that the merge area could be lengthened by physically separating the park and ride lot from the roadway, which would improve the existing condition and reduce the impact.

As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.

**Plan Requirements and Timing.** Improvements shall be installed prior to occupancy clearance. The applicant shall construct and implement the improvements under a Caltrans encroachment permit. **Monitoring.** Caltrans and the County of San Luis Obispo shall site inspect to ensure installation of improvements prior to occupancy clearance.

**Agricultural Residential  
Cluster Subdivision  
T-1(c)**

**U.S. 101 Southbound Off-Ramp to SR 58.** The project applicant shall extend the deceleration length from 250 to 550 feet for the southbound off-ramp to provide acceptable freeway ramp diverge operations under Cumulative Plus Agricultural Residential Cluster Subdivision conditions.

As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.

**Plan Requirements and Timing.** Improvements shall be installed prior to occupancy clearance. The applicant shall construct and implement the improvements under a Caltrans encroachment permit. **Monitoring.** Caltrans and the County of San Luis Obispo shall site inspect to ensure installation improvements prior to occupancy clearance.



**Agricultural Residential  
Cluster Subdivision  
T-1(d)**

**El Camino Real/Estrada Avenue Redesign.** With the addition of Agricultural Residential Cluster Subdivision traffic, the project applicant shall construct the following improvements:

1. Widen Estrada Avenue, between El Camino Real and the railroad tracks, to provide a dedicated northbound right-turn lane.
2. Widen El Camino Real to provide a separate left-turn lane for westbound El Camino Real traffic to turn onto southbound Estrada Avenue.
3. Reduce the superelevation of the El Camino Real curve at Estrada Avenue
4. Prior to implementation of Future Development Program measure T-1(d), traffic signal installation and rail pre-emption, advance limit lines for northbound Estrada traffic shall be provided immediately south of the rail tracks, and a Manual on Uniform Traffic Control Devices (2003 Edition) R8-10 sign which states "Stop Here When Flashing" shall be provided to minimize the potential for vehicles to stop directly on the railroad tracks.

According to San Luis Obispo County Public Works staff, extension of an existing culvert is required as part of this improvement. The applicant shall secure any regulatory permits for the necessary construction of intersection improvements to meet Caltrans standards.

As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.

**Plan Requirements and Timing.** Improvement plans for the El Camino Real/Estrada Avenue intersection shall be submitted for review by Planning and Building prior to approval of Land Use Permits. The improvements shall be constructed prior to occupancy clearance. The applicant shall implement the improvements under a Caltrans encroachment permit.

**Monitoring.** Caltrans and the County of San Luis Obispo shall site inspect to ensure installation of improvements prior to occupancy clearance.

**Agricultural Residential  
Cluster Subdivision  
T-1(e)**

**Estrada Avenue/H Street Warning Beacon.** A pedestrian-activated advanced warning beacon shall be installed on the northbound approach to the intersection of Estrada Avenue and H Street, before the crest on Estrada Avenue, to warn drivers of the presence of pedestrians crossing at the intersection. A



pedestrian-activated beacon shall also be installed for southbound Estrada Avenue traffic. The precise location for beacon installation shall be determined in consultation with Caltrans under the encroachment permit process, and shall include any required ramps or other Americans with Disabilities Act (ADA) upgrades. The applicant shall fund and install both advanced warning beacons.

The *Santa Margarita Design Plan*, adopted October 9, 2001, recommended the following long-term improvements to Estrada Avenue between H Street and I Street:

- Improve sight distance by eliminating the hill/crest
- Add curbs and textured crossings at Estrada Avenue/H Street
- Provide bike lanes on Estrada Avenue

These improvements represent alternative mitigation measures for this intersection. However, eliminating the crest would require extensive earthwork and roadbed re-construction. Depending on the final design of the long-term improvements, the flashing beacons could be integrated into the plan.

As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.

**Plan Requirements and Timing.** The pedestrian-activated warning beacons shall be installed prior to occupancy clearance. The applicant shall fund and install the required advance warning beacons on Estrada Avenue under a Caltrans encroachment permit prior to occupancy clearance. **Monitoring.** Caltrans and the County of San Luis Obispo shall site inspect to ensure installation of the pedestrian-activated warning beacons prior to occupancy clearance.

Residual Impacts. If the construction and occupation of residences occurs prior to completion of the above improvements, existing deficiencies and associated impacts would remain. Although proposed mitigation would reduce impacts to the extent possible, due to the regarding Caltrans approval of improvements within their jurisdiction, and uncertainty regarding right-of-way acquisition, it cannot be assured that all improvements would be feasibly constructed prior to occupation of the proposed residences. As a result, impacts would remain significant and unavoidable.

Implementation of many transportation improvements required as mitigation (i.e., improvements to SR 58 south of J Street and the Estrada Avenue/H Street Warning Beacon) would not result in significant environmental impacts related to site disturbance since





improvements would occur within existing disturbed rights-of-way. It should be noted that impacts associated with implementation of required transportation improvements (e.g., construction impacts, aesthetic impacts) are discussed in other impact sections of this EIR to the extent possible. Refer to Section 4.3, *Biological Resources*, for a discussion of biological resources impacts related to transportation improvements, such as redesign of the intersection of El Camino Real/Estrada Avenue. Since the precise location of the U.S. 101 Southbound Off-Ramp to SR 58 and U.S. 101 Northbound Off-Ramp to SR 58 roadway improvements has not been determined, precise environmental impacts associated with such improvements would be too speculative to address at this time. Environmental impacts associated with implementation of required transportation improvements would be evaluated during the preparation of a Permit Engineering Evaluation Report (PEER), if one is determined necessary during the encroachment permit process and/or separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA).

**Agricultural Residential Cluster Subdivision Impact T-2**      **The internal roadway system proposed for the Agricultural Residential Cluster Subdivision homes would provide adequate circulation. However, site access to the Agricultural Residential Cluster Subdivision could result in an inadequate stopping sight distance. Class II, significant but mitigable, impacts would result.**

*Site Access.* Primary access to the Agricultural Residential Cluster Subdivision from SR 58 is proposed via one existing driveway and one new driveway from West Pozo Road. The existing driveway (hereafter the “east driveway”) is located approximately 750 feet west of the Calf Canyon Road (SR 58)/West Pozo Road intersection. The new driveway (hereafter the “west driveway”) would be located approximately 0.5 miles west of this intersection. No improvements (i.e., turn pockets) are proposed on West Pozo Road (SR 58) near the two project driveways.

Sight distances were analyzed at the proposed locations of the east and west driveways to determine whether they meet Caltrans design criteria. As referenced in the Caltrans Highway Design Manual, the sight distance requirements for private roadway intersections are determined based on “stopping sight distance.” Stopping sight distance is measured from the driver’s eye, assumed to be 3.5 feet above the road, to an object 0.5 feet high on the road. According to County of San Luis Obispo Department of Public Works staff, vehicles travel at speeds at or over 55 mph along this corridor. The stopping sight distance for a 60-mph road is 590 feet. The sight distance from the east driveway is adequate based on Caltrans standards. The east driveway is expected to handle the majority (i.e., approximately 80%) of Agricultural Residential Cluster Subdivision traffic, and the main internal roadway connects to this driveway.

However, the stopping sight distance from the west driveway is limited by an existing crest on West Pozo Road to the west of the currently proposed driveway location. Therefore, impacts related to site access are potentially significant, and mitigation is required.

The design of the driveways on West Pozo Road would follow the tapers and radius as illustrated on Figure 405.7 of the Caltrans Highway Design Manual.

Refer to Section 4.10, *Public Services*, for a discussion of impacts related to emergency access.

*Internal Circulation.* The internal roadway system is structured as a series of three loop roads and two cul-de-sacs. Several of the housing units are located at the end of private drives



connected to the loop roads and cul-de-sacs. Based upon a review of the projected volumes at the driveways, the number of proposed driveways is adequate to serve the Agricultural Residential Cluster Subdivision development. Impacts related to internal circulation would be less than significant.

Mitigation Measures. The following mitigation measure would reduce impacts related to site access to a less than significant level:

**Agricultural Residential Cluster Subdivision T-2(a)**

**West Driveway Relocation.** The proposed west driveway shall be relocated at least 590 feet to the east to eliminate stopping site distance impacts associated with the West Pozo Road crest located west of the driveway. The relocated driveway will be in close proximity to the driveway for the cemetery located on the north side of Pozo Road.

The design of the driveways shall follow recommended guidelines as stated in the Caltrans Highway Design Manual.

**Plan Requirements and Timing.** The relocated driveway and driveway design shall be shown on plans submitted to Planning and Building for review and approval prior to land use permit approval for tract improvements. **Monitoring.** Caltrans and County Public Works shall review plans prior to issuance of building permits and inspect prior to occupancy clearance.

Residual Impacts. Implementation of the above mitigation measure would increase stopping site distance from the proposed west driveway, resulting in less than significant site access impacts. Similar to the implementation of the west driveway in its proposed location, the relocated west driveway would result in construction impacts, tree removal impacts, and aesthetics impacts, as discussed in other impact sections of this EIR.

**Agricultural Residential Cluster Subdivision Impact T-3**

**Development of the proposed residential units may generate parking demands in excess of the proposed parking supply. This would generate a Class III, less than significant, impact.**

According to County standards [County Land Use Ordinance Section 22.18.050(C)], residential projects must provide two off-street parking spaces per single-family unit. Therefore, the proposed 112-unit project would result in a parking demand of 224 garage spaces. The applicant's plan does not indicate whether these spaces would be included in the development. However, the applicant is required to comply with County Land Use Ordinance Section 22.18.050(C) as a condition of project approval. Therefore, impacts related to parking demand would be less than significant.

It should be noted that the provision of adequate off-site parking at commercial businesses within the community of Santa Margarita is the responsibility of individual property owners.

Mitigation Measures. No mitigation is required.

Residual Impacts. With implementation of parking spaces in accordance with County standards, parking impacts would be less than significant.



**Agricultural Residential Cluster Subdivision Impact T-4**

**The addition of traffic generated by the Agricultural Residential Cluster Subdivision may result in conflicts with pedestrians and bicyclists, as well as increase demand for transit services. Although impacts on transit services would be less than significant, impacts related to pedestrian movement and bicycle conflicts are Class II, significant but mitigable.**

*Bicycle.* Several bicycle facilities exist in the vicinity of the Agricultural Residential Cluster Subdivision site. However, bike lanes are not provided on SR 58 adjacent to the site. Bicyclists are forced to use the narrow shoulders or to ride in the travel lanes. The traffic added by the Agricultural Residential Cluster Subdivision will increase potential automobile-bicycle conflicts on SR 58 between downtown Santa Margarita and the Agricultural Residential Cluster Subdivision driveways due to the narrow roadway width on West Pozo Road (SR 58). Mitigation is required to ensure less than significant impacts.

*Pedestrian.* Limited pedestrian sidewalks and crosswalks are provided in downtown Santa Margarita and there are currently no pedestrian facilities between the proposed development and downtown. Typical activities within the Agricultural Residential Cluster Subdivision development are unlikely to create high demand for pedestrian facilities to and from downtown because the site is located more than one mile away. However, traffic generated by the Agricultural Residential Cluster Subdivision will add traffic to the El Camino Real/Encina Avenue intersection. According to San Luis Obispo County Public Works Department, Caltrans District 5 Traffic Safety staff have completed a warrant study which shows the El Camino Real/Encina Avenue intersection meeting warrants for pedestrian flashing warning lights (the volume warrant is not met). According to Caltrans District 5 staff, the proposed Agricultural Residential Cluster Subdivision would likely trigger the volume warrant being satisfied.

The proposed provision of a private pathway between the community of Santa Margarita and the Agricultural Residential Cluster Subdivision would accommodate a portion of the increased pedestrian demand. However, because the pedestrian trail would be gated and private, some pedestrians traveling between the subdivision and community would be diverted to West Pozo Road, which would be considered unsafe for pedestrian movement due to conflicts with vehicles. As a result, impacts related to pedestrian facilities would be potentially significant.

*Transit.* The nearest transit facilities to the Agricultural Residential Cluster Subdivision are located on El Camino Real in Santa Margarita, approximately one mile north of the proposed development. Typical activities within the Agricultural Residential Cluster Subdivision are unlikely to create demand for transit facilities due to the relatively low density of the proposed development. Therefore, the Agricultural Residential Cluster Subdivision would have a less than significant impact on the transit facilities.

Mitigation Measures. Implementation of Agricultural Residential Cluster Subdivision mitigation measure T-1(a), which requires widening of West Pozo Road (SR 58) along the Agricultural Residential Cluster Subdivision site's frontage to accommodate County-planned Class II bicycle lanes or shoulders, would reduce potential automobile-bicycle conflict impacts to a less than significant level. The following mitigation measures are required to reduce potential automobile-pedestrian conflicts:



**Agricultural Residential  
Cluster Subdivision  
T-4(a)**

**El Camino Real/Encina Avenue In-Pavement Flashing Lights.** Pedestrian in-pavement flashing lights shall be installed on the eastbound and westbound approaches to the intersection of El Camino Real and Encina Avenue to warn drivers of the presence of pedestrians crossing at the intersection. The precise location for beacon installation shall be determined in consultation with Caltrans under the encroachment permit process, and shall include any required ramps or other Americans with Disabilities Act (ADA) upgrades. The applicant shall fund and install the in-pavement flashing lights on El Camino Real.

The design of the pedestrian in-pavement flashing lights shall be consistent with the *Santa Margarita Design Plan*, adopted October 9, 2001, which recommended pedestrian improvements along El Camino Real in downtown Santa Margarita. Because El Camino Real (SR 58) is a state-maintained roadway, this measure would require Caltrans approval and an encroachment permit.

**Plan Requirements and Timing.** The pedestrian in-pavement flashing lights shall be installed prior to occupancy clearance. The applicant shall fund and install the required pedestrian in-pavement flashing lights on El Camino Real under a Caltrans encroachment permit prior to occupancy clearance. **Monitoring.** Caltrans and County Public Works shall inspect this location to ensure installation of the pedestrian warning beacons prior to occupancy clearance.

**Agricultural Residential  
Cluster Subdivision  
T-4(b)**

**Pedestrian Pathway.** The gate to the proposed pedestrian pathway between the subdivision and community shall be removed from site plans, and be open for public use. No-climb fencing shall be installed for the length of the trail. An entity, comprised of homeowners, shall be formed to maintain the pathway. The trail shall also permit bicycle transportation.

**Plan Requirements and Timing.** Prior to issuance of grading permits, revised site plans depicting the removal of the gate and dedication of the pedestrian trail between the subdivision and community shall be submitted to and reviewed by Planning and Building. **Monitoring.** Planning and Building shall site inspect during construction to ensure compliance with approved plans.

Residual Impacts. With implementation of the above mitigation measures, impacts related to automobile-bicycle and automobile-pedestrian conflicts would be reduced to a less than significant level.

Implementation of required pedestrian improvements would not result in significant environmental impacts since improvements would occur within existing disturbed rights-of-way. It should be noted that impacts associated with implementation of required transportation improvements (e.g., construction impacts) are discussed in other impact sections of this EIR.



**d. Cumulative No Project Traffic Volumes.** Cumulative No Project volumes reflect 20 years of growth in the study area plus traffic from pending projects. According to County staff, no pending projects are proposed in the immediate Santa Margarita area. Two pending projects were identified in south Atascadero that would add some trips through Santa Margarita.

In addition to traffic from the pending projects, an annual growth factor of 1.4% was applied to the existing volumes for a 20-year period. The growth factor is based upon a comparison of existing (Year 2006) roadway volumes to Year 2001 volumes. Pending project trips were added to the growth-factored volumes to represent Cumulative No Project Conditions. Cumulative No Project roadway segment volumes were developed by applying the growth factor and including traffic from the pending projects.

**e. Cumulative Plus Agricultural Residential Cluster Subdivision Traffic Volumes.** The Agricultural Residential Cluster Subdivision-generated trips were added to the Cumulative No Project volumes to represent Cumulative Plus Agricultural Residential Cluster Subdivision Conditions.

**f. Cumulative Plus Agricultural Residential Cluster Subdivision Plus Future Development Program Traffic Volumes.** The Future Development Program would consist of 514 residences (including the Agricultural Residential Cluster Subdivision) and the additional following uses: private golf course, club house and pro shop; guest ranch, lodge, and restaurant; 12-room bed and breakfast; cafe; amphitheater; crafts studios, galleries and shops; interpretive center and gift shops; nine wineries with tasting rooms and permitted special events; neighborhood park and swimming pool; five ranch/farm headquarters; one livestock sales yard and café; three places of worship; and a retreat center. Table 4.12-13 shows that the Future Development Program would generate 8,137 average daily weekday trips, 655 AM peak-hour trips, and 818 PM peak-hour trips. The amount of traffic added to the surrounding roadway system by most Future Development Program uses was estimated by applying trip generation rates appropriate for the AM and PM peak hours as published in *Trip Generation (7<sup>th</sup> Edition)* by the Institute of Transportation Engineers (ITE). Trip generation estimates for the wineries are based on surveys presented in the *Santa Margarita Ranch Project Draft Traffic and Circulation Study* (ATE, 2004). Several land uses are assumed to generate traffic outside of the weekday morning and evening peak-hours. These uses include the farm support quarters, amphitheater, churches, livestock sales, and special events for wineries. These uses are estimated to generate a majority of their trips during early weekday evenings (after 6 p.m.) or during the weekend. The swimming pool/neighborhood park is assumed to serve Santa Margarita residents. As a result, trips would be internal to the community, rather than new trips to the area. The retreat center was assumed to generate trips at the same rate as single-family homes, as a reasonable worst-case estimate. The Future Development Program trips were added to Cumulative Plus Agricultural Residential Cluster Subdivision traffic volumes to establish volumes for Cumulative Plus Agricultural Residential Cluster Subdivision Plus Future Development Program Conditions.

**Table 4.12-13. Future Development Program Trip Generation**

Use	ITE Land Use Code	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total



**Table 4.12-13. Future Development Program Trip Generation**

Use	ITE Land Use Code	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
<b>Trip Rates</b>								
Single-Family Residential and Retreat Center (per dwelling unit)	Single-Family Detached Housing, 210	9.25	0.18	0.54	0.72	0.58	0.35	0.93
Golf Course (per hole)	Golf Course, 430	35.74	1.75	0.47	2.22	1.21	1.53	2.74
Guest Ranch (per unit)	Resort Hotel, 330	2.45	0.27	0.10	0.37	0.21	0.28	0.49
Café (per seat)	High-Turnover Restaurant, 932	4.83	0.24	0.23	0.47	0.24	0.18	0.42
Amphitheater (per seat)	Live Theater, 441	0.20	0.00	0.00	0.00	0.01	0.01	0.02
Specialty Retail (per 1,000 square feet)	Specialty Retail Center, 814	44.32	0.00	0.00	0.00	1.19	1.52	2.71
Winery (per 1,000 square feet)	–	22.20	1.15	1.14	2.29	0.92	1.37	2.29
Worship (per 1,000 square feet)	Church, 560	9.11	0.39	0.33	0.72	0.34	0.32	0.66
<b>Trip Estimates</b>								
Single-Family Res. and Retreat Center (431 d.u.)		3,987	78	233	311	251	148	399
Golf Course (36 holes)		1,287	63	17	80	44	55	99
Guest Ranch (262 units)		642	70	27	97	55	73	128
Café (200 seats)		966	49	45	94	49	35	84
Amphitheater (600 seats)		120	0	0	0	6	6	12
Specialty Retail (9 k.s.f.)		399	0	0	0	11	13	24
Winery (27 k.s.f.)		599	31	31	62	25	37	62
Worship (15 k.s.f.)		137	6	5	11	5	5	10
<b>Total Future Development Program Estimates</b>		<b>8,137</b>	<b>297</b>	<b>358</b>	<b>655</b>	<b>446</b>	<b>372</b>	<b>818</b>

Note: Future Development Program trip generation is in addition to the Agricultural Residential Cluster Subdivision.

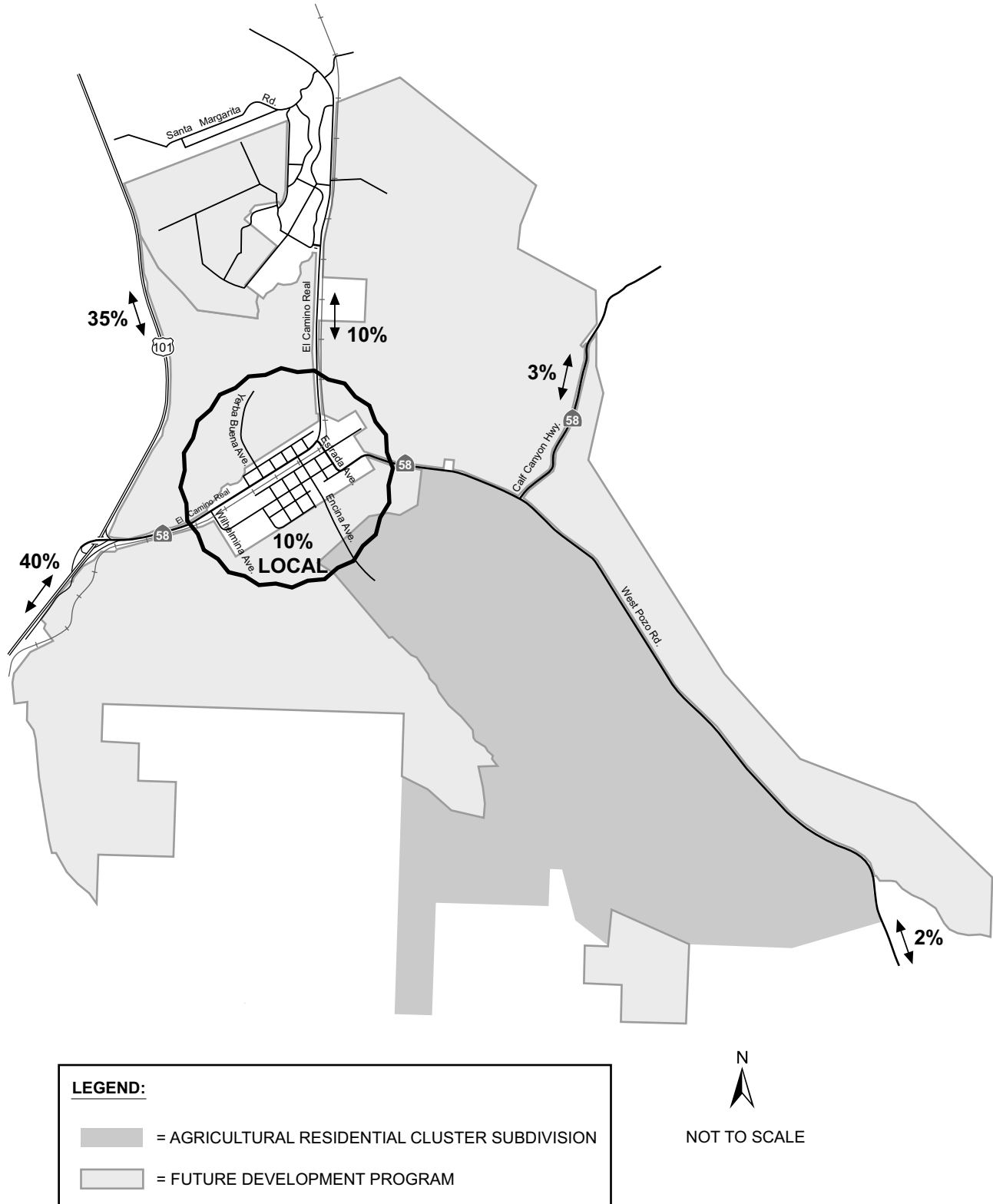
Source: Trip Generation (7th Edition), Institute of Transportation Engineers, 2003.

The directions of approach and departure for Future Development Program traffic were estimated based on the existing travel patterns in the area and the relative locations of employment centers and other attractions such as schools, parks, and retail areas. Figures 4.12-4 and 4.12-8 illustrate the major directions of approach and departure that form the trip distribution pattern for the Future Development Program.

**g. Cumulative Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.12.2(c) for a discussion of transportation and circulation impacts resulting from the Agricultural Residential Cluster Subdivision independently.

The following section reviews the cumulative impacts of the Agricultural Residential Cluster Subdivision and Future Development Program. The *Cumulative + Agricultural Residential Cluster Subdivision + Future Development Program* (hereafter the *Cumulative + Future Development Program*) forecast scenario reflects traffic generated by the Future Development Program in addition to 20 years of growth in the study area (the *Cumulative No Project* scenario) and traffic from the proposed Agricultural Residential Cluster Subdivision (the *Cumulative + Agricultural Residential Cluster Subdivision* scenario) as shown in Figures 4.12-9 and 4.12-10.





Commercial Trip Distribution

Figure 4.12-8

Source: Fehr & Peers, 2006.

**Future Development Program Impact T-1**

The Future Development Program would result in the addition of 8,137 average daily weekday trips (655 AM peak-hour and 818 PM peak-hour trips) to the study-area roadways and intersections. This would cause two local roadway segments, four U.S. 101 mainline segments, all four U.S. 101/SR 58 interchange ramps, and four intersections to operate at unacceptable levels of service during peak hours. Implementation of proposed mitigation measures would partially reduce impacts. However, due to uncertainty regarding Caltrans approval of facilities within State jurisdiction and uncertainty regarding the timing of the improvements, impacts would be Class I, *significant and unavoidable*.

**Cumulative Roadway Operations.** *Cumulative No Project, Cumulative + Agricultural Residential Cluster Subdivision, and Cumulative + Future Development Program* daily roadway segment traffic operations have been quantified utilizing roadway ADT-based LOS thresholds presented in Tables 4.12-2 through 4.12-4 and the projected daily weekday traffic volumes with implementation of the Agricultural Residential Cluster Subdivision, full buildout of the Future Development Program, and cumulative growth. Tables 4.12-14(a) through 4.12-14(c) present the projected daily traffic volumes and a summary of the *Cumulative No Project, Cumulative + Agricultural Residential Cluster Subdivision, and Cumulative + Future Development Program* roadway segment LOS conditions.

**Table 4.12-14(a) Cumulative + Future Development Program Two-Lane Highway Levels of Service**

Roadway Segment	Class Designation	Peak Hour	Cumulative No Project		Cumulative + Agricultural Residential Cluster Subdivision		Cumulative + ARCS + Future Development Program	
			PTSF <sup>1</sup>	LOS	PTSF <sup>1</sup>	LOS	PTSF <sup>1</sup>	LOS
El Camino Real North of Estrada Avenue	I	AM	46.0	C	47.5	C	54.4	C
		PM	39.4	C	41.2	C	48.8	C
West Pozo Road (SR 58) between J Street and West Driveway	II	AM	50.2	B	54.6	B	57.4	C
		PM	52.0	B	58.2	C	60.1	C
West Pozo Road southeast of Calf Canyon Highway (SR 58)	II	AM	32.6	A	32.7	A	36.3	A
		PM	31.7	A	31.8	A	35.7	A
Calf Canyon Highway (SR 58) northeast of West Pozo Road	II	AM	55.3	C	55.6	C	57.0	C
		PM	51.4	B	51.5	B	53.7	B

<sup>1</sup> PTSF = Percent time-spent-following.





**Table 4.12-14(b) Cumulative Local Roadway Levels of Service**

Roadway Segment	Roadway Type	Cumulative No Project		Cumulative + Agricultural Residential Cluster Subdivision		Cumulative + ARCS + Future Development Program	
		Volume <sup>1</sup>	LOS	Volume	LOS	Volume	LOS
El Camino Real (SR 58) between Wilhelmina Avenue and Maud Avenue	2-Lane Arterial (no left-turn lane)	7,250	C	7,978	D	11,816	F
El Camino Real (SR 58) between Pinal Avenue and Estrada Avenue	2-Lane Arterial (no left-turn lane)	7,000	C	7,820	D	10,332	E
Estrada Avenue (SR 58) south of El Camino Real	2-Lane Arterial (no left-turn lane)	5,100	B	6,258	C	7,712	C
Wilhelmina Avenue between El Camino Real and I Street	2-Lane Collector/ Local Street	980	A	980	A	5,932	C

<sup>1</sup> Average daily traffic.

**Table 4.12-14(c) Cumulative U.S. 101 Mainline Levels of Service**

Travel Direction	Segment	Peak Hour	Cumulative No Project		Cumulative + Agricultural Residential Cluster Subdivision		Cumulative + ARCS + Future Development Program	
			Density <sup>1</sup>	LOS	Density <sup>1</sup>	LOS	Density <sup>1</sup>	LOS
Northbound	South of SR 58	AM	12.0	B	12.1	B	13.3	B
		PM	31.2	E	31.7	E	34.8	E
	North of SR 58	AM	12.1	B	12.1	B	12.9	B
		PM	28.3	D	28.4	D	29.6	D
Southbound	North of SR 58	AM	25.7	D	25.7	D	26.6	D
		PM	16.3	C	16.4	C	17.4	C
	South of SR 58	AM	29.3	D	29.7	D	31.8	D
		PM	16.7	B	16.9	B	18.3	B

<sup>1</sup> Measured in vehicles per mile per lane.

As shown in Tables 4.12-14(a) through 4.12-14(c), several area roadways are forecast to operate at unacceptable LOS D, LOS E or LOS F under the *Cumulative No Project*, *Cumulative + Agricultural Residential Cluster Subdivision*, and *Cumulative + Future Development Program* traffic volumes. The following paragraphs outline the deficiencies:

*El Camino Real (SR 58) between Wilhelmina Avenue and Maud Avenue.* El Camino Real (SR 58) between Wilhelmina Avenue and Maud Avenue is projected to operate at LOS D during *Cumulative + Agricultural Residential Cluster Subdivision* and LOS F during *Cumulative + Future Development Program* conditions.

*El Camino Real (SR 58) between Pinal Avenue and Estrada Avenue.* El Camino Real (SR 58) between Pinal Avenue and Estrada Avenue is projected to operate at LOS D during *Cumulative + Agricultural Residential Cluster Subdivision* and LOS E during *Cumulative + Future Development Program* conditions.

*U.S. 101 northbound south of SR 58.* U.S. 101 northbound south of SR 58 is projected to operate at LOS D during *Cumulative No Project*, *Cumulative + Agricultural Residential Cluster Subdivision*, and *Cumulative + Future Development Program* conditions.

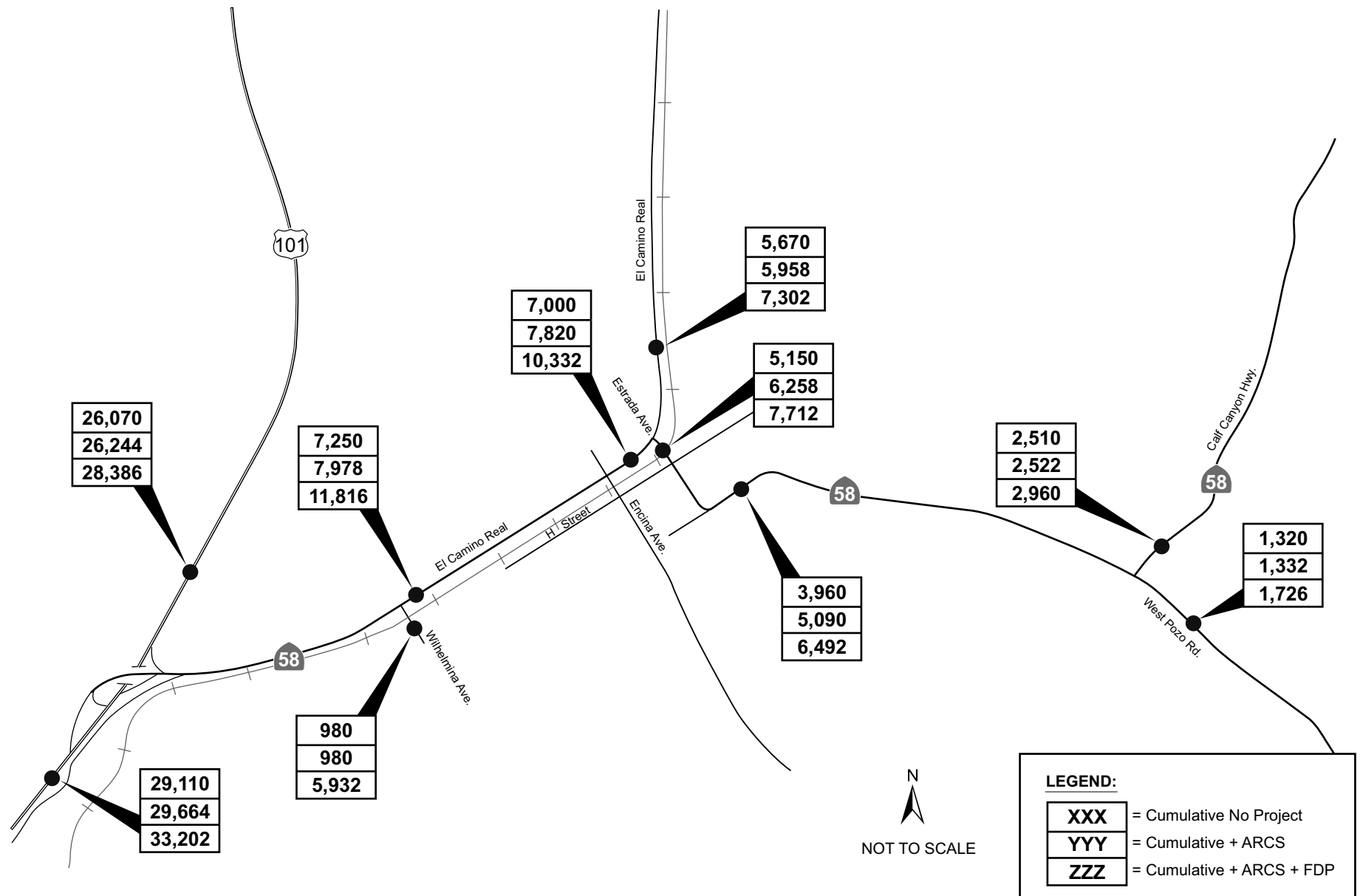


*U.S. 101 northbound north of SR 58.* U.S. 101 northbound north of SR 58 is projected to operate at LOS D during *Cumulative No Project, Cumulative + Agricultural Residential Cluster Subdivision, and Cumulative + Future Development Program* conditions.

*U.S. 101 southbound south of SR 58.* U.S. 101 southbound south of SR 58 is projected to operate at LOS D during *Cumulative No Project, Cumulative + Agricultural Residential Cluster Subdivision, and Cumulative + Future Development Program* conditions.

*U.S. 101 southbound north of SR 58.* U.S. 101 southbound north of SR 58 is projected to operate at LOS D during *Cumulative + Future Development Program* conditions.



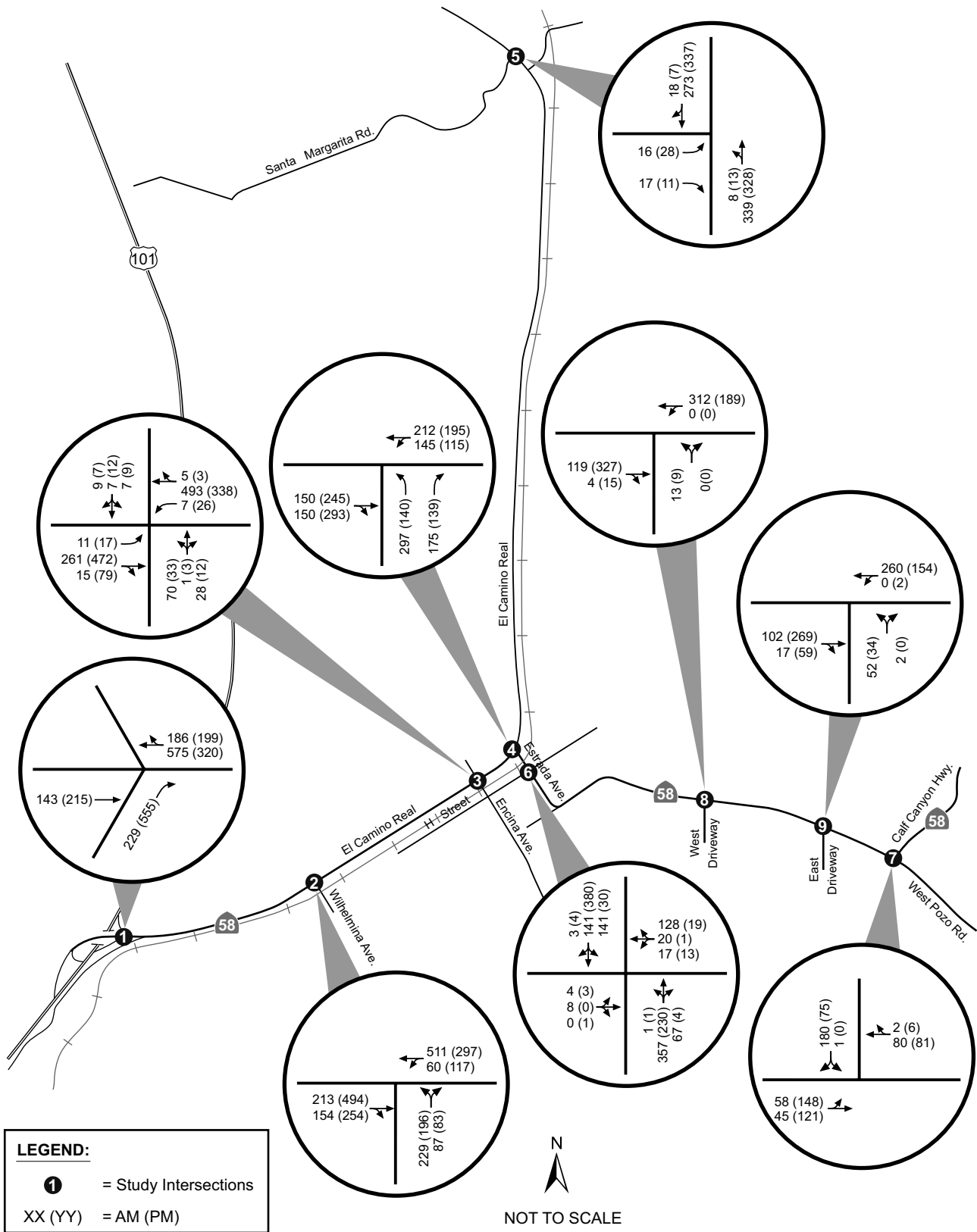


Baseline Cumulative and Cumulative + Future Development Program  
 Average Daily Traffic Volumes

Source: Fehr & Peers, 2006.

Figure 4.12-9

Santa Margarita Ranch Agricultural Residential Cluster Subdivision Project and Future Development Program EIR  
**Section 4.12 Transportation and Circulation**



Cumulative + Future Development Program Intersection  
 Peak-Hour Traffic Volumes

Figure 4.12-10

Source: Fehr & Peers, 2006.

U.S. 101 Ramps. Table 4.12-15 presents the projected daily weekday traffic volumes and a summary of the *Cumulative No Project, Cumulative + Agricultural Residential Cluster Subdivision, and Cumulative + Future Development Program* freeway ramp segment LOS conditions.

**Table 4.12-15 Cumulative + Future Development Program  
 U.S. 101 at SR 58 Ramp Junction Levels of Service**

Travel Direction	Merge/Diverge	Peak Hour	Cumulative No Project		Cumulative + Agricultural Residential Cluster Subdivision		Cumulative + ARCS + Future Development Program	
			Density <sup>1</sup>	LOS	Density <sup>1</sup>	LOS	Density <sup>1</sup>	LOS
Northbound	Diverge (Off-ramp)	AM	16.5	B	16.6	B	17.8	B
		PM	36.5	E	36.8	E	38.8	E
	Merge (On-ramp)	AM	14.8	B	14.9	B	15.6	B
		PM	30.8	D	30.9	D	31.7	D
Southbound	Diverge (Off-ramp)	AM	30.6	D	30.6	D	31.5	D
		PM	20.2	C	20.3	C	21.4	C
	Merge (On-ramp)	AM	31.3	D	31.6	D	32.9	D
		PM	19.4	B	19.6	B	20.9	C

<sup>1</sup> Measured in vehicles per mile per lane.

As shown in Table 4.12-15, the U.S. 101 northbound off-ramp to SR 58 and U.S. 101 northbound on-ramp from SR 58 operate at an unacceptable level, LOS D and E, respectively, under Cumulative No Project Conditions. The addition of traffic from the Agricultural Residential Cluster Subdivision and the Future Development Program will exacerbate unacceptable operations. This is a potentially significant impact.

In addition, the addition of **Agricultural Residential Cluster Subdivision and Future Development Program** traffic will exacerbate unacceptable operations at the U.S. 101 southbound off-ramps to SR 58. As discussed in Section 4.12.1(e), the U.S. 101 southbound off-ramp is configured with a short diverge taper and vehicles must negotiate a sharp curve that is posted for 15 mph within approximately 250 feet of exiting the mainline. This design causes southbound U.S. 101 vehicles to brake suddenly within a short distance to negotiate the off-ramp. The deceleration length for the southbound off-ramp must be lengthened to 550 feet (with Agricultural Residential Cluster Subdivision traffic) and 650 feet (with Agricultural Residential Cluster Subdivision and Future Development Program traffic) to provide acceptable operations under *Cumulative + Agricultural Residential Cluster Subdivision* and *Cumulative + Future Development Program* conditions. The U.S. 101 northbound off-ramp intersection has no traffic control devices. As a result, vehicles exiting the U.S. 101 northbound off-ramp meet eastbound SR 58 traffic at an incline that limits sight distance, and there is only 150 feet of merge area. Under *Cumulative + Agricultural Residential Cluster Subdivision* and *Cumulative + Future Development Program* conditions, the Future Development Program is expected to significantly impact both off-ramps by adding traffic to locations with existing hazards and deficiencies. Therefore, impacts are potentially significant and mitigation is required.

**Cumulative Intersection Operations.** *Cumulative No Project, Cumulative + Agricultural Residential Cluster Subdivision, and Cumulative + Future Development Program* AM and PM peak hour intersection traffic operations are presented in Table 4.12-16 and Figure 4.12-10. The *Cumulative + Future Development Program* traffic volumes were generated by superimposing the Future Development Program generated traffic volumes on the projected *Cumulative + Agricultural Residential Cluster Subdivision* traffic volumes.



**Table 4.12-16 Cumulative + Future Development Program Intersection Levels Of Service**

Intersection	Peak Hour	Cumulative No Project		Cumulative + Agricultural Residential Cluster Subdivision		Cumulative + ARCS + Future Development Program	
		Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>
U.S. 101 Northbound Ramps and State Route 58	AM	9.1	A	9.1	A	11.0	B
	PM	11.1	B	11.7	B	22.8	C
El Camino Real (SR 58) and Wilhelmina Avenue	AM	14.5	B	15.6	C	>100	F
	PM	13.5	B	14.5	B	>100	F
El Camino Real (SR 58) and Encina Avenue	AM	15.9	C	17.5	C	25.3	D
	PM	15.9	C	17.7	C	25.3	D
El Camino Real (SR 58) and Estrada Avenue	AM	21.2	C	31.5	D	>100	F
	PM	12.5	B	14.4	B	24.0	C
El Camino Real and Santa Margarita Road	AM	11.3	B	11.5	B	12.4	B
	PM	12.2	B	12.5	B	14.2	B
Estrada Avenue (SR 58) and H Street	AM	20.1	C	22.9	C	27.9	D
	PM	11.7	B	12.9	B	14.8	B
Calf Canyon Highway (SR 58) and West Pozo Road	AM	9.6	A	9.6	A	9.9	A
	PM	8.9	A	8.9	A	9.1	A
West Pozo Road (SR 58) and West Driveway	AM	Future Intersection		11.4	B	12.0	B
	PM	Future Intersection		11.9	B	12.7	B
West Pozo Road (SR 58) and East Driveway	AM	Future Intersection		11.2	B	11.9	B
	PM	Future Intersection		11.5	B	12.3	B

<sup>1</sup> Whole intersection weighted average control delay expressed in seconds per vehicle using methodology described in the 2000 HCM. For side street stop controlled intersections, total control delay for the worst movement is presented.

<sup>2</sup> For side street stop controlled intersections, LOS for the worst movement is shown. LOS calculations conducted using the SYNCHRO analysis software package.

As shown, the addition of Future Development Program traffic will cause four intersections to operate at unacceptable levels of service under the *Cumulative + Future Development Program* traffic volumes. The following text outlines the deficiencies:

*El Camino Real/Estrada Avenue.* As indicated in Section 4.12.1(e), sight distance is limited at this location due to the steep grade of the Estrada Avenue approach. In addition, the minor street approach (Estrada Avenue) is projected to deteriorate to an unacceptable level under ***Cumulative + Agricultural Residential Cluster Subdivision and Cumulative + Future Development Program*** conditions. The intersection meets the rural MUTCD peak-hour signal warrant **under *Cumulative + Future Development Program* conditions**. Therefore, the addition of Future Development Program traffic to this intersection causes a significant impact.

*El Camino Real/Wilhelmina Avenue.* The side-street approach (Wilhelmina Avenue) is projected to deteriorate to unacceptable levels under *Cumulative + Future Development Program* conditions and the rural peak-hour signal warrant is satisfied. The peak-hour warrant is a guideline from the *Manual on Uniform Traffic Control Devices* that determines whether traffic signal installation should be considered. This is a significant impact.

*El Camino Real/Encina Avenue.* The level of service at the El Camino Real/Encina Avenue intersection deteriorates to an unacceptable level (LOS D) under *Cumulative + Future Development Program* conditions, but the rural peak-hour signal warrants are not



satisfied. The peak-hour warrant is a guideline from the *Manual on Uniform Traffic Control Devices* that determines whether traffic signal installation should be considered. Thus, the Future Development Program would have a less than significant impact at this location and no mitigation is required.

*Estrada Avenue/H Street.* This intersection is projected to operate at LOS D during the AM peak hour under *Cumulative + Future Development Program* conditions and the peak-hour signal warrant is satisfied. The peak-hour warrant is a guideline from the *Manual on Uniform Traffic Control Devices* that determines whether traffic signal installation should be considered. The installation of a traffic signal is required to provide acceptable intersection operations according to Caltrans standards. However, it should be noted that a signal at this location would be located approximately 500 feet from the required signal at the El Camino Real/Estrada Avenue intersection and signal coordination between the two signals would be required. A traffic signal is not recommended at the Estrada Avenue/H Street intersection because of the close proximity to the adjacent signal and County staff does not support signalization at this location. Caltrans will make the final determination on the need for a signal at this location. Impacts on the intersection of Estrada Avenue/H Street would be significant.

Mitigation Measures. Due to existing deficiencies, Agricultural Residential Cluster Subdivision measures T-1(a) (SR 58 south of J Street), T-1(b) (U.S. 101 Southbound Off-Ramp to SR 58), T-1(c) (U.S. 101 Northbound Off-Ramp to SR 58), T-1(d) (El Camino Real/Estrada Avenue Redesign), and T-1(e) (Estrada Avenue/H Street Warning Beacon) would apply to all Future Development Program land uses. In addition, because the addition of Future Development Program traffic would cause two local roadway segments, four U.S. 101 mainline segments, all four U.S. 101/SR 58 interchange ramps, and four intersections to operate at unacceptable levels of service during peak hours, additional mitigation is required.

*Roadway Segments.* Although Future Development Program traffic is estimated to have a significant impact on two segments of El Camino Real (between Wilhelmina Avenue and Maud Avenue and between Pinal Avenue and Estrada Avenue), Future Development Program measures T-1(a) (El Camino Real/Estrada Avenue Signalization) and T-1(b) (El Camino Real/Wilhelmina Avenue Signalization) would provide acceptable intersection operations. These two segments are projected to operate at LOS E or F under *Cumulative + Future Development Program* conditions. East of Murphy Avenue to Pinal Avenue, SR 58 widens to include a center two-way turn lane with left-turn lanes at intersections. The wider section of SR 58 provides additional roadway capacity by allowing vehicles to move out of the through lanes and wait in the center of the roadway to turn left. In addition, mitigation is required to address safety impacts associated with the 90-degree curves on SR 58 near J Street.

*U.S. 101 Segments.* Additional capacity to U.S. 101 is required to provide acceptable operations (i.e., to reduce the density to better than the LOS C/D threshold) on the study area U.S. 101 segments (U.S. 101 northbound south of SR 58, U.S. 101 northbound north of SR 58, U.S. 101 southbound south of SR 58, and U.S. 101 southbound north of SR 58). The widening of U.S. 101 from four to six lanes from the Cuesta Grade north to Atascadero is identified as a planned improvement in the *2005 Regional Transportation Plan* but is not currently funded. In addition, Caltrans (rather than the County) must approve improvements within their jurisdiction. Therefore, no mitigation is available to adequately reduce impacts to U.S. 101 in the study area, and impacts are significant and unavoidable.



*U.S. 101 Ramps.* All four ramps at the US 101/SR 58 interchange are projected to operate at unacceptable levels, LOS D, under Cumulative No Project Conditions. The addition of Future Development Program traffic will contribute to existing operational issues at the interchange, which would be considered a potentially significant impact. Due to existing deficiencies, Agricultural Residential Cluster Subdivision measures T-1(b) (U.S. 101 Southbound Off-Ramp to SR 58) and T-1(c) (U.S. 101 Northbound Off-Ramp to SR 58), would apply to all Future Development Program land uses. In accordance with these mitigation measures, the applicant is required to contribute toward preparation of a Project Study Report (PSR) to identify appropriate interchange improvements to correct operational deficiencies and evaluate alternative configurations. The PSR will identify an interchange design to provide improved operations for all ramps. In addition, due to additional demand from the Future Development Program, additional mitigation is required.

*Intersections.* Future Development Program measures T-1(d) (El Camino Real/Estrada Avenue Signalization), T-1(e) (El Camino Real/Wilhelmina Avenue Signalization), T-1(f) (SR 58 Improvements Between Wilhelmina Avenue and Pinal Avenue) and T-1(g) (Future Development Impact Fee) are required to reduce impacts related to study area intersections.

The following mitigation measures are required:

**Future Development Program T-1(a)**

**SR 58 South of J Street.** To mitigate the Future Development Program's impacts to the two 90-degree curves on SR 58 near J Street, realignment of SR 58 along a tangent south of J Street to the Agricultural Residential Cluster Subdivision development is required. The realignment would make the SR 58/J Street junction into more of a typical intersection layout.

As these improvements would occur within Caltrans jurisdiction, an encroachment permit from Caltrans would be required if the cost of the improvements is less than three million dollars. A Project Study Report and encroachment permit from Caltrans would be required if the cost of the improvements exceeds three million dollars.

**Plan Requirements and Timing.** Improvements shall be installed prior to occupancy clearance for the first Future Development Program component on the Ranch property. If this development requires preparation of a Specific Plan, the Specific Plan shall establish a finance district to construct and implement the alternate improvements under a Caltrans encroachment permit and/or PSR, depending on the cost of improvements. If this development does not require a Specific Plan, the applicant shall fund the improvements as well as the creation of an area wide traffic model and associated reimbursement agreement.

**Monitoring.** Caltrans and the Public Works Department shall site inspect to ensure installation of improvements prior to occupancy clearance.

**Future Development Program T-1(b)**

**U.S. 101 Southbound Off-Ramp to SR 58.** Redesign of the southbound off-ramp to accommodate a larger loop radius and higher design speed would be required to meet current Caltrans design standards with Future Development Program. The project applicant shall extend the





deceleration length from 550 feet [as required by Agricultural Residential Cluster Subdivision measure T-1(c)] to 650 feet for the southbound off-ramp to provide acceptable freeway ramp diverge operations under Cumulative Plus Agricultural Residential Cluster Subdivision Plus Future Development Program conditions. A Caltrans encroachment permit and/or PSR would be required to select an appropriate design, depending on the cost of improvements.

**Plan Requirements and Timing.** Improvements shall be installed prior to occupancy clearance for the first Future Development Program component on the Ranch property. If this development requires preparation of a Specific Plan, the Specific Plan shall establish a finance district to construct and implement the improvements under a Caltrans encroachment permit and/or PSR, depending on the cost of improvements. If this development does not require a Specific Plan, the applicant shall fund the improvements as well as the creation of an area wide traffic model and associated reimbursement agreement.  
**Monitoring.** Caltrans and the Public Works Department shall site inspect to ensure installation of improvements prior to occupancy clearance.

**Future  
Development  
Program T-1(c)**

**U.S. 101 Southbound On-Ramp from SR 58.** Redesign of the US 101 southbound on-ramp to accommodate an acceleration lane for westbound SR 58 traffic. The applicant is required to contribute toward preparation of a Project Study Report (PSR) to identify appropriate interchange improvements to correct operational deficiencies and evaluate alternative configurations.

**Plan Requirements and Timing.** Improvements shall be installed prior to occupancy clearance for the first Future Development Program component on the Ranch property. If this development requires preparation of a Specific Plan, the Specific Plan shall establish a finance district to construct and implement the improvements under a Caltrans encroachment permit and/or PSR, depending on the cost of improvements. If this development does not require a Specific Plan, the applicant shall fund the improvements as well as the creation of an area wide traffic model and associated reimbursement agreement.  
**Monitoring.** Caltrans and the Public Works Department shall site inspect to ensure installation of improvements prior to occupancy clearance.

**Future  
Development  
Program T-1(d)**

**El Camino Real/Estrada Avenue Signalization.** A traffic signal at the intersection of El Camino Real and Estrada Avenue shall be installed in concurrence with Agricultural Residential Cluster Subdivision measure T-1(d) (El Camino Real/Estrada Avenue Redesign). Extension of the existing culvert will be required as stated previously in Agricultural Residential Cluster Subdivision measure T-1(d). Caltrans shall make the final determination on the need for a signal at this location since SR 58 is a state-maintained roadway. Future signalization of this intersection shall include rail pre-emption to allow northbound vehicles to clear the



tracks when a train approaches the crossing.

Signalization of this intersection would result in LOS B operations under *Cumulative + Future Development Program* conditions. This improvement would also eliminate the sight-distance impediment for left-turn vehicles by requiring El Camino Real traffic to stop.

It should be noted that a westbound left-turn lane from El Camino Real to Estrada Avenue is warranted under both Cumulative project scenarios (refer to Appendix J for technical calculations). According to County of San Luis Obispo staff, sufficient right-of-way is provided to accommodate turn lanes. The design of the left-turn lanes needs to consider the following adjacent physical constraints: railroad tracks south of the intersection, a creek west of the intersection, a house northwest of the intersection, and a utility box southeast of the intersection.

**Plan Requirements and Timing.** Detailed site plans displaying proposed traffic signals shall be included in the Specific Plan (or within individual plans, as applicable) for review by Caltrans and the County of San Luis Obispo prior to approval. Improvements shall be installed prior to occupancy clearance for the first Future Development Program component on the Ranch property. If this development requires preparation of a Specific Plan, the Specific Plan shall establish a finance district to install the traffic signal under a Caltrans encroachment permit and/or PSR, depending on the cost of improvements. If this development does not require a Specific Plan, the applicant shall fund the improvements as well as the creation of an area wide traffic model and associated reimbursement agreement. Because SR 58 is a state-maintained roadway, Caltrans shall make the final determination on the need for a signal at this location. Monitoring. Prior to occupancy clearance, Caltrans and County Public Works shall verify implementation of approved plans.

**Future  
Development  
Program T-1(e)**

**El Camino Real/Wilhelmina Avenue Signalization.** A traffic signal shall be installed at the intersection of El Camino Real and Wilhelmina Avenue. Caltrans shall make the final determination on the need for a signal at this location.

Signalization at this intersection would result in acceptable LOS B operations (or better) under *Cumulative + Future Development Program* conditions.

**Plan Requirements and Timing.** Detailed site plans displaying proposed traffic signals shall be included in the Specific Plan (or within individual plans, as applicable) for review by Caltrans and the County of San Luis Obispo prior to approval. Improvements shall be installed prior to occupancy clearance for the first Future Development Program component on the Ranch property. If this development requires preparation of a Specific Plan, the Specific Plan shall establish a finance



district to install the El Camino Real/Wilhelmina Avenue traffic signal under a Caltrans encroachment permit and/or PSR, depending on the cost of improvements. If this development does not require a Specific Plan, the applicant shall fund the improvements as well as the creation of an area wide traffic model and associated reimbursement agreement. Because El Camino Real (SR 58) is a state-maintained roadway, Caltrans shall make the final determination on the need for a signal at this location. **Monitoring.** Prior to occupancy clearance, Caltrans and County Public Works shall verify implementation of approved plans.

**Future  
Development  
Program T-1(e-f)**

**SR 58 Improvements Between Wilhelmina Avenue and Pinal Avenue.** Improvements on SR 58 between Wilhelmina Avenue to Pinal Avenue shall be constructed, consistent with the *Santa Margarita Design Plan*, which calls for a three lane section (one lane in each direction with a center two-way left-turn lane or median island) between Wilhelmina Avenue and Encina Avenue. Implementation of these improvements would mitigate roadway segment impacts to Encina Avenue.

**Plan Requirements and Timing.** Detailed site plans displaying proposed improvements shall be included in the Specific Plan (or within individual plans, as applicable) for review by Caltrans and the County of San Luis Obispo prior to approval. Improvements shall be installed prior to occupancy clearance for the first Future Development Program component on the Ranch property. If this development requires preparation of a Specific Plan, the Specific Plan shall establish a finance district to install the improvements under a Caltrans encroachment permit and/or PSR, depending on the cost of improvements. If this development does not require a Specific Plan, the applicant shall fund the improvements as well as the creation of an area wide traffic model and associated reimbursement agreement. Because SR 58 is a state-maintained roadway, Caltrans shall review improvement plans for this location. **Monitoring.** Prior to occupancy clearance, Caltrans and the County of San Luis Obispo shall verify implementation of approved plans.

**Future  
Development  
Program T-1(d-g)**

**Future Development Impact Fee.** As part of the future Specific Plan, a finance district shall be created to implement improvements identified under Future Development Program measures T-1(a) through T-1(f). The finance district may consist of an area wide fee where projects that are located within the Specific Plan Area will be required to pay impact fees or require the applicant to “front” the cost of the improvements and be reimbursed as land uses are developed. Supplemental studies would be required to determine the cost of the required improvements and the appropriate impact fee.

Because a Specific Plan is only required before an application is approved for a subdivision other than a Cluster development, future development could occur in accordance with the Future Development Program prior to preparation of a Specific Plan. Should this occur, the applicant shall fund the creation of a traffic model for the area. The



traffic model shall be prepared by a qualified consultant and shall provide a nexus for determining the proportional share of mitigation for projects in the area. In concert with the traffic model, a funding mechanism shall be created to facilitate reimbursement of the cost of the required improvements and for model creation .

**Plan Requirements and Timing.** As part of the Specific Plan, the project applicant shall pay for the development of a detailed funding plan to address implementation and payment of the required Future Development Program mitigation measures. Should development occur prior to completion of the Specific Plan, the applicant shall fund the creation of an area wide traffic model and associated reimbursement agreement prior to the issuance of grading permits for the first project proposed on the property. **Monitoring.** Prior to issuance of grading permits, Planning and Building will review the funding plan as part of the Specific Plan and/or ensure completion of the traffic model and reimbursement agreement.

Residual Impacts. If the construction and occupation of any conceptual future land use occurs prior to completion of the above improvements, existing deficiencies and associated impacts would remain. Although mitigation measures outlined above would reduce impacts to ramp junctions and study intersections (and therefore to two segments of El Camino Real) to the extent possible, due to the uncertainty regarding Caltrans approval of improvements within their jurisdiction and the lack of a future signal at the Estrada Avenue/H Street intersection, it cannot be assured that these improvements would be feasibly constructed prior to occupation of the first Future Development Program land use. As a result, impacts would remain significant and unavoidable. Impacts related to study area U.S. 101 segments would be Class I, *significant and unavoidable*.

Implementation of many transportation improvements required as mitigation (e.g., signalization) would not result in significant environmental impacts related to site disturbance since improvements would occur within existing disturbed rights-of-way. It should be noted that impacts associated with implementation of required transportation improvements (e.g., construction impacts, aesthetic impacts) are discussed in other impact sections of this EIR to the extent possible. However, since the final designs of required transportation improvements have not been determined, precise environmental impacts associated with future improvements would be too speculative to address at this time. Environmental impacts associated with required transportation improvements would be evaluated at a project level of detail in separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA), including as part of the Specific Plan or individual development review process, as applicable, for future development on the property.

**Future Development  
Program Impact T-2**

**The Future Development Program may result in inadequate site access and/or internal circulation conflicts. This would generate a Class I, *significant and unavoidable*, impact.**

*Site Access.* Because no active application currently exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, the assessment of site access is based on a reasonable worst case scenario with regard to the location of future access points. It is assumed that the livestock sales yard and Oakenshaw Retreat Center would



connect to SR 58 via the frontage road along U.S. 101. Traffic from the residential village, guest ranch, lodge, restaurant, winery, and golf course are assumed to access study area roadways via Wilhelmina Avenue. Traffic from the workforce housing, community pool and four wineries were assigned directly to West Pozo Road. Traffic from one winery was assigned directly to Calf Canyon Highway, and traffic from another winery was assigned directly to El Camino Real. Traffic from the bed and breakfast, equestrian and interpretive centers, café, amphitheater, winery, and feed lot was assigned to El Camino Real and Yerba Buena Avenue.

In addition, the Future Development Program does not identify required secondary emergency access. Inadequate secondary access to Future Development Program land use components is a potentially significant impact.

Because the Future Development Program is conceptual, it does not provide specific locations of access points. As a result, sight distances cannot be analyzed for this component of the project. However, potential hazards may be associated with assumed access points. For example, the livestock sales yard and Oakenshaw Retreat Center are presumed to connect to SR 58 via the frontage road along U.S. 101, which would create unsafe turning movements on SR 58 to access the frontage road. In addition, traffic from the residential village, guest ranch, lodge, restaurant, winery, and golf course are assumed to access study area roadways via one point on Wilhelmina Avenue, which could result in deficient emergency access. In addition, should access to Future Development Program land uses require railroad crossings, public safety impacts could result. Therefore, impacts related to site access are potentially significant and mitigation is required.

*Internal Circulation.* Because no active application currently exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, the assessment of traffic impacts is based on a reasonable worst case scenario with respect to internal circulation design. However, precise internal circulation impacts would be too speculative to address at this time. Any subdivision other than an agricultural cluster on the Ranch property would require that a Specific Plan be prepared for the Santa Margarita Ranch (refer to Table 2-4 in Section 2.0 *Project Description*). Program-level environmental analysis would subsequently be required, including the analysis of traffic-related and internal circulation impacts. In addition, future projects which do not necessitate a Specific Plan would require a site-specific environmental study, including analysis of traffic-related and internal circulation impacts.

Mitigation Measures. All new roadways will be required to meet County standards related to roadway cross sections. In addition, the following mitigation measures are required:

**Future Development Program T-2(a)**

**Site-Specific Access Analysis.** As part of the Specific Plan for future development on the property (or within individual development plans as applicable), a detailed analysis of access points to Future Development Program land uses and possible impacts to area intersections shall be conducted. This analysis shall recommend mitigation, as necessary, to ensure adequate site access. At a minimum, the site-specific access analysis shall consider the following measures:

- Requiring that access to the livestock sales yard and Oakenshaw Retreat Center be provided via a new roadway



- connection to SR 58, rather than the U.S. 101 frontage road;
- Requiring that additional access be provided to the residential and commercial areas located south and east of Santa Margarita. These access points should minimize intrusion into the existing residential neighborhoods. Potential access could be provided via new roadways extending east to SR 58 that are located south of the Santa Margarita downtown area;
- Requiring that access to proposed land uses that require railroad crossings be located at existing railroad crossings, that existing railroad crossings, such as private crossings, be closed to offset rail crossing impacts, that fencing be installed along the portions of the railroad corridor adjacent to the property, and/or that railroad crossing facilities be upgraded. If new public or private crossings are proposed, the project applicant must coordinate and receive approval from Union Pacific Rail and the California Public Utilities Commission (PUC) when Future Development Program plans are developed; and
- Where possible, requiring that access to SR 58 and El Camino Real be consolidated with existing access points.

**Plan Requirements and Timing.** Detailed site plans displaying proposed access points shall be included in the Specific Plan (or within individual plans, as applicable) for review by Planning and Building prior to approval. **Monitoring.** Prior to issuance of occupancy permits, Planning and Building staff shall verify implementation of approved plans.

**Future Development  
Program T-2(b)**

**Shoulder Widths.** Adequate shoulder width or parallel paths shall be provided along all future roadways to safely accommodate bicyclists and pedestrians.

**Plan Requirements and Timing.** Detailed site plans displaying proposed shoulder widths or parallel paths shall be included in the Specific Plan (or within individual plans, as applicable) for review by Planning and Building prior to approval. **Monitoring.** Prior to issuance of occupancy permits, Planning and Building staff shall verify implementation of approved plans.

**Future Development  
Program T-2(c)**

**Driveways.** Future Development Program driveways shall intersect with roadways at points that provide adequate sight distance for all movements, and all intersections shall be spaced a minimum of 150 feet apart.

**Plan Requirements and Timing.** Detailed site plans displaying proposed driveways shall be included in the Specific Plan (or



within individual plans, as applicable) for review by Planning and Building prior to approval. **Monitoring.** Prior to issuance of occupancy permits, Planning and Building staff shall verify implementation of approved plans.

Residual Impacts. Implementation of the above mitigation measures would reduce impacts to the extent possible. However, because of the uncertainty of timing of the proposed improvements, and uncertainty regarding Caltrans approval of improvements within their jurisdiction, impacts would remain significant and unavoidable.

Since the revised locations of future access roads, including secondary access, have not been determined, precise environmental impacts associated with future access road locations would be too speculative to address at this time. Environmental impacts associated with traffic and access road construction would be evaluated in separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA), including as part of the Specific Plan or individual development review process, as applicable, for future development on the property.

**Future Development  
Program Impact T-3**

**Future Development Program land uses may generate parking demands in excess of future parking supply. However, future applicants would be required to comply with County parking standards, resulting in Class III, less than significant impacts.**

According to County standards [County Land Use Ordinance Section 22.18.050(C)], residential projects must provide two off-street parking spaces per single-family unit and one to two spaces, plus guest parking spaces, per multi-family unit (depending on unit size). In addition, hotels require two spaces plus one space per unit and one additional space per ten units. General merchandise stores require one space per 300 square feet of sales area, while restaurants require one customer parking space per 60 square feet and one employee space per 350 square feet. Because no active application currently exists for the Future Development Program, it is unclear if the required number of spaces would be included in future development. However, future applicants would be required to comply with County Land Use Ordinance Section 22.18.050 as a condition of project approval. Therefore, impacts related to parking demand would be less than significant.

Mitigation Measures. No mitigation is required.

Residual Impacts. With implementation of parking spaces in accordance with County standards, parking impacts would be less than significant.

**Future Development  
Program Impact T-4**

**The addition of traffic generated by the Future Development Program may result in conflicts with pedestrians and bicyclists, as well as increase demand for transit services. Impacts are Class II, significant but mitigable.**

*Bicycle.* As discussed in Section 4.12.1(f), bike lanes are provided in the vicinity of the Future Development Program. The traffic added by the Future Development Program would increase potential automobile-bicycle conflicts on El Camino Real within the community of Santa Margarita. Mitigation is required to ensure less than significant impacts.



*Pedestrian.* Limited pedestrian sidewalks and crosswalks are provided in Santa Margarita and there are currently no pedestrian facilities between Future Development Program land use locations and downtown. The *Santa Margarita Design Plan* recommended wider sidewalks, landscaped planters, center medians, street trees, pedestrian lights, textured pedestrian crossings, mid-block crosswalks, bulb-outs, and other streetscape improvements to enhance the pedestrian environment. The increased demand for these improvements is a potentially significant impact and mitigation is required.

*Transit.* Transit facilities are located along El Camino Real in Santa Margarita. Future development pursuant to the Future Development Program will increase demand for transit facilities. The increased demand is a potentially significant impact and mitigation is required.

Mitigation Measures. The following mitigation measures are required:

**Future Development  
Program T-4(a)**

**Bicycle Facilities.** Bike lanes shall be installed in both directions on El Camino Real in downtown Santa Margarita, consistent with the *Santa Margarita Design Plan*. Because El Camino Real (SR 58) is a state-maintained roadway, this measure would require Caltrans approval.

**Plan Requirements and Timing.** Detailed circulation plans displaying required bicycle facilities shall be included in the Specific Plan (or within individual plans, as applicable) for review by Caltrans and San Luis Obispo County Planning and Building prior to approval. Bicycle facilities shall be installed prior to occupancy clearance for the first Future Development Program component on the Ranch property. If this development requires preparation of a Specific Plan, the Specific Plan shall establish a finance district to install the facilities. If this development does not require a Specific Plan, the applicant shall fund the facilities as well as the creation of an area wide traffic model and associated reimbursement agreement. **Monitoring.** Prior to occupancy clearance, Caltrans and County Public Works shall verify implementation of approved plans.

**Future Development  
Program T-4(b)**

**Pedestrian Facilities.** A center median lane along El Camino Real in downtown Santa Margarita shall be installed, consistent with the *Santa Margarita Design Plan*. Provision of a center median lane would reduce capacity in the corridor by focusing access to adjacent properties at intersections. Vehicles would still be able to make u-turns to access development. In-pavement lighting at crosswalks shall also be installed, and may be installed on state-maintained roadways. Right-of-way along Future Development Program access roads shall be preserved for the installation of sidewalks. Because El Camino Real (SR 58) is a state-maintained roadway, this measure would require Caltrans approval.

**Plan Requirements and Timing.** Detailed circulation plans displaying required pedestrian facilities shall be included in the





Specific Plan (or within individual plans, as applicable) for review by Caltrans and San Luis Obispo County Planning and Building prior to approval. Pedestrian facilities shall be installed prior to occupancy clearance for the first Future Development Program component on the Ranch property. If this development requires preparation of a Specific Plan, the Specific Plan shall establish a finance district to install the facilities. If this development does not require a Specific Plan, the applicant shall fund the facilities as well as the creation of an area wide traffic model and associated reimbursement agreement. **Monitoring.** Prior to occupancy clearance, Caltrans and County Public Works shall verify implementation of approved plans.

**Future Development Program T-4(c)**

**Transit Facilities.** Bus stops shall be installed near Future Development Program land use access points, such as at the El Camino Real/Wilhelmina Avenue intersection, and coordinateion shall be occur during Specific Plan preparation and/or construction of the first Future Development Program component on the Ranch property, whichever comes first, with the San Luis Obispo Regional Transit Authority to adjust the bus schedules to meet increased demand. The number and location of bus stops shall be identified prior to occupancy clearance for the first Future Development Program component on the Ranch property. Because transit facilities may be located on a state-maintained roadway (SR 58), this measure would require Caltrans approval.

**Plan Requirements and Timing.** Detailed circulation plans displaying required transit facilities shall be included in the Specific Plan (or within individual plans, as applicable) for review by Caltrans and San Luis Obispo County Planning and Building prior to approval. Bus stops shall be identified and installed prior to occupancy clearance for the first Future Development Program component on the Ranch property. If this development requires preparation of a Specific Plan, the Specific Plan shall establish a finance district to identify and install the facilities. If this development does not require a Specific Plan, the applicant shall fund the identification and installation facilities as well as the creation of an area wide traffic model and associated reimbursement agreement. **Monitoring.** Prior to occupancy clearance, Caltrans and County Public Works shall verify implementation of approved plans.

Residual Impacts. With implementation of the above mitigation measure, impacts related to automobile-bicycle conflicts and demand on pedestrian and transit facilities would be reduced to a less than significant level.

Implementation of most required pedestrian, bicycle and transit improvements would not result in significant environmental impacts since improvements would occur within existing disturbed rights-of-way. It should be noted that impacts associated with implementation of



required transportation improvements (e.g., construction impacts, aesthetic impacts) are discussed in other impact sections of this EIR to the extent possible. However, since the final designs of required transportation improvements have not been determined, precise environmental impacts associated with future improvements would be too speculative to address at this time. Environmental impacts associated with required transportation improvements would be evaluated at a project level of detail in separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA), including as part of the Specific Plan or individual development review process, as applicable, for future development on the property.





## 4.13 VISUAL RESOURCES

*Agricultural Residential Cluster Subdivision.* Because individual site plans, design plans, and/or landscaping plans would be prepared by lot owners at a later date, the proposed Agricultural Residential Cluster Subdivision would result in potentially significant impacts to the aesthetic environment. Although the clustering of the proposed residential units and the preservation of open space and agricultural lands would partially maintain the rural character of the site, the proposed Agricultural Residential Cluster Subdivision has the potential to change the aesthetic character of the vicinity through the alteration of scenic vistas, the introduction of new light and glare generators into the area, and changing the area's character from a rural to rural-residential condition. This impact is significant and unavoidable (Class I).

*Future Development Program.* Because no active application exists for the Future Development Program other than the Agricultural Residential Cluster Subdivision, the assessment of aesthetic impacts is based on a reasonable worst case scenario with regard to the future location and design of future land uses within anticipated development areas. Due to the extent of development envisioned in the Future Development Program, buildout of the program would unavoidably alter the existing rural visual character of the Santa Margarita Ranch area, introduce new development along viewing corridors, and introduce new light and glare generators into the region. Impacts are significant and unavoidable (Class I).

### 4.13.1 Setting

**a. Visual Character of the Ranch.** The visual character of the Santa Margarita Ranch area is primarily rural, with little development throughout the almost 14,000-acre property. The Ranch is flanked by the Santa Lucia Mountains to the west and the Salinas River to the east, with gently rolling grasslands, vineyards, row crops, grazing land, riparian corridors, and dense oak woodland characterizing the interior portions of the property. The absence of substantial urban development has allowed most areas of the Ranch to retain a rural character. In addition to its rural character, the Ranch's geographic location within an area dominated by mountain and hill terrain also contributes substantially to its visual qualities.

Extending to the south of the Ranch, the visual character of the surrounding area is dominated by agricultural uses, with open space south of the property in the Los Padres National Forest. Some low-density rural residential development and agricultural uses are located east and west of the Santa Margarita Ranch property. North of the Ranch densities increase as neighborhoods transition into residential-suburban homes, the community of Margarita Farms, and commercial retail uses in the City of Atascadero. The Ranch surrounds the urban and suburban uses in the community of Santa Margarita. A sand and gravel quarry is located just outside of the Ranch property, approximately two miles northeast of Santa Margarita. An oil tank storage facility is located along El Camino Real outside of the Ranch and Future Development Program boundaries.

**b. Visual Character of the Agricultural Residential Cluster Subdivision Site.** The portion of the Santa Margarita Ranch proposed for Agricultural Residential Cluster Subdivision development is undeveloped hilly terrain located near the center of the Ranch, south of the community of Santa Margarita. Portions of the Agricultural Residential Cluster Subdivision site are currently used for irrigated croplands, including wine grape production. Dominant



features include gently to steeply sloping topography, scattered vegetation including grasses, forbs, scrub, oak woodland, and riparian species, and several streams which traverse the lower reaches of the Agricultural Residential Cluster Subdivision site. Elevations range from approximately 930 feet above mean sea level (msl) to approximately 1,300 feet msl.

The proposed residential development would occur southeast of the community of Santa Margarita, west of West Pozo Road, in a relatively hilly portion of the Agricultural Residential Cluster Subdivision site. These hills typically rise 250 to 300 feet above the surrounding terrain in the northern part of the Agricultural Residential Cluster Subdivision site and about 100 to 250 feet at the southern end. Their defining slopes are often very steep, particularly where they are undercut locally by creeks. The vegetation patterns on these hills exhibit a visually appealing arrangement from grassland through savanna to oak woodland or chaparral at the summits. This patterning gives the hills strong contrasts in color, tone, shape, and texture from the surroundings.

The Agricultural Residential Cluster Subdivision site would be visible from portions of Highway 58 and West Pozo Road due to its location on elevated terrain. Additionally, the site is visible from areas of the Santa Margarita community, particularly homes located at the southern end of the community.

With respect to light and glare, the Agricultural Residential Cluster Subdivision site currently has no street lighting or nighttime activity that is lighted, with the exception of limited lighting for on-site agricultural uses. Land uses in the vicinity that would be most sensitive to night lighting are the residences located approximately 500 feet north of the Agricultural Residential Cluster Subdivision site, in the town of Santa Margarita.

**c. Regulatory Setting.** San Luis Obispo County regulates the design of the built environment through its Land Use Element (LUE) and Land Use Ordinance (LUO). The LUE prescribes visual resource policies, and the LUO, in some cases, requires development review of projects.

The LUE Framework for Planning (Inland) contains policy statements that serve as a framework for evaluating proposed projects for their aesthetic merit in areas designated as Sensitive Resource Areas (SRAs). The SRA combining designation occurs along the southwestern edge of the Santa Margarita Ranch property. No development is planned in this location, however, due to the steep topography that occurs in the Los Padres National Forest, located south of the Ranch property.

The County General Plan Open Space Element contains policies for development in scenic corridor areas. The Open Space Element states that no officially designated scenic highways are located in the vicinity of Santa Margarita Ranch. However, Open Space Element Policy #24 specifies a number of County roads to be studied to determine if and where scenic corridors should be designated, including two in the project vicinity: Highway 58 from the Santa Margarita urban reserve line to the Kern County line and West Pozo Road between Hi Mountain Road and Highway 58.



The LUO contains provisions that regulate the design of future development, such as:

- For applications that propose development along significant visual corridors, as identified in the Open Space Element or the Land Use Element, a visual analysis shall be required to be prepared by a qualified individual approved by the Office of the Environmental Coordinator (Ordinance 22.02.035-038(h)).
- A grading permit may be issued only where the Building Official first finds, where applicable, that: The proposed grading will not create substantial adverse long-term visual effect visible from off-site. (Ordinance 22.05.030(d)(3)).

The Salinas River Area Plan contains Highway Corridor Design Standards intended to provide public views of:

- Scenic vistas and backdrops containing varied topography including ridgelines and rock features;
- Significant stands of trees and wildflowers; and
- Natural landmarks, historical buildings and pastoral settings.

In addition, County Ordinance 22.02 et seq. contains extensive site design provisions related to building heights, setbacks, landscaping, and other design elements.

#### **4.13.2 Impact Analysis**

**a. Methodology and Significant Thresholds.** The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. This evaluation measures the existing visual resource against the proposed Agricultural Residential Cluster Subdivision and Future Development Program, analyzing the nature of the anticipated change. The Agricultural Residential Cluster Subdivision and Future Development Program were observed and photographically documented in the surrounding context. The Salinas River Area Plan, County Land Use Element (LUE), and County Land Use Ordinance (LUO) were reviewed for policy instruction relative to visual resources and design policy.

In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in the any of the following:

- *Have a substantial adverse effect on a scenic vista;*
- *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;*
- *Substantially degrade the existing visual character or quality of the site and its surroundings; and/or*
- *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*

To assess the potential visual impacts that the Agricultural Residential Cluster Subdivision and Future Development Program may produce, photographic interpretation of present view conditions was completed in addition to photographic simulations of post-Agricultural



Residential Cluster Subdivision conditions. In this analysis, modifications to the viewshed were considered not significant if the modification would be visually subordinate. A modification that is visually dominant or one that substantially modifies the existing view adversely is considered a significant impact.

Views are discussed below in terms of foreground, middleground, and background views. Foreground views are those immediately presented to the viewer, and include objects at close range. Middleground views occupy the center of the viewshed, and tend to include objects that dominate the viewshed in normal circumstances. Background views include distant objects and other objects that make up the horizon.

**b. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact VR-1**      **The clustering of the proposed Agricultural Residential Cluster Subdivision units and preservation of open space and agricultural lands would partially maintain the rural character of the site. However, the proposed development has the potential to alter the aesthetic character of the Agricultural Residential Cluster Subdivision vicinity through alteration of scenic vistas, the introduction of new light and glare generators in to the area, and the changing of the area’s character from a rural to rural-residential condition. This is Class I, significant and unavoidable, impact to the aesthetic character of the area.**

**Viewing Corridor Impacts.** The Agricultural Residential Cluster Subdivision site would not be visible from any State-designated scenic highways or routes. However, the County General Plan identifies portions of Highway 58 and West Pozo Road as potential scenic roadways. The Agricultural Residential Cluster Subdivision residences would be visible from both of these roadways due to its location on elevated terrain. Additionally, the site is visible from areas of the Santa Margarita community. However, it should be noted that the project proposes to cluster the residential units in a generally north-south orientation in the central portion of the site, which would reduce visual impacts from viewpoints east and west of the site.

Photographs were taken from three sensitive public vantage points that have views of the Agricultural Residential Cluster Subdivision area. Figure 4.13-1 provides locations for the visual simulation photos. Figures 4.13-2 through 4.13-4 present visual simulations of the pre- and post-Agricultural Residential Cluster Subdivision conditions from these locations.

Estrada Avenue and J Street. Portions of the Agricultural Residential Cluster Subdivision site are visible from public roadways in the community of Santa Margarita, as well as from private homes located at the southern end of the community. As depicted on Plate 4.13-2A, existing views looking south from the intersection Estrada Avenue and J Street in the community of Santa Margarita are composed of relatively flat agricultural grazing land in the foreground and rising oak-covered hills in the background. Proposed Lot 30 would be visible from this viewpoint (refer to Plate 4.13-2B). The distance between existing viewpoints and proposed disturbance, and the presence of intervening vegetation, would limit views of proposed Agricultural Residential Cluster Subdivision disturbance. Nevertheless, because the proposed development would alter the rural character of



the site to a more developed condition as viewed from public roadways and private residences in the community of Santa Margarita, the Agricultural Residential Cluster Subdivision would result in potentially significant impacts on views from these viewing corridors.

*State Route 58 Viewshed.* State Route 58 (SR 58) is a two-lane highway that extends eastbound through the County from Highway 101 to the Kern County line. The segment of SR 58 between Highway 101 and the eastern end of the community of Santa Margarita is also known as El Camino Real. East of town, El Camino Real curves northward and SR 58 branches off southeast to West Pozo Road. As depicted in on Plate 4.13-3A, existing views looking west from the segment of SR 58 east of West Pozo Road consist of agricultural uses and associated structures and vegetation in the foreground, hillsides, vegetation, and oak woodlands in the middle-ground, and the Santa Lucia Mountains in the background. Proposed structures and other improvements along the north and westerly Phase I ridgelines, including Lots 1 through 4, 6 through 11, 14 and 52, would be visible in the background from this viewpoint (refer to Plate 4.13-3B). Certain proposed residential structures may silhouette against the sky from these viewpoints. Since the proposed development would alter the rural character of the site to a more developed condition as viewed from public viewpoints along SR 58, and units may silhouette against the sky from these views, the Agricultural Residential Cluster Subdivision would result in potentially significant impacts on views from this public viewing corridor.

*West Pozo Road Viewshed.* West Pozo Road is a two-lane rural roadway that extends southwest from SR 58 to its terminus in the town of Pozo. As depicted on Plate 4.13-4A, existing views looking northwest from West Pozo Road viewpoints include agricultural uses and associated structures and vegetation in the foreground, hillsides, vegetation, and oak woodlands in the middle-ground, and the Santa Lucia Mountains in the background. Proposed structures and other improvements along southern facing Phase III ridgelines, including on Lots 90, 92 through 95, 97 through 99, 101, 104 through 106, and 112, would be visible in the background from West Pozo Road viewpoints south of SR 58 (refer to Plate 4.13-4B). Certain proposed residential structures may silhouette against the sky from these viewpoints. Since the proposed development would alter the rural character of the site to a more developed condition as viewed from public viewpoints along West Pozo Road, and units may silhouette against the sky from these views, the Agricultural Residential Cluster Subdivision would result in potentially significant impacts on views from this public viewing corridor.

It should be noted that Plates 4.13-2B through 4.13-4B depict post-Agricultural Residential Cluster Subdivision conditions from three vantage points. Additional public and private vantage points occur throughout the vicinity of the property. Consequently, residences on additional lots may be visible from other roadways within and adjacent to the community of Santa Margarita. In particular, Lots 47 and 50 through 55 may be visible from West Pozo Road, north of camera location one (refer to Figure 4.13-1). Due to proposed lot locations atop ridgelines along the eastern portion of the Agricultural Residential Cluster Subdivision site, these lots may silhouette against the sky. Impacts are potentially significant.

**Light and Glare Impacts.** Site illumination provides safety for vehicular and pedestrian movement, and increases security. It can also serve to interpret the Agricultural Residential Cluster Subdivision arrangement by giving emphasis to focal points, gathering places, landscaping, and building entrances. Well-conceived lighting gives clarity and unity to the overall site and to each subarea within it. At the same time, the introduction of new lighting





into an unlit area would extend the light glow of an urban area further into rural areas, proportionally affecting the urban light glow in the nighttime sky.

At present, there is minimal nighttime lighting of the Agricultural Residential Cluster Subdivision site. However, implementation of the proposed Agricultural Residential Cluster Subdivision would require additional lighting that could be visible from public viewing corridors, including Highway 58 and West Pozo Road. Streetlights, entry lights, and interior lights have the potential to adversely affect passing motorists and degrade the nighttime view of the area. The addition of homes and streetlighting in this area would contribute to an alteration of the rural character of the Agricultural Residential Cluster Subdivision site.

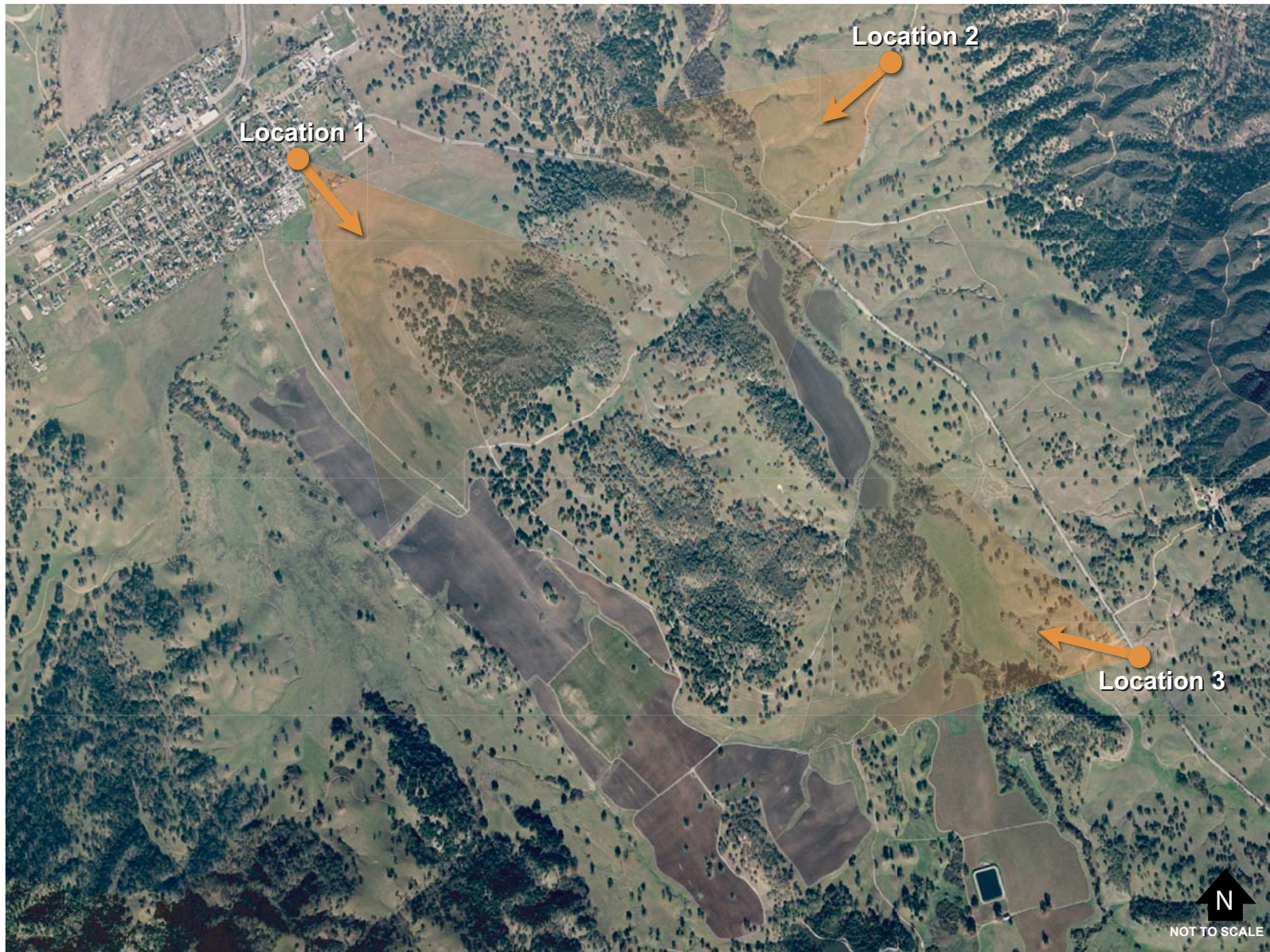
Sources of glare that may affect public viewpoints would be building exterior materials, surface paving materials, and vehicles traveling or parked on roads and driveways within the Agricultural Residential Cluster Subdivision area. Any highly reflective facade materials would be of particular concern. Public viewpoints may be impacted by project-generated lighting and glare.

**Conclusion.** The Agricultural Residential Cluster Subdivision proposes to cluster the residential units in a generally north-south orientation in the central portion of the site, which would reduce visual impacts from viewpoints east and west of the site. Regardless, the proposed Agricultural Residential Cluster Subdivision has the potential to alter the aesthetic character of the site vicinity by changing the scenic views from public viewing locations, introducing community design elements that may be aesthetically inconsistent with the surrounding area and introducing new light and glare generators into the area.

It should be noted that County regulations require oak trees removed to be replaced with a ratio of 4:1 (trees replaced to trees lost) for oak trees greater than six inches diameter at Diameter Breast Height (DBH) or 4.5 feet above mean natural grade, and a 2:1 replacement ratio for oak trees impacted, but not removed as a result of construction activities.

It should also be noted that the installation of off-site sound walls required as mitigation for noise impacts (refer to Section 4.8, *Noise*) and off-site transportation improvements, including traffic signals and signage, required as mitigation for traffic impacts (refer to Section 4.12, *Transportation and Circulation*) would also result in substantial adverse changes to visual character in the vicinity.





Visual Simulation Photo Location Map

Source: Interacta, 2006

Figure 4.13-1

County of San Luis Obispo









Photo 1- Existing viewshed from Estrada Avenue and J Street looking south.



Photo 2- Post-Agricultural Residential Cluster Subdivision viewshed from Estrada Avenue and J Street looking south.

Viewshed Photosimulation from  
Estrada Avenue and J Street  
(Location 1)

Figure 4.13-2

County of San Luis Obispo









Photo 1- Existing viewshed from Highway 58 looking west.

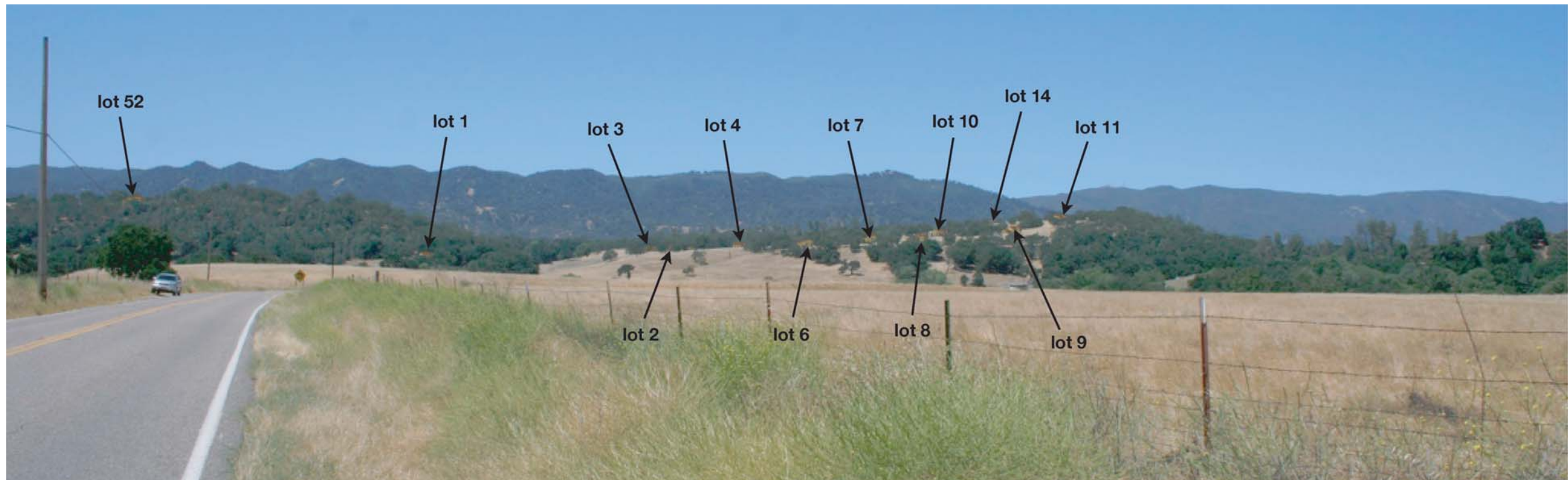


Photo 2- Post-Agricultural Residential Cluster Subdivision viewshed from Highway 58 looking west.

Viewshed Photosimulation from  
Highway 58 (Location 2)







Photo 1- Existing viewshed from West Pozo Road looking northwest.

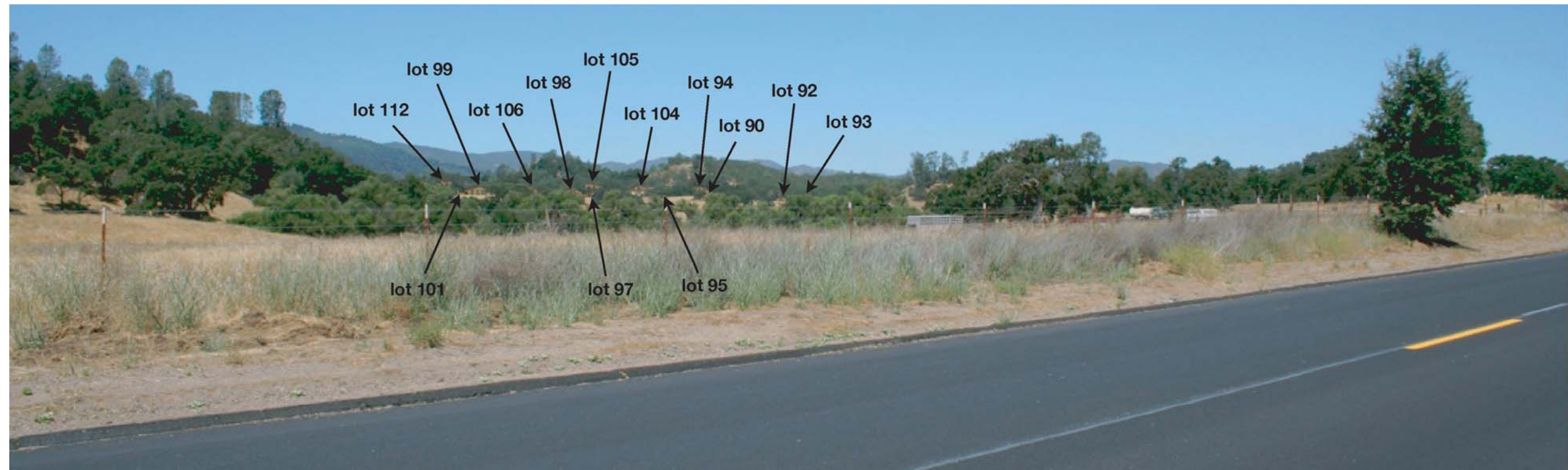


Photo 2- Post-Agricultural Residential Cluster Subdivision viewshed from West Pozo Road looking northwest.

Viewshed Photosimulation from  
West Pozo Road (Location 3)





Mitigation Measures. The following mitigation measures are required:

**Agricultural Residential  
Cluster Subdivision  
VR-1(a)**

**Prohibition of Structural Silhouetting.** Proposed lots located on on-site ridgelines shall be relocated, building heights shall be limited, and vegetative screening shall be provided such that the residential units do not silhouette against the sky when viewed from off-site viewpoints. If structural setbacks are implemented, structures shall be setback as follows: units on Lots 50 through 54 shall be setback to the west from the top of the bluff a sufficient vertical distance to preclude silhouetting of units on the top of on-site bluffs. This could also require the relocation of Lots 47 and 55.

**Plan Requirements and Timing.** The relocated, height-reduced, and vegetation-screened units shall be shown on plans submitted to Planning and Building for review and approval prior to land use permit approval for tract improvements. Prior to issuance of building permits, individual lot owners shall submit topographical cross-section figures that demonstrate that proposed units do not silhouette against the sky, subject to the review of County Planning and Building. Cross sections shall be included in Covenants, Conditions and Restrictions (CC&Rs), and monitored by a Homeowners Association (or similar entity) with oversight by County Planning and Building. **Monitoring.** Planning and Building shall review building plans and cross sections prior to issuance of building permits and inspect units prior to occupancy clearance.

**Agricultural Residential  
Cluster Subdivision  
VR-1(b)**

**Architectural and Landscape Guidelines.** The applicant shall develop and implement Architectural and Landscape Guidelines that include the components listed below. The Guidelines shall include clear criteria and requirements to guide the design, layout, and landscaping of individual residential lots. All future development shall comply with the Guidelines. Enforcement of compliance with the Guidelines shall be the responsibility of the Planning and Building Department.

**Tract landscaping.** Landscaping guidelines shall describe the following elements:

- Landscaping shall emulate and be compatible with the surrounding natural environment; only natural fiber, biodegradable materials shall be used;
- Fuel management techniques shall be used, including, but not limited to, fire resistive landscaping, defensible space features, and strictly controlled vegetation within defensible space;
- Fire-resistant vegetation shall be used in tract landscaping.



***Individual House Landscaping.*** Landscaping Plans for individual houses shall be prepared by a qualified Landscape Architect, and shall be designed to screen and blend the proposed development into the surrounding area while preserving identified viewsheds. Individual lot landscaping plans shall incorporate plants consistent with the San Luis Obispo County Approved Plant List. Only natural fiber, biodegradable materials shall be used.

***Roofing and Feature Color and Material.*** Development plans shall include earth-tone colors on structure roofing and other on-site features to lessen potential visual contrast between the structures and the hilly terrain that constitutes the visual backdrop of the area. Natural building materials and colors compatible with surrounding terrain (earthtones and non-reflective paints) shall be used on exterior surfaces of all structures, including fences.

***Avoidance of Visual Prominence.*** To avoid the visual prominence of structures located at Lots 1 through 4, 6 through 11, 14, 30, 52, 90, 92 through 95, 97 through 99, 101, 104 through 106, and 112, no structure shall exceed a height of 22 feet, except for ancillary features such as antennas or other elements determined to be compatible by Planning and Building.

***Understory and Retaining Wall Treatment.*** Understories and retaining walls higher than six (6) feet shall be in tones compatible with surrounding terrain using textured materials or construction methods which create a textured effect.

***Plan Requirements and Timing.*** Draft Design Guidelines shall be submitted to Planning and Building for review and approval prior to final map recordation. Guidelines shall be recorded with the final map for the tract. A copy of the Guidelines shall be submitted with grading, building, and landscaping plans prior to land use permit approval for individual lot development. Guidelines shall be included in Covenants, Conditions and Restrictions (CC&Rs), and monitored by a Homeowners Association (or similar entity) with oversight by County Planning and Building. ***Monitoring.*** Planning and Building shall review the Guidelines prior to final recordation. For both tract and individual house projects, Planning and Building shall ensure construction according to plan.



outs, or split lanes. Home sites should be located where oak trees are less dense on the lot. For additional oak tree impact mitigation, refer to Sections 4.1, *Agricultural Resources* and 4.3, *Biological Resources*.

**Plan Requirements and Timing.** Planning and Building shall review tract improvement and individual site plans for avoidance of oak tree removal. **Monitoring.** Planning and Building shall review plans prior to final recordation and ensure compliance with oak tree replacement standards.

**Agricultural Residential  
Cluster Subdivision  
VR-1(d)**

**Bury Water Tanks.** The water tanks shall be placed below grade to reduce their visual profile. The tanks shall be placed at a depth such that the tanks do not silhouette against the sky. If burying water tanks is infeasible, natural building materials and colors compatible with surrounding terrain (earthtones and non-reflective paints) shall be used on exterior surfaces.

**Plan Requirements and Timing.** The buried tanks shall be depicted on building plans, to be submitted for Planning and Building approval of tract improvement plans. Prior to issuance of building permits, the applicant shall submit topographical cross-section figures that demonstrate that the water tanks do not silhouette against the sky, subject to the review of County Planning and Building. Cross sections shall be included in Covenants, Conditions and Restrictions (CC&Rs), and monitored by a Homeowners Association (or similar entity) with oversight by County Planning and Building. **Monitoring.** Planning and Building shall review building plans and cross sections prior to issuance of building permits and inspect units prior to occupancy clearance.

**Agricultural Residential  
Cluster Subdivision  
VR-1(e)**

**Lighting.** New lighting shall be oriented away from sensitive uses, and should be hooded, shielded, and located to direct light pools downward and prevent glare. The following standards shall also be implemented:

- All exterior lighting shall be designed as part of the overall architectural concept. Fixtures, standards and all exposed accessories shall be harmonious with the building design, the lighting design and hardware of the public spaces, and the overall visual environment of the County.
- Lighting shall be used for safety and security to illuminate building entrances, parking and loading areas, and pedestrian walkways.
- Light fixtures with exposed light bulbs shall generally be avoided.



- All light fixtures shall be shielded to confine the spread of light within the Agricultural Residential Cluster Subdivision boundaries.

**Plan Requirements and Timing.** The applicant shall submit lighting plans to Planning and Building for review and approval prior to issuance of building permits. Lighting plans shall be included in Covenants, Conditions and Restrictions (CC&Rs), and monitored by a Homeowners Association (or similar entity) with oversight by County Planning and Building. **Monitoring.** Planning and Building shall review all lighting plans prior to issuance of building permits.

**Agricultural Residential  
Cluster Subdivision  
VR-1(f)**

**Street Light Limitations.** Streetlights shall be pedestrian in scale, not to exceed a height of 10 feet, and shall be architecturally compatible with surrounding development. Streetlights, where they are included, shall be primarily for pedestrian safety (at roadway intersections only), and shall not provide widespread illumination.

**Plan Requirements and Timing.** The applicant shall submit the tract lighting plan subject to the review and approval of Planning and Building prior to issuance of building permits. Individual lot developers shall submit lot lighting plans subject to the review and approval of Planning and Building prior to approval of building permits. Lighting plans shall be included in Covenants, Conditions and Restrictions (CC&Rs), and monitored by a Homeowners Association (or similar entity) with oversight by County Planning and Building. **Monitoring.** Planning and Building shall site inspect prior to occupancy clearance for each phase.

**Agricultural Residential  
Cluster Subdivision  
VR-1(g)**

**Clear Excess Debris.** Upon completion of each phase of development, the developer shall clear the project site of all excess construction debris.

**Plan Requirements and Timing.** This requirement shall be noted on final building plans. Debris clearance shall occur prior to occupancy clearance for each phase. **Monitoring.** Planning and Building shall site inspect prior to occupancy clearance for each phase.

**Agricultural Residential  
Cluster Subdivision  
VR-1(h)**

**Grading.** Grading should preserve hillsides and natural topography to the maximum extent feasible. Grading transitions should be gentle rather than abrupt.

**Plan Requirements and Timing.** Future applicants shall submit grading plans to Planning and Building for review and approval



prior to issuance of grading permits. Grading plans shall be included in Covenants, Conditions and Restrictions (CC&Rs), and monitored by a Homeowners Association (or similar entity) with oversight by County Planning and Building. **Monitoring.** Planning and Building shall review grading plans prior to issuance of grading permits and inspect units prior to occupancy clearance for each phase.

**Agricultural Residential  
Cluster Subdivision  
VR-1(i)**

**Accessory Structures/Infrastructure.** New roads shall be blended into the landscape and follow existing topography and vegetation patterns. Cut and fill slopes shall be contoured to conform to the prevailing adjacent landforms and landscapes and drainage swales should be used rather than curbs. Utility service for new development shall be underground.

**Plan Requirements and Timing.** The applicant shall submit plans depicting new road and utility placement and design, subject to the review and approval of Planning and Building. Plans shall be included in Covenants, Conditions and Restrictions (CC&Rs), and monitored by a Homeowners Association (or similar entity) with oversight by County Planning and Building. **Monitoring.** Planning and Building shall review plans prior to final recordation.

Residual Impacts. Although impacts would be reduced through the above mitigation measures, no mitigation is available to avoid changing the site from its rural condition to a more suburban condition. This is considered a substantial adverse effect. Impacts would remain *significant and unavoidable*.

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**c. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.13.2(b) for a discussion of visual impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development  
Program Impact VR-1**

**Development in accordance with the Future Development Program would unavoidably alter the existing rural visual character of the area, introduce new development along viewing corridors, and introduce new light and glare generators into the area. Potential impacts to visual resources are Class I, significant and unavoidable.**

**Viewing Corridor Impacts.** Future Development Program land uses would be visible from Highway 101, State Route 58, West Pozo Road, and portions of the Santa Margarita community.



*Highway 101 Viewshed.* U.S. Highway 101 (U.S. 101) is a four-lane highway that runs north-south along the western edge of the Santa Margarita Ranch. Between 19,750 and 22,060 vehicles travel this road daily. Existing views of the Ranch, looking east from Highway 101 south of the SR 58 interchange, are composed primarily of the Santa Lucia Mountains and Foothills. The Future Development Program envisions a retreat center in the Santa Lucia Foothills, which would include up to 24 individual cabins and a 12,000 square foot lodge. The cabins and lodge would be dispersed over 30 acres in a narrow, northerly trending band, which is located approximately 1,000 feet east of US 101 at its southernmost reach and 3,250 feet east of US 101 at its northernmost reach. The cabins and lodge would likely be screened from view by intervening topography and vegetation. The Future Development Program also envisions a livestock sales yard adjacent to US 101, approximately 1,250 feet south of SR 58. The livestock sales yard would be located on approximately 20 acres and include a café. As a reasonable worst-case scenario for aesthetic impacts, structures may be constructed up to a maximum allowable height of 25 feet, may be located on west-facing (highway-facing) slopes. Although development may be partially screened by intervening topography and vegetation, under a reasonable worst case scenario, development in this location could be visible from U.S. 101. Impacts are potentially significant.

North of the SR 58 interchange, views of the Ranch become more expansive as the topography changes from mountainous to a relatively flat, rolling hill landscape. Existing views from this viewshed include grazing land in the foreground, the existing Ranch headquarters, including equestrian center, barn and home site, in the middle ground, with vacant hillside grasslands and oak savannahs in the background. Although the existing Ranch headquarters are visible from this viewing corridor, the scenic character of the area is rural, and background views are of pristine rural and natural visual quality. The Future Development Program envisions a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater and 40,000 square foot winery near the existing Ranch headquarters location. The winery would also include a 6,000 square foot retail component. As a reasonable worst-case scenario for aesthetic impacts, structures may be constructed up to a maximum allowable height of 25 feet, may be located on west-facing (highway-facing) slopes, and may silhouette against the sky. Due to the lack of intervening topography and sparse vegetation, under a reasonable worst case scenario, development in this location, including grading and landscaping, would be highly visible from U.S. 101, and would alter the rural and natural visual character of this portion of the Ranch property. Impacts are potentially significant.

*El Camino Real Viewshed.* El Camino Real runs north-south from the community of Santa Margarita to Atascadero. Approximately 4,300 vehicles travel this road daily. Existing views of the Ranch, looking east from El Camino Real, include panoramic views of broad, open grassland and oak savannahs with foothill and mountain backdrops. As discussed above, the Future Development Program envisions a Bed and Breakfast, café, amphitheater and winery at the existing Ranch headquarters location, west of El Camino Real. As a reasonable worst-case scenario for aesthetic impacts, structures may be constructed up to a maximum allowable height of 25 feet and may be located on east-facing slopes, or silhouette against the sky. In addition, the northernmost envisioned winery and ranch headquarters may be visible from travelers on El Camino Real. Under a reasonable worst case scenario, development in these locations, including associated grading and landscaping, may be visible from the El Camino



Real viewshed, and would alter the rural and natural visual character of this portion of the Ranch property. Impacts are potentially significant.

*State Route 58 Viewshed.* State Route 58 is a two-lane highway that runs east-west from U.S. 101 through the community of Santa Margarita, where it curves south before extending northeast to the Kern County line. Between 1,900 and 5,490 vehicles travel this road daily. Existing views from this roadway west of the community of Santa Margarita, looking south, include agricultural uses and associated structures and vegetation in the foreground, hillsides, vegetation, and oak woodlands in the middle-ground, and the Santa Lucia Mountains in the background. The Future Development Program envisions the following uses south of this roadway: a residential village; a 250-unit guest ranch and lodge with a 24,000 square foot restaurant; a 40,000 square foot winery including an additional 6,000 square foot retail component; and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop. The land area reserved for these uses extends along the length of SR 58 between U.S. 101 and the community of Santa Margarita, and continues southward along the western edge of the Agricultural Residential Cluster Subdivision site to the southernmost lot locations (refer to Figure 2-9 in Section 2.0, *Project Description*). The envisioned uses would be dispersed over this large area, and would be partially screened from view by intervening topography. However, as a reasonable worst-case scenario for aesthetic impacts, the guest ranch, lodge, restaurant, and winery facilities may be constructed up to a maximum allowable height of 25 feet and may be located adjacent to SR 58 on north-facing (roadway-facing) slopes or silhouette against the sky. In addition, up to 347 residences (the remainder of the 550 residential units allowable under the Salinas River Area Plan, minus 36 residential units in Tract 1, 112 units on Tract 2586, and 5 units on Ranch headquarter parcels) could be constructed adjacent to this roadway. Each of these residences could be 3,500 square feet and two stories (25 feet) tall. The golf course could also be visible from this roadway. The level of development envisioned for this location would permanently alter the existing pristine rural and natural visual condition of the area, resulting in potentially significant viewing corridor impacts.

Existing views from SR 58 between Santa Margarita and West Pozo Road include open grazing land, rolling hills, and oak savannahs. The Future Development Program envisions a 40,000 square foot winery south of this segment of SR 58 as well as a 5-acre park and community pool, three 20,000 square foot worship centers, and 50 units of work force housing, constructed in one two-story structure, to the north. As SR 58 curves northeasterly, views looking northwest include rolling hills and oak savannahs in the foreground, with rising hills in the background. Looking southeast, foreground views include relatively flat grassland, with oak savannahs and mountainous terrain in the middle- and background. The Future Development Program envisions a Ranch headquarters directly east of this segment of SR 58 and a winery beyond. The Ranch headquarters could include a two-story, 5,000 square foot residence on a 2.5-acre lot. The winery could include a 40,000 square foot structure and an additional 6,000 square foot retail component. Under a reasonable worst case scenario, facilities on the Ranch headquarters would be highly visible from this viewshed, and although portions of the winery may be screened from view by intervening topography, much of the winery could be visible as well. The development envisioned for this location would permanently alter the existing pristine rural and natural visual condition of the area, resulting in potentially significant viewing corridor impacts.

*West Pozo Road Viewshed.* West Pozo Road is a two-lane rural roadway that extends southwest from SR 58 to its terminus in the town of Pozo. Approximately 1,000 vehicles travel this road daily.





Existing views of the Ranch, looking west from West Pozo Road viewpoints, include agricultural uses and associated structures and vegetation in the foreground, with vacant hillside grasslands and oak savannahs in the background. Views looking east are primarily composed of mountainous backdrops with foothills and oak savannahs dominating the foreground. South of the proposed Agricultural Residential Cluster Subdivision, two Ranch headquarters sites with wineries are envisioned west of West Pozo Road, and one Ranch headquarters site with a winery is envisioned east of West Pozo Road. Each Ranch headquarters/winery may include a two-story, 5,000 square foot residence, a 40,000 square foot winery, and a 6,000 square foot winery-related retail component. The Ranch headquarters/winery west of West Pozo Road nearest the Agricultural Residential Cluster Subdivision could include an 80,000 square foot winery. Under a reasonable worst case scenario, all facilities may be visible from West Pozo Road, either in the foreground or middle ground. The development envisioned along this roadway would permanently alter the existing pristine rural and natural visual condition of the area, resulting in potentially significant viewing corridor impacts.

*Santa Margarita Community Viewshed.* Much of the Ranch is visible from local roadways in the community of Santa Margarita. Roadways at the northern edge of town have views to the north of broad, open grassland and cropland with rising hills in the background. The bed and breakfast, café, amphitheater and winery envisioned on the existing Ranch headquarters site may be visible from these local roadways (refer to the Highway 101 Viewshed discussion above for reasonable worst-case visual conditions). Views from the western edge of town, looking southwest, are composed of agricultural uses and associated structures and vegetation in the foreground, hillsides, vegetation, and oak woodlands in the middle-ground, and the Santa Lucia Mountains in the background. The residential village, guest ranch, lodge, restaurant, winery, and golf course envisioned in this area may also be visible from local roadways (refer to the State Route 58 Viewshed discussion for reasonable worst-case visual conditions). In addition, views from roadways on the eastern edge of town currently consist of open grazing land, rolling hills, and oak savannahs. The community park and swimming pool, worship centers, and work force housing envisioned for this area could be visible from these viewpoints (refer to the State Route 58 Viewshed discussion for reasonable worst-case visual conditions). Future Development Program land uses may be visible from various community roadways and would permanently alter the pristine rural and natural visual condition of the surrounding area. Impacts are potentially significant.

The Future Development Program includes the dedication of land for a future sewage treatment plant, public hiking and/or equestrian trails, and a community drainage facility. When developed, these land uses may impact viewsheds in the Santa Margarita Ranch area. However, locations for these uses have not yet been established. Because specific locations are not currently envisioned, impacts associated with these facilities would be too speculative to address at this time. The visual impacts for these facilities would be addressed during separate environmental and design review once development locations and plans are available.

**Light and Glare Impacts.** At present, there is minimal nighttime lighting throughout the Santa Margarita Ranch. However, development in accordance with the Future Development Program would increase the ambient nighttime lighting throughout the Ranch property. Increased lighting from streetlights, entry lights, interior lights, parking lot lights, and signage on business establishments may impact residences and motorists on area roadways. Increased glare could potentially occur as a result of building materials, roofing



materials and windows reflecting sunlight. Potential light and glare impacts from the Future Development Program are significant.

**Conclusion.** The current visual character of the Santa Margarita Ranch property and surrounding area is highly scenic and rural. The Future Development Program envisions potential future development throughout the Ranch, which would permanently alter the rural character of the area and introduce new development along viewing corridors. The introduction of light and glare would also contribute to a change in visual character. Buildout of the Future Development Program would significantly alter the existing rural visual character of the Santa Margarita Ranch. Impacts would be significant and unavoidable.

It should also be noted that the installation of off-site sound walls required as mitigation for noise impacts (refer to Section 4.8, *Noise*) and off-site transportation improvements, including traffic signals and signage, required as mitigation for traffic impacts (refer to Section 4.12, *Transportation and Circulation*) would also result in substantial adverse changes to visual character in the vicinity.

Mitigation Measures. Visual impacts would be reduced to some extent through compliance with Salinas River Area Plan and San Luis Obispo County Land Use Ordinance requirements. For example, in accordance with LUO Section 22.104.040.A.1, future residential development in the Santa Margarita Ranch area would be clustered in compliance with Section 22.22.150 (Agricultural Lands Clustering) and would be required to reconfigure and/or relocate existing parcels with minimal or no visual impact on Santa Margarita and Highway 101, thereby reducing viewing corridor impacts to some extent. All future development would additionally be required to comply with exterior lighting requirements, height limits, and setback requirements of the San Luis Obispo County General Plan. Nonetheless, additional mitigation measures are required.

Agricultural Residential Cluster Subdivision measures VR-1(a) (Prohibition of Structural Silhouetting), VR-1(b) (Architectural and Landscape Guidelines), VR-1(c) (Oak Tree Removal), VR-1(d) (Bury Water Tanks), VR-1(e) (Lighting), VR-1(f) (Street Light Limitations), VR-1(g) (Clear Excess Debris), VR-1(h) (Grading), and VR-1(i) (Accessory Structures/Infrastructure) would apply to all Future Development Program land uses. The following additional mitigation measures are also required to further reduce aesthetic impacts:

**Future Development Program VR-1(a)**

**Residential Siting and Design Standards.** Residential site locations shall be chosen to minimize aesthetic impacts. Considerations shall include, but not be limited to, the following:

- Home sites shall be clustered in accordance with San Luis Obispo County LUO Section 22.104.040.A.1 and Section 22.22.150 (Agricultural Lands Clustering).
- No building envelopes shall be located where they would create a skyline silhouette.
- Lots shall be screened from roads to minimize impacts to visual corridors.

Residential design shall blend new residences and associated



improvements into the natural landscapes. This may include, but not be limited to, the following architectural considerations:

- All buildings and associated improvements conform to existing topography.
- For lots located on slopes, stepped foundations shall be used.
- The height and scale of new development shall be compatible with that of surrounding development and/or surrounding natural environment. Residences located beneath the tree canopy shall not penetrate the canopy. Residences located in open space must visually relate to some other larger vertical element in the landscape, such as mature oak trees.
- Building materials shall blend with the surrounding environment in terms of color, texture, non-reflectivity and scale.
- Residences shall be designed to maximize the use of energy efficient climate control systems such as passive solar gain for heating and natural ventilation for cooling.
- Extensive paved areas for long-term external storage of vehicles shall not be permitted.
- Landscaping material standards shall be implemented to promote the use of native vegetation. Landscaping shall

blend into the natural environment and screen the residence from view where feasible.

- Walls and fences shall be designed in a style, materials and color to complement the buildings to which they are attached.
- Attached multi-family development shall incorporate the following elements:
  - Units that resemble large single family dwellings
  - Varied front setbacks within the same structure
  - Staggered unit plans
  - Use of reverse building plans to add variety
  - Maximum of two adjacent units with identical exterior wall and roof lines
  - A variety of orientations to avoid monotony
  - The units shall be clustered on the site.
- The design of residential buildings shall include articulation to give them richness and scale. Long uninterrupted exterior walls shall be avoided. For dwellings with sloped roofs, both vertical and horizontal articulation is encouraged.

**Plan Requirements and Timing.** Residential location and design shall be subject to review by Planning and Building. Design



standards shall be depicted on site plans. **Monitoring.** Planning and Building shall review site plans prior to issuance of building permits.

**Future Development  
Program VR-1(b)**

**Commercial Siting and Design Standards.** Potential commercial development under the Future Development Program includes a restaurant, café, hotel, bed & breakfast, golf clubhouse and pro shop, and gift shops. Specific site locations for these developments shall be chosen to minimize aesthetic impacts. Considerations shall include, but not be limited to, the following:

- Buildings shall be designed and placed at locations that will reduce their visibility from Highway 101, El Camino Real, State Route 58, West Pozo Road, and the community of Santa Margarita.
- No building envelopes shall be located where they would create a skyline silhouette.
- No development on slopes of 30 percent or greater.

Commercial design shall blend new structures and associated improvements into the natural landscapes. This may include, but not be limited to, the following architectural considerations:

- Structures shall be visually broken up by creating horizontal emphasis through the use of trim or other elements, adding awnings, eaves or other ornamentation, by using a combination of complimentary colors, and through the use of landscaping.
- All areas to be utilized for storage, refuse, or loading shall be screened from view of access streets, roadways, or adjacent residences with berms, landscaping, low garden walls, fencing, or a combination of these features.
- Parking lot areas shall be landscaped using an orchard design with a minimum of one tree per three spaces planted at the rear of the parking space. In order to provide visual relief, glare reduction, and shade, large-canopy trees are recommended, with the requirement that a minimum of 50% of the trees used are of a species found in the project vicinity (i.e. *Quercus agrifolia*, *Quercus lobata*, and *Platanus racemosa*) to create a transition with the native vegetation along throughout the Santa Margarita Ranch.
- Buildings shall be designed to fit in with the landscape by utilizing alternative foundation systems such as split level, post and beam, etc., and use exterior materials and colors that blend with the surroundings.



**Plan Requirements and Timing.** Residential location and design shall be subject to review by Planning and Building. Design standards shall be depicted on site plans. **Monitoring.** Planning and Building shall review site plans prior to issuance of building permits.

**Future Development  
Program VR-1(c)**

**Golf Course Siting and Design Standards.** Future applicants shall be encouraged to design the golf course according to the philosophy of 'Natural Course Design.' Considerations shall include, but not be limited to, the following:

- The course shall be planned around natural features, including topography, trees, vegetation, and streams. The existing contour of the land shall suggest the placement of holes and flow of the course.
- Turf shall be limited to approximately 25% of the course in order to retain natural aesthetic of the area as well as to conserve water resources.
- Siting and design considerations for the club house, pro shop, and/or other appurtenant facilities shall be similar to the Commercial Siting and Design Standards noted in mitigation measure AES(FDP)-1(b).

**Plan Requirements and Timing.** Residential location and design shall be subject to review by Planning and Building. Design standards shall be depicted on site plans. **Monitoring.** Planning and Building shall review site plans prior to issuance of building permits.

**Future Development  
Program VR-1(d)**

**Hillsides.** Protect hillsides as a visual amenity by implementing design standards and grading requirements that call for:

- Decreasing density as slope increases;
  - Limiting the amount of grading;
  - Providing substantial amounts of landscaping;
  - Incorporating architectural treatment that enhances the form of the hillside rather than conflicting with it;
  - Limiting the number of building sites that may be placed on prominent ridgelines;
  - Ensuring sensitive design of development on steep slopes, and on the crest of major ridgelines.
- Considerations for development on steep slopes shall include the following:
- Avoid slope stability hazards by restricting development from slopes of 30 percent or greater.
  - Site-specific visual assessments (with and without the project) to thoroughly evaluate the visual effects of



- development proposals on slopes of 30 percent or greater.
- For new development located on ridges and hills consider providing a substantial building setback from the edge of the downhill slope and/or screening landscaping, where the slope exceeds 15 percent.

**Plan Requirements and Timing.** Residential design standards and grading requirements shall be subject to review by Planning and Building. Design standards shall be depicted on site plans.  
**Monitoring.** Planning and Building shall review site plans prior to issuance of building permits.

Residual Impacts. With implementation of the above mitigation measures, impacts would be reduced to the extent feasible. However, due to the extent of the Future Development Program and the amount of visual conversion of the existing rural nature of the Santa Margarita Ranch, impacts would remain *significant and unavoidable*.

**d. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative visual resources impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.





## 4.14 WATER AND WASTEWATER

*The following section is based on a hydrogeological study/water resources analysis prepared by Hopkins Groundwater Consultants (refer to Appendix K) and a drainage and wastewater analysis prepared by Boyle Engineering Corporation (refer to Appendix H).*

*Agricultural Residential Cluster Subdivision. The applicant proposes to use groundwater to provide water for domestic use. The proposed Agricultural Residential Cluster Subdivision would use about 96 acre-feet per year (afy) of water. This demand may contribute to overdraft of the aquifer system. Although mitigation, including the establishment of a groundwater monitoring program and water conservation measures, would reduce overall system demand, uncertainty of additional water supply would result in Class I, significant and unavoidable, impacts. The Agricultural Residential Cluster Subdivision involves the use of septic systems. Percolation testing has not been conducted for all proposed lots. Mitigation measures requiring a septic tank maintenance plan and septic tank and leachfield site plans would result in Class II, significant but mitigable, impacts related to wastewater disposal. Impacts related to groundwater quality would also be Class II, significant but mitigable. Mitigation measures include regulating the use of water softeners and pollutant input minimization. Septage load management impacts would be Class III, less than significant, pursuant to compliance with standards and regulations.*

*Future Development Program. Because no active application currently exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, the assessment of water and wastewater impacts is based on a reasonable worst case scenario with regard to the location of future land uses and water use. Buildout of the Future Development Program would result in impacts similar to those resulting from the Agricultural Residential Cluster Subdivision individually. However, the Future Development Program would use about 926 acre-feet per year (afy) of water. Groundwater impacts are Class I, significant and unavoidable. In addition, no percolation tests have been completed for Future Development Program land uses subsequent to the Agricultural Residential Cluster Subdivision. Impacts are Class II, significant but mitigable. Water quality and septage load impacts would be similar to those resulting from the Agricultural Residential Cluster Subdivision individually. The Future Development Program envisions nine wineries located throughout the Ranch property. Water quality impacts resulting from winery wastewater are Class II, significant but mitigable. Development and implementation of a wastewater master plan would reduce impacts to a less than significant level.*

### 4.14.1 Setting

**a. Water Supply and Current Demand.** The Santa Margarita Ranch overlies portions of the Paso Robles Groundwater Basin (Paso Robles Basin), the Santa Margarita and Vaqueros bedrock aquifers, and shallow alluvial aquifers. The Paso Robles Basin is one of 53 basins in the Central Coast Hydrologic Region and comprises approximately 860 square miles of area drained by the Salinas River. Although the Paso Robles Basin is the primary source of groundwater in the region, the existing wells on the Ranch property do not extract from the Paso Robles Basin. Rather, the primary aquifer units that supply existing wells on the Ranch consist of Paso Robles Formation sand and gravel deposits, an undefined or stratigraphic equivalent to the Paso Robles Formation, and the Santa Margarita Formation. The Paso Robles and Santa Margarita Formations are discussed below.





The Paso Robles Formation is a widely distributed, weak conglomerate comprising gravel, sand, silt and clay. This unit outcrops in the hills east of Garden Farms, at Chalk Hill and the hills to the south of Highway 58. The Paso Robles Formation ranges in thickness from 300 to 400 feet in the vicinity of Santa Margarita Ranch. The Paso Robles Formation is found at depths of 400 to 500 feet below ground surface (bgs) along the eastern portion of the Ranch property. The Paso Robles Formation, where present, likely forms the primary aquifer zone from which the higher yielding wells on the Ranch produce.

The Santa Margarita Formation is primarily thick, poorly stratified marine sandstone with finer interbeds of mudstone, siltstone, conglomerate and diatomite. This formation outcrops extensively in the Santa Margarita area between the Rinconada and Nacimiento fault zones and conformably overlies the Monterey Formation and likely defines the effective base of fresh water under much of the Ranch property. The Santa Margarita Formation is believed to be up to 1,000 feet thick in some areas. The Santa Margarita sandstone forms a poor to moderate aquifer for groundwater production and likely contributes to the yield in a number of the existing Ranch wells.

The safe yield of the aquifer system has not been determined in the vicinity of the Santa Margarita Ranch. Approximately 34 wells are located in the Santa Margarita Ranch area. Three are located in the northern portion of the Ranch and serve the community of Garden Farms; four are located near the center of the Ranch and serve the community of Santa Margarita. Of the 27 remaining wells, the Ranch operates approximately 20 wells from which historical groundwater data have been collected since 1999. Data includes groundwater levels, well production, well performance and water quality test results. A summary report that includes this data through April 2006 (RHA, 2006) forms the basis for reviewing impacts of historical groundwater use and the availability of groundwater to supply the Agricultural Residential Cluster Subdivision and Future Development Program.

The Ranch ownership participated in the planning phases of the Nacimiento Water Project. On May 18, 2004, the Board of Supervisors approved a policy to consider a cooperative arrangement between the Ranch and County Service Area No. 23 (CSA 23) (which provides water service to the community of Santa Margarita) if CSA 23 participates in the State Water Project. However, an agreement has not yet been reached.

Water Demand. Existing water uses in the area include domestic and agricultural Ranch uses. Table 4.14-1 indicates the estimated amount of annual water demand that is attributed to the existing and planned land uses on the Ranch property. The itemized water demands presented in Table 4.14-1 were calculated using the standard San Luis Obispo County water demand estimation factors for domestic and municipal land uses. In addition to the County data, an irrigation demand of 2.0 acre feet per year per acre (afy/ac) was used for landscaping and turf watering. This demand factor accounts for average annual rainfall and evaporation rates measured in the area.



**Table 4.14-1 Existing Ranch Water Demands**

Land Use	Land Use Characteristics	Water Use Factor (acre-feet/unit)	Annual Water Demand (acre-feet)
Margarita Farms	36 residential units on 1.0 to 2.5 acre lots (128 acres total)	1.44 / lot	51.84
1 residential lot	1.0 acre in size	1.44 / lot	1.44
Farm support housing units	7 units on 1.0 acre or less	0.9 / lot	6.30
Private cabins	4 units on 1.0 acre or less	0.9 / lot	3.60
Margarita Vineyard	973.9 acres	1.6 / acre	1,558.24*
Existing Ranch Water Use Total			1,621.42
Planned Orchards	500 acres	2.0 / acre	1,000**
Planned Vineyards	1,026.1 acres	1.6 / acre	1,641.76*
<b>Planned Ranch Water Use Total</b>			<b>2,641.76</b>
<b>Existing and Planned Ranch Water Use Total</b>			<b>4,263.18</b>

Source: Hopkins, 2006 and RHA, 2006.

\* This estimate is based on a factor of 1.6 afy per acre and does not account for the immaturity of on-site vineyards.

Actual consumptive demand is estimated at approximately 400 afy.

\*\* This estimate is based on a factor of 2.0 afy per acre as a reasonable worst case scenario.

As shown in Table 4.14-1, existing Ranch water demands are approximately 1,621 acre feet per year (afy). Planned vineyards and orchards would add approximately 2,642 afy of demand to this figure for a total of 4,263 afy. Approximately 4 percent (63 afy) of existing demand is derived from rural residential uses and approximately 96 percent (1,558 afy) is derived from agricultural uses (i.e., vineyards). With planned vineyards in place, this ratio would change to 1.5 percent and 98.5 percent, respectively. It should be noted that although 63 afy is derived from rural residential uses, Margarita Farms (with a demand of 52 afy) is the only non-agricultural development on the Ranch property that draws from the same aquifer units as the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

Consumptive Use. Approximately 40 percent of rural residential water use and 32 percent of agricultural water use results in groundwater recharge, thereby returning to the local aquifer system. Consumptive water use refers to the amount of groundwater that does not result in groundwater recharge, and is permanently removed from the local aquifer system. Although approximately 52 afy is currently used for rural residential use (i.e. Margarita Farms), approximately 21 afy would return to the system as groundwater recharge. Therefore, net consumptive use for existing residential uses on the Ranch is approximately 31 afy. Similarly, although an estimated 1,558 afy is currently used for agricultural purposes (vineyard irrigation), approximately 499 afy would return to the system as groundwater recharge. Therefore, based on a factor of 1.6 afy per acre (afy/acre), net consumptive use for existing agricultural uses on the Ranch is estimated at approximately 1,059 afy (1.6 afy/acre is the water duty factor applied by Hopkins Groundwater Consultants vineyard irrigation in San Luis Obispo County; refer to Appendix K). The actual reported annual consumption for existing Ranch agricultural uses is 285 afy. This discrepancy may be attributed to a number of factors, including the immaturity of vineyard plantings (as younger crops require less irrigation) and reported discharge meter inaccuracies. Based on available data for immature vineyard water use and reported consumptive demand (past average annual uses), existing agricultural water use on the Ranch is estimated at approximately 400 afy. Therefore, in addition to an estimated 31 afy residential consumption, the total existing consumptive demand on the Ranch property is estimated to be 431 afy.



**b. Existing Santa Margarita Ranch Water Service.** Existing Santa Margarita Ranch water uses are supplied entirely by groundwater. The Ranch property is currently served by approximately 27 wells, located primarily along the east side of the Ranch, west of West Pozo Road. Individual well yields typically range between 200 and 400 gallons per minute (gpm) with some wells capable of rates of up to 1,000 gpm (RHA, 2006). Water supply for the community of Santa Margarita is provided by CSA 23 and is produced solely from water wells in the vicinity of the town.

**c. Wastewater.** The Santa Margarita Ranch is not currently served by wastewater infrastructure. Existing development on the Ranch property, including 36 units in the Santa Margarita Farms Subdivision, one single family residence, four private cabins, and seven farm support housing units, are served by individual on-site septic systems. The communities of Santa Margarita and Garden Farms are also served entirely by septic systems.

#### **4.14.2 Impact Analysis**

##### **a. Methodology and Significance Thresholds.**

1. Methodology. Impacts to water conveyance facilities were assessed by determining where and how close each of these facilities was located to Agricultural Residential Cluster Subdivision and Future Development Program facilities, as well as the sufficiency of the existing water lines to accommodate additional demand associated with the Agricultural Residential Cluster Subdivision and Future Development Program. Well and percolation data provided by the applicant was evaluated to determine the suitability of on-site conditions to support the water and wastewater demand generated by the Agricultural Residential Cluster Subdivision and Future Development Program.

2. Significance Thresholds. In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in any of the following:

- *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);*
- *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;*
- *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;*
- *Fail to have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed; or*
- *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.*



**b. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact W-1**      **The Agricultural Residential Cluster Subdivision would increase the use of water from area aquifer units, including the Paso Robles and Santa Margarita Formations, by 96 acre-feet per year (afy). This net consumptive use may contribute to overdraft of the aquifer system. Groundwater use associated with the Agricultural Residential Cluster Subdivision is a Class I, significant and unavoidable, impact.**

The Agricultural Residential Cluster Subdivision would use water from existing wells, which extract groundwater from aquifer units located beneath the Ranch property, including Paso Robles Formation sand and gravel deposits, an undefined or stratigraphic equivalent to the Paso Robles Formation, and the Santa Margarita Formation. The majority of these wells are located along the east side of the Ranch property, west of West Pozo Road.

The proposed single-family homes are estimated to use approximately 1.44 acre-feet per year (afy) of water. Therefore, the proposed 112-unit Agricultural Residential Cluster Subdivision would be anticipated to demand 161.28 afy. However, approximately 40 percent of rural residential water use results in groundwater recharge, thereby returning to the local aquifer system [refer to Section 4.14.1(a) *Consumptive Use*]. Although the Agricultural Residential Cluster Subdivision would demand an estimated 161 afy, approximately 64 afy would return to groundwater as recharge. Therefore, net consumptive use for Agricultural Residential Cluster Subdivision development would be approximately 96 afy. The magnitude of this additional demand is a 22 percent increase in groundwater production over the existing Ranch consumptive demand (431 afy). It should be noted that the applicant proposes storm drains along area roadways to direct drainage from the proposed development to detention features within the agricultural conservation easements (ACEs). This would further promote percolation and groundwater recharge.

The applicant proposes to use the Santa Margarita Ranch Mutual Water Company (SMRMWC), to provide the water needed to support the proposed Agricultural Residential Cluster Subdivision. SMRMWC would utilize existing on-site wells to meet domestic needs. Individual well yields typically range between 200 and 400 gallons per minute (gpm), with some wells capable of rates of up to 1,000 gpm. The water would be drawn from Paso Robles Formation sand and gravel deposits, an undefined or stratigraphic equivalent to the Paso Robles Formation, and the Santa Margarita Formation aquifer units. Water would be stored in two 188,000 gallon water tanks located at the top of a hill near the center of the Agricultural Residential Cluster Subdivision.

As described above, net consumptive water demand for the Agricultural Residential Cluster Subdivision is estimated to be approximately 96 afy. To evaluate whether this would result in aquifer overdraft, the groundwater levels in the aquifer system must be evaluated over at least one complete hydrologic cycle to establish a trend (generally several decades). Available groundwater level and production data have been collected intermittently and have not been collected over a complete hydrologic cycle. Therefore, available groundwater data from the Ranch are not sufficient to determine the long-term impacts of existing and proposed



groundwater pumping. Because the safe yield of the aquifer system cannot be verified, the overdraft condition of the aquifer system is not known, and impacts to water resources could be significant.

Mitigation Measures. The following mitigation measures are required to ensure that impacts would be reduced to the extent possible:

**Agricultural Residential  
Cluster Subdivision  
W-1(a)**

**Groundwater and Surface Water Monitoring Programs.** A comprehensive groundwater monitoring program shall be established by the applicant in consultation with the County Public Works Department, Planning and Building Department, and the Regional Water Quality Control Board (RWQCB) to collect annual well production data, semiannual groundwater level data from all available wells, and semi-annual (dry and wet weather) water quality testing of key constituents of potential concern (i.e., nitrate). The applicant shall provide additional facilities as necessary to monitor the anticipated impacts on groundwater resources for each phase of Agricultural Residential Cluster development. Up gradient and down gradient monitoring locations shall be established.

A comprehensive stream flow monitoring program shall also be established and funded by the applicant in consultation with the County Public Works Department, Planning and Building Department, and RWQCB. The monitoring program shall include new monitoring stations on Trout Creek and Rinconada Creek.

Monitoring data shall be provided by the applicant annually to County Public Works, Planning and Building, and RWQCB. Remedial action shall be developed based on the significance of the adverse conditions documented by the groundwater and surface water monitoring programs and subsequently implemented. Remedial action may include water rationing, including the prohibition of later phases of development until adequate water supply is demonstrated, and/or the importation of additional water supply [refer to Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply)].

**Plan Requirements and Timing.** Prior to occupancy clearance, the applicant, in consultation with the Public Works Department, Planning and Building Department, and RWQCB, shall establish the groundwater and surface water monitoring program on the Ranch property. **Monitoring.** Public Works, Planning and Building, and RWQCB shall review groundwater and surface water stream flow monitoring data annually and require remedial action as necessary. The type of remedial action that may be required shall be based on the significance of the adverse



conditions documented by the monitoring program.

**Agricultural Residential  
Cluster Subdivision  
W-1(b)**

**Water Conservation Measures.** The applicant shall implement water conservation measures, including, but not limited to:

- Using available and proven technologies and equipment that provide adequate performance with a substantial water savings. This may include the installation of high efficiency washing machines and ultra-low flush toilets and/or the use of micro sprinklers or drip tape for domestic and agricultural irrigation, installation of hot water pipe circulating systems or “point-of-use” water heaters. Installation of these water conservation measures shall be included in CC&Rs for residential lots and monitored by a homeowners association or similar entity;
- Implementing tiered commodity rates for water sales that increase with higher water usage to financially encourage each resident to conserve water;
- Establishing low water use landscaping on all common landscaped areas greater than 0.1 acres, including low water use irrigation methods such as drip irrigation;
- Limiting total residential irrigated landscape areas to 1,500 square feet and limiting turf (lawn) areas to no more than 20% of residential irrigated landscape areas (or 300 square feet at maximum); and
- Providing and updating an educational brochure regarding water conservation.

**Plan Requirements and Timing.** The applicant shall include water conservation measures on site plans, subject to approval by Public Works. **Monitoring.** Public Works shall site inspect to ensure development is in accordance with approved plans prior to occupancy clearance.

**Agricultural Residential  
Cluster Subdivision  
W-1(c)**

**Imported Water Supply.** The applicant shall acquire imported water supply to serve the Agricultural Residential Cluster Subdivision. Potential sources include State Water and/or the Nacimiento Water Project.

**Plan Requirements and Timing.** The applicant shall provide proof of adequate water supply to serve the proposed Agricultural Residential Cluster Subdivision prior to issuance of grading permits. **Monitoring.** Planning and Building and the Department of Public Works shall confirm adequate water supply prior to issuance of a development permit.

Residual Impacts. Implementation of Agricultural Residential Cluster Subdivision measures W-1(a) (Groundwater and Surface Water Monitoring Program) and W-1(b) (Water Conservation Measures) would reduce the overall water system demand for the Agricultural



Residential Cluster Subdivision from an estimated 161.28 afy to approximately 139.94 afy (about 13 percent). This represents a reduction in net consumptive use from an estimated 96 afy to approximately 84 afy [refer to Section 4.14.1(a) *Consumptive Use*]. However, additional water supply would still be required. Additional water may be available for the Agricultural Residential Cluster Subdivision through the State Water Project and/or the Nacimiento Water Project, as outlined in Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply) above. It should be noted that Santa Margarita Ranch, LLC does not currently have an allocation for the State Water Project (SWP), although SWP pipelines are located in the vicinity of the Ranch. The Santa Margarita Ranch Mutual Water Company (SMRMWC), which is proposed by Santa Margarita Ranch, LLC as part of the Agricultural Residential Cluster Subdivision, is identified as an eligible agency for the Nacimiento Water Project (NWP). Pursuant to execution of a Water Delivery Entitlement Contract (WDEC), the SMRMWC could receive an allocation for the NWP, which has not yet been constructed. Due to resulting uncertainties regarding timing and availability of these sources, additional water supply cannot be assured at this time. Impacts would remain significant and unavoidable.

Despite the uncertainties discussed above, it may one day be feasible for the applicants to obtain imported water (i.e. through obtainment of SWP allocations or construction of the NWP pipeline). Resultant implementation of Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply) would require extension of water lines, which could result in residual environmental impacts. Physical impacts associated with infrastructure necessary to import water to the property have been addressed in several adopted Environmental Impact Reports (EIRs) and one Mitigated Negative Declaration (MND). These EIRs and MND are herein incorporated by reference into this Revised Draft EIR: State Water Project (SWP) Coastal Branch Phase II and Mission Hills Extension Final EIR (State of California Division of Planning, May 1991), State Water Project Coastal Branch (Phase II) Local Distribution Lines and Facilities Final EIR (ERCE, March 1992), Nacimiento Water Project (NWP) Final EIR (Marine Research Specialists, December 2003), Addendum No. 1 to the NWP Final EIR (ESA Associates, June 2007), and Santa Margarita Water System Project MND (County of San Luis Obispo Public Works, June 2007). A Supplement to the SWP Coastal Branch Phase II and Mission Hills Extension Final EIR (State of California Division of Planning, October 1994) addressed technical design changes and realignment of Reach 5 of the project, which does not cover the Santa Margarita area. Addenda to the SWP Coastal Branch (Phase II) Local Distribution Lines and Facilities Final EIR are similarly not applicable to the area.

The previous environmental documents incorporated by reference are summarized below:

- Final Environmental Impact Report for the State Water Project Coastal Branch, Phase II and Mission Hills Extension, SCH# 1990010613. This document addressed the proposed construction of new State Water Project (SWP) facilities that would transport SWP water to San Luis Obispo and Santa Barbara Counties. The facilities analyzed in the program-level analysis included the Coastal Branch, Phase II and the Mission Hills Extension. The Coastal Branch, Phase II runs along the southern edge of the community of Santa Margarita.
- Final Environmental Impact Report for the State Water Project Coastal Branch (Phase II) Local Distribution Lines and Facilities, SCH# 1992100959. This document evaluates the site-specific impacts of the construction and operation of local distribution water



pipelines, a water treatment plant, and supporting facilities that are associated with the State Water Project Coastal Branch, Phase II. This document tiers from the Final Environmental Impact Report for the State Water Project Coastal Branch, Phase II and Mission Hills Extension (discussed above). Nine local water distribution pipelines are analyzed in this document, including the North County Pipeline, which extends for approximately 17 miles from the Coastal Branch pipeline at SR 58 just east of the town of Santa Margarita to Paso Robles.

- Final Environmental Impact Report for the Nacimiento Water Project, December 2003, Marine Research Specialists, SCH# 2001061022. This document addressed a proposal to develop the Nacimiento Water Project. The report analyzed impacts of two co-equal water delivery options: a Treated Water Option and a Raw Water Option. Both options included construction of an intake at Lake Nacimiento, water storage tanks, pump stations, and a 64-mile water transmission pipeline. This transmission pipeline would run along El Camino Real through the community of Santa Margarita. However, the Raw Water Option included construction of three water discharge facilities while the Treated Water Option included construction and operation of a central Water Treatment Plant near Lake Nacimiento on Camp Roberts' property.
- Addendum to the Final Environmental Impact Report for the Nacimiento Water Project, June 2007, ESA Associates, SCH# 2001061022. This document addressed minor alterations to the proposed Nacimiento Water Project, including pipeline alignment refinements, turnout location refinements, and pump station and storage tank modifications. All analyzed modifications are applied to the Raw Water Option scenario, which was approved by the Board of Supervisors of the SLOCFWCD in January 2004. Within the Santa Margarita Ranch vicinity, the pipeline would run along the northern boundary of the community of Santa Margarita rather than along El Camino Real. This would avoid one railroad crossing, two crossings of Highway 58, and avoid traffic impacts through the community of Santa Margarita.
- Mitigated Negative Declaration for the Santa Margarita Water System Project (591R360301) ED06-351, June 2007, County of San Luis Obispo Public Works, SCH# 2007071005. This document addresses impacts related water system improvements in the Santa Margarita vicinity. This includes: removal of one existing water tank and construction of a new 500,000-gallon water storage tank; construction of a paved access road extending from Wilhelmina Avenue/I Street to the tank site; installation of pipeline to the water tank site; replacement of existing pipelines within Encina Avenue and K Street; replacement of existing pipeline within F Street, east of Pinal Avenue; installation of a water system loop on F Street and Maria Avenue; replacement of 23 wharf heads with new standard fire hydrants; and installation of parallel distribution pipelines within Wilhelmina Avenue and el Camino Real.

The above documents are available for review at the County of San Luis Obispo Department of Planning and Building Environmental Coordinators Office, 976 Osos Street, San Luis Obispo, CA 93408. Both NWP documents are also available on-line at [http://www.slocounty.ca.gov/PW/NacWP/General\\_Project\\_Information/reports.htm](http://www.slocounty.ca.gov/PW/NacWP/General_Project_Information/reports.htm).





The above documents addressed impacts associated with State and Nacimiento Water Projects, including cumulative and growth inducing impacts. However, implementation of Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply) would require connection to SWP or NWP water lines as well as installation of additional connector pipelines and associated infrastructure. Possible locations for such connections and pipelines are described below, including a discussion of potential impacts that would result.

- SWP Connection via Encina Avenue. This delivery option would connect to the existing State water pipeline located along the southern boundary of the community of Santa Margarita (as analyzed in the Final Environmental Impact Report for the State Water Project Coastal Branch, Phase II and Mission Hills Extension) in the vicinity of Encina Avenue. The pipeline would extend east for approximately 950 feet and south along existing ranch roadways for approximately 4,250 feet and then east along existing ranch roadways for another 900 feet. Pipelines would be approximately 4 inches in diameter and would require an approximate 8 foot wide trench during construction. Disturbance would be contained within existing County and ranch roadway right-of-ways and would therefore be negligible. Installation of water lines would not occur through undisturbed Ranch property.

Maintenance would consist of turnout flow meter calibration, occurring approximately once every one to two years, and electromechanical work at pump stations and/or leak repair as needed. Ranch owners would be responsible for the construction, operation and maintenance of any service connection to the SWP facilities serving the Ranch.

- SWP Connection West of Santa Margarita. The existing State water pipeline traverses the southern boundary of the community of Santa Margarita and extends southwest from the community toward U.S. Highway 101 (as analyzed in the Final Environmental Impact Report for the State Water Project Coastal Branch, Phase II and Mission Hills Extension). This delivery option would connect to the existing waterline approximately 875 feet west of the community of Santa Margarita. It would then extend an additional 1,300 feet west before extending 4,750 linear feet south-southwest. Pipelines would be approximately 4 inches in diameter and would require an approximate 8 foot wide trench during construction. This delivery option would include the installation of water mains across undeveloped Ranch property and the construction of a new water tank on the west side of the Ranch.

Maintenance would consist of turnout flow meter calibration, occurring approximately once every one to two years, and electromechanical work at pump stations and/or leak repair as needed. Ranch owners would be responsible for the construction, operation and maintenance of any service connection to the SWP facilities serving the Ranch.

Installation of water lines through undeveloped Ranch property could result in impacts related to grading and associated erosion, tree removal, and impacts to California annual grassland and emergent wetlands. Compliance with county grading and storm water ordinances would minimize impacts related to drainage and erosion. In addition, as noted under Agricultural Residential Cluster Subdivision Impact B-1, no mitigation is required to address the loss of common habitat types, including California annual grassland.



Agricultural Residential Cluster Subdivision measures B-3(a) (Tree Identification), B-3(b) (Heritage Oak Tree Avoidance), B-3(c) (Oak Tree Protection and Mitigation and Monitoring Plan) and B-4(a) (Wetland and Riparian Protection) would apply to disturbance associated with this SWP delivery option. Since the precise location of water pipelines has not been determined, precise environmental impacts associated with such improvements would be too speculative to address at this time. Environmental impacts associated with implementation of this connection would be evaluated in a separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA).

- NWP Connection via Encina Avenue. This delivery option would connect to the Nacimiento waterline at the northern extent of Encina Avenue (as analyzed in the 2007 Addendum to the Final Environmental Impact Report for the Nacimiento Water Project) within the community of Santa Margarita. A pipeline would be constructed within the existing Encina Avenue right-of-way to the southern extent of the roadway at the Ranch boundary (as analyzed in the 2007 MND for the Santa Margarita Water System Project). Delivery of Nacimiento water would be achieved using one of two approaches: (1) the untreated Nacimiento water delivered to the Ranch would be used for agriculture, and the offset of groundwater otherwise extracted for agriculture would be used for the Agricultural Residential Cluster Subdivision development; or (2) the untreated Nacimiento water delivered to the Ranch would be treated on-site and used for the Agricultural Residential Cluster Subdivision.

It should be noted that both of the above options could result in policy inconsistencies. For example, Policy 11 in the County's Agriculture and Open Space Element (AGP11, Agricultural Water Supplies) states that groundwater should be maintained for agricultural use. Importing water for agricultural purposes and using the offset groundwater for residential purposes (as in approach 1) would be potentially inconsistent with this policy. In contrast, the County's Framework for Planning (Inland) includes the goal of maintaining "a distinction between urban and rural development by providing for rural uses outside of urban and village areas..." The objective of this goal is to restrict urban services from being provided outside urban or village reserve areas. Importing water and constructing a treatment facility outside of an urban reserve line (as in approach 2) would be potentially inconsistent with this policy, because the proposed Agricultural Residential Cluster Subdivision site is located approximately five miles from the City of Atascadero's Urban Reserve Line.

The pipeline connecting to the Nacimiento waterline would be contained within the Encina Avenue right-of-way through the community of Santa Margarita Ranch, while the pipeline between the community and the existing Ranch irrigation system would be located within existing Ranch roadways for a maximum of 1,600 feet. Pipelines on the Ranch property would be approximately 4 inches in diameter and would require an approximate 8 foot wide trench during construction. Disturbance would be contained within existing right-of-ways and would therefore be minimal. Installation of water lines would not occur through undisturbed Ranch property.



Maintenance would consist of turnout flow meter calibration, occurring approximately once every one to two years, and electromechanical work at pump stations and/or leak repair, if needed, between mid-December and mid-January each year. Ranch owners would be responsible for the construction, operation and maintenance of any service connection to the NWP facilities serving the Ranch.

- NWP Connection via Yerba Buena Avenue. This delivery option would connect to the Nacimiento waterline at the intersection of Yerba Buena Avenue and El Camino Real (as analyzed in the 2007 Addendum to the Final Environmental Impact Report for the Nacimiento Water Project) within the community of Santa Margarita. A pipeline would be constructed within existing right-of-ways to the southern extent of the community at the Ranch boundary. Delivery of Nacimiento water would be achieved using one of two approaches: (1) the untreated Nacimiento water delivered to the Ranch would be used for agriculture, and the offset of groundwater otherwise extracted for agriculture would be used for the Agricultural Residential Cluster Subdivision development; or (2) the untreated Nacimiento water delivered to the Ranch would be treated on-site and used for the Agricultural Residential Cluster Subdivision. Refer to *NWP Connection via Encina Avenue* above for a discussion of potential policy inconsistencies related to these approaches.

Within the community of Santa Margarita, disturbance would be contained within existing right-of-ways. Pipeline between the community and the existing Ranch irrigation system would be located within existing Ranch roadways. Pipelines on the Ranch property would be approximately 4 inches in diameter and would require an approximate 8 foot wide trench during construction. Disturbance would be contained within existing right-of-ways and would therefore be minimal.

Maintenance would consist of turnout flow meter calibration, occurring approximately once every one to two years, and electromechanical work at pump stations and/or leak repair, if needed, between mid-December and mid-January each year. Ranch owners would be responsible for the construction, operation and maintenance of any service connection to the NWP facilities serving the Ranch.

Installation of water lines through portions of the remainder parcel and potential development of a water treatment facility could result in impacts related to grading and associated erosion, tree removal, and impacts to California annual grassland and emergent wetlands. Compliance with county grading and storm water ordinances would minimize impacts related to drainage and erosion. In addition, as noted under Agricultural Residential Cluster Subdivision Impact B-1, no mitigation is required to address the loss of common habitat types, including California annual grassland.

Agricultural Residential Cluster Subdivision measures B-3(a) (Tree Identification), B-3(b) (Heritage Oak Tree Avoidance), B-3(c) (Oak Tree Protection and Mitigation and Monitoring Plan) and B-4(a) (Wetland and Riparian Protection) would apply to this NWP delivery option. Since the precise location of water pipelines has not been determined, precise environmental impacts associated with such improvements would be too speculative to address at this time. Environmental impacts associated with



implementation of this connection would be evaluated in a separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA).

- NWP Connection via El Camino Real. This delivery option would connect to the Nacimiento waterline along El Camino Real (as analyzed in the 2007 Addendum to the Final Environmental Impact Report for the Nacimiento Water Project) just west of the community of Santa Margarita. A pipeline would be constructed to extend south through ranch property for approximately 500 feet. It would then extend south-southwest for approximately 4,750 linear feet. Pipelines on the Ranch property would be approximately 4 inches in diameter and would require an approximate 8 foot wide trench during construction. This delivery option would include the installation of water mains across undeveloped Ranch property and the construction of a new water tank on the west side of the Ranch (as analyzed in the 2007 MND for the Santa Margarita Water System Project). Delivery of Nacimiento water would be achieved using one of two approaches: (1) the untreated Nacimiento water delivered to the Ranch would be used for agriculture, and the offset of groundwater otherwise extracted for agriculture would be used for the Agricultural Residential Cluster Subdivision development; or (2) the untreated Nacimiento water delivered to the Ranch would be treated on-site and used for the Agricultural Residential Cluster Subdivision. Refer to *NWP Connection via Encina Avenue* above for a discussion of potential policy inconsistencies related to these approaches.

Maintenance would consist of turnout flow meter calibration, occurring approximately once every one to two years, and electromechanical work at pump stations and/or leak repair, if needed, between mid-December and mid-January each year. Ranch owners would be responsible for the construction, operation and maintenance of any service connection to the NWP facilities serving the Ranch.

Installation of water lines through undeveloped Ranch property and potential development of a water treatment facility could result in impacts related to grading and associated erosion, tree removal, and impacts to California annual grassland and emergent wetlands. Compliance with county grading and storm water ordinances would minimize impacts related to drainage and erosion. In addition, as noted under Agricultural Residential Cluster Subdivision Impact B-1, no mitigation is required to address the loss of common habitat types, including California annual grassland.

Agricultural Residential Cluster Subdivision measures B-3(a) (Tree Identification), B-3(b) (Heritage Oak Tree Avoidance), B-3(c) (Oak Tree Protection and Mitigation and Monitoring Plan) and B-4(a) (Wetland and Riparian Protection) would apply to this NWP delivery option. Since the precise location of water pipelines has not been determined, precise environmental impacts associated with such improvements would be too speculative to address at this time. Environmental impacts associated with implementation of this connection would be evaluated in a separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA).



**Agricultural Residential Cluster Subdivision Impact W-2**

**Agricultural Residential Cluster Subdivision soils provide sufficient percolation to support effluent disposal fields. However, percolation tests have not been completed for all proposed lots. Improper disposal field design could result in health hazards or potential ground and surface water contamination. Therefore, the Agricultural Residential Cluster Subdivision would result in Class II, significant but mitigable impacts related to wastewater disposal.**

The Agricultural Residential Cluster Subdivision involves the use of septic systems, as the site is remotely located a sufficient distance from sanitary sewer service facilities to preclude connections to such facilities. Percolation testing was conducted by Buena Geotechnical Services (October 23, 2003) to evaluate the general native soil materials for the suitability of installing individual wastewater disposal fields. Percolation testing was performed in conformance with the methods provided in the Uniform Plumbing Code (UPC) and per the requirements of the State of California, Regional Water Quality Control Board (RWQCB) Central Coast Region (Basin Plan) standards. The average time for the water level to drop one inch ranged from 15 to 60 minutes, with an average of 33 minutes. A total of 26 borings were performed around the property to determine whether septic tank and leachfield disposal systems would be appropriate for the Agricultural Residential Cluster Subdivision. The Buena Geotechnical Services study was a general characterization of site suitability of leachfields, and borings were not collected in sufficient quantities to indicate whether each lot has an appropriate area for a septic tank and leachfield. The study indicated that on-site soils generally provide sufficient percolation for leachfields. However, San Luis Obispo County typically requires a minimum of 3 percolation tests per leachfield, an exploratory boring to 10 feet below the drain field bottom, and a site plan prior to approving a leachfield for construction. A minimum of 336 borings (for 112 residences) would be required to confirm whether each lot has an acceptable leachfield site.

As proposed, the Agricultural Residential Cluster Subdivision does not violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems. However, the generalized percolation test, borings, and leachfield siting study performed by thus far are not sufficient for assessing the capacity of each individual leachfield. In addition, plans have not been submitted which show an acceptable location (appropriate setbacks, slope, and siting) for each leachfield. Improper placement and design of wastewater systems could result in contamination of ground or surface waters, and/or other health hazards. This would be a potentially significant impact unless mitigation is incorporated.

Mitigation Measures. The following mitigation measures are required to reduce impacts related to wastewater disposal:

**Agricultural Residential Cluster Subdivision W-2(a)**

**Septic Tank Maintenance Plan and Monitoring.** The applicant shall prepare a Septic Tank Maintenance Plan. The Plan shall require a minimum tank cleaning frequency of once every ~~two~~ **five** years, delineate proposed groundwater monitoring locations (up gradient and down gradient of the proposed Agricultural Residential Cluster Subdivision), and recommended frequency of collection and analysis. The applicant shall install groundwater



monitoring wells, which shall be sited and designed by a qualified hydrogeologist. At a minimum, three groundwater monitoring wells shall be located up gradient of the Agricultural Residential Cluster Subdivision and three shall be located downgradient.

**Plan Requirements and Timing.** The Septic Tank Maintenance Plan shall be submitted to Planning and Public Works Departments **and to the RWQCB** for review and approval. Groundwater monitoring results shall be submitted to Public Works Department **and to the RWQCB** for review. At a minimum, groundwater samples shall be taken on an annual basis and shall include an analysis of TDS, chlorides, nitrate, nitrite, total nitrogen, ammonia, sodium, and sulfate by a certified laboratory. Sampling and analysis costs shall be paid by the applicant. If a statistically significant increase is observed in any of the above parameters, the applicant shall be responsible for developing a Wastewater Collection, Treatment, and Disposal Master Plan. The constituents of concern and threshold limits shall be determined by the county. Monitoring wells shall be installed prior to clearance for occupancy. County Public Works and RWQCB staff shall specify long-term septic tank maintenance and groundwater monitoring requirements, including components of work and schedule for completion. Requirements shall be included in the Home Owner's Association Codes, Covenants, and Restrictions (CC&Rs).

**Monitoring.** Public Works shall site inspect for installation of monitoring wells. Public Works review is required for monitoring well installation, and Planning Department review is required for release of the performance security. Public Works staff shall review regular groundwater monitoring reports (as specified in the Plan) and determine, in consultation with the RWQCB and County Planning staff, whether a Wastewater Collection, Treatment and Disposal Master Plan is required.

**Agricultural Residential  
Cluster Subdivision  
W-2(b)**

**Septic Tank and Leachfield Site Plans.** The applicant shall develop and submit septic tank and leachfield site plans for each proposed lot, as well as percolation tests and borings in accordance with County leachfield design/construction requirements. The applicant shall demonstrate sufficient leachfield percolation for each proposed residential unit and lot, in accordance with County standards.

**Plan Requirements and Timing.** The applicant shall submit septic tank and leachfield site plans to Planning and Building with Development Permit Application. **Monitoring.** County Environmental Health and Building Department staff shall review plans prior to issuance of a development permit.



Residual Impacts. With implementation of the above measures, impacts related to wastewater disposal would be less than significant.

**Agricultural Residential Cluster Subdivision Impact W-3**      **Wastewater discharge systems can degrade groundwater quality if wastes are put into the discharge systems that are harmful to groundwater quality. Impacts are Class II, significant but mitigable.**

Groundwater in California often has a high mineral content, a condition commonly referred to as “hard water.” Residents typically offset the hardness through the use of a water softener. Water softeners utilize sodium or potassium salt brines, which are eventually discharged into the wastewater disposal system. The addition of these brines into a septic field can be harmful to groundwater quality (refer to Appendix H). In addition, residents could put chemicals, paints, solvents, pesticides, herbicides, or other household hazardous wastes into the drains, which would degrade the water quality in their septic systems. Because of adverse effects associated with on-site softening of hard water, impacts resulting from the on-site recharge of water softeners, and potential wastes being put down the drains, impacts are potentially significant. Refer to Section 4.5, *Drainage, Erosion and Sedimentation*, for a discussion of additional water quality impacts.

Mitigation Measures. The following mitigation measures are recommended to prevent the potential adverse impact to groundwater through the on-site use of water softeners:

**Agricultural Residential Cluster Subdivision W-3(a)**      **Water Softeners.** Agricultural Residential Cluster Subdivision residents shall be prohibited from installing water softeners which require on-site regeneration or are self-regenerating. Off-site regenerated water softeners shall be allowed if they are regenerated outside the Agricultural Residential Cluster Subdivision site.

**Plan Requirements and Timing.** Water softeners shall be shown on plans submitted to Planning and Building for review and approval prior to issuance of building permits, as applicable. The prohibition of on-site or self-regenerating water softeners shall be included in Covenants, Conditions and Restrictions (CC&Rs), and monitored by a Homeowners Association (or similar entity) with oversight by County Planning and Building. **Monitoring.** Planning and Building shall review site plans for compliance prior to issuance of building permits. County inspector shall inspect site for installation of self-regenerating water softeners prior to occupancy of the structures.

**Agricultural Residential Cluster Subdivision W-3(b)**      **Pollutant Input Minimization.** The Santa Margarita Ranch Mutual Water Company shall annually include a written statement with resident water bills that describes methods to prevent degradation of water quality in septic systems. The flyer shall state that chemicals, paints, solvents, pesticides, herbicides,



or other household hazardous wastes shall not enter drains.

**Plan Requirements and Timing.** The applicant shall coordinate with the Environmental Health Division on any new regulations or education information on avoiding adverse impacts to the quality of effluent entering septic systems. The written statements shall be provided to all future residents and occupants-annually by the Santa Margarita Ranch Mutual Water Company via inclusion with water bill statements. **Monitoring.** Planning and Building shall review the statements annually to ensure preventative methods are described.

Residual Impacts. With implementation of the above measures, impacts related to water quality from septic systems would be less than significant.

**Agricultural Residential Cluster Subdivision Impact W-4**      **Implementation of the Agricultural Residential Cluster Subdivision would result in septage load that cannot be managed by existing local facilities. This will result in Class III, less than significant impacts.**

Septage is material that has been removed, typically pumped, from a treatment tank or waste holding tank and hauled to another location for final disposition or additional treatment. Each 1,200-gallon septic tank would be required to be pumped approximately once every five years. As a result, approximately 27,000 gallons of septage per year would be hauled from the proposed Agricultural Residential Cluster Subdivision.

The closest septage receiving station to the Agricultural Residential Cluster Subdivision is the Santa Maria Wastewater Treatment Facility, located in Santa Maria, approximately 40 miles south of the community of Santa Margarita. This facility is currently at capacity [*Survey of Septage, Treatment, Handling, and Disposal Practices in California* (California Wastewater Training and Research Center at CSU-Chico, 2002)]. Although an expansion of the treatment facility is planned, septage loads would need to be hauled to other, more distant facilities in the interim. The hauling and disposal of septage is required to comply with County health and water quality standards, as well as State and federal regulations. Compliance with these standards and regulations would ensure less than significant impacts.

Mitigation Measures. No mitigation measures are required.

Residual Impacts. Impacts would be less than significant.

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**c. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.14.2(b) for a discussion of water and wastewater impacts resulting from the Agricultural Residential Cluster Subdivision independently.





**Future Development Program Impact W-1**

**The Future Development Program would increase the use of water from area aquifer units, including the Paso Robles and Santa Margarita Formations, by 926 acre-feet per year (afy). This net consumptive use may contribute to overdraft of the aquifer system. Groundwater use associated with the Future Development Program is a Class I, significant and unavoidable, impact.**

The Future Development Program includes the Agricultural Residential Cluster Subdivision, the balance of the 550 single-family residential units allowable pursuant to the Salinas River Area Plan (402 residences) and the additional following uses: private golf course, club house and pro shop; guest ranch, lodge, and restaurant; 12-room bed and breakfast; cafe; amphitheater; crafts studios, galleries and shops; interpretive center and gift shops; nine wineries with tasting rooms and permitted special events; neighborhood park and swimming pool; five ranch/farm headquarters; one livestock sales yard and café; three places of worship; and a retreat center. Table 4.14-2 outlines the anticipated water demand from each of these facilities.

**Table 4.14-2. Future Development Program Water Demands**

<b>Land Use</b>	<b>Land Use Characteristics</b>	<b>Water Use Factor (acre-feet/unit)</b>	<b>Annual Water Demand (acre-feet)</b>
Agricultural Residential Cluster Subdivision	112 residential lots	1.44/lot	161.28
Remainder of the 550 residential units allowable under the Salinas River Area Plan (excluding Margarita Farms and Agricultural Residential Cluster Subdivision)	402 residential lots	1.44/lot	578.8
Guest ranch, lodge, and restaurant	150 to 250 units, 40 tables/200 patrons, 100 acres	0.15/room	37.5
Restaurant	40 tables/ 200 patrons	0.022/seat	4.4
Bed and breakfast	12 rooms	0.15/room	1.8
Private golf course, club house, shop	27 to 36 holes / 220 to 280 acres	2 afy/acre	560
Café	20 tables/ 100 patrons	0.022/seat	2.2
Amphitheater	200 to 600 seats	0.022/seat	13.2
Craft studios, galleries, and shops	6,000 square feet	0.11/1000 sf	0.66
Interpretive center and gift shops	3,000 square feet	0.11/1000 sf	0.33
Nine wineries, tasting rooms, and special events	8 @ 20,000 to 40,000 square feet each, 1 @ 80,000 square feet / 42 events per year per facility	0.17/1,000 sf	68
Five ranch/farm headquarters	2.5 acres each	1.44/lot	7.2
Livestock sales yard and café	20 acres / one Saturday per month / 75 patrons	0.022/seat	1.65
Horse ranch	30 (+) horses	0.1/horse	3
Three places of worship	2,000 to 5,000 square feet each	0.17/1,000 sf	2.55
Oakenshaw Retreat Center	16 to 24 units on 30 acres with lodge and residence	0.15/room	3.6
Neighborhood parkland and swimming pool	5 acres east of Santa Margarita Community	2 afy/acre	10
Dedication of land for expansion of cemetery	5 acres	2 afy/acre	10



**Table 4.14-2. Future Development Program Water Demands**

Land Use	Land Use Characteristics	Water Use Factor (acre-feet/unit)	Annual Water Demand (acre-feet)
<b>Future Development Program Water Use Total</b>			<b>1,466.17</b>

Approximately 40 percent of rural residential water use and 32 percent of agricultural water use results in groundwater recharge, thereby returning to the local aquifer system [refer to Section 4.14.1(a) *Consumptive Use*]. Although the Future Development Program would demand an estimated 1,305 afy (subsequent to the Agricultural Residential Cluster Subdivision), approximately 475 afy would return to groundwater as recharge. Therefore, net consumptive use for Future Development Program residential and commercial development would be approximately 830 afy. When added to the estimated Agricultural Residential Cluster Subdivision consumptive demand (96 afy), this amounts to 926 afy. The magnitude of this additional demand is a 215 percent increase in groundwater production over the existing Ranch consumptive demand (431 afy).

As described under Agricultural Residential Cluster Subdivision Impact W-1, data are not available to conclude whether this increase in demand would result in aquifer system overdraft. Available data indicate that the long-term capability of the aquifer system may be insufficient to provide adequate quantities of water for the Future Development Program.

In addition, if groundwater is produced within or adjacent to the northern portion of the Ranch, impacts would be significant. The increased groundwater demand in this area would decrease the amount of groundwater available to existing wells that draw from this shallow alluvial aquifer and supply CSA 23 and Garden Farms, as the Atascadero sub-basin which supplies water to the Atascadero Mutual Water Company (AMWC). This would be considered a potential long-term water supply availability impact.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures W-1(a) (Groundwater and Surface Water Monitoring Programs), W-1(b) (Water Conservation Measures), and W-1(c) (Imported Water Supply) would apply to all Future Development Program land uses. Water supply would need to be acquired prior to issuance of grading permits for individual Future Development Program land use components, and would be coordinated through the required Specific Plan. The Specific Plan will also be required to include a comprehensive water supply analysis pursuant to California Senate Bill (SB) 610 [Water Code §10910(g)(3), Water Supply Assessments] and California Senate Bill (SB) 221 [Government Code §66473.7(b)(2), Written Verifications of Water Supply]. The following additional mitigation measure is required.

**Future Development Program W-1(a)**

**Reclaimed Water.** Reclaimed water from the envisioned Future Development Program municipally operated sanitary sewer and treatment plant shall, to the extent feasible, be collected and applied for irrigation or turf/landscape areas, including the envisioned golf course [refer to Future Development Program measure W-2(b) (Wastewater Master Plan) for specifics concerning implementation of the wastewater treatment facility].



A qualified professional shall prepare a reclaimed water use plan that outlines the preferred locations of landscaping for such irrigation, with an evaluation of the expense and maintenance hours required for operating and monitoring the irrigation facilities, subject to County approval. The plan shall also evaluate the feasibility of recharging groundwater with treated effluent, including the identification of recharge sites, and analysis of the assimilative capacity of the groundwater for constituents of concern. Water Reclamation Requirements will be required for all recycled water uses.

**Plan Requirements and Timing.** A reclaimed water use plan shall be prepared in accordance with County Health Department standards and included in the Specific Plan (or within individual plans, as applicable) for review prior to approval. **Monitoring.** Health Department shall review the reclaimed water use plan and Public Works shall site inspect to ensure development is in accordance with approved plans prior to occupancy clearance.

Residual Impacts. Implementation of the required measures would reduce the overall water system demand. However, additional water supply would still be required. Additional water may be available for the Future Development Program land uses through the State Water Project and/or the Nacimiento Water Project, as outlined in Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply). However, due to uncertainty regarding timing and availability of these sources, additional water supply cannot be assured at this time. Impacts would remain significant and unavoidable. Refer to the *Residual Impacts* discussion under Agricultural Residential Cluster Subdivision W-1, which also applies to the Future Development Program.

**Future Development  
Program Impact W-2**

**Since the capacity, features, location and timing of the potential future sewage treatment facility envisioned for dedication have not yet been determined, individual future developments could require the use of septic systems prior to treatment plant implementation. Percolation tests have not been completed for any Future Development Program land uses. Therefore, it is not known if area soils would provide sufficient percolation to support effluent disposal fields. Improper disposal field design could result in health hazards or potential ground and surface water contamination. Therefore, the Future Development Program would result in Class II, significant but mitigable impacts related to wastewater disposal.**

The Future Development Program includes the dedication of land for a potential future sewage treatment facility of up to ten (10) acres. The capacity, features, location and timing of this potential future sewage treatment facility have not yet been determined. Therefore, individual development Future Development Program land uses may proceed in advance of implementation of the treatment facility, and would therefore require septic systems. Although



percolation testing was conducted for the Agricultural Residential Cluster Subdivision (refer to Agricultural Residential Cluster Subdivision Impact W-2), no testing has been performed for subsequent Future Development Program components. Improper placement and design of wastewater systems could result in contamination of ground or surface waters and/or other health hazards. This would be a potentially significant impact unless mitigation is incorporated.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure W-2(a) (Septic Tank Maintenance Plan) and W-2(b) (Septic Tank and Leachfield Site Plans) would apply to all Future Development Program land uses constructed prior to implementation of a Wastewater Treatment Plant. The following additional mitigation measures are required to reduce impacts related to wastewater disposal:

**Future Development Program W-2(a)**

**Groundwater Characterization Study.** As part of the Specific Plan for future development on the property (or within individual development plans as applicable), a characterization of existing groundwater and estimate of assimilative capacity of groundwater underneath each Future Development Program development area (or individual septic field locations, as applicable) shall be performed. Characterization would be required prior to any future development projects on the Ranch property subsequent the Agricultural Residential Cluster Subdivision. The Characterization Study shall analyze long-term hydraulic disposal capacity, subsurface soil profiles, groundwater lateral hydraulic gradient and mounding potential, and assimilative capacity of the site(s) for water quality constituents of concern.

**Plan Requirements and Timing.** The groundwater characterization study shall be included in the Specific Plan (or within individual plans, as applicable) for review by Planning and Building prior to approval. **Monitoring.** County Environmental Health and Planning and Building staff shall review the Plan prior to adoption of the Specific Plan (or issuance of a development permit, as applicable).

**Future Development Program W-2(b)**

**Wastewater Master Plan.** Implementation of the wastewater treatment facility should proceed in advance of the first Future Development Program subdivision proposed subsequent to the Agricultural Residential Cluster Subdivision. A Community Wastewater Collection, Treatment, and Disposal Facility Master Plan shall be created as part of the required Specific Plan for future development subsequent to the Agricultural Residential Cluster Subdivision. The Plan shall be completed after the groundwater characterization study and shall address alternative sites for treatment facilities, process alternatives, and disposal/reuse options for buildout of the property as well as provisions to serve the existing community of Santa Margarita.



The Plan shall present a phased implementation strategy to address project-by-project impacts as the Future Development Program is implemented. Objectives shall be developed by the County and Regional Water Quality Control Board prior to acceptance or approval of the Plan. A regional or decentralized wastewater treatment system designed to County and Regional Water Quality Control Board requirements shall be implemented. The Wastewater Master Plan shall specify and require maintenance and best management practices for operation. The Master Plan shall also investigate the feasibility of irrigating Future Development Program landscaping and recharging groundwater with treated effluent from the wastewater treatment facility.

**Plan Requirements and Timing.** The Community Wastewater Collection, Treatment, and Disposal Facility Master Plan shall be submitted for review and approval by Planning and Building prior to adoption of the Specific Plan subsequent to the Agricultural Residential Cluster Subdivision. All components of the Plan shall be implemented prior to issuance of any occupancy permits subsequent to the Agricultural Residential Cluster Subdivision. **Monitoring.** Planning and Building shall review the Plan prior to issuance of grading permits for Future Development Program land uses subsequent to the Agricultural Residential Cluster Subdivision. Planning and Building shall ensure compliance with requirements set forth in the Plan.

Residual Impacts. With implementation of the above measures, impacts related to wastewater disposal would be less than significant.

**Future Development  
Program Impact W-3**

**Wastewater discharge systems can degrade groundwater quality if wastes are put into the discharge systems that are harmful to groundwater quality. Impacts are Class II, significant but mitigable.**

Groundwater in California often has a high mineral content, a condition commonly referred to as “hard water.” Residents typically offset the hardness through the use of a water softener. Water softeners utilize sodium or potassium salt brines, which are eventually discharged into the wastewater disposal system. The addition of these brines into a septic field can be harmful to groundwater quality (refer to Appendix H). In addition, residents could put chemicals, paints, solvents, pesticides, herbicides, or other household hazardous wastes into the drains, which would degrade the water quality in their septic systems. Because of adverse effects associated with on-site softening of hard water, impacts resulting from the on-site recharge of water softeners, and potential wastes being put down the drains, impacts are potentially significant.



Mitigation Measures. Agricultural Residential Cluster Subdivision measures W-3(a) (Water Softeners) and W-3(b) (Pollutant Input Minimization) would apply to all Future Development Program land uses. No additional mitigation is necessary.

Residual Impacts. With implementation of the required measures, impacts related to water quality would be less than significant.

**Future Development Program Impact W-4**      **Buildout of the Future Development Program would result in septage load that cannot be managed by local facilities. This would result in Class III, less than significant impacts.**

Because the Future Development Program would involve the use of septic systems, septage would have to be hauled from Future Development Program land uses to the nearest septage receiving station (Santa Maria Wastewater Treatment Facility). This facility is currently at capacity. Therefore, septage loads would need to be hauled to other, more distant facilities. Refer to the discussion under Agricultural Residential Cluster Subdivision Impact W-4. Compliance with County health and water quality standards and regulations would ensure less than significant impacts.

Mitigation Measures. No mitigation measures are required.

Residual Impacts. Impacts would be less than significant.

**Future Development Program Impact W-5**      **The Future Development Program envisions nine wineries located throughout the Ranch property. Winery wastewater contains fermentation waste products, cleaning chemicals, and raw source water constituents. Improperly designed irrigation systems and leach fields could potentially backflow and contaminate groundwater. This is a Class II, significant but mitigable impact.**

Each of the nine wineries envisioned in the Future Development Program includes a 5-acre processing facility with on-site tasting room, gift shops, and a bed and breakfast. The existing Margarita (Cuesta Ridge) Vineyard currently produces approximately 350,000 cases of wine annually. At buildout of the Future Development Program (the addition of nine wineries), total production is estimated at approximately 1 million cases annually.

Winery wastewater would be generated by a number of activities such as barrel tank washing, crush operations, bottling and general cleaning. Winery wastewater consists of fermentation waste products (including tannins, lignins, volatile acids, and yeasts), cleaning chemicals (caustic sodas and disinfectants), and raw source water constituents. Each winery is estimated to generate approximately 18 gallons of wastewater per case produced. During peak crush periods, this would result in approximately 49,315 gallons per day (gpd) of wastewater flow. This effluent would likely be discharged to on-site leachfields. Although all discharges from the nine wineries would require Waste Discharge Requirements, improperly designed irrigation systems and leach fields could potentially backflow and contaminate groundwater. This would be a potentially significant impact.



Mitigation Measures. Future Development Program measure W-2(b) (Wastewater Master Plan) would reduce winery wastewater-related impacts to a less than significant level. No further mitigation is required.

Residual Impacts. With implementation of the required measure, impacts related to winery wastewater would be less than significant.

**d. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative water and wastewater impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.



## **5.0 GROWTH INDUCING IMPACTS**

Section 15126(g) of the State CEQA Guidelines requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. The potential for the Agricultural Residential Cluster Subdivision and Future Development Program to induce growth is discussed in this section.

Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed Agricultural Residential Cluster Subdivision and envisioned Future Development Program's growth inducing potential is therefore considered significant if it could result in significant effects in one or more environmental issue areas.

### **5.1 ECONOMIC GROWTH**

#### **5.1.1 Agricultural Residential Cluster Subdivision Economic Growth**

The proposed Agricultural Residential Cluster Subdivision involves private residential development and does not include any commercial or industrial development. Therefore, it would not directly generate jobs or economic activity. Based on the Sheriff Department's population generation factor of 2.7 persons per dwelling unit, the 112-unit Agricultural Residential Cluster Subdivision would be expected to generate approximately 302 residents. The estimated 302 residents that would be added on the Agricultural Residential Cluster Subdivision site would increase activity in nearby retail establishments and may generate demand for such services as landscaping, gardening, home cleaning and maintenance. In addition, the 112 residential units and associated 302 people in the Santa Margarita area would constitute an approximate 22.8% increase in the existing population of the Santa Margarita community, which was estimated as 1,325 people as of the year 2005. This would represent a substantial growth in community population. As a result, Agricultural Residential Cluster Subdivision residents may induce new service providers to relocate to the area. Physical effects may result from economic growth generated by the proposed Agricultural Residential Cluster Subdivision.

Improvements to existing commercial businesses, including building, parking and other improvements, would be required to comply with County regulations. The impacts of other development in the area would depend upon the location and magnitude of such development, although the types of impacts would likely be similar to those of the proposed Agricultural Residential Cluster Subdivision. Environmental areas that could experience significant effects if similar development were to occur elsewhere in the vicinity include agriculture, biological resources, visual resources and noise. Such impacts would be addressed on a case-by-case basis as individual development projects are proposed.

#### **5.1.2 Future Development Program Economic Growth**

The commercial components of the Future Development Program would directly generate jobs and economic activity. Using a factor of 500 building square feet per worker for commercial uses, the estimated 157,250 square feet of commercial/retail development would generate an





estimated 315 jobs (refer to Table 2-5 in Section 2.0, *Project Description*). In addition, the livestock sales yard is assumed to generate ten jobs, while each of the three places of worship is assumed to generate five jobs. Therefore, the Future Development Program is estimated to generate a total of 340 new jobs. A portion of the jobs would be expected to be filled by occupants of the residential components of the Future Development Program. Although some jobs would likely be filled by current residents of the community of Santa Margarita, many of the new job opportunities would likely be filled by commuters from nearby urban areas such as San Luis Obispo and Atascadero.

Under the Future Development Program, circulation, water, sewer, and drainage infrastructure would be constructed to accommodate urban development in the area. This additional demand for services and multiplier-effect related economic growth is not expected to significantly impact the region, and the costs of such demand will be at least partially offset by the additional tax base, both in property and sales.

Based on the Sheriff Department's population generation factor of 2.7 persons per dwelling unit, the 514-unit Future Development Program (including the proposed Agricultural Residential Cluster Subdivision) would be expected to generate approximately 1,388 residents. The estimated 1,388 residents that would be added on the Ranch property would increase activity in nearby retail establishments and may generate demand for such services as landscaping, gardening, and home cleaning and maintenance. In addition, the 514 residential units and associated 1,388 people would constitute an approximate 104.8% increase in the existing population of the Santa Margarita community of approximately 1,325. This would represent major growth in community population. As a result, Future Development Program residents may induce new service providers to relocate to the area. Physical effects may result from economic growth generated by the Future Development Program.

Improvements to existing commercial businesses, including building, parking and other improvements, would be required to comply with County regulations. As with the Agricultural Residential Cluster Subdivision individually, the impacts of other development in the area would depend upon the location and magnitude of such development. Such impacts would be addressed on a case-by-case basis as individual development projects are proposed.

## **5.2 POPULATION GROWTH**

### **5.2.1 Agricultural Residential Cluster Subdivision Population Growth**

Implementation of the proposed Agricultural Residential Cluster Subdivision would result in a total of 112 dwelling units and an associated population increase of 302 persons (based on the Sheriff Department's population generation factor of 2.7 persons per unit). This represents an approximate 22.8% increase in the existing population of the Santa Margarita community of approximately 1,325.

Recent residential development has been limited in the community of Santa Margarita. However, to the extent that urban development in the County has generally progressed to the south from Atascadero, along Highway 101 and El Camino Real, as housing demand in northern San Luis Obispo County has increased substantially in recent years, the proposed Agricultural Residential Cluster Subdivision can be viewed as an extension of this growth trend. Although the Agricultural



Residential Cluster Subdivision would not substantially affect the overall County population, it involves the development of a currently undeveloped rural area. The Agricultural Residential Cluster Subdivision directly induces growth in a rural location. The impacts associated with this direct population growth are addressed throughout this EIR. The Agricultural Residential Cluster Subdivision could also set a precedent for similar development in the general area. In this way, the Agricultural Residential Cluster Subdivision could indirectly induce growth in nearby rural locations, in accordance with County General Plan land use designations for these areas. On the other hand, the proposed Agricultural Residential Cluster Subdivision includes a substantial open space component that would discourage a continuation of this growth trend to the south of the site. The proposed open space component of the Agricultural Residential Cluster Subdivision would preclude this land from more intensive urban development, slowing an observable growth pattern trend in the area.

The impacts of other development in the area would depend upon the location and magnitude of such development. Such impacts would be addressed on a case-by-case basis as individual development projects are proposed.

## **5.2.2 Future Development Program Population Growth**

Buildout in accordance with the Future Development Program would result in a total of 514 dwelling units (402 units in addition to the Agricultural Residential Cluster Subdivision) and an associated population increase of 1,388 persons. This represents an approximate 104.8% increase in the existing population of the Santa Margarita community of approximately 1,325.

As with the Agricultural Residential Cluster Subdivision individually, the Future Development Program could be viewed as an extension of a growth trend to the south from Atascadero, along Highway 101 and El Camino Real. Buildout of the Future Development Program would substantially affect the overall population of the community of Santa Margarita, as well as introduce commercial growth in a rural area. Therefore, the Future Development Program directly induces growth in a rural location. The impacts associated with this direct population growth are addressed throughout this EIR. The Future Development Program includes allowable development as outlined by the Salinas River Area Plan (refer to Section 2.4.2 in Section 2.0, *Project Description*), and represents complete buildout of the property. As such, it would reduce the potential for additional development on the property.

As with the Agricultural Residential Cluster Subdivision individually, the impacts of other development in the area would depend upon the location and magnitude of such development. Such impacts would be addressed on a case-by-case basis as individual development projects are proposed.

## **5.3 REMOVAL OF OBSTACLES TO GROWTH**

### **5.3.1 Agricultural Residential Cluster Subdivision Removal of Obstacles to Growth**

The Agricultural Residential Cluster Subdivision site, as currently zoned and designated under the San Luis Obispo County General Plan for agricultural use, could accommodate limited residential development. Currently, land use and zoning controls would limit growth potential in the area. However, these are political barriers to growth that can be changed, as land use and zoning



controls can be amended to be less restrictive. If these actions occurred, the growth potential of the area would increase. Because the site is currently not developed with urban uses, it would require the extension of urban infrastructure to serve planned development. New infrastructure that would be required includes new roads serving the site, the addition of drainage facilities and the extension of water lines. The potential for each of these types of infrastructure to induce growth is discussed below.

Road Extensions. Access to the site would be from West Pozo Road, which is a two-lane roadway adjacent to the Agricultural Residential Cluster Subdivision site. The proposed internal road system consists of a series of local roads designed specifically to serve site development (see Figures 2-8A through 2-8E of Section 2.0, *Project Description*). None of the internal roads are designed to serve additional development. Therefore, although extensions of planned roads to other portions of the site or off-site areas could occur, the current circulation system would not easily accommodate such extensions. The potential for the proposed internal road system to induce additional growth either on-site or off-site is limited.

Drainage Infrastructure. The Agricultural Residential Cluster Subdivision includes new drainage infrastructure to handle the increase in stormwater flow that would be created by on-site development. New facilities are anticipated to be sized to meet the needs of future on-site development. However, if these are overbuilt, they could accommodate additional or more intensive development on-site or at off-site upstream locations at some point in the future, thereby removing an obstacle to future growth.

Water Infrastructure. The Agricultural Residential Cluster Subdivision would require the acquisition of additional water supply (State Water and/or the Nacimiento Water Project) to serve the Agricultural Residential Cluster Subdivision. If these water lines are overbuilt, or excess State Water/Nacimiento Water is acquired, this could accommodate additional or more intensive development at off-site locations at some point in the future, thereby removing an obstacle to future growth.

Wastewater Infrastructure. Each proposed Agricultural Residential Cluster Subdivision residential lot will have an individual septic system. Therefore, wastewater infrastructure for the Agricultural Residential Cluster Subdivision would not accommodate additional development or remove an obstacle to further growth.

Mitigation Measures. The following mitigation measure would limit the potential for the Agricultural Residential Cluster Subdivision to induce growth in the area, thereby reducing potentially significant physical effects associated with growth:

**Agricultural Residential Cluster Subdivision GI-1(a)**

**Infrastructure Capacity Limitations.** Infrastructure and service capacity for the proposed Agricultural Residential Cluster Subdivision shall be sized to meet only the demands of the Agricultural Residential Cluster Subdivision itself.

**Plan Requirements and Timing.** Public Works shall review plans for required infrastructure extensions and improvements prior to approval of initial building permits. **Monitoring.** Public Works shall review plans prior to issuance of building permits and inspect prior to occupancy clearance.



Residual Impacts. With the above measure, the potential to induce further growth would be reduced to a less than significant level.

### **5.3.2 Future Development Program Removal of Obstacles to Growth**

Currently, land use and zoning controls would limit growth potential in the Future Development Program area. However, these are political barriers to growth that can be changed, as land use and zoning controls can be amended to be less restrictive. If these actions occurred, the growth potential of the area would increase.

Because the Future Development Program area is now generally undeveloped, it would require the extension of urban infrastructure to serve potential development. New infrastructure that would be required includes development of new roads, extension of water lines, and the construction of a wastewater treatment facility. The potential for each of these types of infrastructure to induce growth is discussed below.

Road Extensions. Current access to Future Development Program land use locations is from U.S. 101, SR 58/El Camino Real and West Pozo Road. Preliminary access locations have been identified but internal roadway systems have not been determined for Future Development Program uses. If Future Development Program roadway systems are overbuilt, additional or more intensive development could be accommodated on-site or off-site at some point in the future, thereby removing an obstacle to future growth.

Water Infrastructure. The Future Development Program would require the extension of water lines and would require new wells and the acquisition of additional water supply (State Water and/or the Nacimiento Water Project) to serve Future Development Program land uses. If these water lines are overbuilt, or excess State Water/Nacimiento Water is acquired, this could accommodate additional or more intensive development on or adjacent to the Ranch property at some point in the future, thereby removing an obstacle to future growth.

Wastewater Infrastructure. The Future Development Program includes the dedication of 10 acres of land for a future wastewater treatment facility for the existing community, at a location to be determined. If such infrastructure is overbuilt, it could accommodate additional or more intensive development on-site or at off-site at some point in the future, thereby removing an obstacle to future growth.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure GI-1(a) (Infrastructure Capacity Limitations) would apply to all Future Development Program land uses. Infrastructure planning and coordination for Future Development Program land uses would be accomplished with a Specific Plan and through the individual development project review process.

Residual Impacts. With the required measure, the potential to induce further growth would be reduced to a less than significant level.





## 6.0 ALTERNATIVES

As required by Section 15126(d) of the State CEQA Guidelines, this EIR examines a range of reasonable alternatives to the proposed Agricultural Residential Cluster Subdivision and conceptual Future Development Program that could feasibly achieve similar objectives. The discussion focuses on alternatives that may be able to reduce many of the adverse impacts associated with the proposed Agricultural Residential Cluster Subdivision and Future Development Program. Included in this analysis is the CEQA-required “no project” alternative, an existing zoning alternative, an alternative that involves a revised cluster design, three alternatives that provide alternate locations for the proposed Agricultural Residential Cluster Subdivision and a tighter cluster alternative. This analysis also includes four alternatives for the envisioned Future Development Program: three that avoid identified constraints and one that moves the livestock auctions to the northern portion of the Ranch. A revised version of the proposed Agricultural Residential Cluster Subdivision project, an alternative which implements Smart Growth Principles, and a reduced (i.e., fewer number of units) project alternative are also included. These are summarized below, and subsequently discussed in greater detail within the impact analysis for each alternative:

- Alternative 1: No Project/No Development
- Alternative 2: No Project/Existing Zoning
- Alternative 3: Revised Cluster Design
- Alternative 4: Revised Cluster Location 1
- Alternative 5: Revised Cluster Location 2
- Alternative 6: Revised Cluster Location 3
- Alternative 7: Tighter Cluster Alternative
- Alternative 8: Alternative Future Development Program Scenario 1
- Alternative 9: Alternative Future Development Program Scenario 2
- Alternative 10: Alternative Future Development Program Scenario 3
- Alternative 11: Alternative Location for Livestock Sales
- Alternative 12: Amended Project
- Alternative 13: Santa Margarita Town Expansion
- Alternative 14: Reduced Project

The California Supreme Court, in *Citizens of Goleta Valley v. Board of Supervisors* (1990), indicated that a discussion of alternative sites is needed if the project “may be feasibly accomplished in a successful manner considering the economic, environmental, social, and technological factors involved” at another site.

As suggested in *Goleta*, several criteria form the basis of whether alternative sites need to be considered in detail. These criteria take the form of the following questions:

1. *Could the size and other characteristics of another site physically accommodate the project?*
2. *Is another site reasonably available for acquisition?*
3. *Is the timing of carrying out development on an alternative site reasonable for the applicant?*
4. *Is the project economically feasible on another site?*
5. *What are the land use designation(s) of alternative sites?*
6. *Does the lead agency have jurisdiction over alternative sites? and*



7. *Are there any social, technological, or other factors which may make the consideration of alternative sites infeasible?*

Alternatives 4, 5, 6, and 13 discuss the consequences of developing the Agricultural Residential Cluster Subdivision at alternate locations that could meet these criteria. No alternative sites located off the Santa Margarita Ranch property are evaluated because the Ranch property can accommodate a range of alternative project sites due to its size.

## **Project Objectives**

The applicant's overall project objective is to construct a residential development that includes up to 112 units in a rural setting. The applicant's objectives for the project include the following:

- Firmly establish continued long-term viability of existing vineyards, cattle grazing activities, and future crop development through creative planning and utilization of the County Agricultural Cluster Ordinance;
- Protect the existing vineyards and agricultural lands for the long term by placing them in ACEs and/or Williamson Act Conservation Contract(s); and
- Create an economically feasible and successful residential cluster project through a three (3) phased development with incremental conservation easement dedications.

The applicant also intends the project to be located close to existing town amenities, thereby allowing easy access to goods and services. Another primary objective is to preserve open space and agricultural resources to the extent possible.

The objectives of the Future Development Program include the following:

- Plan for land uses that will enhance the County and community of Santa Margarita by accommodating the needs of the community, expanding the tax base, and providing jobs and housing;
- Plan for a mix of uses that will relate to each other, to adjacent land uses, and to the rural and semi-rural context of the property;
- Plan for workforce housing toward achieving the County's fair share housing requirements; and
- Plan for recreational amenities of benefit to both the community and the region.

## **Alternatives Considered But Rejected**

According to *CEQA Guidelines*, Section 15126.6, an EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts. 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 (projects with a regionally significant impact should consider the regional context), and whether



the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. This section identifies one alternatives considered by the County, but rejected as infeasible, and provides a brief explanation of the reasons for its exclusion.

Specific Plan Alternative. This alternative would assume that a Specific Plan is prepared for the proposed Agricultural Residential Cluster Subdivision. This alternative was rejected because although a Specific Plan would provide additional planning information for the property, it would not be expected to change or avoid the physical impacts of the proposed Agricultural Residential Cluster Subdivision. It should be noted that preparation of a Specific Plan is required prior to implementation of any future subdivisions on the property subsequent to the proposed Agricultural Residential Cluster Subdivision.

## **6.1 ALTERNATIVE 1: No Project/No Development**

### **6.1.1 Description**

This alternative assumes that the proposed Agricultural Residential Cluster Subdivision and Future Development Program are not constructed, and that no new development would occur on the Ranch property. The property would continue to support existing land uses, including: an equestrian center, private narrow gauge railroad, vineyard(s), private 3,400 foot airstrip, farmland, eight-acre cattle feedlot, agricultural roads, trails, agricultural support residences along with agricultural accessory structures, historic structures, water wells, and various above-ground and underground utilities.

### **6.1.2 Impact Analysis**

With the implementation of the No Project/No Development Alternative, the Ranch property would be kept predominately as agricultural open space with continued vineyard production and grazing lands. Since development would not occur on the Ranch property, impacts related to construction and long-term site disturbances, such as biological resources, cultural resources, geologic stability and visual resources impacts would not occur. In addition, since no new residents would be added to the area, impacts based on a per capita generation would not occur. These issues include air quality, noise, public services, recreation, and transportation and circulation. Because no residential development would occur, no additional residents or property would be exposed to geologic or other public safety hazards.

The current availability of water would not be changed and the discharge of wastewater associated with urban-related runoff would not occur in the absence of development. However, the existing wastewater discharge from crop irrigation would continue at its current levels. The development of crop production (irrigated and nonirrigated), open space, and rangeland on the areas of the Ranch proposed for residential development under the Agricultural Residential Cluster Subdivision and envisioned for residential and commercial development under the Future Development Program would result in a continuity of the overall open space throughout the Ranch. Therefore, this alternative would not result in direct impacts to agricultural resources.





Because the site could be planted with irrigated crops, including vineyards, instead of supporting residential development, more water may be consumed on-site, as irrigated vineyards are more water consumptive on a per-acre basis than residential development or open space. Water consumption could therefore be greater under this alternative. However, this alternative would not implement additional residential units in an area with an uncertain water supply.

Overall, impacts would be less than for the proposed Agricultural Residential Cluster Subdivision and Future Development Program, because no new development is anticipated.

## **6.2 ALTERNATIVE 2: No Project/Existing Zoning**

### **6.2.1 Description**

This alternative assumes that the proposed Agricultural Residential Cluster Subdivision and conceptual Future Development Program are not constructed, and that the Ranch property would be developed in accordance with the existing zoning and General Plan designations for the site. The Ranch property is currently zoned and designated as Rural Residential (RR) and Agriculture (AG) under the General Plan. The RR designation applies to the already-developed Santa Margarita Farms Subdivision (Tract 1), located at the northern end of the Ranch. The remainder of the Ranch property is designated AG and consists of 28 parcels. According to Chapter 22.30.480(A) of the San Luis Obispo County Code, up to two residential units are allowable on each agricultural parcel. Therefore, this alternative assumes a buildout of 56 residential units located throughout the Ranch property. Due to the configuration of existing parcels on the Ranch, the majority of the residences (48 units, or approximately 86% of buildout) would be located along the eastern, southern and southwestern portions of the property. Four residences would be located in the northeastern quadrant of the Ranch (north of SR 58 and east of El Camino Real) and two residences would be located north of the community of Santa Margarita. The remaining two residences would be located in the central portion of the Ranch property, near the proposed Agricultural Residential Cluster Subdivision site. It is assumed that each unit would install an individual well for water service, an on-site septic system for sewer service and access roads as necessary.

In addition to 56 residential units, several non-residential land uses may be allowed on AG designated land. This alternative assumes a buildout which includes those non-residential land uses envisioned under the Future Development Program which would be an allowable or permitted use pursuant to Chapter 22.06.030 of the San Luis Obispo County Code. This would include one Bed and Breakfast located on the Ranch headquarters parcel and nine wineries located throughout the property. The Bed & Breakfast would be limited to three units and 3,000 square feet (rather than 12 units and 12,000 square feet as envisioned) and the wineries would exclude the envisioned retail component (including galleries and gift shops).

It should be noted that, due to the existing zoning and General Plan designations for the site, this alternative would not preclude future proposed development under the County's agricultural cluster subdivision ordinance (Chapter 22.22.152). Consequently, an Agricultural Residential Cluster Subdivision such as that proposed would not conflict with the existing



General Plan designations for the site and could eventually be constructed, even if a No Project/Existing Zoning Alternative were implemented at this time. Similarly, this alternative would not preclude future non-residential uses pursuant to Chapter 22.06.030 of the San Luis Obispo County Code which may not be envisioned under the Future Development Program. This could include industry, manufacturing and processing uses; recreation, education and public assembly uses; retail trade uses; and/or service uses (refer to Table 2-2 in Chapter 22.06.030).

## **6.2.2 Impact Analysis**

*Agricultural Resources.* This alternative would result in the construction of 56 residential units, or approximately 50% fewer residential units than the Agricultural Residential Cluster Subdivision and 90% fewer residential units than the Agricultural Residential Cluster Subdivision and Future Development Program combined. In addition, the No Project/Existing Zoning Alternative includes a three-unit Bed & Breakfast and nine wineries (excluding retail components), and excludes all other commercial and other non-residential land uses envisioned in the Future Development Program (refer to Table 2-4 in Section 2.0, *Project Description*). Therefore, this alternative would result in substantially less overall site disturbance than the proposed Agricultural Residential Cluster Subdivision and Future Development Program. In addition, due to the configuration of existing parcels on the Ranch, the majority of the residences in this alternative would be located along the eastern, southern and southwestern portions of the property. As shown in Figures 4.1-2 and 4.1-3 in Section 4.1, *Agricultural Resources*, prime soils and important or unique farmland generally occur through the central portion of the Ranch property. Accordingly, impacts related to the conversion of prime soils and fragmentation of agricultural areas would be reduced when compared to the proposed Agricultural Residential Cluster Subdivision and Future Development Program. Similarly, because substantially fewer residential units would be located near existing agricultural operations, conflicts between urban and agricultural uses would be reduced when compared to the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

It should be noted that the proposed Agricultural Residential Cluster Subdivision includes 3,633 acres of permanent agricultural conservation easements (ACE's). This alternative does not include agricultural conservation easements. However, with this alternative, the balance of the property outside the disturbance areas associated with the construction of 56 residential units would remain in agricultural use or as open space. Because this alternative would not preclude future proposed development under the County's agricultural cluster subdivision ordinance (Chapter 22.22.152) or additional non-residential uses pursuant to Chapter 22.06.030, future development on agricultural lands could occur. However, a future agricultural cluster subdivision would require the preservation of agricultural lands. Therefore, overall impacts to the conversion of prime soils areas and fragmentation of agricultural areas, as well as conflicts between urban and agricultural uses would be reduced when compared to the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

*Air Quality.* This alternative would generate 87% fewer average daily vehicle trips than the Agricultural Residential Cluster Subdivision and Future Development Program combined (see *Transportation and Circulation* discussion below). Therefore, air contaminant emissions associated with vehicle use would be substantially reduced. In addition, because this



alternative would accommodate 56 fewer residential units than the Agricultural Residential Cluster Subdivision and 458 fewer residential units than the Agricultural Residential Cluster Subdivision and Future Development Program combined, and would exclude the majority of non-residential land uses envisioned in the Future Development Program, long term emissions associated with electricity and natural gas usage would be reduced as well. Similarly, this alternative would generate fewer grading- and construction-related emissions, since the area of disturbance would be reduced. Odor nuisance impacts associated with equestrian facilities, livestock sales, and septic systems would also be reduced under this alternative.

Both the Agricultural Residential Cluster Subdivision and Future Development Program are potentially inconsistent with San Luis Obispo APCD's 2001 *Clean Air Plan* (CAP). Because the No Project/Existing Zoning Alternative would be consistent with the General Plan, it would be consistent with the development assumptions in the CAP. Impacts related to CAP consistency would therefore be reduced when compared to the Agricultural Residential Cluster Subdivision and Future Development Program.

Overall, air quality impacts would be reduced under the No Project/Existing Zoning Alternative when compared to the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

*Biological Resources.* This alternative would result in the construction of substantially fewer residential units than the Agricultural Residential Cluster Subdivision and/or Future Development Program. In addition, the No Project/Existing Zoning Alternative includes a three-unit Bed & Breakfast and nine wineries (excluding retail components), and excludes all other commercial and other non-residential land uses envisioned in the Future Development Program (refer to Table 2-4 in Section 2.0, *Project Description*). Because less area would be developed and less site activity would result, biological resources impacts, including impacts to sensitive habitats and species and impacts to trees, would be reduced when compared to the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

*Cultural Resources.* This alternative would result in the construction of substantially fewer residential units than the Agricultural Residential Cluster Subdivision and/or Future Development Program. In addition, the No Project/Existing Zoning Alternative includes a three-unit Bed & Breakfast and nine wineries (excluding retail components), and excludes all other commercial and other non-residential land uses envisioned in the Future Development Program (refer to Table 2-4 in Section 2.0, *Project Description*). Therefore, this alternative would result in substantially less overall site disturbance when compared to the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

Thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site (refer to Section 4.4, *Cultural Resources*). Due to the configuration of existing parcels on the Ranch, the No Project/Existing Zoning Alternative would result in the majority of the 56 residences being located along the eastern, southern and southwestern portions of the property. Approximately two residences could be located near the proposed Agricultural Residential Cluster Subdivision site. Since substantially less overall site disturbance would occur with this alternative, impacts related to damage or destruction of the important associations of these sites, and disruption of



their setting and feeling, would be reduced compared to the Agricultural Residential Cluster Subdivision and Future Development Program. Similarly, this alternative would also result in fewer impacts related to disturbing previously unidentified buried archeological deposits or human remains. In addition, because this alternative would only generate 152 new residents (compared to 302 generated by the Agricultural Residential Cluster Subdivision and 1,388 generated by the Agricultural Residential Cluster Subdivision and Future Development Program combined), the reduced amount of site activity would reduce the likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites.

Although this alternative includes a three-unit Bed & Breakfast and winery on the existing Ranch headquarter parcel, it excludes a 6,000 square foot café, 600 seat amphitheater, and retail components associated with the winery under the envisioned Future Development Program. Site disturbance near the existing Ranch headquarters would subsequently be reduced. Therefore, fewer impacts to historical buildings and structures, including impacts to the historical context of the cultural landscape, would result in this location.

*Drainage, Erosion and Sedimentation.* Due to the configuration of existing parcels on the Ranch, the No Project/Existing Zoning Alternative would result in the majority of the 56 residences being located along the eastern, southern and southwestern portions of the property. These areas generally contain steeper slopes than the northern and central portions of the Ranch property. As a result, erosion and sedimentation to drainages could result during construction of individual residences. However, because the area of potential disturbance would be substantially less than under the proposed Agricultural Residential Cluster Subdivision and Future Development Program, less overall soil area could be disrupted. Therefore, impacts related to erosion, sedimentation, and pollutant discharges during construction would be reduced. In addition, because this alternative would result in substantially fewer residential units and the elimination of most commercial and other non-residential land uses, the amount of paved areas would be substantially reduced. Permanent increases in surface runoff and accelerated erosion would therefore be reduced compared to the Agricultural Residential Cluster Subdivision and Future Development Program. Storm water transport of pollutants, bacteria, and sediment into downstream facilities would also be reduced.

100-year flood zones occur near Trout Creek, the unnamed tributary to Trout Creek, Yerba Buena Creek, Santa Margarita Creek and Rinconada Creek (refer to Figure 4.5-1 in Section 4.5, *Drainage, Erosion and Sedimentation*). These flood zones are generally located in the northern and central portions of the Ranch, where substantially less development would occur under this alternative due to existing lot configurations on the property and the exclusion of most non-residential land uses. In addition, fewer overall structures would be located on the Ranch property under this alternative, thereby reducing the number of structures and residents potentially subject to flood-related hazards.

Overall, drainage, erosion and sedimentation impacts would be less with this alternative when compared to those expected under the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

*Geologic Stability.* Due to the configuration of existing parcels on the Ranch, the No Project/Existing Zoning Alternative would result in the majority of the 56 allowable residences being located along the eastern, southern and southwestern portions of the property. These areas



generally contain steeper slopes than the northern and central portions of the Ranch property. Hazards related to erosive soils and landsliding could result, particularly in the southwestern portion of the property (refer to Figures 4.6-3 and 4.6-5 in Section 4.6, *Geologic Hazards*).

However, this alternative would accommodate substantially fewer residential units when compared to the Agricultural Residential Cluster Subdivision and Future Development Program and would exclude most non-residential uses envisioned under the Future Development Program. Therefore, development under this alternative would expose substantially fewer structures and residents to geologic hazards on the Ranch property. In addition to soil erosion and landsliding, this includes seismic ground shaking, fault rupture, expansive soils, settlement, liquefaction, and groundwater percolation. Overall, geologic stability impacts would be reduced under the No Project/Existing Zoning Alternative.

Land Use. Under the No Project/Existing Zoning Alternative, the Ranch property would be developed in accordance with the existing zoning and General Plan designations for the site, resulting in 56 dwellings, substantially fewer homes than under the Agricultural Residential Cluster Subdivision and Future Development Program. In addition, the No Project/Existing Zoning Alternative includes a three-unit Bed & Breakfast and nine wineries (excluding retail components), and excludes all other commercial and other non-residential land uses envisioned in the Future Development Program (refer to Table 2-4 in Section 2.0, *Project Description*). Due to the reduced amount of site disturbance and construction, temporary noise, air quality and visual impacts would be reduced compared to the Agricultural Residential Cluster Subdivision and Future Development Program. In addition, this alternative would not convert as much open land as the proposed Agricultural Residential Cluster Subdivision and Future Development Program. Therefore, land use impacts would be reduced under the No Project/Existing Zoning Alternative.

Noise. This alternative would generate 87% fewer average daily vehicle trips than the Agricultural Residential Cluster Subdivision and Future Development Program combined (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby roadways would be significantly reduced. In addition, because this alternative would accommodate fewer residential units, fewer residents would be exposed to nuisance noise generated by aircraft flying overhead or by passing trains on the Union Pacific Railroad (UPRR). Similarly, this alternative would generate fewer construction-related noise impacts, since the area of disturbance and number of units would be reduced.

Overall, noise impacts would be substantially less with the No Project/Existing Zoning Alternative when compared to the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

Public Safety. Due to the configuration of existing parcels on the Ranch, the No Project/Existing Zoning Alternative would result in the majority of the 56 allowable residences being located along the eastern, southern and southwestern portions of the property. Many of these areas have not been historically used for crop production. In addition, this alternative would result in the construction of substantially fewer residential units compared to the proposed Agricultural Residential Cluster Subdivision and Future Development Program and excludes the majority of commercial and other non-residential land uses envisioned in the Future Development



Program. Therefore, substantially less site disturbance would occur in areas of historical croplands. Consequently, the potential for future site construction workers and residents to be exposed to residual quantities of presently-banned agricultural chemicals would decrease.

Since this alternative would accommodate substantially fewer residential units than the proposed Agricultural Residential Cluster Subdivision and Future Development Program, fewer residents would be exposed to other public safety hazards overall. In addition to residual agricultural chemicals, this includes: exposure to contaminants from highway and railway accidents that involve hazardous materials; the use, transport, or storage of hazardous chemicals; traffic safety hazards due to conflicts between proposed uses and existing off-site mining operations and on-site agricultural operations; hazards related to aircraft accidents; and exposure to valley fever.

It is assumed that each unit under this alternative would install an individual well for water service. Therefore, potential public safety impacts associated with failure of the Agricultural Residential Cluster Subdivision water tanks would be eliminated. Similarly, the No Project/Existing Zoning Alternative eliminates the Future Development Program golf course, thereby eliminating hazards related to errant golf balls.

Overall, due to the reduced residential development potential and the elimination of non-residential uses, the No Project/Existing Zoning Alternative would result in fewer public safety impacts than the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

*Public Services.* This alternative would result in the construction of 56 residential units, which is substantially fewer residential units than the Agricultural Residential Cluster Subdivision and Future Development Program. Consequently, the need for law enforcement and fire protection would be decreased considerably. Based on the student generation rates used in the public services analysis for the proposed Agricultural Residential Cluster Subdivision and Future Development Program (refer to tables 4.12-2 and 4.12-4 in Section 4.10, *Public Services*), this alternative would generate approximately 24 students. This represents a decrease of 24 students (50% less) when compared to the Agricultural Residential Cluster Subdivision and a decrease of 200 students (89% less) when compared to the Agricultural Residential Cluster Subdivision and Future Development Program combined. Therefore, the need for school services would also be decreased considerably. In addition, based on the solid waste generation rates used in the public services analysis for the proposed Agricultural Residential Cluster Subdivision and Future Development Program (refer to Section 4.10, *Public Services*), this alternative would generate approximately 67 tons of solid waste per year. This represents a decrease of 1,054.6 tons per year (94% less) when compared to the Agricultural Residential Cluster Subdivision and Future Development Program combined. Therefore, the need for solid waste services would also be decreased considerably. Library demand would similarly be reduced under the No Project/Existing Zoning Alternative.

Overall, this alternative is considered to have lesser public service impacts compared to the Agricultural Residential Cluster Subdivision and Future Development Program.

*Recreation.* This alternative would result in the construction of substantially fewer residential units than the Agricultural Residential Cluster Subdivision and Future Development Program.



Based on the County standard of 3 acres of parkland and open space per 1,000 residents, this alternative would generate demand for approximately 0.45 acres of parkland. This represents a decreased demand of 0.45 acres of parkland (50% less) when compared to the Agricultural Residential Cluster Subdivision and a decreased demand of 3.7 acres of parkland (88% less) when compared to the Agricultural Residential Cluster Subdivision and Future Development Program combined. Therefore, this alternative is considered to have lesser impacts related to parkland demand when compared to the Agricultural Residential Cluster Subdivision and Future Development Program. However, the No Project/Existing Zoning Alternative does not include recreational facilities envisioned under the Future Development Program, including a community park, a swimming pool, and multi-use trails. Overall, recreation impacts would be both better and worse under the No Project/Existing Zoning Alternative when compared to the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

*Transportation and Circulation.* This alternative would accommodate substantially fewer residential units when compared to the Agricultural Residential Cluster Subdivision and Future Development Program. In addition, the No Project/Existing Zoning Alternative includes a three-unit Bed & Breakfast and nine wineries (excluding retail components), and excludes all other commercial and other non-residential land uses envisioned in the Future Development Program (refer to Table 2-4 in Section 2.0, *Project Description*). Based on the trip generation rates used in the traffic analysis for the proposed Agricultural Residential Cluster Subdivision and Future Development Program (refer to tables 4.12-9 and 4.12-13 in Section 4.12, *Transportation and Circulation*), this alternative would generate approximately 1,176 average daily trips. This represents a decrease of 8,115 daily trips (87% less) when compared to the Agricultural Residential Cluster Subdivision and Future Development Program combined. As a result, traffic impacts on local roadway and highway segments and intersections would be substantially reduced when compared to the proposed Agricultural Residential Cluster Subdivision and Future Development Program. This alternative would reduce, but not eliminate, impacts related to railroad crossings. Pedestrian, bicycle, and transit impacts would be reduced proportionately to the reduction in the amount of site activity with this alternative when compared to the Agricultural Residential Cluster Subdivision and Future Development Program.

*Visual Resources.* The Agricultural Residential Cluster Subdivision and Future Development Program would result in significant and unavoidable impacts to the aesthetic character of the Santa Margarita Ranch. The No Project/Existing Zoning Alternative would result in the construction of 56 residential units, substantially fewer residential units than the Agricultural Residential Cluster Subdivision and Future Development Program. In addition, the No Project/Existing Zoning Alternative includes a three-unit Bed & Breakfast and nine wineries (excluding retail components), and excludes all other commercial and other non-residential land uses envisioned in the Future Development Program (refer to Table 2-4 in Section 2.0, *Project Description*). Therefore, substantially less overall site disturbance would occur. Due to the configuration of existing parcels on the Ranch, this minimal site disturbance would primarily occur along the eastern, southern and southwestern portions of the property. These areas are less visible from public viewpoints such as area roadways when compared to the Agricultural Residential Cluster Subdivision site and several Future Development Program land use locations (refer to Section 4.13, *Visual Resources*).



Overall, the amount of site disturbance and development along viewing corridors would be reduced, as would the amount light and glare generators introduced into the area. Impacts related to the visual character of the Ranch property would therefore be reduced under the No Project/Existing Zoning Alternative.

*Water and Wastewater.* This alternative would accommodate substantially fewer residential units when compared to the Agricultural Residential Cluster Subdivision and Future Development Program and would eliminate most commercial and other non-residential land uses envisioned in the Future Development Program. Based on the demand estimation factors and groundwater recharge percentages used in the water resource analysis for the proposed Agricultural Residential Cluster Subdivision and Future Development Program (refer to table 4.14-2 in Section 4.14, *Water and Wastewater*), this alternative would result in a net consumptive use of approximately 116.5 acre-feet per year (afy). This represents a decrease of 809.5 afy (87% less) when compared to the Agricultural Residential Cluster Subdivision and Future Development Program combined. As a result, impacts related to groundwater use and overdraft of the aquifer system would be significantly reduced when compared to the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

This alternative assumes that each unit would install an on-site septic system for sewer service. Similar to the Agricultural Residential Cluster Subdivision and Future Development Program, improper disposal field design could result in similar health hazards or potential ground and surface water contamination. Since the number of units would be reduced, impacts related to the wastewater generation would be reduced under the No Project/Existing Zoning Alternative. Similarly, because fewer septic systems would be installed, water quality impacts resulting from the on-site recharge of water softeners and household wastes would be less than the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

However, it should be noted that this alternative does not include the dedication of land for a wastewater treatment facility. As a result, long-term wastewater generation impacts may be greater for this alternative than for the proposed Agricultural Residential Cluster Subdivision and Future Development Program, which includes a wastewater treatment facility. The Future Development Program envisions nine wineries located throughout the Ranch property. Because the No Project/Existing Zoning Alternative includes these land uses, impacts related to winery wastewater would be similar.

Overall, water and wastewater impacts under the No Project/Existing Zoning Alternative would be better, worse and similar to than under the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

## **6.3 ALTERNATIVE 3: Revised Cluster Design**

### **6.3.1 Description**

This alternative analyzes an alternate site plan for the proposed Agricultural Residential Cluster Subdivision. The overall development potential of this alternative would be the same as for the proposed Agricultural Residential Cluster Subdivision. However, this alternative would reconfigure the 112 lots so as to reduce to the overall project footprint. Under this alternative, Lots





1 and 43 through 115 would be relocated north of the proposed East Driveway, within the currently proposed Phase 1 development area (refer to Figure 6-1). All proposed roadways south of East Driveway would be eliminated, although the water tanks would remain as proposed. The permanent agricultural conservation easements (ACE) would remain southwest of the community of Santa Margarita, as proposed. Access would be provided via one existing driveway and one new driveway from West Pozo Road, as proposed. However, internal circulation would be redesigned to accommodate more compact clustering. Water service would be provided by the Santa Margarita Mutual Water Company and sewer would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision.

Although the amount of site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision, the overall project footprint would be reduced by approximately 47%. Since the general configuration and clustering of the individual lots would be altered, this alternative would require County approval for redesign elements.

### **6.3.2 Impact Analysis**

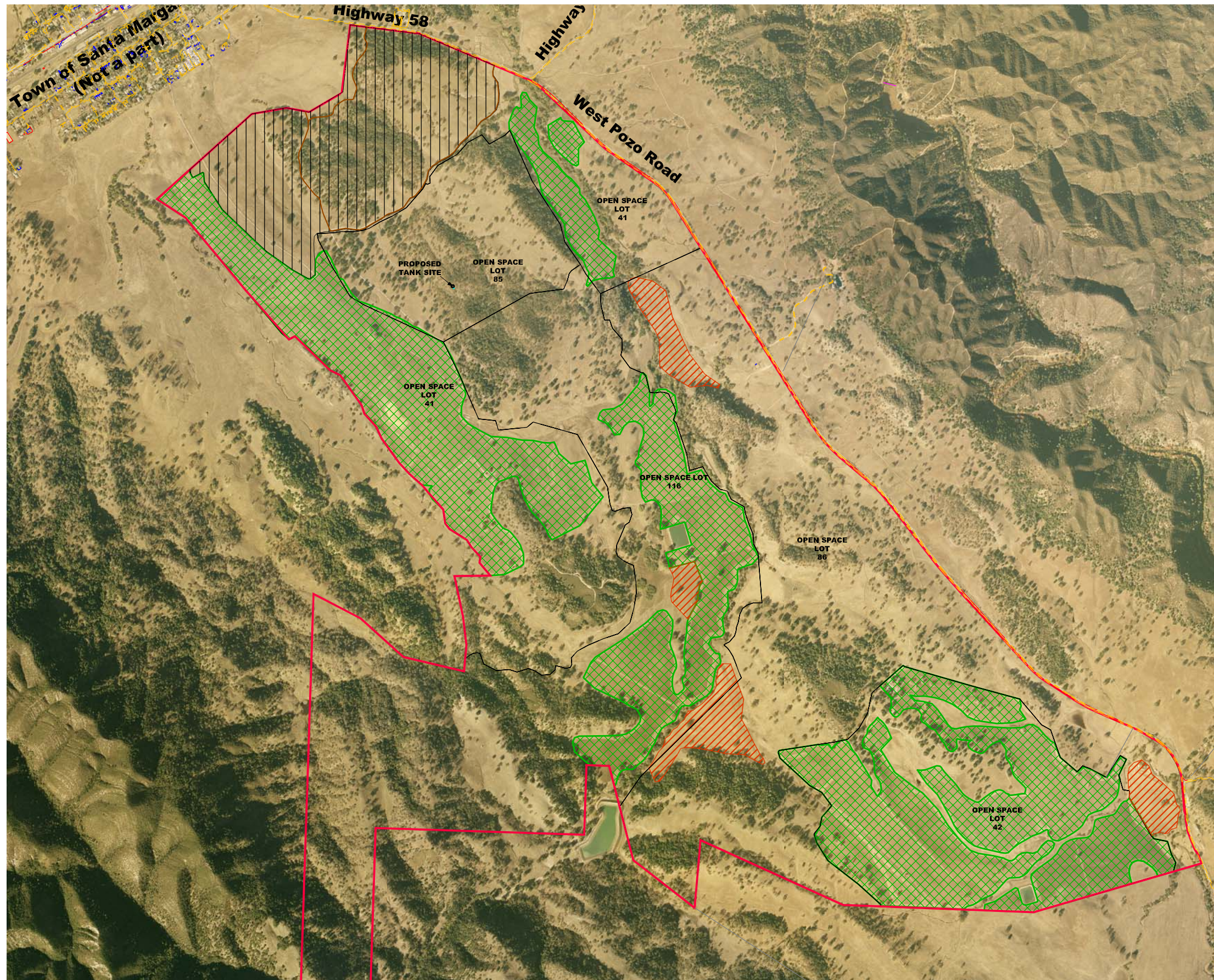
*Agricultural Resources.* Although this alternative would result in the same number of dwelling units as the proposed Agricultural Residential Cluster Subdivision, the overall project footprint would be reduced by approximately 47%. As a result, impacts related to the conversion of prime soil areas and fragmentation of agricultural areas would be less than the proposed Agricultural Residential Cluster Subdivision. Due to its location and clustering, site disturbance associated with this alternative would not significantly fragment an existing grazing unit. In addition, because lots would be configured in a more compact manner, with the majority of lots located on the interior of the cluster, fewer lots would be located adjacent to existing agricultural operations. As a result, conflicts between urban and agricultural uses would be incrementally reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

*Air Quality.* This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). As a result, air contaminant emissions associated with vehicle use would be the same as the proposed Agricultural Residential Cluster Subdivision. In addition, because this alternative would accommodate the same number residential units, long term emissions associated with electricity and natural gas usage would be identical. Grading- and construction-related emissions and odor nuisance impacts would be slightly reduced due to the reduced area of disturbance compared to the proposed Agricultural Residential Cluster Subdivision.

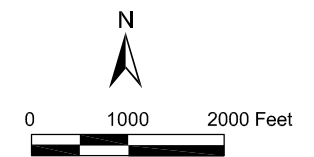
The Agricultural Residential Cluster Subdivision is potentially inconsistent with San Luis Obispo APCD's 2001 *Clean Air Plan* (CAP) because it does not include sufficient Transportation Control Measures (TCMs) and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. The Revised Cluster Design Alternative would similarly exclude sufficient TCMs and would similarly increase trip lengths in the vicinity. In addition, because this alternative would generate the same amount of average daily vehicle trips, the rate of increase in vehicle trips and miles traveled would be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to CAP consistency would be similar under the Revised Cluster Design Alternative.







-  TENATIVE TRACT 2586 BOUNDARY
-  LOCATION FOR REVISED CLUSTER DESIGN ALTERNATIVE
-  EXISTING VINYARD
-  AG IN PROGRESS



Alternative 3:  
Revised Cluster Design

Source: EDA Design Professionals, June 2006.

Figure 6-1





*Biological Resources.* Under the Revised Cluster Design Alternative, Lots 1 and 43 through 115 would be relocated north of the proposed East Driveway, within the currently proposed Phase 1 development area. As shown in Figure 4.3-2 in Section 4.3, *Biological Resources*, this area contains 12 natural plant communities and/or wildlife habitat types, similar to the proposed Agricultural Residential Cluster Subdivision site as a whole. The habitat types include California annual grassland, native perennial grassland, central (Lucian) sage scrub, chamise chaparral, blue oak woodland, coast live oak woodland, valley oak woodland, riparian/riverine, emergent wetland, seasonal pools, mixed oak woodland and ruderal. The San Luis Obispo Mariposa Lily, a CNPS List 1B plant species, also occurs within the Revised Cluster Design Alternative site, similar to the proposed Agricultural Residential Cluster Subdivision site as a whole.

Under this alternative, the overall project footprint would be reduced by approximately 47%. However, because the same number of units would be constructed, site disturbance would be only slightly reduced when compared to the proposed Agricultural Residential Cluster Subdivision. This alternative would therefore result in slightly fewer impacts related to habitat conversion, oak tree removal and San Luis Obispo Mariposa Lily removal when compared to the proposed Agricultural Residential Cluster Subdivision. Similarly, impacts to special-status animal species, including the California red-legged frog (CRLF), South/Central California Coast Steelhead, white-tailed kite, golden eagle, Cooper's hawk, sharp-shinned hawk, pallid bat, American badger, legless lizard, and southwestern pond turtle, would be slightly reduced. Because all development south of the proposed East Driveway would be eliminated, impacts to Vernal Pool Fairy Shrimp (VPFS) and impacts related to the reduction of migration corridors for special-status and common wildlife species would also be reduced.

Overall, this alternative would result in slightly reduced impacts related to biological resources when compared to the proposed Agricultural Residential Cluster Subdivision.

*Cultural Resources.* Thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site (refer to Section 4.4, *Cultural Resources*). Although this alternative would result in the same number of dwelling units as the proposed Agricultural Residential Cluster Subdivision, the overall project footprint would be reduced by approximately 47%. All development south of the proposed East Driveway would be eliminated. As a result, impacts related to damage or destruction of the important associations of these sites, and disruption of their setting and feeling, would be somewhat reduced compared to the Agricultural Residential Cluster Subdivision.

However, because the same number of units would be constructed, site disturbance would be only slightly reduced when compared to the proposed Agricultural Residential Cluster Subdivision. This alternative would therefore result in slightly reduced impacts related to disturbing previously unidentified buried archeological deposits or human remains. In addition, because this alternative would generate the same number of new residents, there would be a similar likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites.



Overall, this alternative would result in reduced impacts related to cultural resources when compared to the proposed Agricultural Residential Cluster Subdivision.

Drainage, Erosion and Sedimentation. Although the overall project footprint would be reduced under this alternative, site disturbance would be only slightly reduced when compared to the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to erosion, sedimentation, and pollutant discharges during construction would be slightly reduced. The amount of paved areas under this alternative would be slightly reduced when compared to the proposed Agricultural Residential Cluster Subdivision. Therefore, permanent increases in surface runoff and accelerated erosion, as well as storm water transport of pollutants, bacteria, and sediment into downstream facilities, would be slightly reduced under the Revised Cluster Design Alternative.

As discussed in Section 4.5, *Drainage, Erosion and Sedimentation*, the eastern reaches of the proposed Agricultural Residential Cluster Subdivision site, just south of the east driveway, would be located within the flood zone associated with Trout Creek (refer to Figure 4.5-1). The Revised Cluster Design Alternative would not be located in this area. Therefore, impacts related to flood hazard exposure would be reduced.

Geologic Stability. The Revised Cluster Design Alternative would accommodate the same number residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, development under this alternative would expose the same number of units and residents to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch.

Under the Revised Cluster Design Alternative, Lots 1 and 43 through 115 would be relocated north of the proposed East Driveway, within the currently proposed Phase 1 development area. As discussed in Section 4.6, *Geologic Stability*, this area is subject to soil-related hazards (expansive soils, erosive soils and settlement); moderate to high landslide potential; and moderate to high liquefaction potential (refer to Figures 4.6-3, 4.6-5 and 4.6-6, respectively) similar to the proposed Agricultural Residential Cluster Subdivision site as a whole. Because the same number of units would be exposed to similar hazards, this alternative would result in similar geologic stability impacts as the proposed Agricultural Residential Cluster Subdivision.

Overall, impacts would be similar to the proposed Agricultural Residential Cluster Subdivision.

Land Use. This alternative would result in the same number of dwelling units as the proposed Agricultural Residential Cluster Subdivision, although the overall project footprint would be reduced by approximately 47%. As a result, construction activity would result in similar temporary noise, air quality and visual impacts compared to the Agricultural Residential Cluster Subdivision. However, this alternative would not convert as much open land as the proposed Agricultural Residential Cluster Subdivision. Therefore, land use impacts would be reduced compared to the proposed Agricultural Residential Cluster Subdivision.

Noise. This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby major roadways would be similar to the



Agricultural Residential Cluster Subdivision. In addition, because this alternative would accommodate the same number of residential units, residents would similarly be exposed to nuisance noise generated by aircraft flying overhead or by passing trains on the Union Pacific Railroad (UPRR). This alternative would generate similar construction-related noise impacts, since the area of disturbance and number of units would be the same.

Overall, noise impacts would be similar to the proposed Agricultural Residential Cluster Subdivision.

*Public Safety.* Although the overall project footprint would be reduced under this alternative, site disturbance would be on slightly reduced when compared to the proposed Agricultural Residential Cluster Subdivision. As with the Agricultural Residential Cluster Subdivision, site disturbance would not occur in an area of historical croplands. Therefore, impacts related to residual agricultural chemicals would be similarly less than significant.

Since this alternative would accommodate the same number residential units as the proposed Agricultural Residential Cluster Subdivision, the same number of residents would be exposed to other public safety hazards overall. In addition to residual agricultural chemicals, this includes: exposure to contaminants from highway and railway accidents that involve hazardous materials; the use, transport, or storage of hazardous chemicals; traffic safety hazards due to conflicts between proposed uses and existing off-site mining operations and on-site agricultural operations; hazards related to potential aircraft accidents; and exposure to valley fever.

Under this alternative, Lots 1 and 43 through 115 would be relocated north of the proposed East Driveway, within the currently proposed Phase 1 development area, while the water tanks would remain as proposed. Since no residences would be located near the water tanks under this alternative, potential public safety impacts associated with their failure would be eliminated.

Overall, the Tighter Cluster Alternative would result in impacts which are reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

*Public Services.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Consequently, the increase in demand for law enforcement, fire protection, school, solid waste, and library services would be identical. Therefore, this alternative is considered to have similar public service impacts compared to the proposed Agricultural Residential Cluster Subdivision.

*Recreation.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Consequently, the need for recreational facilities would be identical. Therefore, this alternative is considered to have similar impacts related to parkland demand when compared to the proposed Agricultural Residential Cluster Subdivision.

*Transportation and Circulation.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Therefore, this alternative would generate the same number of average daily trips. As a result, traffic impacts on local roadway



and highway segments and intersections would be similar to the proposed Agricultural Residential Cluster Subdivision. Impacts related to access, railroad crossings, and pedestrian, bicycle and transit demand would also be similar.

*Visual Resources.* This alternative would result in the same number of dwelling units as the proposed Agricultural Residential Cluster Subdivision, although the overall project footprint would be reduced by approximately 47%. The overall visual effect of this alternative would be a more compact cluster. The tighter clustering of lots and the associated preservation of additional open space would maintain more of the rural character of the site than the proposed Agricultural Residential Cluster Subdivision. However, the tighter cluster would also result in a more concentrated urbanized appearance within the rural context. Although more homes may be visible from roadways within the community of Santa Margarita due to the relocation of lots north of the proposed East Driveway, no development would be visible from locations south of the proposed East Driveway. As a result, impacts related to the alteration of visual character under this alternative would be both better and worse when compared to the proposed Agricultural Residential Cluster Subdivision.

*Water and Wastewater.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Therefore, this alternative would result in the same net consumptive water use. As a result, impacts related to groundwater use and overdraft of the aquifer system would be the same as for the proposed Agricultural Residential Cluster Subdivision. This alternative assumes that sewer would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision. Impacts related to improper disposal field design, on-site recharge of water softeners and household wastes, and septage load would therefore be similar to the proposed Agricultural Residential Cluster Subdivision.

## **6.4 ALTERNATIVE 4: Revised Cluster Location 1: North of Community**

### **6.4.1 Description**

This alternative assumes that the proposed Agricultural Residential Cluster Subdivision is relocated north of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern (refer to Figure 6-2). Lots would be rearranged in a generally east-west trending configuration.

The permanent agricultural conservation easements (ACE) would be relocated north of the community of Santa Margarita and west and east of El Camino Real in order to remain contiguous with the cluster. Access to the alternative site would be provided via extensions of existing roadways, including Yerba Buena Avenue, in the northern portion of the community of Santa Margarita. Water service would be provided by the Santa Margarita Mutual Water Company and sewer would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision. Water tanks would be relocated from the southern portion of the Agricultural Residential Cluster Subdivision to a hilltop within Revised Cluster Location 1. Figure 6-2 illustrates this alternate location.



## 6.4.2 Impact Analysis

Agricultural Resources. This alternative would relocate the Agricultural Residential Cluster Subdivision north of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. As discussed in Section 4.1, *Agricultural Resources*, the proposed Agricultural Residential Cluster Subdivision would permanently convert 21.2 acres containing prime soils to non-agricultural uses and would permanently compromise the viability of a 676.7-acre grazing unit. As shown in Figure 6-2, prime soils occur in the central portion of the revised location, on either side of Santa Margarita Creek. Due to its extent, this area could not feasibly be avoided by development on this alternative site. Therefore, this alternative would permanently convert more prime soils to non-agricultural use than the Agricultural Residential Cluster Subdivision. As a result, impacts related to the conversion of prime soil areas would be greater when compared to the proposed Agricultural Residential Cluster Subdivision.

However, because this alternative location is contiguous with the community of Santa Margarita, this alternative would result in fewer impacts related to grazing unit fragmentation. In addition, because lots would be relocated away from existing vineyards in the southern portion of the Ranch property, fewer lots would be located adjacent to existing agricultural operations. As a result, conflicts between urban and agricultural uses would be incrementally reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

Overall, the Revised Cluster Location 1 Alternative would result in greater impacts to prime soils and reduced impacts to grazing units and agricultural conflicts compared to the proposed Agricultural Residential Cluster Subdivision.

Air Quality. This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). As a result, air contaminant emissions associated with vehicle use would be the same as the proposed Agricultural Residential Cluster Subdivision. In addition, because this alternative would accommodate the same number of residential units, long term emissions associated with electricity and natural gas usage would be identical. Grading- and construction-related emissions and odor nuisance impacts would also be similar under this alternative.

The Agricultural Residential Cluster Subdivision is potentially inconsistent with San Luis Obispo APCD's 2001 *Clean Air Plan* (CAP) because it does not include sufficient Transportation Control Measures (TCMs) and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. The Revised Cluster Location 1 Alternative would similarly exclude sufficient TCMs and would similarly increase trip lengths in the vicinity. In addition, because this alternative would generate the same amount of average daily vehicle trips, the rate of increase in vehicle trips and miles traveled would be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to CAP consistency would be similar under the Revised Cluster Location 1 Alternative.

Biological Resources. This alternative would relocate the Agricultural Residential Cluster Subdivision north of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. As shown in Figure 4.3-2 in Section 4.3,

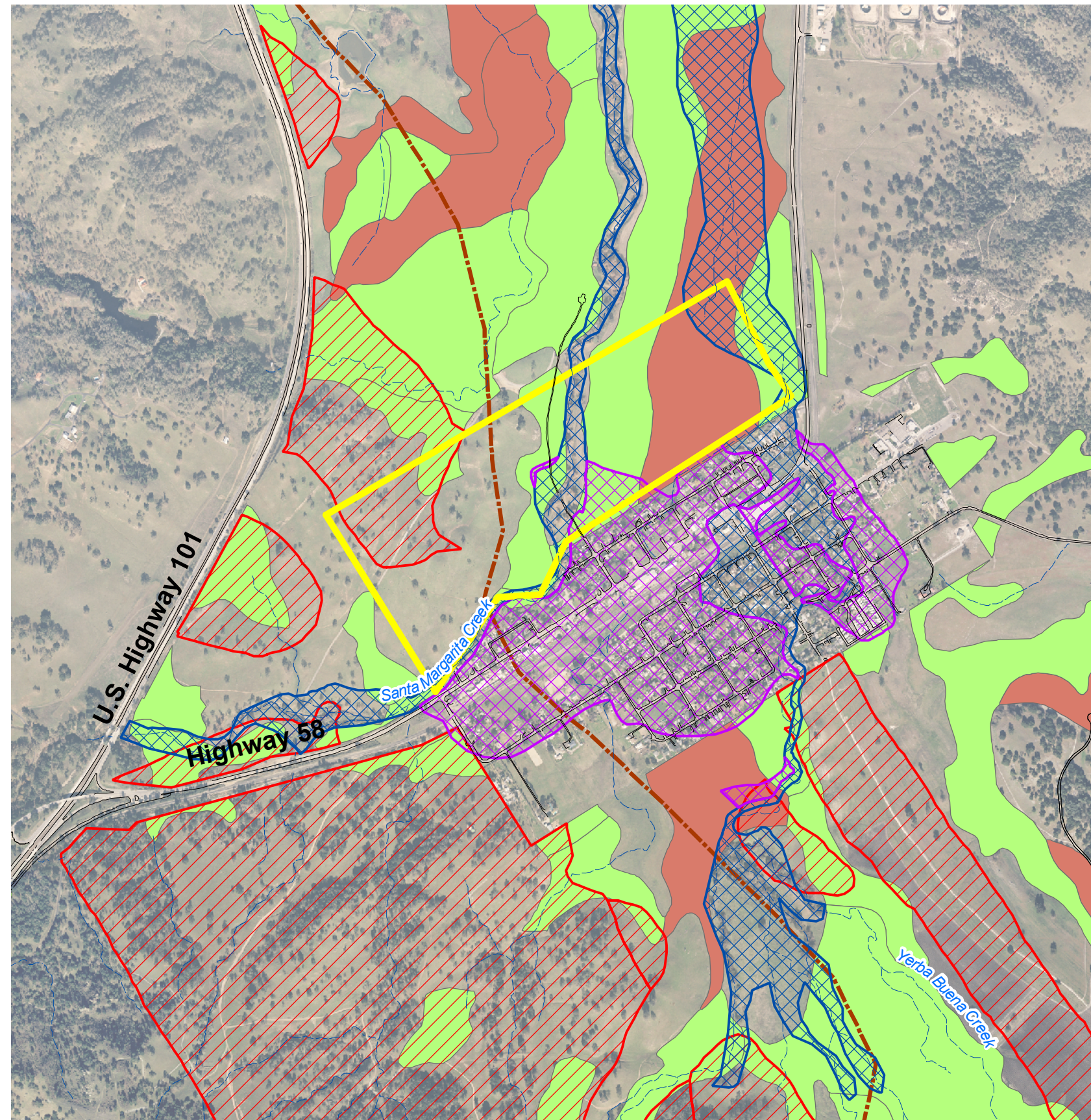











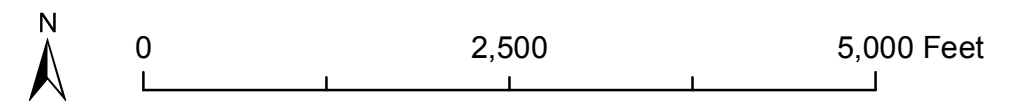
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-  NACIMIENTO FAULT ZONE
-  REVISED CLUSTER LOCATION 1: NORTH OF COMMUNITY
-  100-YEAR FEMA FLOODPLAIN
-  500-YEAR FEMA FLOODPLAIN
-  HIGH LANDSLIDE POTENTIAL
-  PRIME AGRICULTURAL SOILS IF IRRIGATED
-  PRIME AGRICULTURAL SOILS REGARDLESS OF IRRIGATION



Alternative 4:  
 Revised Cluster Location 1:  
 North of Community





*Biological Resources*, this area is primarily composed of valley oak woodland, emergent wetland, riparian/riverine, and agriculture (vineyard) habitat types. Since the same number of units would be constructed, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts to valley oak woodland, emergent wetland, riparian/riverine, and agriculture habitat types would be greater than the proposed Agricultural Residential Cluster Subdivision. However, because California annual grassland, native perennial grassland, central (Lucian) sage scrub, chamise chaparral, blue oak woodland, coast live oak woodland do not occur in this area, impacts to these habitat types would be eliminated. In addition, the San Luis Obispo Mariposa Lily, a CNPS List 1B plant species, does not occur in this alternative location. As a result, impacts to this special-status plant species would be reduced.

As shown in Figure 4.3-3 in Section 4.3, *Biological Resources*, no seasonal pools occur within this alternate location. Therefore, impacts to Vernal Pool Fairy Shrimp (VPFS), a Federally Threatened species, would be eliminated.

In addition, because this alternative would be located adjacent to the community of Santa Margarita, impacts related to the reduction of migration corridors for special-status and common wildlife species would also be reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

Overall, biological resource impacts would be both better and worse when compared to the proposed Agricultural Residential Cluster Subdivision.

*Cultural Resources.* Thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site (refer to Section 4.4, *Cultural Resources*). This alternative would relocate development north of the community of Santa Margarita and would therefore avoid these resources. However, other prehistoric and historical archaeological sites are located within the revised cluster location. Although development in this area would avoid resources on the proposed Agricultural Residential Cluster Subdivision site, it would nonetheless impact cultural resources on the revised location. As a result, impacts related to damage or destruction of prehistoric and historical archaeological sites, and disruption of their setting and feeling, would be similar to the proposed Agricultural Residential Cluster Subdivision.

Since the same number of units would be constructed, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. This alternative would therefore result in similar impacts related to disturbing previously unidentified buried archeological deposits or human remains. Because this alternative would generate the same number of new residents, there would be a similar likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites. Overall, impacts related to identified resources, previously unidentified buried archeological deposits or human remains, and relic collecting and/or vandalism under this alternative would be similar to the proposed Agricultural Residential Cluster Subdivision.

It should be noted that because this alternative would continue the existing grid of the community of Santa Margarita, it would be compatible with the historical layout and design of the community. Impacts related to the alteration of cultural landscapes would therefore be



reduced under this alternative when compared to the proposed Agricultural Residential Cluster Subdivision.

*Drainage, Erosion and Sedimentation.* This alternative would result in the same number residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to erosion, sedimentation, and pollutant discharges during construction would be similar to the proposed Agricultural Residential Cluster Subdivision. The amount of paved areas under this alternative would also be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, permanent increases in surface runoff and accelerated erosion, as well as storm water transport of pollutants, bacteria, and sediment into downstream facilities, would be similar under the Revised Cluster Location 1 Alternative.

Portions of the Agricultural Residential Cluster Subdivision are located in a 100-year flood zone. However, no habitable structures would be located in these areas under the proposed Agricultural Residential Cluster Subdivision. Portions of the Revised Cluster Location 1 are similarly located in a 100-year flood zone (refer to Figure 6-2). However, this alternative could place habitable structures in this area. Therefore, impacts related to flood hazard exposure would be greater when compared to the proposed Agricultural Residential Cluster Subdivision.

Overall, impacts related to drainage, erosion and sedimentation would be similar to the proposed Agricultural Residential Cluster Subdivision, while impacts related to flood hazard exposure would be greater than the proposed Agricultural Residential Cluster Subdivision.

*Geologic Stability.* This alternative would relocate the Agricultural Residential Cluster Subdivision north of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. The Revised Cluster Location 1 Alternative would accommodate the same number residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, it would expose the same number of units and residents to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch. However, under this alternative, lots could be located directly atop the Nacimiento Fault Zone, which bisects the alternative site (refer to Figure 6-2). As discussed in Section 4.6, *Geologic Stability*, surface rupture hazard on the Agricultural Residential Cluster Subdivision site would be unlikely. As a result, impacts related to surface rupture would be greater when compared to the proposed Agricultural Residential Cluster Subdivision.

The previous location for the Agricultural Residential Cluster Subdivision was subject to soil-related hazards (expansive soils, erosive soils and settlement) and high liquefaction potential (refer to Figures 4.6-3 and 4.6-6 in Section 4.6, *Geologic Stability*). The area north of the community of Santa Margarita is subject to similar soil-related hazards (expansive soils, erosive soils and settlement) and high liquefaction potential. Because the same number of units would be exposed to similar hazards, this alternative would result in similar soil-related hazards and liquefaction impacts as the proposed Agricultural Residential Cluster Subdivision.

As shown in Figure 4.6-6 in Section 4.6, *Geologic Stability*, the previous location for the Agricultural Residential Cluster Subdivision was subject to moderate landslide potential. The alternative location is subject to high landslide potential (refer to Figure 6-2). Due to its extent, this area could not feasibly be avoided by development on this alternative site. However, fewer lots overall



would be exposed to landsliding hazards when compared to the Agricultural Residential Cluster Subdivision. Therefore, impacts related to landslide potential would be less under this alternative when compared to the Agricultural Residential Cluster Subdivision.

Overall, this alternative would result in greater impacts related to surface rupture, similar impacts related to groundshaking and soil-related hazards, and fewer impacts related to landslide potential when compared to the proposed Agricultural Residential Cluster Subdivision.

Land Use. This alternative would relocate the Agricultural Residential Cluster Subdivision north of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. Since this alternative would locate residential units immediately adjacent to the existing community, the exposure of existing sensitive receptors to construction noise, air quality, and visual impacts would be greater. However, because development potential under this alternative would be similar to the proposed Agricultural Residential Cluster Subdivision, this alternative would convert a similar amount open land as the proposed Agricultural Residential Cluster Subdivision. Therefore, land use impacts would be both greater than and similar to the proposed Agricultural Residential Cluster Subdivision.

Noise. This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby major roadways would be similar to the Agricultural Residential Cluster Subdivision. However, because this alternative would locate residential units closer to the private airstrip, private railroad, and Union Pacific Railroad (UPRR), exposure to periodic high noise levels would be greater under this alternative. In addition, since this alternative would locate residential units immediately adjacent to the existing community, the exposure of existing sensitive receptors to construction noise would be greater.

Overall, noise impacts would be both similar to and worse than the proposed Agricultural Residential Cluster Subdivision.

Public Safety. This alternative would relocate the Agricultural Residential Cluster Subdivision north of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. As discussed in Section 4.9, *Public Safety*, site disturbance associated with the proposed Agricultural Residential Cluster Subdivision would not occur in an area of historical croplands. However, according to the agricultural study prepared for the Agricultural Residential Cluster Subdivision and Future Development Program, various crops, including winegrapes and olives, have historically been cultivated in the Ranch Headquarters area (north of the community of Santa Margarita). Due to its proximity to the Ranch headquarter parcel, the Revised Cluster Location 1 Alternative could occur in areas historically used for agricultural production with soils that could contain residual quantities of presently-banned agricultural chemicals. Therefore, impacts would be greater when compared to the Agricultural Residential Cluster Subdivision.

Because this alternative would locate residential units closer to the private airstrip, State Route 58, and the UPRR, exposure of people to exposure to contaminants from highway and railway accidents that involve hazardous materials, and hazards related to potential aircraft accidents



would be increased when compared to the proposed Agricultural Residential Cluster Subdivision. However, because this alternative would convert a similar amount open land as the proposed Agricultural Residential Cluster Subdivision, impacts related to valley fever exposure would be similar.

Overall, the Revised Cluster Location 1 Alternative would result in greater public safety impacts when compared to the proposed Agricultural Residential Cluster Subdivision.

*Public Services.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Consequently, the increased demand for law enforcement, fire protection, school, solid waste, and library services would be similar. Therefore, this alternative is considered to have similar public service impacts compared to the proposed Agricultural Residential Cluster Subdivision.

*Recreation.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Consequently, the need for recreational facilities would be similar. Therefore, this alternative is considered to have similar impacts related to parkland demand when compared to the proposed Agricultural Residential Cluster Subdivision.

*Transportation and Circulation.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Therefore, this alternative would generate the same number of average daily trips. However, additional traffic would be added to side streets in the community of Santa Margarita. According to the traffic study prepared for the proposed Agricultural Residential Cluster Subdivision by Fehr & Peers (October 2006), this would result in additional congestion and may require intersection improvements such as additional turn lanes or traffic signals. In addition, pedestrian and bicycle conflicts would increase in the community of Santa Margarita, thereby requiring implementation of the improvements as outlined in the Santa Margarita Design Plan. Transit demand for services would also increase compared to the Agricultural Residential Cluster Subdivision.

However, this alternative would reduce impacts related to railroad crossings because fewer trips would require crossing the UPRR rail line when compared to the proposed Agricultural Residential Cluster Subdivision, which is located across the UPRR from the community of Santa Margarita and El Camino Real.

Overall, traffic impacts would be both better and worse than the proposed Agricultural Residential Cluster Subdivision.

*Visual Resources.* This alternative would relocate the Agricultural Residential Cluster Subdivision north of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. The placement of a residential cluster immediately adjacent to the existing community would result in greater visibility of the residential uses from viewpoints on the north side of the community, and could block scenic views from existing residential properties. However, the alternative would reduce visual changes viewed from the south side of the community. In addition, the relatively flat topography of this alternative site would reduce the visibility of residential units when compared to the hillside development included



with the proposed Agricultural Residential Cluster Subdivision. As a result, impacts related to the alteration of visual character under this alternative would be both better and worse when compared to the proposed Agricultural Residential Cluster Subdivision.

*Water and Wastewater.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Therefore, this alternative would result in the same net consumptive water use. As a result, impacts related to groundwater use and overdraft of the aquifer system would be similar to the proposed Agricultural Residential Cluster Subdivision. This alternative assumes that sewer would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision. Impacts related to improper disposal field design, on-site recharge of water softeners and household wastes and septage load would therefore be similar to the proposed Agricultural Residential Cluster Subdivision.

## **6.5 ALTERNATIVE 5: Revised Cluster Location 2: South of Community**

### **6.5.1 Description**

This alternative assumes that the proposed Agricultural Residential Cluster Subdivision is relocated south of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern (refer to Figure 6-3). Lots would be rearranged in a generally east-west trending configuration.

The permanent agricultural conservation easements (ACE) would remain southwest of the community of Santa Margarita, as proposed. Access to the alternative site would be provided via extensions of existing roadways, including Encina Avenue and Margarita Avenue, in the southern portion of the community of Santa Margarita. Water service would be provided by the Santa Margarita Mutual Water Company and sewer would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision. Figure 6-3 illustrates this alternate location.

### **6.5.2 Impact Analysis**

*Agricultural Resources.* This alternative would relocate the Agricultural Residential Cluster Subdivision south of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. As discussed in Section 4.1, *Agricultural Resources*, the proposed Agricultural Residential Cluster Subdivision would permanently convert 21.2 acres containing prime soils to non-agricultural uses and would permanently compromise the viability of a 676.7-acre grazing unit. As shown in Figure 6-3, prime soils occur in the central portion of the revised location, near Yerba Buena Creek. Due to its extent, this area could not feasibly be avoided by development on this alternative site. Therefore, this alternative would permanently convert more prime soils to non-agricultural use than the Agricultural Residential Cluster Subdivision. As a result, impacts related to the conversion of prime soil areas would be greater when compared to the proposed Agricultural Residential Cluster Subdivision. In addition, as with the proposed Agricultural Residential Cluster Subdivision, this alternative would significantly fragment a grazing unit.

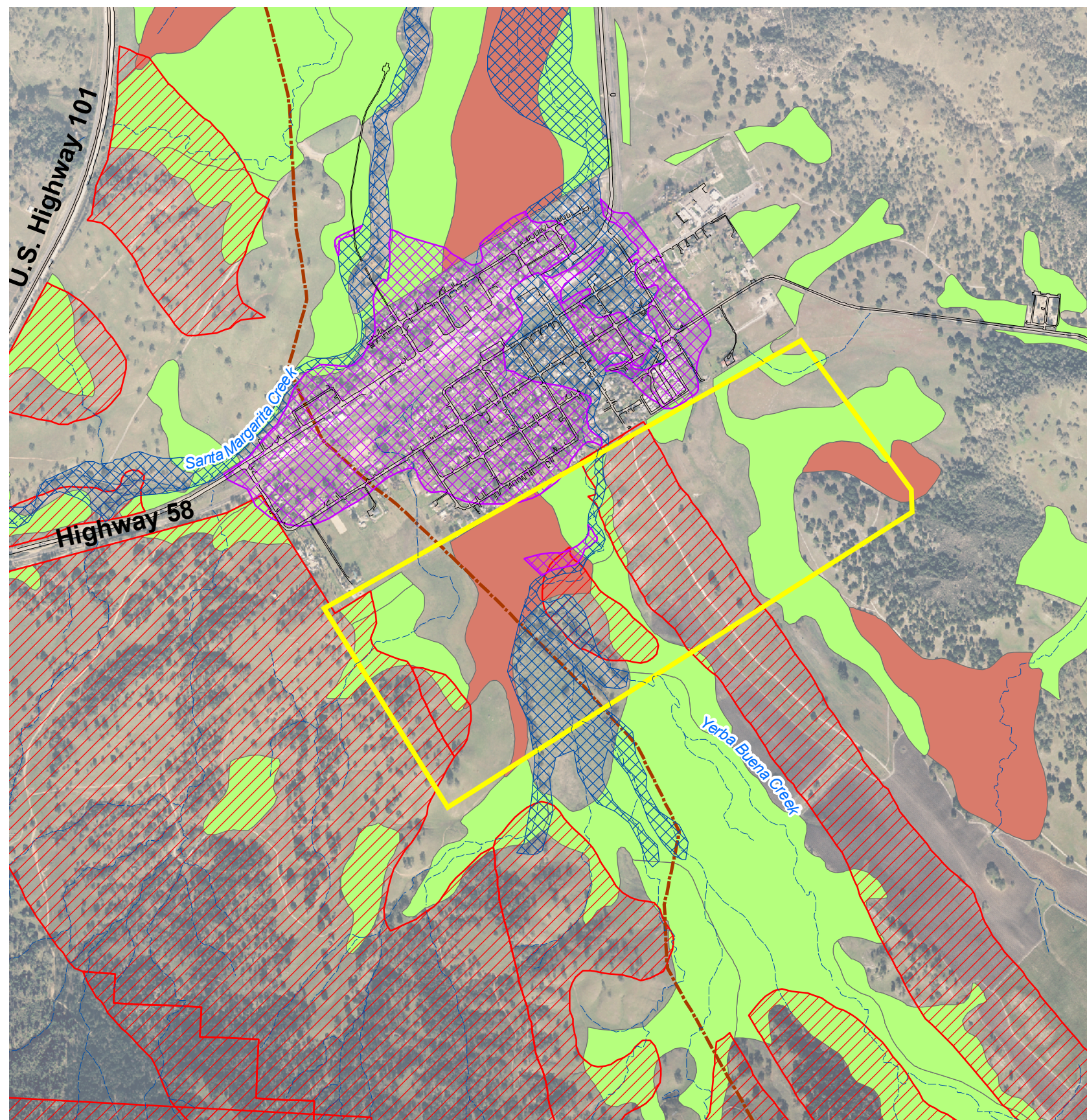











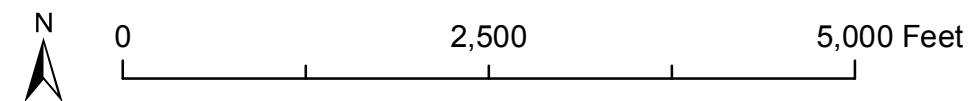
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-  NACIMIENTO FAULT ZONE
-  REVISED CLUSTER LOCATION 2: SOUTH OF COMMUNITY
-  100-YEAR FEMA FLOODPLAIN
-  500-YEAR FEMA FLOODPLAIN
-  HIGH LANDSLIDE POTENTIAL
-  PRIME AGRICULTURAL SOILS IF IRRIGATED
-  PRIME AGRICULTURAL SOILS REGARDLESS OF IRRIGATION



Alternative 5:  
Revised Cluster Location 2:  
South of Community





However, because lots would be relocated adjacent to the community of Santa Margarita, and away from existing vineyards in the southern portion of the Ranch property, fewer lots would be located adjacent to existing agricultural operations. As a result, conflicts between urban and agricultural uses would be incrementally reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

Overall, the Revised Cluster Location 2 Alternative would result in greater impacts to prime soils and grazing units and reduced impacts to agricultural conflicts compared to the proposed Agricultural Residential Cluster Subdivision.

*Air Quality.* This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). As a result, air contaminant emissions associated with vehicle use would be the same as the proposed Agricultural Residential Cluster Subdivision. In addition, because this alternative would accommodate the same number residential units, long term emissions associated with electricity and natural gas usage would be identical. Grading- and construction-related emissions and odor nuisance impacts would also be similar under this alternative.

The Agricultural Residential Cluster Subdivision is potentially inconsistent with San Luis Obispo APCD's 2001 Clean Air Plan (CAP) because it does not include sufficient Transportation Control Measures (TCMs) and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. The Revised Cluster Location 2 Alternative would similarly exclude sufficient TCMs and would similarly increase trip lengths in the vicinity. In addition, because this alternative would generate the same amount of average daily vehicle trips, the rate of increase in vehicle trips and miles traveled would be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to CAP consistency would be similar under the Revised Cluster Location 2 Alternative.

*Biological Resources.* This alternative would relocate the Agricultural Residential Cluster Subdivision south of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. As shown in Figure 4.3-2 in Section 4.3, *Biological Resources*, this area is primarily composed of California annual grassland, emergent wetland, seasonal pool, and riparian/riverine habitat types. Since the same number of units would be constructed, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, direct impacts to California annual grassland, emergent wetland, and riparian/riverine habitat types would be greater than the proposed Agricultural Residential Cluster Subdivision. However, because valley oak woodland, native perennial grassland, central (Lucian) sage scrub, chamise chaparral, blue oak woodland, coast live oak woodland do not occur in this area, impacts to these habitat types would be eliminated. In addition, the San Luis Obispo Mariposa Lily, a CNPS List 1B plant species, does not occur in this alternative location. As a result, impacts to this special-status plant species would be reduced.

The proposed Agricultural Residential Cluster Subdivision would result in potentially significant impacts to Vernal Pool Fairy Shrimp (VPFS), a Federally Threatened species, because of direct and indirect impacts to seasonal pools. As shown in Figure 4.3-3 in Section 4.3,



*Biological Resources*, Seasonal Pool 1 (SP 1) is located within this alternate location. Therefore, impacts to seasonal pools and VPFS would be similar to the proposed Agricultural Residential Cluster Subdivision.

The federally threatened South/Central California Coast Steelhead (Steelhead) is known to occur within Santa Margarita, Trout, and Rinconada Creeks. Because the Revised Cluster Location 2 Alternative would not be located near one of these creeks, impacts to Steelhead would be reduced compared to the proposed Agricultural Residential Cluster Subdivision. However, development under this alternative would occur near Yerba Buena Creek. The federally threatened California red-legged frog (CRLF) has been observed within this creek. Therefore, impacts to CRLF would be similarly significant but mitigable.

Because this alternative would be located adjacent to the community of Santa Margarita, impacts related to the reduction of migration corridors for special-status and common wildlife species would also be reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

Overall, biological resource impacts would be both better and worse when compared to the proposed Agricultural Residential Cluster Subdivision.

*Cultural Resources*. Thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site (refer to Section 4.4, *Cultural Resources*). This alternative would relocate development adjacent to the community of Santa Margarita and would therefore avoid some of these resources. However, other prehistoric and historical archaeological sites are located within the revised cluster location. Although development in this area would avoid some of the resources on the proposed Agricultural Residential Cluster Subdivision site, it would nonetheless impact cultural resources on the revised location. As a result, impacts related to damage or destruction of prehistoric and historical archaeological sites, and disruption of their setting and feeling, would be similar to the proposed Agricultural Residential Cluster Subdivision.

Since the same number of units would be constructed, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. This alternative would therefore result in similar impacts related to disturbing previously unidentified buried archeological deposits or human remains. Because this alternative would generate the same number of new residents, there would be a similar likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites. Overall, impacts related to identified resources, previously unidentified buried archeological deposits or human remains, and relic collecting and/or vandalism under this alternative would be similar to the proposed Agricultural Residential Cluster Subdivision.

It should be noted that because this alternative would continue the existing grid of the community of Santa Margarita, it would be compatible with the historical layout and design of the community. Impacts related to the alteration of cultural landscapes would therefore be reduced under this alternative when compared to the proposed Agricultural Residential Cluster Subdivision.



*Drainage, Erosion and Sedimentation.* This alternative would result in the same number residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to erosion, sedimentation, and pollutant discharges during construction would be similar to the proposed Agricultural Residential Cluster Subdivision. The amount of paved areas with this alternative would also be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, permanent increases in surface runoff and accelerated erosion, as well as storm water transport of pollutants, bacteria, and sediment into downstream facilities, would be similar under the Revised Cluster Location 2 Alternative.

Portions of the Agricultural Residential Cluster Subdivision are located in a 100-year flood zone. However, no habitable structures would be located in these areas under the proposed Agricultural Residential Cluster Subdivision. Portions of the Revised Cluster Location 2 are similarly located in a 100-year flood zone (refer to Figure 6-3). However, this alternative could place habitable structures in this area. Therefore, impacts related to flood hazard exposure would be greater when compared to the proposed Agricultural Residential Cluster Subdivision.

Overall, impacts related to drainage, erosion and sedimentation would be similar to the proposed Agricultural Residential Cluster Subdivision, while impacts related to flood hazard exposure would be greater than the proposed Agricultural Residential Cluster Subdivision.

*Geologic Stability.* This alternative would relocate the Agricultural Residential Cluster Subdivision south of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. The Revised Cluster Location 2 Alternative would accommodate the same number residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, it would expose the same number of units and residents to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch. However, under this alternative, lots could be located directly atop the Nacimiento Fault Zone, which bisects the alternative site (refer to Figure 6-3). As discussed in Section 4.6, *Geologic Stability*, surface rupture hazard on the Agricultural Residential Cluster Subdivision site would be unlikely. As a result, impacts related to surface rupture would be greater when compared to the proposed Agricultural Residential Cluster Subdivision.

The previous location for the Agricultural Residential Cluster Subdivision was subject to soil-related hazards (expansive soils, erosive soils and settlement), moderate landslide potential, and high liquefaction potential (refer to Figures 4.6-3, 4.6-5 and 4.6-6 in Section 4.6, *Geologic Stability*). The area immediately south of the community of Santa Margarita is subject to similar soil-related hazards (expansive soils, erosive soils and settlement), high landslide potential, and high liquefaction potential. Because the same number of units would be exposed to similar hazards, this alternative would result in similar soil-related hazards and liquefaction impacts as the proposed Agricultural Residential Cluster Subdivision.

Overall, this alternative would result in greater impacts related to surface rupture and similar impacts related to groundshaking, soil-related hazards, and landslide potential when compared to the proposed Agricultural Residential Cluster Subdivision.



*Land Use.* This alternative would relocate the Agricultural Residential Cluster Subdivision south of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. Since this alternative would locate residential units immediately adjacent to the existing community, the exposure of existing sensitive receptors to construction noise, air quality, and visual impacts would be greater. However, because development potential under this alternative would be similar to the proposed Agricultural Residential Cluster Subdivision, this alternative would convert a similar amount open land as the proposed Agricultural Residential Cluster Subdivision. Therefore, land use impacts would be both greater than and similar to the proposed Agricultural Residential Cluster Subdivision.

*Noise.* This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby major roadways would be similar to the Agricultural Residential Cluster Subdivision. However, because this alternative would locate residential units closer to the private airstrip, private railroad, and Union Pacific Railroad (UPRR), exposure to periodic high noise levels would be greater under this alternative. In addition, since this alternative would locate residential units immediately adjacent to the existing community, the exposure of existing sensitive receptors to construction noise would be greater.

Overall, noise impacts would be both similar to and worse than the proposed Agricultural Residential Cluster Subdivision.

*Public Safety.* This alternative would relocate the Agricultural Residential Cluster Subdivision south of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. As discussed in Section 4.9, *Public Safety*, site disturbance associated with the proposed Agricultural Residential Cluster Subdivision would not occur in an area of historical croplands. Due to its proximity to the proposed Agricultural Residential Cluster Subdivision site, site disturbance associated with the Revised Cluster Location 2 Alternative would similarly not occur in an area of historical croplands. Therefore, impacts would be similar when compared to the Agricultural Residential Cluster Subdivision.

Because this alternative would locate residential units closer to the private airstrip, State Route 58, and the UPRR, exposure of people to exposure to contaminants from highway and railway accidents that involve hazardous materials, and hazards related to potential aircraft accidents would be increased when compared to the proposed Agricultural Residential Cluster Subdivision. However, because this alternative would convert a similar amount open land as the proposed Agricultural Residential Cluster Subdivision, impacts related to valley fever exposure would be similar.

Overall, the Revised Cluster Location 2 Alternative would result in public safety impacts both similar to and greater than the proposed Agricultural Residential Cluster Subdivision.

*Public Services.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Consequently, the need for law enforcement, fire protection, school, solid waste, and library services would be similar. Therefore, this alternative is considered to have similar public service impacts compared to the proposed Agricultural Residential Cluster Subdivision.



*Recreation.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Consequently, the need for recreational facilities would be similar. Therefore, this alternative is considered to have similar impacts related to parkland demand when compared to the proposed Agricultural Residential Cluster Subdivision.

*Transportation and Circulation.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Therefore, this alternative would generate the same number of average daily trips. However, additional traffic would be added to side streets in the community of Santa Margarita. According to the traffic study prepared for the proposed Agricultural Residential Cluster Subdivision by Fehr & Peers (October 2006), this would result in additional congestion and may require intersection improvements such as additional turn lanes or traffic signals. In addition, pedestrian and bicycle conflicts would increase in the community of Santa Margarita, thereby requiring implementation of the improvements as outlined in the Santa Margarita Design Plan. Transit demand for services would also increase compared to the Agricultural Residential Cluster Subdivision.

Overall, traffic impacts would be worse than the proposed Agricultural Residential Cluster Subdivision.

*Visual Resources.* This alternative would relocate the Agricultural Residential Cluster Subdivision south of and immediately adjacent to the community of Santa Margarita, continuing the existing community grid pattern. The placement of a residential cluster immediately adjacent to the existing community would result in greater visibility of the residential uses from viewpoints on the south side of the community, and could block scenic views from existing residential properties. However, the relatively flat topography of this alternative site would reduce the visibility of residential units when compared to the hillside development included with the proposed Agricultural Residential Cluster Subdivision. As a result, impacts related to the alteration of visual character under this alternative would be both better and worse when compared to the proposed Agricultural Residential Cluster Subdivision.

*Water and Wastewater.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Therefore, this alternative would result in the same net consumptive water use. As a result, impacts related to groundwater use and overdraft of the aquifer system would be similar to the proposed Agricultural Residential Cluster Subdivision. This alternative assumes that sewer would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision. Impacts related to improper disposal field design, on-site recharge of water softeners and household wastes and septage load would therefore be similar to the proposed Agricultural Residential Cluster Subdivision.





## 6.6 ALTERNATIVE 6: Revised Cluster Location 3: Southwest of Community

### 6.6.1 Description

This alternative assumes that the proposed Agricultural Residential Cluster Subdivision is relocated south of El Camino Real and west of the community of Santa Margarita (refer to Figure 6-4). Under the proposed Agricultural Residential Cluster Subdivision and Future Development Program, this area is envisioned for future development of a residential village, private golf course, guest ranch, lodge, restaurant, and winery. Lots would be arranged in a generally north-south trending configuration.

The permanent agricultural conservation easements (ACE) would remain southwest of the community of Santa Margarita, as proposed. Access to the alternative site would be provided via extensions of existing roadways, including Wilhelmina Avenue, in the southwestern portion of the community of Santa Margarita. Water service would be provided by the Santa Margarita Mutual Water Company and sewer would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision. Water tanks would be relocated from the southern portion of the Agricultural Residential Cluster Subdivision to a hilltop within revised cluster location 3. Figure 6-4 illustrates this alternate location.

### 6.6.2 Impact Analysis

*Agricultural Resources.* This alternative would relocate the Agricultural Residential Cluster Subdivision south of El Camino Real and west of the community of Santa Margarita. As discussed in Section 4.1, *Agricultural Resources*, the proposed Agricultural Residential Cluster Subdivision would permanently convert 21.2 acres containing prime soils to non-agricultural uses and would permanently compromise the viability of a 676.7-acre grazing unit. As shown in Figure 6-4, no prime soils occur in Revised Cluster Location 3. As a result, impacts related to the conversion of prime soil areas would be eliminated. However, as with the proposed Agricultural Residential Cluster Subdivision, this alternative would significantly fragment a grazing unit. Therefore, impacts related to grazing unit fragmentation would be similar to the proposed Agricultural Residential Cluster Subdivision.

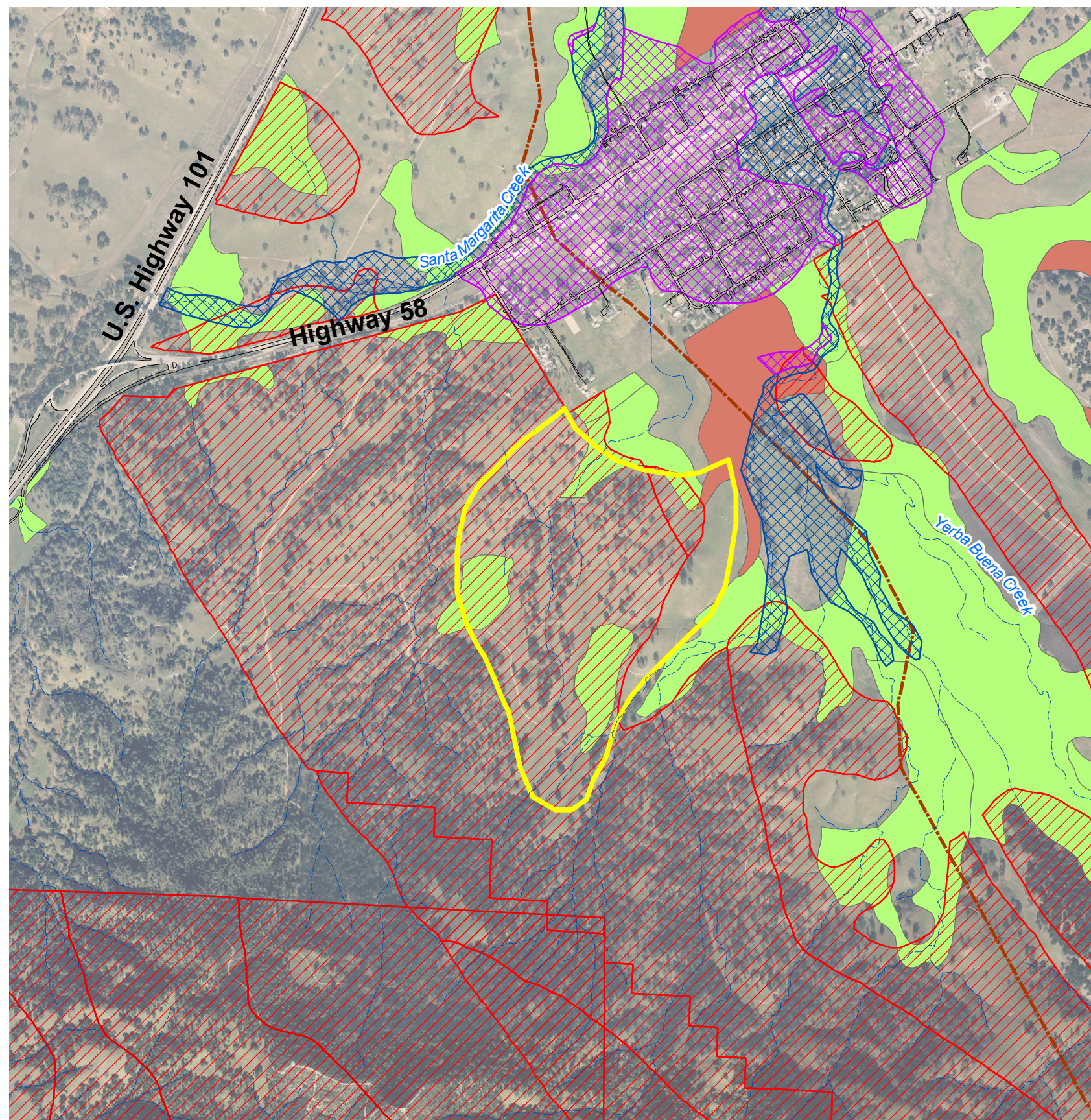
Because lots would be relocated away from existing vineyards in the southern portion of the Ranch property, fewer lots would be located adjacent to existing agricultural operations. As a result, conflicts between urban and agricultural uses would be incrementally reduced when compared to the proposed Agricultural Residential Cluster Subdivision.








Overall, the Revised Cluster Location 3 Alternative would result in similar impacts to grazing units and reduced impacts to prime soils and agricultural conflicts compared to the proposed Agricultural Residential Cluster Subdivision.

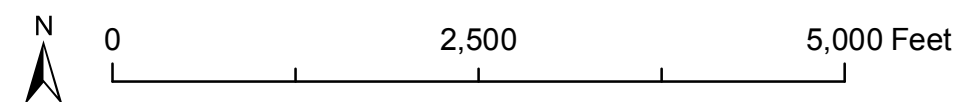
*Air Quality.* This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). As a result, air contaminant emissions associated with vehicle use would be the same as the proposed Agricultural Residential Cluster Subdivision. In addition, because







-  NACIMIENTO FAULT ZONE
-  REVISED CLUSTER LOCATION 3: SOUTHWEST OF COMMUNITY
-  100-YEAR FEMA FLOODPLAIN
-  500-YEAR FEMA FLOODPLAIN
-  HIGH LANDSLIDE POTENTIAL
-  PRIME AGRICULTURAL SOILS IF IRRIGATED
-  PRIME AGRICULTURAL SOILS REGARDLESS OF IRRIGATION



Alternative 6:  
 Revised Cluster Location 3:  
 Southwest of Community





this alternative would accommodate the same number residential units, long term emissions associated with electricity and natural gas usage would be identical. Grading- and construction-related emissions and odor nuisance impacts would also be similar under this alternative.

The Agricultural Residential Cluster Subdivision is potentially inconsistent with San Luis Obispo APCD's 2001 *Clean Air Plan* (CAP) because it does not include sufficient Transportation Control Measures (TCMs) and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. The Revised Cluster Location 3 Alternative would similarly exclude sufficient TCMs and would similarly increase trip lengths in the vicinity. In addition, because this alternative would generate the same amount of average daily vehicle trips, the rate of increase in vehicle trips and miles traveled would be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to CAP consistency would be similar under the Revised Cluster Location 3 Alternative.

*Biological Resources.* This alternative would relocate the Agricultural Residential Cluster Subdivision south of El Camino Real and west of the community of Santa Margarita. As shown in Figure 4.3-2 in Section 4.3, *Biological Resources*, this area is primarily composed of blue oak woodland and California annual grassland habitat types. Since the same number of units would be constructed, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, direct impacts to blue oak woodland and California annual grassland habitat types would be greater than the proposed Agricultural Residential Cluster Subdivision. However, because native perennial grassland, central (Lucian) sage scrub, chamise chaparral, coast live oak woodland and valley oak woodland do not occur in this area, impacts to these habitat types would be eliminated. In addition, the San Luis Obispo Mariposa Lily, a CNPS List 1B plant species, does not occur in this alternative location. As a result, impacts to this special-status plant species would be reduced.

The proposed Agricultural Residential Cluster Subdivision would result in potentially significant impacts to Vernal Pool Fairy Shrimp (VPFS), a Federally Threatened species, because of direct and indirect impacts to seasonal pools. As shown in Figure 4.3-3 in Section 4.3, *Biological Resources*, no seasonal pools are located within this alternate location. Therefore, impacts to seasonal pools and VPFS would be reduced when compared to the proposed Agricultural Residential Cluster Subdivision. Similarly, because this alternative would not be located near any on-site creeks, direct take of the federally-threatened South/Central California Coast Steelhead (Steelhead) and California red-legged frogs (CRLF) would be reduced compared to the Agricultural Residential Cluster Subdivision.

Because this alternative would be located closer to the community of Santa Margarita and developed in a more compact area, impacts related to the reduction of migration corridors for special-status and common wildlife species would also be reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

Overall, biological resource impacts would be both better and worse than the proposed Agricultural Residential Cluster Subdivision.



Cultural Resources. Thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site (refer to Section 4.4, *Cultural Resources*). This alternative would relocate development southwest to the community of Santa Margarita and would therefore avoid some of these resources. However, other prehistoric and historical archaeological sites are located within the revised cluster location. Although development in this area would avoid some of the resources on the proposed Agricultural Residential Cluster Subdivision site, it would nonetheless impact cultural resources on the revised location. As a result, impacts related to damage or destruction of prehistoric and historical archaeological sites, and disruption of their setting and feeling, would be similar to the proposed Agricultural Residential Cluster Subdivision.

Since the same number of units would be constructed, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. This alternative would therefore result in similar impacts related to disturbing previously unidentified buried archeological deposits or human remains. Because this alternative would generate the same number of new residents, there would be a similar likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites. Overall, impacts related to identified resources, previously unidentified buried archeological deposits or human remains, and relic collecting and/or vandalism under this alternative would be similar to the proposed Agricultural Residential Cluster Subdivision.

Drainage, Erosion and Sedimentation. This alternative would result in the same number residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to erosion, sedimentation, and pollutant discharges during construction would be similar to the proposed Agricultural Residential Cluster Subdivision. The amount of paved areas under this alternative would also be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, permanent increases in surface runoff and accelerated erosion, as well as storm water transport of pollutants, bacteria, and sediment into downstream facilities, would be similar under the Revised Cluster Location 3 Alternative.

Portions of the Agricultural Residential Cluster Subdivision are located in a 100-year flood zone. However, no habitable structures would be located in these areas under the proposed Agricultural Residential Cluster Subdivision. Revised Cluster Location 3 avoids flood zones altogether (refer to Figure 6-4). Therefore, impacts related to flood hazard exposure would be reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

Overall, impacts related to drainage, erosion and sedimentation would be similar to the proposed Agricultural Residential Cluster Subdivision, while impacts related to flood hazard exposure would be reduced.

Geologic Stability. This alternative would relocate the Agricultural Residential Cluster Subdivision south of El Camino Real and west of the community of Santa Margarita. The Revised Cluster Location 3 Alternative would accommodate the same number residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, it would expose the same number of units and residents to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch.



The previous location for the Agricultural Residential Cluster Subdivision was subject to soil-related hazards (expansive soils, erosive soils and settlement), moderate landslide potential, and high liquefaction potential (refer to Figures 4.6-3, 4.6-5 and 4.6-6 in Section 4.6, *Geologic Stability*). The area immediately south of the community of Santa Margarita is subject to similar soil-related hazards (expansive soils, erosive soils and settlement), high landslide potential, and high liquefaction potential. Because the same number of units would be exposed to similar hazards, this alternative would result in similar soil-related hazards and liquefaction impacts as the proposed Agricultural Residential Cluster Subdivision.

Overall, this alternative would result in similar geologic stability impacts when compared to the proposed Agricultural Residential Cluster Subdivision.

Land Use. This alternative would relocate the Agricultural Residential Cluster Subdivision south of El Camino Real and west of the community of Santa Margarita. Similar to the proposed Agricultural Residential Cluster Subdivision, this site would be located a sufficient distance from existing residential uses to preclude significant temporary noise, air quality and visual impacts from construction. In addition, because development potential under this alternative would be similar to the proposed Agricultural Residential Cluster Subdivision, this alternative would convert a similar amount open land as the proposed Agricultural Residential Cluster Subdivision. Therefore, land use impacts would be similar to the proposed Agricultural Residential Cluster Subdivision.

Noise. This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby major roadways would be similar to the Agricultural Residential Cluster Subdivision. Due to the alteration in trip distribution patterns, traffic noise impacts on Wilhelmina Avenue would be increased, while traffic noise impacts on Estrada Avenue would be reduced, when compared to the proposed Agricultural Residential Cluster Subdivision. Because this alternative would locate residential units closer to the private airstrip, private railroad, and Union Pacific Railroad (UPRR), exposure to periodic high noise levels would be greater under this alternative. This alternative would generate similar construction-related noise impacts, since the area of disturbance and number of units would be the same.

Overall, noise impacts would be both similar to and worse than the proposed Agricultural Residential Cluster Subdivision.

Public Safety. This alternative would relocate the Agricultural Residential Cluster Subdivision south of El Camino Real and west of the community of Santa Margarita. As discussed in Section 4.9, *Public Safety*, site disturbance associated with the proposed Agricultural Residential Cluster Subdivision would not occur in an area of historical croplands. Due to its proximity to the proposed Agricultural Residential Cluster Subdivision site, site disturbance associated with the Revised Cluster Location 3 Alternative would similarly not occur in an area of historical croplands. Therefore, impacts would be similar when compared to the Agricultural Residential Cluster Subdivision.



Because this alternative would locate residential units closer to the private airstrip, State Route 58, and the UPRR, exposure of people to exposure to contaminants from highway and railway accidents that involve hazardous materials, and hazards related to potential aircraft accidents would be increased when compared to the proposed Agricultural Residential Cluster Subdivision. However, because this alternative would convert a similar amount open land as the proposed Agricultural Residential Cluster Subdivision, impacts related to valley fever exposure would be similar.

Overall, the Revised Cluster Location 3 Alternative would result in public safety impacts both similar to and greater than the proposed Agricultural Residential Cluster Subdivision.

*Public Services.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Consequently, the need for law enforcement, fire protection, school, solid waste, and library services would be similar. Therefore, this alternative is considered to have similar public service impacts compared to the proposed Agricultural Residential Cluster Subdivision.

*Recreation.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Consequently, the need for recreational facilities would be similar. Therefore, this alternative is considered to have similar impacts related to parkland demand when compared to the proposed Agricultural Residential Cluster Subdivision.

*Transportation and Circulation.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Therefore, this alternative would generate the same number of average daily trips. According to the traffic study prepared for the proposed Agricultural Residential Cluster Subdivision by Fehr & Peers (October 2006), this alternative would result in similar traffic impacts on local roadway and highway segments and intersections as the proposed Agricultural Residential Cluster Subdivision. Impacts related to access, railroad crossings, and pedestrian, bicycle and transit demand would also be similar.

*Visual Resources.* This alternative would relocate the Agricultural Residential Cluster Subdivision south of El Camino Real and west of the community of Santa Margarita. Although more homes may be visible from roadways within the community of Santa Margarita and State Route (SR) 58 west of the community of Santa Margarita, no development would be visible from public viewsheds south of the community, including Estrada Avenue, State Route 58 and West Pozo Road (refer to Section 4.13, *Visual Resources*). Therefore, overall visual impacts would be both better and worse under the Revised Cluster Location 3 Alternative.

*Water and Wastewater.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Therefore, this alternative would result in the same net consumptive water use. As a result, impacts related to groundwater use and overdraft of the aquifer system would be similar to the proposed Agricultural Residential Cluster Subdivision. This alternative assumes that sewer would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision. Impacts related to improper disposal field design, on-site recharge of water softeners and household wastes,



and septage load would therefore be similar to the proposed Agricultural Residential Cluster Subdivision.

## **6.7 ALTERNATIVE 7: Tighter Cluster Alternative**

### **6.7.1 Description**

This alternative analyzes an alternate site plan for the proposed Agricultural Residential Cluster Subdivision. The overall development potential of this alternative would be the same as for the proposed Agricultural Residential Cluster Subdivision. However, this alternative would reconfigure the 111 clustered lots so as to reduce to the overall project footprint. Under this alternative, all Lots (excluding one ranch headquarters unit located on Parcel 42) would be clustered in the remainder parcel, north of the proposed Agricultural Residential Cluster Subdivision and south of the community of Santa Margarita, and in the northernmost portion of the Agricultural Residential Cluster Subdivision site (refer to Figure 6-5). All lots would be one acre in size, and would be located adjacent to one another so as to minimize the overall project footprint. Access would be provided via one existing driveway and one new driveway from West Pozo Road, as proposed. However, internal circulation would be redesigned to accommodate tighter clustering (refer to Figure 6-5). The permanent agricultural conservation easements (ACE) would remain southwest of the community of Santa Margarita, as proposed. Water service would be provided by the Santa Margarita Mutual Water Company and sewer would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision.

Although the amount of site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision, the overall project footprint would be reduced by approximately 78%. Since the general configuration and clustering of the individual lots would be altered, this alternative would require County approval for redesign elements.

### **6.7.2 Impact Analysis**

*Agricultural Resources.* Although this alternative would result in the same number of dwelling units as the proposed Agricultural Residential Cluster Subdivision, the overall project footprint would be reduced by approximately 78%. As a result, impacts related to fragmentation of agricultural areas would be less than the proposed Agricultural Residential Cluster Subdivision. In addition, because lots would be configured in a more compact manner, with the majority of lots located on the interior of the cluster, fewer lots would be located adjacent to existing agricultural operations. As a result, conflicts between urban and agricultural uses would be incrementally reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

However, this alternative would result in the direct conversion of approximately 46.8 acres of prime soils (refer to Figure 6-5 in the Draft EIR and Figure 2-2 in this Revised EIR document). The Agricultural Residential Cluster Subdivision would convert approximately 21.2 acres of prime soils. Therefore, Alternative 7 would result in greater impacts related to direct conversion of prime soils than the Agricultural Residential Cluster Subdivision.





Overall, this alternative would result in both better and worse impacts related to agricultural resources when compared to the Agricultural Residential Cluster Subdivision.

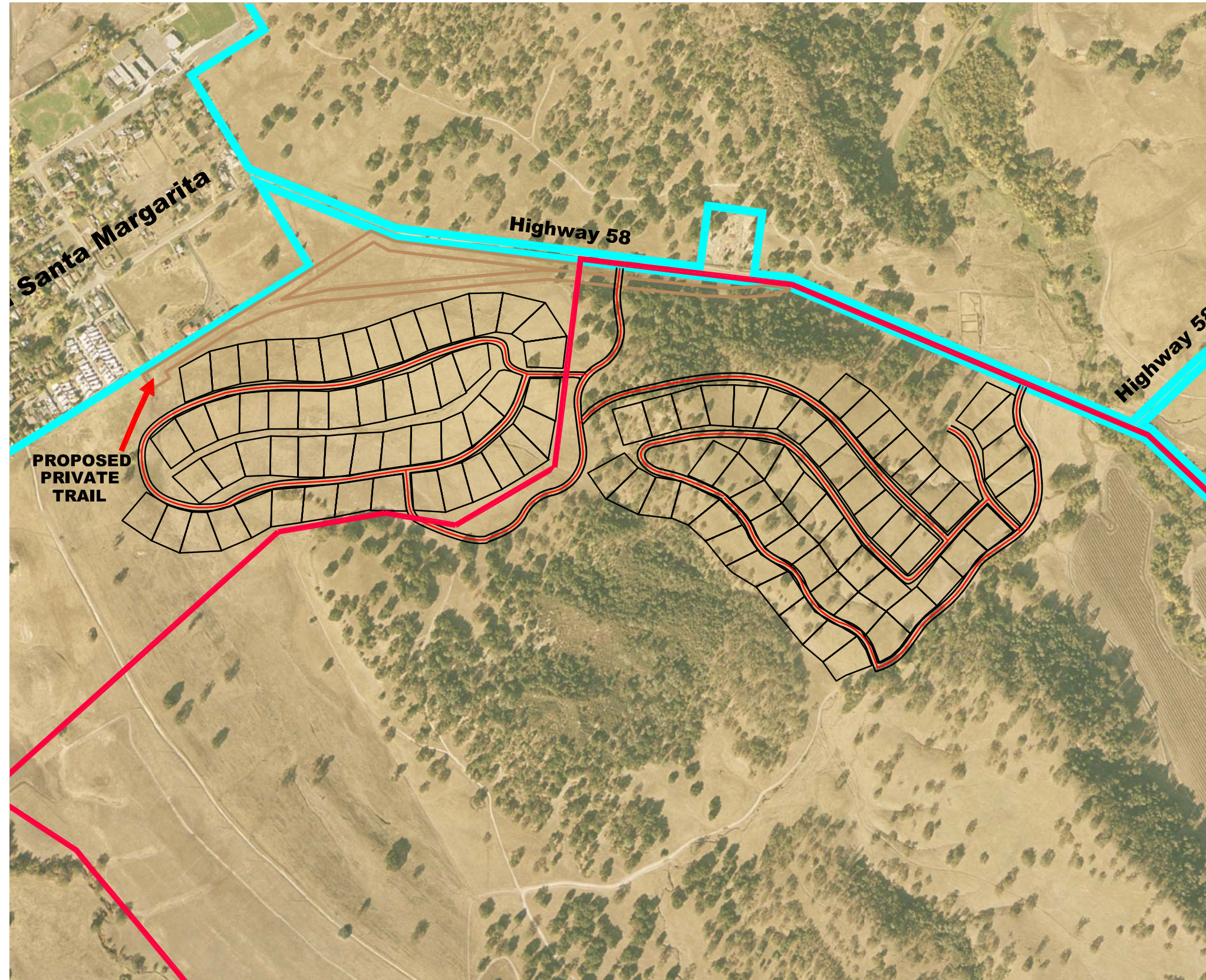
*Air Quality.* This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). As a result, air contaminant emissions associated with vehicle use would be the same as the proposed Agricultural Residential Cluster Subdivision. In addition, because this alternative would accommodate the same number residential units, long term emissions associated with electricity and natural gas usage would be identical. Grading- and construction-related emissions and odor nuisance impacts would also be similar because the same number of units would be constructed and the same number of septic tanks required.





The Agricultural Residential Cluster Subdivision is potentially inconsistent with San Luis Obispo APCD's 2001 Clean Air Plan (CAP) because it does not include sufficient Transportation Control Measures (TCMs) and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. The Tighter Cluster Alternative would similarly exclude sufficient TCMs and would similarly increase trip lengths in the vicinity. In addition, because this alternative would generate the same amount of average daily vehicle trips, the rate of increase in vehicle trips and miles traveled would be similar to the proposed Agricultural Residential Cluster Subdivision. However, the Tighter Cluster Alternative is located adjacent to the community of Santa Margarita, thereby promoting pedestrian transportation. In this way, it would be more consistent with the CAP than the Agricultural Residential Cluster Subdivision. Impacts related to CAP consistency would be therefore be reduced under the Tighter Cluster Alternative, although this alternative would not be consistent with the CAP.

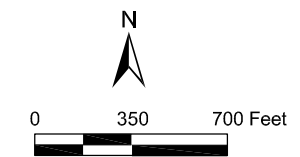
*Biological Resources.* Under the Tighter Cluster Alternative, Lots would be clustered in the remainder parcel and in the northernmost portion of the Agricultural Residential Cluster Subdivision site. As shown in Figures 4.3-2 and 4.3-3 in Section 4.3, Biological Resources, this area contains six natural plant communities and/or wildlife habitat types. The habitat types include California annual grassland, native perennial grassland, blue oak woodland, mixed oak woodland, emergent wetland, and/seasonal pool. The San Luis Obispo Mariposa Lily, a CNPS List 1B plant species, also occurs within the Tighter Cluster Alternative site, similar to the proposed Agricultural Residential Cluster Subdivision site as a whole. The Tighter Cluster Alternative would avoid several habitat types located on the proposed Agricultural Residential Cluster Subdivision site, including chamise chaparral, central (Lucian) coastal scrub, coast live oak woodland, ruderal, riparian/riverine, agriculture and valley oak woodland. Impacts to these habitat types would be reduced. However, the Tighter Cluster Alternative would place a dense residential development ovetop an area containing seasonal pool and emergent wetland habitat types. Because more of this habitat type would be directly converted, this alternative would have greater impacts to these sensitive habitats than the Agricultural Residential Cluster Subdivision. In addition, it is not known whether vernal pool fairy shrimp (VPFS) occupy the seasonal pool. Since protocol surveys for the VPFS have not been completed, they should be presumed present in suitable habitat within Seasonal Pool 1. Since this seasonal pool would be eliminated by the Tighter Cluster Alternative, impacts to VPFS would be greater or equivalent to those of the Agricultural Residential Cluster Subdivision.







-  TENTATIVE TRACT 2586 BOUNDARY
-  TIGHTER CLUSTER ALTERNATIVE LOT LINES
-  TIGHTER CLUSTER ALTERNATIVE ROADWAYS
-  RANCH PROPERTY BOUNDARY



Alternative 7:  
Tighter Cluster Alternative





only slightly reduced when compared to the proposed Agricultural Residential Cluster Subdivision. This alternative would result in slightly fewer impacts to Californian annual grassland and native perennial grassland. This alternative would result in fewer impacts related to habitat conversion, oak tree removal and San Luis Obispo Mariposa Lily removal when compared to the proposed Agricultural Residential Cluster Subdivision. The impacts to special-status animal species, including the California red-legged frog (CRLF), South/Central California Coast Steelhead (Steelhead), white-tailed kite, golden eagle, Cooper's hawk, sharp-shinned hawk, pallid bat, American badger, silvery legless lizard, and southwestern pond turtle, would be substantially reduced due to avoidance of occupied habitats and decreased fragmentation of habitats. Because development in the southern portion of the proposed Agricultural Residential Cluster Subdivision site would be eliminated, impacts related to the reduction of migration corridors for special-status and common wildlife species would also be reduced.

Overall, this alternative would result in reduced impacts related to many biological resources when compared to the proposed Agricultural Residential Cluster Subdivision, but greater impacts to wetland and seasonal pool habitats and potentially VPFS.

*Cultural Resources.* Thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site (refer to Section 4.4, *Cultural Resources*). Although this alternative would result in the same number of dwelling units as the proposed Agricultural Residential Cluster Subdivision, the overall project footprint would be reduced by approximately 78%. All development south of the proposed East Driveway would be eliminated. As a result, impacts related to damage or destruction of the important associations of these sites, and disruption of their setting and feeling, would be somewhat reduced compared to the Agricultural Residential Cluster Subdivision.

However, because the same number of units would be constructed, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. This alternative would therefore result in similar impacts related to disturbing previously unidentified buried archeological deposits or human remains. In addition, because this alternative would generate the same number of new residents, there would be a similar likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites.

Overall, this alternative would result in both similar and reduced impacts related to cultural resources when compared to the proposed Agricultural Residential Cluster Subdivision.

*Drainage, Erosion and Sedimentation.* Although the overall project footprint would be reduced under this alternative, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to erosion, sedimentation, and pollutant discharges during construction would be similar. The amount of paved areas under this alternative would be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, permanent increases in surface runoff and accelerated erosion, as well as storm water transport of pollutants, bacteria, and sediment into downstream facilities, would be similar under the Tighter Cluster Alternative.



As discussed in Section 4.5, *Drainage, Erosion and Sedimentation*, the eastern reaches of the proposed Agricultural Residential Cluster Subdivision site, just south of the east driveway, would be located within the flood zone associated with Trout Creek (refer to Figure 4.5-1). The Tighter Cluster Alternative would not be located in this area. Therefore, impacts related to flood hazard exposure would be reduced.

*Geologic Stability.* The Tighter Cluster Alternative would accommodate the same number residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, development under this alternative would expose the same number of units and residents to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch.

Under the Tighter Cluster Alternative, Lots would be clustered in the remainder parcel and in the northernmost portion of the Agricultural Residential Cluster Subdivision site. As discussed in Section 4.6, *Geologic Stability*, the northernmost portion of the Agricultural Residential Cluster Subdivision site is subject to soil-related hazards (expansive soils, erosive soils and settlement); moderate to high landslide potential; and moderate to high liquefaction potential (refer to Figures 4.6-3, 4.6-5 and 4.6-6, respectively) similar to the proposed Agricultural Residential Cluster Subdivision site as a whole. However, the remainder parcel contains fewer soil-related hazards and a lower landslide potential, thereby placing fewer lots in areas exposed to geologic hazards. As a result, this alternative would result in incrementally reduced geologic stability impacts as the proposed Agricultural Residential Cluster Subdivision.

Overall, impacts would be similar to and less than the proposed Agricultural Residential Cluster Subdivision.

*Land Use.* This alternative would result in the same number of dwelling units as the proposed Agricultural Residential Cluster Subdivision, although the overall project footprint would be reduced by approximately 78%. As a result, construction activity would result in similar temporary noise, air quality and visual impacts compared to the Agricultural Residential Cluster Subdivision. However, this alternative would not convert as much open land as the proposed Agricultural Residential Cluster Subdivision. Therefore, land use impacts would be both similar to and less than the proposed Agricultural Residential Cluster Subdivision.

*Noise.* This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby major roadways would be similar to the Agricultural Residential Cluster Subdivision. In addition, because this alternative would accommodate the same number of residential units, residents would similarly be exposed to nuisance noise generated by aircraft flying overhead or by passing trains on the Union Pacific Railroad (UPRR). This alternative would generate similar construction-related noise impacts, since the area of disturbance and number of units would be the same.

Overall, noise impacts would be similar to the proposed Agricultural Residential Cluster Subdivision.



Public Safety. Although the overall project footprint would be reduced under this alternative, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. As with the Agricultural Residential Cluster Subdivision, site disturbance would not occur in an area of historical croplands. Therefore, impacts related to residual agricultural chemicals would be similarly less than significant.

Since this alternative would accommodate the same number residential units as the proposed Agricultural Residential Cluster Subdivision, the same number of residents would be exposed to other public safety hazards overall. In addition to residual agricultural chemicals, this includes: exposure to contaminants from highway and railway accidents that involve hazardous materials; the use, transport, or storage of hazardous chemicals; traffic safety hazards due to conflicts between proposed uses and existing off-site mining operations and on-site agricultural operations; hazards related to potential aircraft accidents, and exposure to valley fever.

Under this alternative, Lots would be clustered in the remainder parcel and in the northernmost portion of the Agricultural Residential Cluster Subdivision site, while the water tanks would remain as proposed. Since no residences would be located near the water tanks under this alternative, potential public safety impacts associated with their failure would be eliminated.

Overall, the Tighter Cluster Alternative would result in impacts which are both similar and reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

Public Services. This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Consequently, the increase in demand for law enforcement, fire protection, school, solid waste, and library services would be identical. Therefore, this alternative is considered to have similar public service impacts compared to the proposed Agricultural Residential Cluster Subdivision.

Recreation. This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Consequently, the need for recreational facilities would be identical. Therefore, this alternative is considered to have similar impacts related to parkland demand when compared to the proposed Agricultural Residential Cluster Subdivision.

Transportation and Circulation. This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Therefore, this alternative would generate the same number of average daily trips. As a result, traffic impacts on local roadway and highway segments and intersections would be similar to the proposed Agricultural Residential Cluster Subdivision. Impacts related to access, railroad crossings, and pedestrian, bicycle and transit demand would also be similar.

Visual Resources. This alternative would result in the same number of dwelling units as the proposed Agricultural Residential Cluster Subdivision, although the overall project footprint would be reduced by approximately 78%. The overall visual effect of this alternative would be a more compact cluster. The tighter clustering of lots and the associated preservation of additional open space would maintain more of the rural character of the site than the proposed



Agricultural Residential Cluster Subdivision. However, the tighter cluster would also result in a more concentrated urbanized appearance within the rural context. Although more homes may be visible from roadways within the community of Santa Margarita due to the relocation of lots in the remainder parcel and in the northernmost portion of the Agricultural Residential Cluster Subdivision site, no development would be visible from locations south of the proposed East Driveway. As a result, impacts related to the alteration of visual character under this alternative would be both better and worse when compared to the proposed Agricultural Residential Cluster Subdivision.

*Water and Wastewater.* This alternative would result in the same number residential units as the Agricultural Residential Cluster Subdivision. Therefore, this alternative would result in the same net consumptive water use. As a result, impacts related to groundwater use and overdraft of the aquifer system would be the same as for the proposed Agricultural Residential Cluster Subdivision. This alternative assumes that sewer would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision. Impacts related to improper disposal field design, on-site recharge of water softeners and household wastes, and septage load would therefore be similar to the proposed Agricultural Residential Cluster Subdivision.

## **6.8 ALTERNATIVE 8: Alternative Future Development Program Scenario 1**

### **6.8.1 Description**

This alternative would eliminate Future Development Program land uses envisioned for location in the approximately 2,500 acre northeastern quadrant of the Ranch (north of SR 58 and east of El Camino Real). This would involve the elimination of the following uses: a 5-acre park and community pool, three 20,000 square foot worship centers, 50 units of work force housing, two wineries and two Ranch headquarters. Other Future Development Program land uses would remain. Figure 6-6 illustrates this alternative.

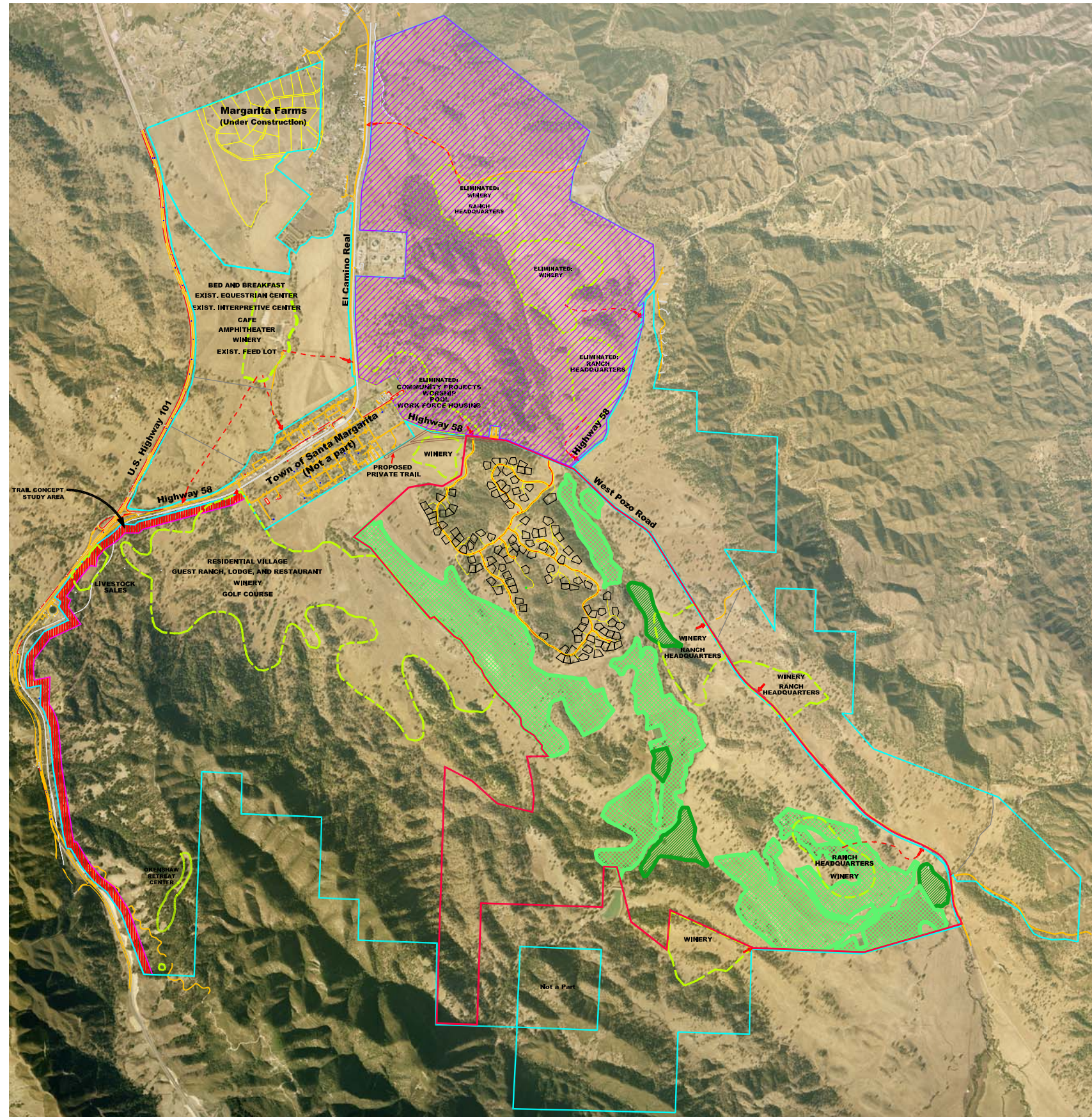
### **6.8.2 Impact Analysis**

*Agricultural Resources.* This alternative would eliminate the envisioned 5-acre park and community pool, three 20,000 square foot worship centers, 50 units of work force housing, two wineries and two Ranch headquarters. Therefore, this alternative would result in less overall site disturbance as the Future Development Program. Some prime soil and farmland of local importance occurs in this area (refer to Figures 4.1-2 and 4.1-3 in Section 4.1, *Agricultural Resources*). Because no site disturbance would occur in this location, impacts related to the conversion of prime soils areas and fragmentation of agricultural areas would be less than the Future Development Program. Similarly, because fewer land uses could be located near existing agricultural operations, conflicts between urban and agricultural uses would be somewhat reduced when compared to the Future Development Program.

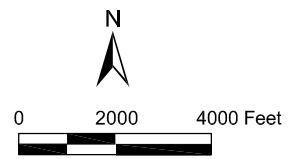
Overall, this alternative would reduce agricultural resource impacts when compared to the currently envisioned Future Development Program.







- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS
- AREA OF ELIMINATED FUTURE DEVELOPMENT PROGRAM LAND USES
- EXISTING VINEYARD
- AG IN PROGRESS
- ROADWAYS
- TRAIL CONCEPT STUDY AREA



Alternative 8:  
 Alternative Future Development Program  
 Scenario 1

Source: EDA Design Professionals, June 2006.

Figure 6-6





*Air Quality.* The Future Development Program is potentially inconsistent with San Luis Obispo APCD's 2001 Clean Air Plan (CAP) because it does not include sufficient Transportation Control Measures (TCMs) and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. Alternative Future Development Program Scenario 1 would similarly exclude sufficient TCMs and would similarly increase trip lengths in the vicinity. However, this alternative would generate 9% fewer average daily vehicle trips when compared to the Future Development Program (see *Transportation and Circulation* discussion below). Therefore, the rate of increase in vehicle trips and miles traveled would not be as extensive as the currently envisioned Future Development Program. Impacts related to CAP consistency would be reduced under Alternative Future Development Program Scenario 1. Odor nuisance impacts associated with wineries and septic systems would also be proportionately reduced under this alternative.

Overall, air quality impacts would be incrementally less under this alternative when compared to the currently envisioned Future Development Program.

*Biological Resources.* This alternative would eliminate the envisioned 5-acre park and community pool, three 20,000 square foot worship centers, 50 units of work force housing, two wineries and two Ranch headquarters located within northeastern quadrant of the Ranch (north of SR 58 and east of El Camino Real). As shown in Figure 4.3-3 in Section 4.3, *Biological Resources*, this area is primarily composed of California annual grassland, chamise chaparral, blue oak woodland, emergent wetland and riparian habitat types. Since development in this area would be eliminated, impacts to these habitat types would be reduced.

Similarly, impacts to special-status animal species, including the California red-legged frog (CRLF), South/Central California Coast Steelhead (Steelhead) and Vernal Pool Fairy Shrimp (VPFS) would be reduced due to the reduced amount of site disturbance. Because all development within the northeastern quadrant of the Ranch would be eliminated, impacts related to the reduction of migration corridors for special-status and common wildlife species would also be reduced.

*Cultural Resources.* Sixty-two prehistoric and historical archaeological sites and 29 isolates are recorded on the surveyed portions of the ranch (refer to Section 4.4, *Cultural Resources*). Twelve (12) prehistoric and historical archaeological sites are located within northeastern quadrant of the Ranch (north of SR 58 and east of El Camino Real). This alternative would eliminate Future Development Program land uses envisioned for location in this area, including: a 5-acre park and community pool, three 20,000 square foot worship centers, 50 units of work force housing, two wineries and two Ranch headquarters. As a result, impacts related to direct damage or destruction of several of these sites, and disruption of their setting and feeling, would be eliminated under Alternative Future Development Program Scenario 1.

In addition, because the area of disturbance would be reduced, this alternative would result in fewer impacts related to disturbing previously unidentified buried archeological deposits or human remains. In addition, because this alternative would generate fewer new residents, there would be less likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites.



Overall, because less area would be developed under this alternative, fewer cultural resources impacts would result compared to the currently envisioned Future Development Program.

Drainage, Erosion and Sedimentation. This alternative would eliminate the envisioned 5-acre park and community pool, three 20,000 square foot worship centers, 50 units of work force housing, two wineries and two Ranch headquarters. Therefore, impacts related to erosion, sedimentation, and pollutant discharges during construction would be reduced. In addition, because the amount of paved areas would be reduced, permanent increases in surface runoff and accelerated erosion would be reduced compared to the Future Development Program. Storm water transport of pollutants, bacteria, and sediment into downstream facilities would also be reduced.

Alternative Future Development Program Scenario 1 eliminates Future Development Program land uses that could otherwise be placed within the 100-year flood zone associated with Trout Creek (refer to Figure 4.5-1 in Section 4.5, *Drainage, Erosion and Sedimentation*). Therefore, impacts related to flood hazard exposure would be reduced.

Overall, drainage, erosion, sedimentation and flood hazard impacts would be less than those expected under the currently envisioned Future Development Program.

Geologic Stability. The Rinconada Fault is located approximately 2,100 feet east of the proposed Agricultural Residential Cluster Subdivision development, running along the eastern edge of the Ranch property. Land uses envisioned under the Future Development Program for this area include four wineries and four Ranch headquarters (refer to Figure 4.6-4 in Section 4.6, *Geologic Stability*). Alternative Future Development Program Scenario 1 would eliminate two wineries and two Ranch headquarters located in the northeastern quadrant of the Ranch property. Therefore, fault rupture hazards would be reduced compared to the currently envisioned Future Development Program. Similarly, because this alternative would eliminate the envisioned 5-acre park and community pool, three worship centers, 50 units of work force housing, two wineries and two Ranch headquarters, development under this alternative would expose fewer units and residents to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch.

This alternative would eliminate Future Development Program land uses envisioned for location in the approximately 2,500 acre northeastern quadrant of the Ranch (north of SR 58 and east of El Camino Real). As discussed in Section 4.6, *Geologic Stability*, this area is subject to soil-related hazards (expansive soils, erosive soils and settlement); moderate to high landslide potential; and moderate to high liquefaction potential (refer to Figures 4.6-3, 4.6-5 and 4.6-6, respectively). Because Alternative Future Development Program Scenario 1 would exclude development in this area, it would incrementally reduce impacts when compared to the currently envisioned Future Development Program.

Overall, geologic stability impacts would be reduced under this alternative, compared to the currently envisioned Future Development Program.

Land Use. This alternative would eliminate Future Development Program land uses envisioned for location in the approximately 2,500 acre northeastern quadrant of the Ranch (north of SR 58 and east of El Camino Real), including: a 5-acre park and community pool, three 20,000 square foot



worship centers, 50 units of work force housing, two wineries and two Ranch headquarters. As a result, the reduced construction activity would result in fewer temporary noise, air quality and visual impacts compared to the Future Development Program. In addition, this alternative would not convert as much open land as the currently envisioned Future Development Program. Therefore, land use impacts would be reduced under Alternative Future Development Program Scenario 1.

*Noise.* This alternative would generate 9% fewer average daily vehicle trips when compared to the Future Development Program (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby major roadways would be incrementally reduced. In addition, because this alternative would accommodate fewer residential units and other occupied structures, fewer residents and site occupants would be exposed to nuisance noise generated by aircraft flying overhead or by passing trains on the Union Pacific Railroad (UPRR). Similarly, this alternative would generate fewer construction-related noise impacts, since the area of disturbance and number of units would be reduced.

*Public Safety.* The historical use of portions of the Santa Margarita Ranch for agricultural production may have resulted in undocumented residual quantities of presently-banned agricultural chemicals. This alternative would eliminate Future Development Program land uses envisioned for location in the approximately 2,500 acre northeastern quadrant of the Ranch (north of SR 58 and east of El Camino Real). Therefore, less site disturbance would occur. Consequently, the number of future site construction workers and residents potentially exposed to residual quantities of presently-banned agricultural chemicals would be reduced.

Since this alternative would accommodate fewer residential units and occupied structures than the Future Development Program, fewer residents and site occupants would be exposed to other public safety hazards overall. In addition to residual agricultural chemicals, this includes: exposure to contaminants from highway and railway accidents that involve hazardous materials; the use, transport, or storage of hazardous chemicals; traffic safety hazards due to conflicts between future uses and existing off-site mining operations and on-site agricultural operations; hazards related to aircraft accidents, and exposure to valley fever.

In addition, under the currently envisioned Future Development Program, access to land uses in the northeastern quadrant of the Ranch would require railroad crossings. This could result in significant public safety impacts. Alternative Future Development Program Scenario 1 eliminates these impacts because it eliminates all future land uses in this area.

*Public Services.* This alternative would eliminate the envisioned 5-acre park and community pool, three 20,000 square foot worship centers, 50 units of work force housing, two wineries and two Ranch headquarters. All other Future Development Program land uses would remain. Consequently, the need for law enforcement and fire protection would be reduced. Based on the student generation rates used in the public services analysis for the Future Development Program (refer to table 4.12-4 in Section 4.10, *Public Services*), this alternative would generate approximately 201 students. This represents a decrease of 23 students (10% less) when compared to the Future Development Program. Therefore, the need for school services would also be decreased. In addition, based on the solid waste generation rates used in the public services analysis for the Future Development Program (refer to Section 4.10, *Public Services*), this



alternative would generate approximately 1,000 tons of solid waste per year (assuming a total of 39 jobs generated by three places of worship and two wineries). This represents a decrease of 121.6 tons per year (11% less) when compared to the Future Development Program. Therefore, the need for solid waste services would also be decreased. Library demand would similarly be reduced under the Alternative Future Development Program Scenario 1 Alternative.

Overall, this alternative is considered to have lesser public service impacts compared to the Future Development Program.

*Recreation.* This alternative would eliminate the envisioned 5-acre park and community pool, three 20,000 square foot worship centers, 50 units of work force housing, two wineries and two Ranch headquarters. Based on the County standard of 3 acres of parkland and open space per 1,000 residents, this alternative would generate demand for approximately 3.8 acres of parkland. This represents a decreased demand of 0.4 acres of parkland (9.5% less) when compared to the Future Development Program. However, because Alternative Future Development Program Scenario 1 excludes recreational facilities envisioned under the Future Development Program, including a 5-acre community park and swimming pool, these recreational demands would not be met under this alternative. Therefore, this alternative would have greater impacts related to parkland demand when compared to the Future Development Program.

*Transportation and Circulation.* This alternative would eliminate the envisioned 5-acre park and community pool, three 20,000 square foot worship centers, 50 units of work force housing, two wineries and two Ranch headquarters. Based on the rates used in the traffic analysis for the Future Development Program (refer to Table 4.12-13 in Section 4.12, *Transportation and Circulation*), this alternative would result in a decrease of approximately 752 daily trips (8% less) as compared to the currently envisioned Future Development Program. As a result, traffic impacts on local roadway and highway segments and intersections would be incrementally reduced when compared to the Future Development Program.

**Table 6-1 Alternative Future Development Program Scenario 1: Eliminated Daily Trips**

Land Use	Trip Rate	Units to be Excluded	Trip Estimate
Worship	9.11 per 1,000 square feet	15,000 square feet	137
Work force housing	9.25 per dwelling unit	50 dwelling units	463
Winery	22.2 per 1,000 square feet	6,000 square feet	133
Ranch HQ	9.25 per dwelling unit	2 dwelling units	19
<b>Trips Eliminated by Alternative Future Development Program Scenario 1</b>			<b>752</b>
<b>Total Trips Remaining</b>			<b>8,539</b>

Impacts related to access, railroad crossings, and pedestrian, bicycle and transit demand would also be proportionately reduced.

*Visual Resources.* As discussed in Section 4.13, *Visual Resources*, the northernmost envisioned winery and ranch Headquarters may be visible from travelers on El Camino Real. Alternative Future Development Program Scenario 1 eliminates Future Development Program land uses envisioned for location in the approximately 2,500 acre northeastern quadrant of the Ranch (north of SR 58 and east of El Camino Real), including this northernmost envisioned winery and ranch Headquarters. Therefore, visual resource impacts in this area would be reduced.



In addition, the reduced level of site disturbance and the associated preservation of additional open space would maintain more of the rural character of the site than the Future Development Program. In addition, fewer new light and glare generators would be introduced into the area. As a result, impacts related to the alteration of visual character under this alternative would be reduced.

Overall, Alternative Future Development Program Scenario 1 would result in reduced visual resource impacts when compared to the proposed Agricultural Residential Cluster Subdivision.

*Water and Wastewater.* This alternative would accommodate 52 fewer residential units when compared to the Future Development Program and would eliminate the following non-residential uses: three places of worship, a neighborhood park and swimming pool, and two wineries with tasting rooms and permitted special events. Based on the demand estimation factors and groundwater recharge percentages used in the water resource analysis for the Future Development Program (refer to table 4.14-2 in Section 4.14, *Water and Wastewater*), this alternative would result in a decrease in net consumptive demand of approximately 51.9 acre-feet per year (5.6% less) as compared to the currently envisioned Future Development Program (refer to Table 6-2). As a result, impacts related to groundwater use and overdraft of the aquifer system would be reduced when compared to the currently envisioned Future Development Program.

**Table 6-2 Alternative Future Development Program Scenario 1:  
 Eliminated Consumptive Water Demand**

Land Use	Water Use Factor (acre-feet/unit)	Annual Water Demand (acre-feet)	Percent Groundwater Recharge	Consumptive Demand
50 affordable residential lots	1.44/lot	51.44	40	30.86
Two 40,000 square foot wineries	0.17/1,000 sf	13.6	32	9.25
Two ranch/farm headquarters	1.44/lot	5.76	40	3.46
Three 5,000 square foot places of worship	0.17/1,000 sf	2.55	40	1.53
5 acre neighborhood parkland and swimming pool	2 afy/acre	10	32	6.8
<b>Consumptive Demand Eliminated by Alternative Future Development Program Scenario 1</b>				<b>51.9</b>
<b>Total Consumptive Demand Remaining</b>				<b>874.1</b>

Although this alternative would accommodate 52 fewer residential units than the Future Development Program, 50 units would consist of affordable residential lots. These lots would be less than one acre in size and would therefore be unable to support septic systems. Consequently, connection to a sewage treatment facility would be required (refer to Future Development Program Impact W-2 in Section 4.14, *Water and Wastewater*). Therefore, compared to the Future Development Program, this alternative would result in the installation two fewer septic systems (one on each of the Ranch headquarters). As a result, impacts related to the placement and design of wastewater systems would be incrementally reduced. Similarly, water quality impacts resulting from the on-site recharge of water softeners and household wastes would be somewhat less than the Future Development Program. In addition, because this



alternative eliminates two of the nine wineries envisioned under the Future Development Program, impacts related to winery wastewater would be incrementally reduced.

Overall, water and wastewater impacts would be less with Alternative Future Development Program Scenario 1 than with the currently envisioned Future Development Program.

## **6.9 ALTERNATIVE 9: Alternative Future Development Program Scenario 2**

### **6.9.1 Description**

This alternative would eliminate Future Development Program land uses in the most sensitive biological areas. This would involve the elimination of the following uses: a 347-unit residential village; a 250-unit guest ranch and lodge with a 24,000 square foot restaurant; a 40,000 square foot winery including an additional 6,000 square foot retail component; and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop. Other Future Development Program land uses would remain. Figure 6-7 illustrates this alternative.

### **6.9.2 Impact Analysis**

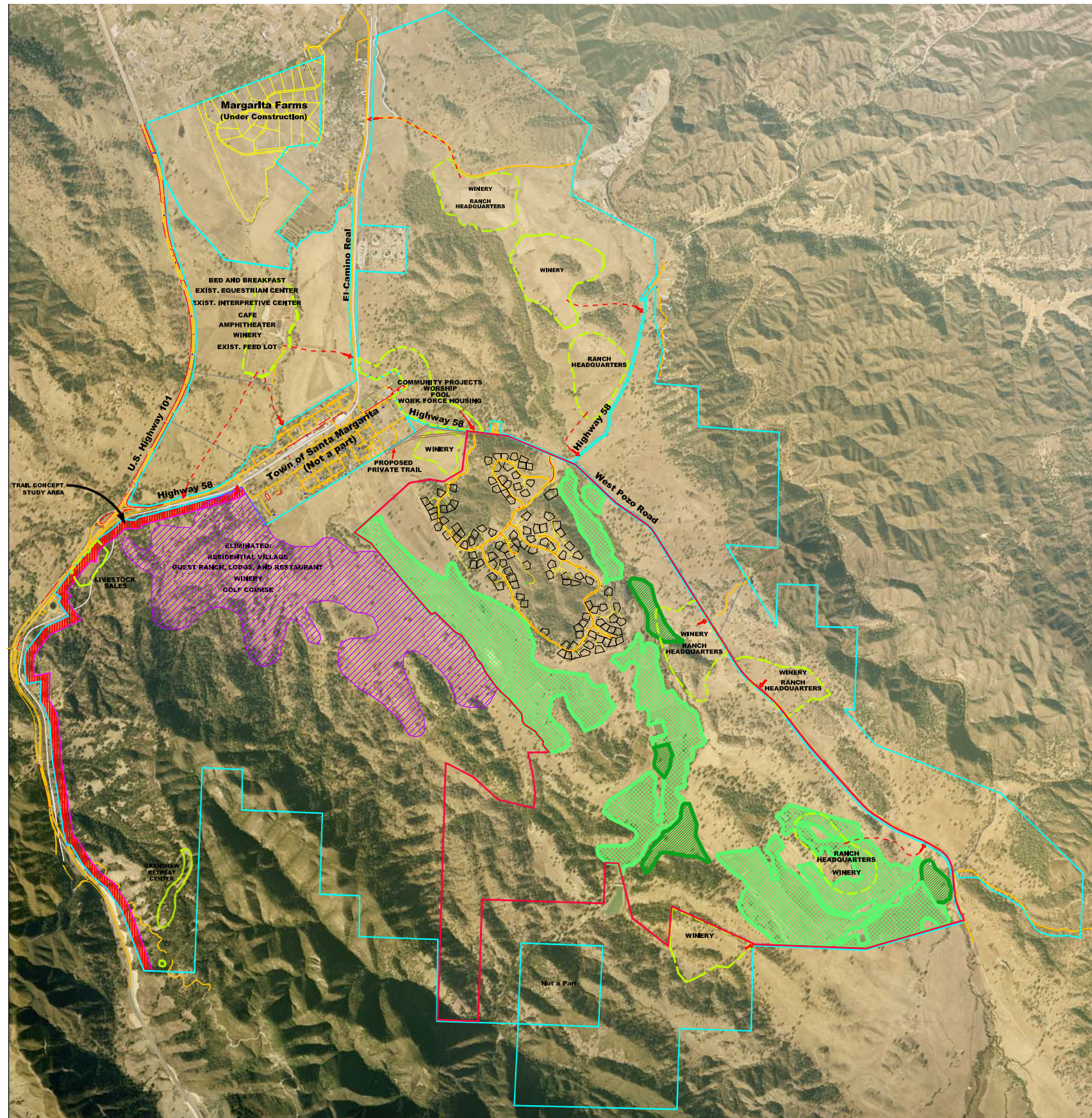
*Agricultural Resources.* By eliminating envisioned Future Development Program land uses southwest of the community of Santa Margarita, this alternative would result in less overall site disturbance when compared to the Future Development Program. This alternative would not convert prime soils areas or the farmland of local importance that occur in these areas (refer to Figures 4.1-2 and 4.1-3 in Section 4.1, *Agricultural Resources*). Similarly, this alternative would reduce impacts related to fragmentation of agricultural areas. In addition, because fewer land uses could be located near existing agricultural operations, conflicts between urban and agricultural uses would be somewhat reduced when compared to the Future Development Program.

Overall, this alternative would reduce agricultural resource impacts when compared to the currently envisioned Future Development Program.

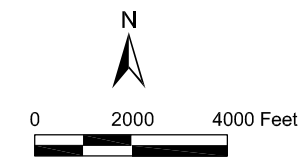
*Air Quality.* The Future Development Program is potentially inconsistent with San Luis Obispo APCD's 2001 *Clean Air Plan* (CAP) because it does not include sufficient Transportation Control Measures (TCMs) and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. Alternative Future Development Program Scenario 2 would similarly exclude sufficient TCMs and would similarly increase trip lengths in the vicinity. However, this alternative would generate 56% fewer average daily vehicle trips when compared to the Future Development Program (see *Transportation and Circulation* discussion below). Therefore, the rate of increase in vehicle trips and miles traveled would not be as extensive as the currently envisioned Future Development Program. Impacts related to CAP consistency would be reduced with this alternative. Odor nuisance impacts associated with wineries and septic systems would also be reduced with this alternative.







- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS
- AREA OF ELIMINATED FUTURE DEVELOPMENT PROGRAM LAND USES
- EXISTING VINEYARD
- AG IN PROGRESS
- ROADWAYS
- TRAIL CONCEPT STUDY AREA



Alternative 9:  
 Alternative Future Development Program  
 Scenario 2

Figure 6-7

Source: EDA Design Professionals, June 2006.





Biological Resources. This alternative would eliminate Future Development Program land uses in the most sensitive biological areas. This would involve the elimination of the following uses: a 347-unit residential village; a 250-unit guest ranch and lodge with a 24,000 square foot restaurant; a 40,000 square foot winery including an additional 6,000 square foot retail component; and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop. As shown in Figure 4.3-3 in Section 4.3, *Biological Resources*, this area (located southwest of the community of Santa Margarita) is composed of California annual grassland, blue oak woodland, valley oak woodland, emergent wetland and riparian habitat types. Since development in this area would be eliminated, impacts to these habitat types would be reduced.

This area also contains several special-status plant species, including San Luis Obispo County morning glory and San Luis Obispo owl's clover, as well as special-status animal species, including the California red-legged frog (CRLF) and the southwestern pond turtle. Because of the reduction in the amount of site disturbance in biologically sensitive areas, impacts to these and other special-status species would be reduced compared to the envisioned Future Development Program. Impacts to migration corridors for special-status and common wildlife species would also be proportionately reduced.

Cultural Resources. Sixty-two prehistoric and historical archaeological sites and 29 isolates are recorded on the surveyed portions of the ranch (refer to Section 4.4, *Cultural Resources*). Thirteen (13) prehistoric and historical archaeological sites are located within or adjacent to the Future Development Program land use location southwest of the community of Santa Margarita. This alternative would eliminate Future Development Program land uses envisioned for location in this area, including: a 347-unit residential village; a 250-unit guest ranch and lodge with a 24,000 square foot restaurant; a 40,000 square foot winery including an additional 6,000 square foot retail component; and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop. As a result, impacts related to direct damage or destruction of several of these sites, and disruption of their setting and feeling, would be eliminated under Alternative Future Development Program Scenario 2.

In addition, because the area of disturbance would be reduced, this alternative would result in fewer impacts related to disturbing previously unidentified buried archeological deposits or human remains. In addition, because this alternative would generate fewer new residents, there would be less likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites.

Overall, because less area would be developed under this alternative, fewer cultural resources impacts would result compared to the currently envisioned Future Development Program.

Drainage, Erosion and Sedimentation. By eliminating envisioned Future Development Program land uses southwest of the community of Santa Margarita, this alternative would result in less overall site disturbance when compared to the Future Development Program. Impacts related to erosion, sedimentation, and pollutant discharges during construction would be reduced accordingly. In addition, because the amount of paved areas would be reduced, permanent increases in surface runoff and accelerated erosion would be reduced compared to the Future Development Program. Storm water transport of pollutants, bacteria, and sediment into downstream facilities would also be reduced.



Alternative Future Development Program Scenario 2 eliminates Future Development Program land uses that could otherwise be placed within the 100-year flood zone associated with Yerba Buena Creek and its tributaries (refer to Figure 4.5-1 in Section 4.5, *Drainage, Erosion and Sedimentation*). Therefore, impacts related to flood hazard exposure would be reduced.

Overall, drainage, erosion, sedimentation and flood hazard impacts would be less than those expected under the currently envisioned Future Development Program.

*Geologic Stability.* The Nacimiento Fault Zone is located approximately 3,100 feet west of the Agricultural Residential Cluster Subdivision development, bisecting the community of Santa Margarita in the west-central portion of the Ranch property. This alternative would eliminate Future Development Program land uses envisioned for location near the Nacimiento Fault trace, including the envisioned residential village, guest ranch, lodge, restaurant, winery and golf course southwest of the community of Santa Margarita (refer to Figure 4.6-4 in Section 4.6, *Geologic Stability*). Therefore, fault rupture hazards would be reduced compared to the currently envisioned Future Development Program. Similarly, development under this alternative would expose fewer structures, residents, and site occupants to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch. The area southwest of the community of Santa Margarita is also subject to soil-related hazards (expansive soils, erosive soils and settlement); moderate to high landslide potential; and moderate to high liquefaction potential (refer to Figures 4.6-3, 4.6-5 and 4.6-6, respectively). Because Alternative Future Development Program Scenario 2 would exclude land uses in this area, it would reduce impacts when compared to the currently envisioned Future Development Program.

*Land Use.* This alternative would eliminate the Future Development Program land uses envisioned southwest of the community of Santa Margarita. As a result, construction activity would result in fewer temporary noise, air quality and visual impacts compared to the Future Development Program. In addition, this alternative would not convert as much open land as the currently envisioned Future Development Program. Therefore, land use impacts would be reduced under Alternative Future Development Program Scenario 2.

*Noise.* This alternative would generate 56% fewer average daily vehicle trips when compared to the Future Development Program (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby major roadways would be reduced. In addition, because this alternative would accommodate fewer residential units, fewer residents would be exposed to nuisance noise generated by aircraft flying overhead or by passing trains on the Union Pacific Railroad (UPRR). Similarly, this alternative would generate fewer construction-related noise impacts, since the area of disturbance and number of units would be reduced.

*Public Safety.* This alternative would eliminate Future Development Program land uses envisioned for location southwest of the community of Santa Margarita, which is an area that may contain undocumented residual quantities of presently-banned agricultural chemicals. Since less site disturbance would occur with this alternative, the number of future site construction workers, residents, and occupants potentially exposed to residual quantities of presently-banned agricultural chemicals would be reduced.



Since this alternative would accommodate fewer residential units than the Future Development Program, fewer residents would be exposed to other public safety hazards overall. In addition to residual agricultural chemicals, this includes: exposure to contaminants from highway and railway accidents that involve hazardous materials; the use, transport, or storage of hazardous chemicals; traffic safety hazards due to conflicts between future uses and agricultural operations; and hazards related to aircraft accidents, and exposure to valley fever.

*Public Services.* This alternative would eliminate the envisioned 347-unit residential village; 250-unit guest ranch and lodge with a 24,000 square foot restaurant; a 40,000 square foot winery including an additional 6,000 square foot retail component; and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop. All other Future Development Program land uses would remain. Consequently, the need for law enforcement and fire protection would be reduced. Based on the student generation rates used in the public services analysis for the Future Development Program (refer to table 4.12-4 in Section 4.10, *Public Services*), this alternative would generate approximately 73 students. This represents a decrease of 151 students (67% less) when compared to the Future Development Program. Therefore, the need for school services would also be decreased. In addition, based on the solid waste generation rates used in the public services analysis for the Future Development Program (refer to Section 4.10, *Public Services*), this alternative would generate approximately 578.2 tons of solid waste per year (assuming a total of 110 jobs generated by the restaurant, winery, and golf course). This represents a decrease of 543.4 tons per year (48% less) when compared to the Future Development Program. Therefore, the need for solid waste services would also be decreased. Library demand would similarly be reduced under the Alternative Future Development Program Scenario 2 Alternative.

Overall, this alternative is considered to have lesser public service impacts compared to the Future Development Program.

*Recreation.* This alternative would eliminate the envisioned 347-unit residential village; 250-unit guest ranch and lodge with a 24,000 square foot restaurant; a 40,000 square foot winery including an additional 6,000 square foot retail component; and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop. Based on the County standard of 3 acres of parkland and open space per 1,000 residents, this alternative would generate demand for approximately 1.4 acres of parkland. This represents a decreased demand of 2.8 acres of parkland (67% less) when compared to the Future Development Program. Therefore, this alternative would have fewer impacts related to parkland demand when compared to the Future Development Program.

*Transportation and Circulation.* This alternative would eliminate the land uses envisioned southwest of the community of Santa Margarita, including: a 347-unit residential village; a 250-unit guest ranch and lodge with a 24,000 square foot restaurant; a 40,000 square foot winery including an additional 6,000 square foot retail component; and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop. Based on the rates used in the traffic analysis for the Future Development Program (refer to Table 4.12-13 in Section 4.12, *Transportation and Circulation*), this alternative would result in a decrease of approximately 5,206 daily trips (56% less) as compared to the currently envisioned Future Development Program.



As a result, traffic impacts on local roadway and highway segments and intersections would be incrementally reduced when compared to the Future Development Program.

Impacts related to access, railroad crossings, and pedestrian, bicycle and transit demand would also be proportionately reduced.

**Table 6-3 Alternative Future Development Program Scenario 2:  
 Eliminated Daily Trips**

Land Use	Trip Rate	Units to be Excluded	Trip Estimate
Residential Village	9.25 per dwelling unit	347 dwelling units	3,210
Guest Ranch, Lodge and Restaurant	2.45 per unit	262 units	642
Winery	22.2 per 1,000 square feet	3,000 square feet	67
Golf Course	35.74 per hole	36 holes	1,287
<b>Trips Eliminated by Alternative                      Future Development Program Scenario 2</b>			<b>5,206</b>
<b>Total Trips Remaining</b>			<b>4,085</b>

*Visual Resources.* This alternative would eliminate the Future Development Program land uses envisioned southwest of the community of Santa Margarita that may be visible from State Route 58, including: a residential village; a 250-unit guest ranch and lodge with a 24,000 square foot restaurant; a 40,000 square foot winery including an additional 6,000 square foot retail component; and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop. Accordingly, this alternative would reduce impacts related to the permanent alteration of the existing pristine rural and natural visual condition of the area.

In addition, the reduced level of site disturbance and the associated preservation of additional open space would maintain more of the rural character of the property when compared to the Future Development Program. In addition, fewer new light and glare generators would be introduced into the area. As a result, impacts related to the alteration of visual character under this alternative would be reduced.

*Water and Wastewater.* This alternative would accommodate 347 fewer residential units when compared to the Future Development Program and would eliminate the following non-residential uses: guest ranch and lodge, restaurant, winery and golf course. Based on the demand estimation factors and groundwater recharge percentages used in the water resource analysis for the Future Development Program (refer to Table 4.14-2 in Section 4.14, *Water and Wastewater*), this alternative would result in a decrease in net consumptive demand of approximately 710.4 acre-feet per year (76.7% less) as compared to the currently envisioned Future Development Program (refer to Table 6-4). As a result, impacts related to groundwater use and overdraft of the aquifer system would be reduced when compared to the currently envisioned Future Development Program.



**Table 6-4 Alternative Future Development Program Scenario 2:  
 Eliminated Consumptive Water Demand**

Land Use	Water Use Factor (acre-feet/unit)	Annual Water Demand (acre-feet)	Percent Groundwater Recharge	Consumptive Demand
Residential Village (347 lots)	1.44/lot	499.68	40	299.8
Guest ranch, lodge, and restaurant	0.15/room	37.5	40	22.5
Restaurant	0.022/seat	4.4	40	2.64
Private golf course, club house, shop	2/acre	560	32	380.8
Winery	0.17/1,000 sf	6.8	32	4.62
<b>Consumptive Demand Eliminated by Alternative Future Development Program Scenario 2</b>				<b>710.4</b>
<b>Total Consumptive Demand Remaining</b>				<b>215.6</b>

Similar to the Future Development Program, improper disposal field design could result in health hazards or potential ground and surface water contamination. However, since potential buildout would be reduced, impacts related to the placement and design of wastewater systems would be reduced under Alternative Future Development Program Scenario 2. Similarly, because fewer septic systems would be installed, water quality impacts resulting from the on-site recharge of water softeners and household wastes would be less than the Future Development Program. In addition, because this alternative eliminates one of the nine wineries envisioned under the Future Development Program, impacts related to winery wastewater would be incrementally reduced.

## **6.10 ALTERNATIVE 10: Alternative Future Development Program Scenario 3**

### **6.10.1 Description**

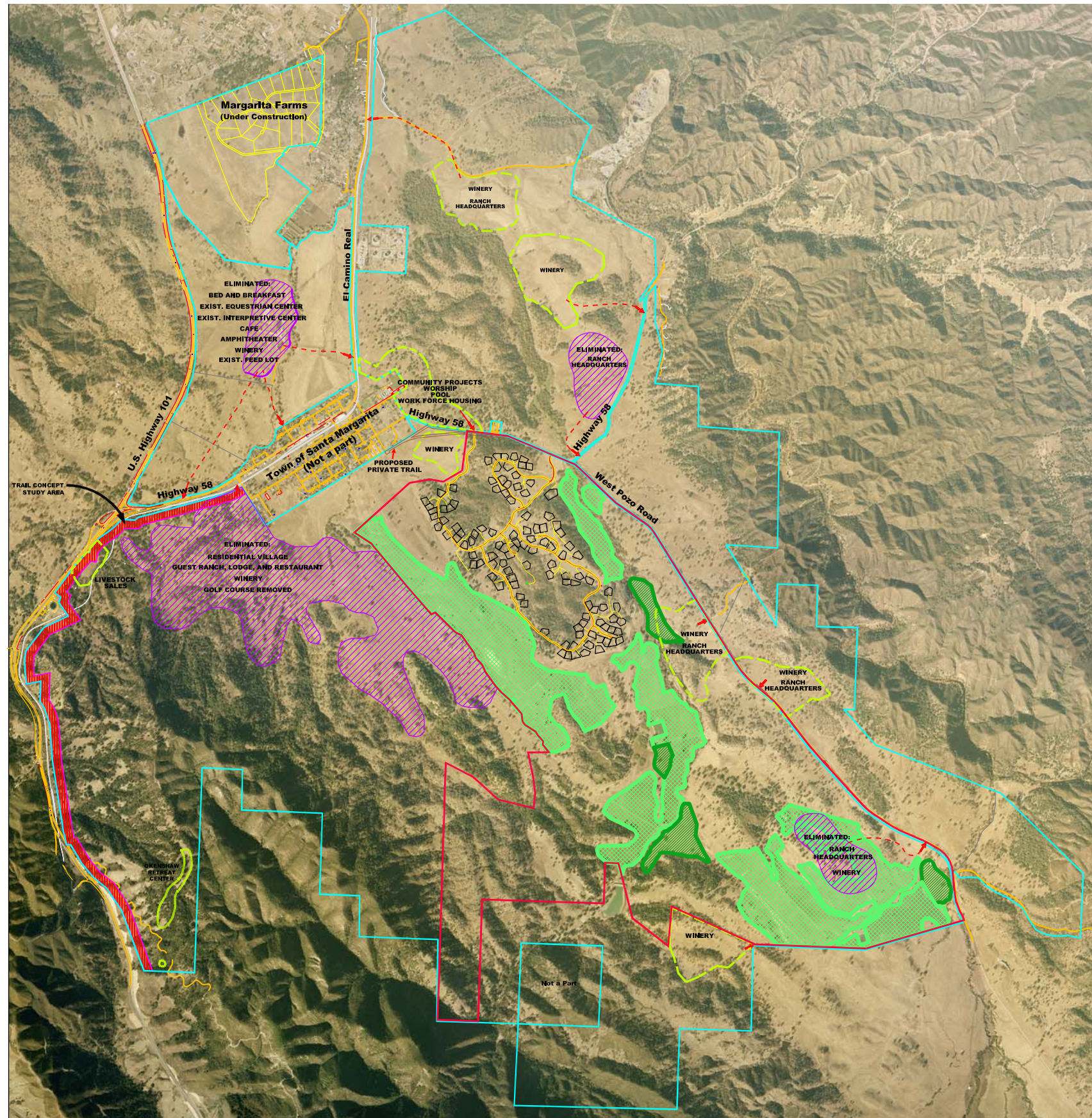
This alternative would eliminate Future Development Program land uses in the most sensitive cultural resource areas. This would involve the elimination of the following uses: a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater, 9,000 square feet of craft studios, galleries, an interpretive center, and gift shops, and a 40,000 square foot winery on the existing Ranch headquarters parcel; a 347-unit residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery including an additional 6,000 square foot retail component, and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop located southwest of the community of Santa Margarita; one Ranch headquarter located northwest of SR 58 (after SR 58 curves northerly); and one winery/Ranch headquarter located in the southern portion of the Ranch property, west of West Pozo Road. Other Future Development Program land uses would remain. Figure 6-8 illustrates this alternative.



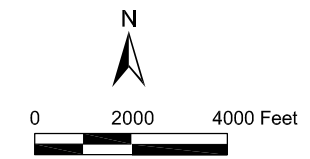
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- TENTATIVE TRACT 2586 BOUNDARY
- PROPOSED LOT LINES FOR TENTATIVE TRACT 2586 RESIDENTIAL CLUSTER SUBDIVISION
- RANCH PROPERTY BOUNDARY
- FUTURE DEVELOPMENT PROGRAM LAND USE LOCATIONS
- AREA OF ELIMINATED FUTURE DEVELOPMENT PROGRAM LAND USES
- EXISTING VINEYARD
- AG IN PROGRESS
- ROADWAYS
- TRAIL CONCEPT STUDY AREA



Alternative 10:  
 Alternative Future Development Program  
 Scenario 3

Figure 6-8

Source: EDA Design Professionals, June 2006.





## 6.10.2 Impact Analysis

*Agricultural Resources.* By eliminating the Future Development Program land uses envisioned on the existing Ranch headquarters parcel, in the area southwest of the community of Santa Margarita, one Ranch headquarter and one winery/Ranch headquarter, this alternative would result in less overall site disturbance when compared to the Future Development Program. This alternative would not convert prime soils areas or the farmland of local importance that occur in these areas (refer to Figures 4.1-2 and 4.1-3 in Section 4.1, *Agricultural Resources*). Similarly, this alternative would reduce impacts related to fragmentation of agricultural areas. In addition, because fewer land uses could be located near existing agricultural operations, conflicts between urban and agricultural uses would be somewhat reduced when compared to the Future Development Program.

*Air Quality.* The Future Development Program is potentially inconsistent with San Luis Obispo APCD's 2001 *Clean Air Plan* (CAP) because it does not include sufficient Transportation Control Measures (TCMs) and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. Alternative Future Development Program Scenario 3 would similarly exclude sufficient TCMs and would similarly increase trip lengths in the vicinity. However, this alternative would generate 74% fewer average daily vehicle trips when compared to the Future Development Program (see *Transportation and Circulation* discussion below). Therefore, the rate of increase in vehicle trips and miles traveled would not be as extensive as the currently envisioned Future Development Program. Impacts related to CAP consistency would be reduced under Alternative Future Development Program Scenario 3. Odor nuisance impacts associated with wineries and septic systems would also be reduced under this alternative.

*Biological Resources.* This alternative would eliminate Future Development Program land uses envisioned on the existing Ranch headquarters parcel, in the area southwest of the community of Santa Margarita, one Ranch headquarter and one winery/Ranch headquarter. As shown in Figure 4.3-3 in Section 4.3, *Biological Resources*, these areas are composed of California annual grassland, blue oak woodland, emergent wetland, riparian and agriculture (vineyard/~~dry farm~~) habitat types. Since development in these areas would be eliminated, impacts to these habitat types would be reduced.

These areas also contain several special-status plant species, including San Luis Obispo County morning glory, San Luis Obispo owl's clover, and San Luis Obispo County Lupine, as well as special-status animal species, including the California red-legged frog (CRLF) and the southwestern pond turtle. Because of the reduction in the amount of site disturbance, impacts to these and other special-status species would be reduced compared to the envisioned Future Development Program. Impacts to migration corridors for special-status and common wildlife species would also be proportionately reduced.

*Cultural Resources.* This alternative was designed specifically to minimize cultural resource impacts identified with the Future Development Program and outlined in Section 4.4, *Cultural Resources*, of this EIR. By eliminating the Future Development Program land uses envisioned on the existing Ranch headquarters parcel, in the area southwest of the community of Santa Margarita, one Ranch headquarter and one winery/Ranch headquarter, this alternative would



eliminate direct damage or destruction to 27 prehistoric and historical archaeological sites which are located on or adjacent to these sites.

In addition, because the area of disturbance would be reduced, this alternative would result in fewer impacts related to disturbing previously unidentified buried archeological deposits or human remains. In addition, because this alternative would generate fewer new residents, there would be less likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites.

Overall, because less area would be developed under this alternative, fewer cultural resources impacts would result compared to the currently envisioned Future Development Program.

*Drainage, Erosion and Sedimentation.* By eliminating the Future Development Program land uses envisioned on the existing Ranch headquarters parcel, in the area southwest of the community of Santa Margarita, one Ranch headquarter and one winery/Ranch headquarter, this alternative would result in less overall site disturbance when compared to the Future Development Program. Impacts related to erosion, sedimentation, and pollutant discharges during construction would be reduced accordingly. In addition, because the amount of paved areas would be reduced, permanent increases in surface runoff and accelerated erosion would be reduced compared to the Future Development Program. Storm water transport of pollutants, bacteria, and sediment into downstream facilities would also be reduced.

Alternative Future Development Program Scenario 3 eliminates Future Development Program land uses that could otherwise be placed within the 100-year flood zone associated with Yerba Buena Creek and Santa Margarita Creek (refer to Figure 4.5-1 in Section 4.5, *Drainage, Erosion and Sedimentation*). Therefore, impacts related to flood hazard exposure would be reduced.

*Geologic Stability.* The Nacimiento Fault Zone is located approximately 3,100 feet west of the Agricultural Residential Cluster Subdivision development, bisecting the community of Santa Margarita in the west-central portion of the Ranch property. This alternative would eliminate Future Development Program land uses envisioned for location near the Nacimiento Fault trace, including the envisioned ranch headquarters parcel land uses, and the residential village, guest ranch, lodge, restaurant, winery and golf course southwest of the community of Santa Margarita (refer to Figure 4.6-4 in Section 4.6, *Geologic Stability*). In addition, the Rinconada Fault is located approximately 2,100 feet east of the proposed Agricultural Residential Cluster Subdivision development, running along the eastern edge of the Ranch property. This alternative would eliminate a Future Development Program ranch headquarters envisioned for location near the Rinconada Fault (refer to Figure 4.6-4 in Section 4.6, *Geologic Stability*). Therefore, fault rupture hazards would be reduced compared to the currently envisioned Future Development Program. Similarly, development under this alternative would expose fewer structures, residents, and site occupants to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch.

This alternative would eliminate Future Development Program land uses envisioned near the existing Ranch headquarters location. As discussed in Section 4.6, *Geologic Stability*, this area is subject to soil-related hazards (expansive soils, erosive soils and settlement) and high liquefaction potential (refer to Figures 4.6-3 and 4.6-6, respectively). The area southwest of the



community of Santa Margarita is also subject to soil-related hazards (expansive soils, erosive soils and settlement); moderate to high landslide potential; and moderate to high liquefaction potential (refer to Figures 4.6-3, 4.6-5 and 4.6-6, respectively). This alternative would also eliminate one Future Development Program Ranch headquarters envisioned northwest of SR 58; and one winery/Ranch headquarter envisioned in the southern portion of the Ranch property, west of West Pozo Road. These areas are subject to soil-related hazards (expansive soils, erosive soils and settlement); moderate to high landslide potential; and moderate liquefaction potential (refer to Figures 4.6-3, 4.6-5 and 4.6-6, respectively). Because Alternative Future Development Program Scenario 3 would exclude land uses in these areas, it would reduce geologic impacts when compared to the currently envisioned Future Development Program.

Land Use. This alternative would eliminate the Future Development Program land uses envisioned on the existing ranch headquarters parcel, in the area southwest of the community of Santa Margarita, one Ranch headquarter and one winery/Ranch headquarter. As a result, construction activity would result in fewer temporary noise, air quality and visual impacts compared to the Future Development Program. In addition, this alternative would not convert as much open land as the currently envisioned Future Development Program. Therefore, land use impacts would be reduced under Alternative Future Development Program Scenario 3.

Noise. This alternative would generate 74% fewer average daily vehicle trips when compared to the Future Development Program (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby major roadways would be reduced. In addition, because this alternative would result in the elimination of residential units, fewer residents would be exposed to nuisance noise generated by aircraft flying overhead or by passing trains on the Union Pacific Railroad (UPRR). In addition, this alternative would generate fewer construction-related noise impacts, since the area of disturbance and number of units would be reduced.

Public Safety. This alternative would eliminate Future Development Program land uses envisioned in areas that may contain undocumented residual quantities of presently-banned agricultural chemicals. Since less site disturbance would occur with this alternative, the number of future site construction workers, residents, and occupants potentially exposed to residual quantities of presently-banned agricultural chemicals would be reduced.

Since this alternative would accommodate fewer residential units than the Future Development Program, fewer residents would be exposed to other public safety hazards overall. In addition to residual agricultural chemicals, this includes: exposure to contaminants from highway and railway accidents that involve hazardous materials; the use, transport, or storage of hazardous chemicals; traffic safety hazards due to conflicts between future uses and agricultural operations; hazards related to aircraft accidents, and exposure to valley fever.

Public Services. This alternative would eliminate the Future Development Program land uses envisioned on the existing ranch headquarters parcel, in the area southwest of the community of Santa Margarita, one Ranch headquarter and one winery/Ranch headquarter. Consequently, the need for law enforcement and fire protection would be reduced. Based on the student generation rates used in the public services analysis for the Future Development Program (refer to table 4.12-4 in Section 4.10, *Public Services*), this alternative would generate approximately 72 students. This represents a decrease of 152 students (68% less) when compared to the Future



Development Program. Therefore, the need for school services would also be decreased. In addition, based on the solid waste generation rates used in the public services analysis for the Future Development Program (refer to Section 4.10, *Public Services*, this alternative would generate approximately 415.4 tons of solid waste per year (assuming a total of 200 jobs generated by the restaurant, golf course, Bed and Breakfast, café, craft studios, galleries, an interpretive center, gift shops and three wineries). This represents a decrease of 706.7 tons per year (63% less) when compared to the Future Development Program. Therefore, the need for solid waste services would also be decreased. Library demand would similarly be reduced under the Alternative Future Development Program Scenario 3 Alternative.

Overall, this alternative is considered to have lesser public service impacts compared to the Future Development Program.

*Recreation.* This alternative would eliminate the Future Development Program land uses envisioned on the existing ranch headquarters parcel, in the area southwest of the community of Santa Margarita, one Ranch headquarter and one winery/Ranch headquarter. Based on the County standard of 3 acres of parkland and open space per 1,000 residents, this alternative would generate demand for approximately 1.4 acres of parkland. This represents a decreased demand of 2.8 acres of parkland (67% less) when compared to the Future Development Program. Therefore, this alternative would have fewer impacts related to parkland demand when compared to the Future Development Program.

*Transportation and Circulation.* This alternative would eliminate the envisioned 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater, 9,000 square feet of craft studios, galleries, an interpretive center, and gift shops, and a 40,000 square foot winery on the existing Ranch headquarters parcel; a 347-unit residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery including an additional 6,000 square foot retail component, and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop located southwest of the community of Santa Margarita; one Ranch headquarter located northwest of SR 58 (after SR 58 curves northerly); and one winery/Ranch headquarter located in the southern portion of the Ranch property, west of West Pozo Road. Based on the rates used in the traffic analysis for the Future Development Program (refer to Table 4.12-13 in Section 4.12, *Transportation and Circulation*), this alternative would result in a decrease of approximately 6,843 daily trips (74% less) as compared to the currently envisioned Future Development Program. As a result, traffic impacts on local roadway and highway segments and intersections would be incrementally reduced when compared to the Future Development Program.

Impacts related to access, railroad crossings, and pedestrian, bicycle and transit demand would also be proportionately reduced.



**Table 6-5 Alternative Future Development Program Scenario 3:  
 Eliminated Daily Trips**

Land Use	Trip Rate	Units to be Excluded	Trip Estimate
Café	4.83 per seat	200 seats	966
Amphitheater	0.20 per seat	600 seats	120
Craft studios, galleries and shops	44.32 per 1,000 square feet	6,000 square feet	266
Interpretive center and gift shops	44.32 per 1,000 square feet	3,000 square feet	133
Residential Village	9.25 per dwelling unit	347 dwelling units	3,210
Guest Ranch, Lodge and Restaurant	2.45 per unit	262 units	642
Golf Course	35.74 per hole	36 holes	1,287
Three Wineries	22.2 per 1,000 square feet	9,000 square feet	200
Two Ranch headquarters	9.25 per dwelling unit	2 units	19
<b>Trips Eliminated by Alternative Future Development Program Scenario 3</b>			<b>6,843</b>
<b>Total Trips Remaining</b>			<b>2,448</b>

*Visual Resources.* This alternative would eliminate the Future Development Program land uses envisioned on the existing ranch headquarters parcel, which would be highly visible from U.S. 101 due to the lack of intervening topography and sparse vegetation. In addition, this alternative would eliminate the Future Development Program land uses envisioned southwest of the community of Santa Margarita that may be visible from State Route 58. Additionally, this alternative would eliminate the Future Development Program ranch headquarters located northwest of SR 58, which would also be highly visible from SR 58. Accordingly, this alternative would reduce impacts related to the permanent alteration of the existing pristine rural and natural visual condition of the area.

In addition, the reduced level of site disturbance and the associated preservation of additional open space would maintain more of the rural character of the property when compared to the Future Development Program. In addition, fewer new light and glare generators would be introduced into the area. As a result, impacts related to the alteration of visual character under this alternative would be reduced.

*Water and Wastewater.* This alternative would eliminate the envisioned 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater, 9,000 square feet of craft studios, galleries, an interpretive center, and gift shops, and a 40,000 square foot winery on the existing Ranch headquarters parcel; a 347-unit residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery including an additional 6,000 square foot retail component, and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop located southwest of the community of Santa Margarita; one Ranch headquarter located northwest of SR 58 (after SR 58 curves northerly); and one winery/Ranch headquarter located in the southern portion of the Ranch property, west of West Pozo Road. The elimination of the 347-unit residential village and two Ranch headquarters would result in the elimination of 349 residences and an associated population of approximately 942 people. Based on





the demand estimation factors and groundwater recharge percentages used in the water resource analysis for the Future Development Program (refer to Table 4.14-2 in Section 4.14, *Water and Wastewater*), this alternative would result in a decrease in net consumptive demand of approximately 732.3 acre-feet per year (79% less) as compared to the currently envisioned Future Development Program (refer to Table 6-6). As a result, impacts related to groundwater use and overdraft of the aquifer system would be reduced when compared to the currently envisioned Future Development Program.

**Table 6-6 Alternative Future Development Program Scenario 3:  
 Eliminated Consumptive Water Demand**

Land Use	Water Use Factor (acre-feet/unit)	Annual Water Demand (acre-feet)	Percent Groundwater Recharge	Consumptive Demand
Bed and breakfast	0.15/room	1.8	40	1.08
Café	0.022/seat	2.2	40	1.32
Amphitheater	0.022/seat	13.2	40	7.92
Craft studios, galleries, and shops	0.11/1000 sf	0.66	40	0.4
Interpretive center and gift shops	0.11/1000 sf	0.33	40	0.2
Residential Village (347 lots)	1.44/lot	499.68	40	299.8
Guest ranch, lodge, and restaurant	0.15/room	37.5	40	22.5
Restaurant	0.022/seat	4.4	40	2.64
Private golf course, club house, shop	2/acre	560	32	380.8
Three Wineries	0.17/1,000 sf	20.4	32	13.87
Two Ranch headquarters	1.44/lot	2.88	40	1.73
<b>Consumptive Demand Eliminated by Alternative Future Development Program Scenario 3</b>				<b>732.3</b>
<b>Total Consumptive Demand Remaining</b>				<b>193.7</b>

Similar to the Future Development Program, improper disposal field design could result in health hazards or potential ground and surface water contamination. However, since potential buildout would be reduced, impacts related to the placement and design of wastewater systems would be reduced under Alternative Future Development Program Scenario 3. Similarly, because fewer septic systems would be installed, water quality impacts resulting from the on-site recharge of water softeners and household wastes would be less than the Future Development Program. In addition, because this alternative eliminates three of the nine wineries envisioned under the Future Development Program, impacts related to winery wastewater would be incrementally reduced.



## 6.11 ALTERNATIVE 11: Alternative Location for Livestock Sales

### 6.11.1 Description

This alternative would relocate the livestock sales yard to reduce access, traffic safety, and other impacts. Under the Future Development Program, this land use would be located adjacent to Highway 101, south of the SR 58 interchange (refer to Figure 2-9 in Section 2.0, *Project Description*). Under this alternative, the livestock sales yard would instead be located approximately 625 feet north of the community of Santa Margarita and 625 to 1,250 feet west of El Camino Real (refer to Figure 6-9). The facility footprint would be approximately 20 acres, as envisioned under the Future Development Program. Access to the site would be provided by an extension of Encina Avenue in the northern portion of the community of Santa Margarita. Other Future Development Program land uses would remain. Figure 6-9 illustrates this alternative.

### 6.11.2 Impact Analysis

*Agricultural Resources.* As shown in Figure 6-9, the previous location for livestock sales yard did not contain prime agricultural soils. Similarly, the new location for the livestock sales yard would avoid prime soils located in the northern portion of the Ranch. Because this alternative would similarly avoid prime soils, impacts to prime soils would be similar to the currently envisioned Future Development Program. However, by relocating the livestock sales yard closer to existing residences, this alternative would result in greater impacts related to conflicts between urban and agricultural uses (e.g., noise, odors, etc.) when compared to the currently envisioned Future Development Program.

*Air Quality.* The Future Development Program is potentially inconsistent with San Luis Obispo APCD's 2001 *Clean Air Plan* (CAP) because it does not include sufficient Transportation Control Measures (TCMs) and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. Because this alternative would relocate the livestock sales yard while maintaining all other Future Development Program land uses as envisioned, it would similarly exclude sufficient TCMs and would similarly increase vehicle trips and miles traveled. Impacts related to CAP consistency would be similar to the currently envisioned Future Development Program. However, by relocating the livestock sales yard closer to existing residences, this alternative would result in greater impacts related to odor nuisances when compared to the currently envisioned Future Development Program.

*Biological Resources.* As shown in Figure 4.3-3 in Section 4.3, *Biological Resources*, the currently envisioned location for livestock sales yard consisted of coast live oak woodland habitat. The alternative location is composed of agricultural lands. Because this alternative would avoid impacts to coast live oak woodland, impacts to this habitat type would be reduced when compared to the currently envisioned Future Development Program.

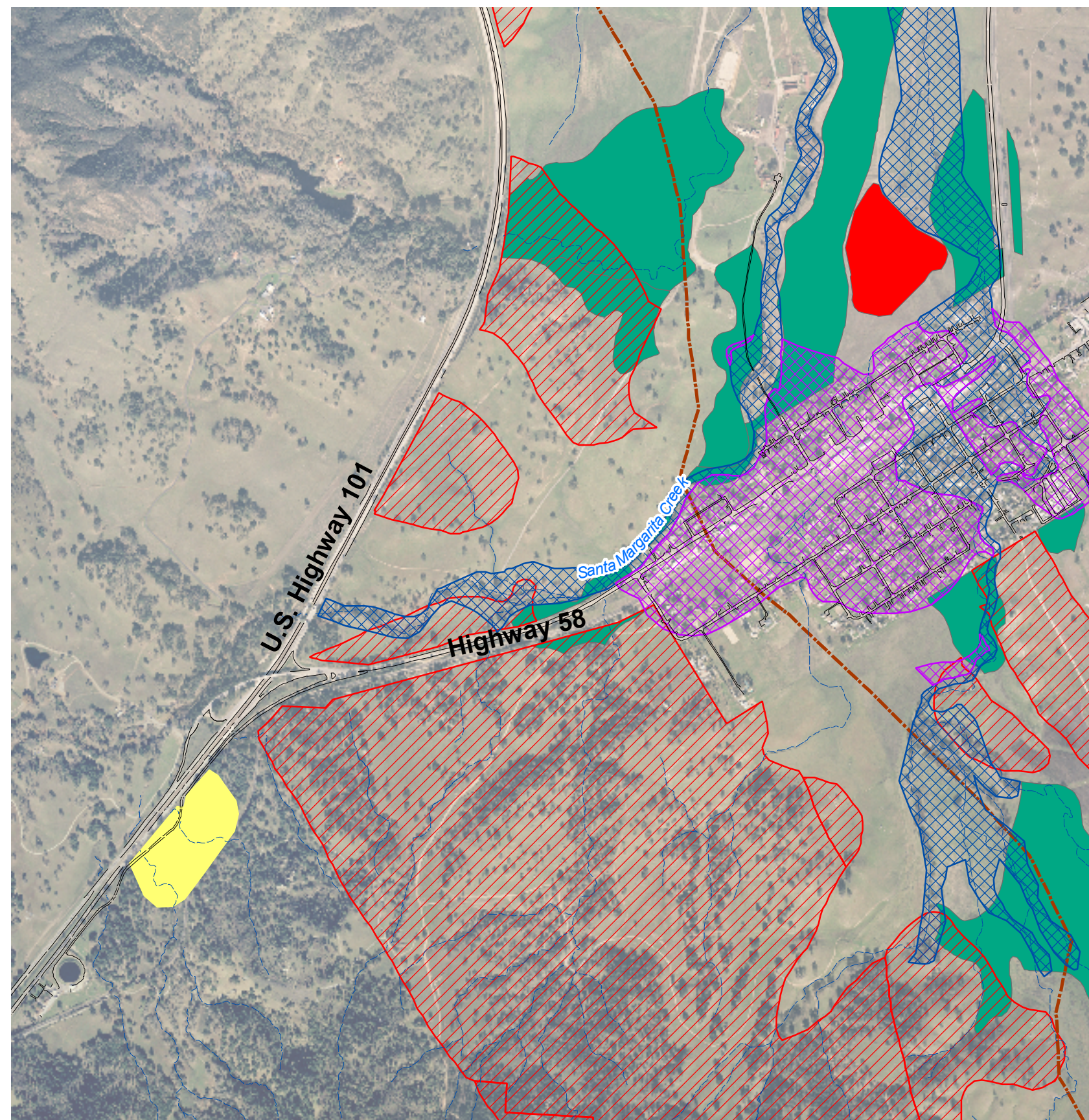
The currently envisioned location for the livestock sales yard does not contain and is not adjacent to aquatic habitats that could support sensitive aquatic species including Vernal Pool Fairy Shrimp (VPFS), South/Central California Coast Steelhead (Steelhead), and California red-legged frog (CRLF). The alternative location for the livestock sales yard is adjacent to Santa Margarita Creek. As a result, this alternative would result in greater impacts on aquatic species, when compared to the Future Development Program.










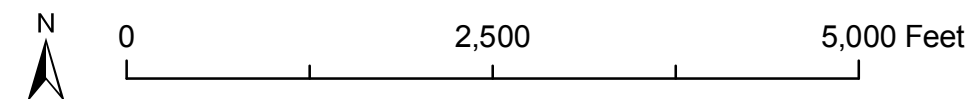
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-  NACIMIENTO FAULT ZONE
-  PREVIOUS LOCATION FOR LIVESTOCK SALES
-  RELOCATED LIVESTOCK SALES
-  100-YEAR FEMA FLOODPLAIN
-  500-YEAR FEMA FLOODPLAIN
-  HIGH LANDSLIDE POTENTIAL
-  PRIME AGRICULTURAL SOILS



Alternative 11:  
Alternative Location for Livestock Sales

Source: SSURGO, 2004, EDA Design Professionals, June 2006, County of San Luis Obispo, 2006, and Federal Emergency Management Agency Q3 Flood Data, May 1996.





Impacts related to the reduction of migration corridors for special-status and common wildlife species would be similar to the envisioned Future Development Program.

Overall, biological resource impacts would be both better and worse when compared to the proposed Agricultural Residential Cluster Subdivision.

*Cultural Resources.* This alternative would relocate the envisioned livestock sales yard while maintaining all other Future Development Program land uses as envisioned. No known prehistoric or historical archaeological sites are located on or near the previous livestock sales yard location. However, two prehistoric and historical archaeological sites are located near the alternative livestock sales yard location. Impacts related to damage or destruction of the important associations of these sites, and disruption of their setting and feeling, would be increased compared to the Future Development Program. In addition, although this alternative would result in similar site disturbance as the Future Development Program, due to its location in close proximity to the Ranch headquarter parcel, the Alternative Location for Livestock Sales would be more likely to disturb previously unidentified buried archeological deposits or human remains.

However, because this alternative would generate the same number of new residents, there would be a similar likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites.

Overall, impacts related to identified resources, previously unidentified buried archeological deposits or human remains would be greater than the currently envisioned Future Development Program, while impacts related to relic collecting and/or vandalism would be similar to the currently envisioned Future Development Program.

*Drainage, Erosion and Sedimentation.* This alternative would relocate the envisioned livestock sales yard while maintaining all other Future Development Program land uses as envisioned. Therefore, impacts related to erosion, sedimentation, and pollutant discharges during construction would be similar to the Future Development Program. The amount of paved areas under this alternative would also be similar to the Future Development Program. Therefore, permanent increases in surface runoff and accelerated erosion, as well as storm water transport of pollutants, bacteria, and sediment into downstream facilities, would be similar under this alternative.

As shown in Figure 6-9, the previous location for livestock sales yard was not exposed to flood hazards. Similarly, the new location for the livestock sales yard has been sited to avoid flood zones in the northern portion of the Ranch. Because this alternative would similarly avoid flood zones, flood hazard impacts would be similar to the currently envisioned Future Development Program.

*Geologic Stability.* This alternative would accommodate the same number residential units as the Future Development Program, thereby exposing the same number of units and residents to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch.



The previous location for the livestock sales yard was subject to high and very high erosion and high shrink-swell potential. The alternative location eliminates hazards related to erosive soils, and reduces impacts related to shrink-swell potential (refer to Figure 4.6-3 in Section 4.6, *Geologic Stability*). As shown in Figure 6-9, neither the Future Development Program location for the livestock sales yard nor the alternative location are characterized by high landsliding potential. Therefore, impacts from soil-related hazards would be less than the Future Development Program, while impacts from landsliding potential would be similar to the Future Development Program. As shown in Figure 4.6-6 in Section 4.6, *Geologic Stability*, the previous location for the livestock sales yard did not contain liquefaction potential. However, the alternative location is composed of high liquefaction potential. Therefore, impacts related to liquefaction potential would be greater under this alternative.

Overall, geologic stability impacts would be both better and worse when compared to the currently envisioned Future Development Program.

Land Use. Although this alternative includes the same land uses as the Future Development Program, the relocation of the livestock sales yard closer to existing residences would increase impacts related to the exposure of receptors to construction nuisances (i.e., temporary noise, air quality and visual impacts) when compared to the Future Development Program. This alternative would convert the same amount open land as the Future Development Program. Overall, land use impacts would be greater for this alternative when compared to the Future Development Program.

Noise. This alternative would generate the same number of average daily vehicle trips when compared to the Future Development Program (see *Transportation and Circulation* discussion below). However, trips associated with the livestock sales yard would be redistributed through the community of Santa Margarita and onto Encina Avenue in the northern portion of the community, which would serve as an access point for the Alternative Location for Livestock Sales. Therefore, noise levels on local roadways within the community of Santa Margarita would increase compared to the Future Development Program. The relocation of the livestock sales yard closer to existing residences would also increase impacts related to the exposure of receptors to construction and operational noise when compared to the Future Development Program.

However, because this alternative would accommodate the same number of residential units, residents would similarly be exposed to nuisance noise generated by aircraft flying overhead or by passing trains on the Union Pacific Railroad (UPRR).

Overall, this alternative would result in greater impacts related to the generation of noise at existing sensitive receptors, but would result in similar impacts related to exposure of new sensitive receptors to existing noise sources.

Public Safety. This alternative would relocate the envisioned livestock sales yard north of the community of Santa Margarita, near the existing Ranch headquarter parcel. The previous livestock sales yard location contains steep slopes, resulting in constraints to agricultural production. Therefore, development on the previous livestock sales location would not have occurred in areas of historical croplands. However, according to the agricultural study prepared for the Agricultural



Residential Cluster Subdivision and Future Development Program, various crops, including winegrapes and olives, have historically been cultivated in the Ranch Headquarters area (north of the community of Santa Margarita). Due to its proximity to the Ranch headquarter parcel, the new livestock sales location could occur in areas historically used for agricultural production with soils that could contain residual quantities of presently-banned agricultural chemicals. Therefore, impacts would be greater when compared to the Future Development Program.

Since this alternative would accommodate the same number residential units as the Future Development Program, the same number of residents would be exposed to other public safety hazards overall. In addition to residual agricultural chemicals, this includes: exposure to contaminants from highway and railway accidents that involve hazardous materials; the use, transport, or storage of hazardous chemicals; hazards related to potential aircraft accidents, and exposure to valley fever.

However, this alternative would eliminate significant traffic safety impacts associated with the location of the livestock sales yard envisioned in the Future Development Program, which requires an unsafe turning movement on SR 58.

Overall, this alternative would result in greater impacts related to residual agricultural chemicals, fewer impacts related to traffic safety, and similar impacts related to hazardous materials, aircraft accidents, and valley fever exposure.

*Public Services.* This alternative would result in the same number residential units as the Future Development Program. Consequently, the need for law enforcement, fire protection, school, solid waste, and library services would be similar. Therefore, this alternative is considered to have similar public service impacts compared to the currently envisioned Future Development Program.

*Recreation.* This alternative would result in the same number residential units as the Future Development Program. Consequently, the need for recreational facilities would be similar. Therefore, this alternative is considered to have similar impacts related to parkland demand when compared to the currently envisioned Future Development Program.

*Transportation and Circulation.* This alternative would relocate the envisioned livestock sales yard while maintaining all other Future Development Program land uses as envisioned. Therefore, this alternative would generate the same number of average daily trips. As a result, traffic impacts on local roadway and highway segments and intersections would be similar to the currently envisioned Future Development Program. However, trips associated with the livestock sales yard would be redistributed through the community of Santa Margarita and onto Encina Avenue in the northern portion of the community, which would serve as an access point for the Alternative Location for Livestock Sales. Therefore, impacts to Encina Avenue would be greater than the currently envisioned Future Development Program.

This alternative would eliminate significant access impacts associated with the location of the livestock sales yard envisioned in the Future Development Program, which requires an unsafe turning movement on SR 58.



Overall, this alternative would result in both greater and lesser transportation and circulation impacts when compared to the Future Development Program.

Visual Resources. The previous livestock sales yard location may have been visible from U.S. 101 (refer to Section 4.13, *Visual Resources*). However, intervening topography and vegetation would have partially screened development from view. In contrast, due to the lack of intervening topography and sparse vegetation in the area surrounding the alternative location, the livestock sales yard may be highly visible from El Camino Real north of the community of Santa Margarita, as well as from residences located in the northern portion of the community, under this alternative. Therefore, impacts to viewing corridors would be greater than the currently envisioned Future Development Program.

Water and Wastewater. This alternative would relocate the envisioned livestock sales yard while maintaining all other Future Development Program land uses as envisioned. Therefore, this alternative would result in the same net consumptive water use. As a result, impacts related to groundwater use and overdraft of the aquifer system would be similar to the Future Development Program. Impacts related to improper disposal field design, on-site recharge of water softeners and household wastes and septage load would also be similar to the currently envisioned Future Development Program.

## **6.12 ALTERNATIVE 12: Amended Project**

### **6.12.1 Description**

This alternative would have essentially the same development characteristics as the proposed project (112 dwelling units), but would incorporate the following project features that address identified environmental constraints:

- Reorganized lot layout. This alternative would reorganize the 112 lots within the same general vicinity of the site as the proposed Agricultural Residential Cluster Subdivision. As illustrated in Figure 6-10, 23 lots would be relocated and the boundaries of 65 lots would be adjusted. The remaining 24 lots would not change. This amended layout is intended to avoid placing lots in areas containing prime soils, reduce visual prominence, reduce impacts on oak trees, and avoid archaeologically-sensitive areas.
- Reorganization of project roadways. Along with reorganization of the Agricultural Residential Cluster Subdivision lots, this alternative would modify project roadways. Four roadways would be eliminated, one roadway would be shortened, and several others would be realigned to more closely follow existing Ranch roads (refer to Figure 6-10). In addition, under this alternative, driveways would be reduced from 22 to 18 feet in width.
- Incorporation of building envelopes and height restrictions. This alternative incorporates building envelopes which restrict development to ½ acre of each proposed lot. These building envelopes are intended to prevent development on biologically-sensitive areas of the site, and in some cases to comply with agricultural buffer setback



requirements. Height restrictions were also placed on 13 lots (51 through 54, 92 through 94, 100, 101, 104 through 106, and 112) in order to reduce impacts to visual resources.

Access to the Amended Project Alternative would be provided via one existing driveway and one new driveway from West Pozo Road. Sewer service would be provided by individual septic systems and water service would be provided by a connection to the Nacimiento Water Project. This alternative would connect to the Nacimiento waterline at the northern extent of Encina Avenue within the community of Santa Margarita. A pipeline would be constructed within the existing Encina Avenue right-of-way to the southern extent of the roadway at the Ranch boundary. The untreated Nacimiento water delivered to the Ranch would be treated on-site and used for the Alternative 12 residences.

Refer to Figure 6-10 for a site plan of Alternative 12 in comparison to the proposed Agricultural Residential Cluster Subdivision.

### **6.12.2 Impact Analysis**

*Agricultural Resources.* Although this alternative would result in the same number of dwelling units as the proposed Agricultural Residential Cluster Subdivision, it would relocate Lots 43, 66 and 71 to avoid prime soil locations identified in the Draft EIR. This would result in fewer impacts related to the direct conversion of prime soil areas. However, since circulation of the Draft EIR, the San Luis Obispo County Agricultural Commissioner's Office has provided guidance regarding the definition of prime soils. The analysis was therefore revised to utilize a more accurate definition of prime soils as well as the most up-to-date soils information and methodology available. Refer to Section 2.1, *Agricultural Resources*, for the full revised analysis. As noted therein, the Agricultural Residential Cluster Subdivision would convert 21.2 acres of prime agricultural soils.

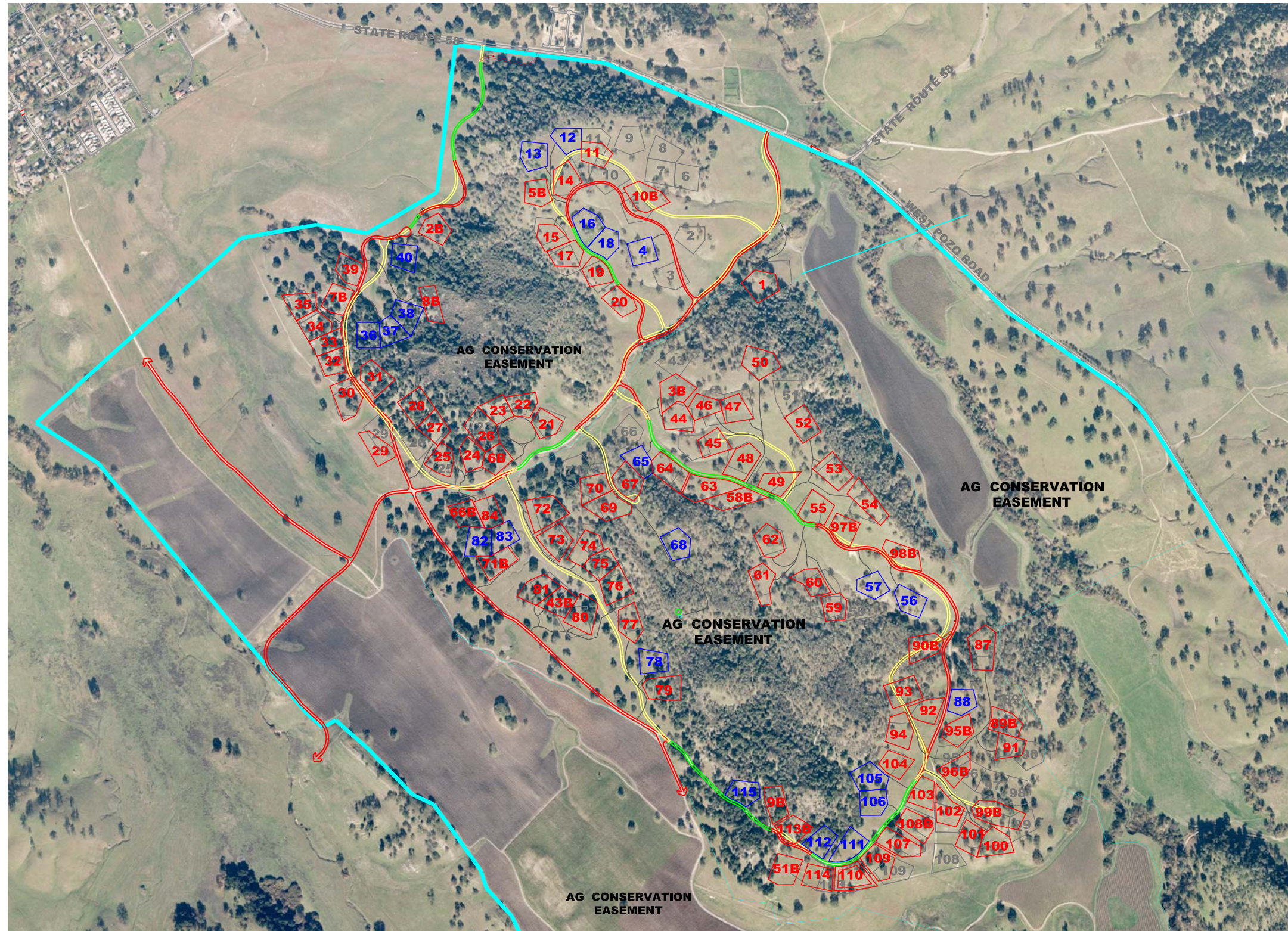
Although the Amended Project Alternative would include building envelopes which restrict development to  $\frac{1}{2}$  acre of each proposed lot, parcelization would nevertheless fragment potential agricultural use on each lot, thereby precluding major farming on each lot as a whole. Therefore, as a reasonable worst case scenario, all prime soils that occur within Amended Project Alternative lot lines could be converted to non-agricultural use. Alternative 12 would therefore convert an estimated 19.96 acres of prime agricultural soils (refer to Figure 6-11). Although the impact would be slightly reduced (1.24 fewer acres of prime soil converted), impacts would remain Class I, *significant and unavoidable*.

The Amended Project Alternative would be located in the same general area as the proposed Agricultural Residential Cluster Subdivision and would consist of approximately the same acreage of overall disturbance. As a result, fragmentation of agricultural areas/grazing lands would be similar to the proposed Agricultural Residential Cluster Subdivision.

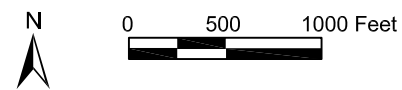
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- TENTATIVE TRACT 2586 BOUNDARY
- 40 TENTATIVE TRACT 2586 LOTS TO REMAIN
- 9 TENTATIVE TRACT 2586 RELOCATED LOTS
- TENTATIVE TRACT 2586 ROADWAYS TO REMAIN
- TENTATIVE TRACT 2586 RELOCATED OR DELETED ROADWAYS
- ALTERNATIVE 12 ROADWAYS (RELOCATED OR ADJUSTED FROM TRACT 2586)
- 10B ALTERNATIVE 12 LOTS (RELOCATED OR ADJUSTED FROM TRACT 2586)

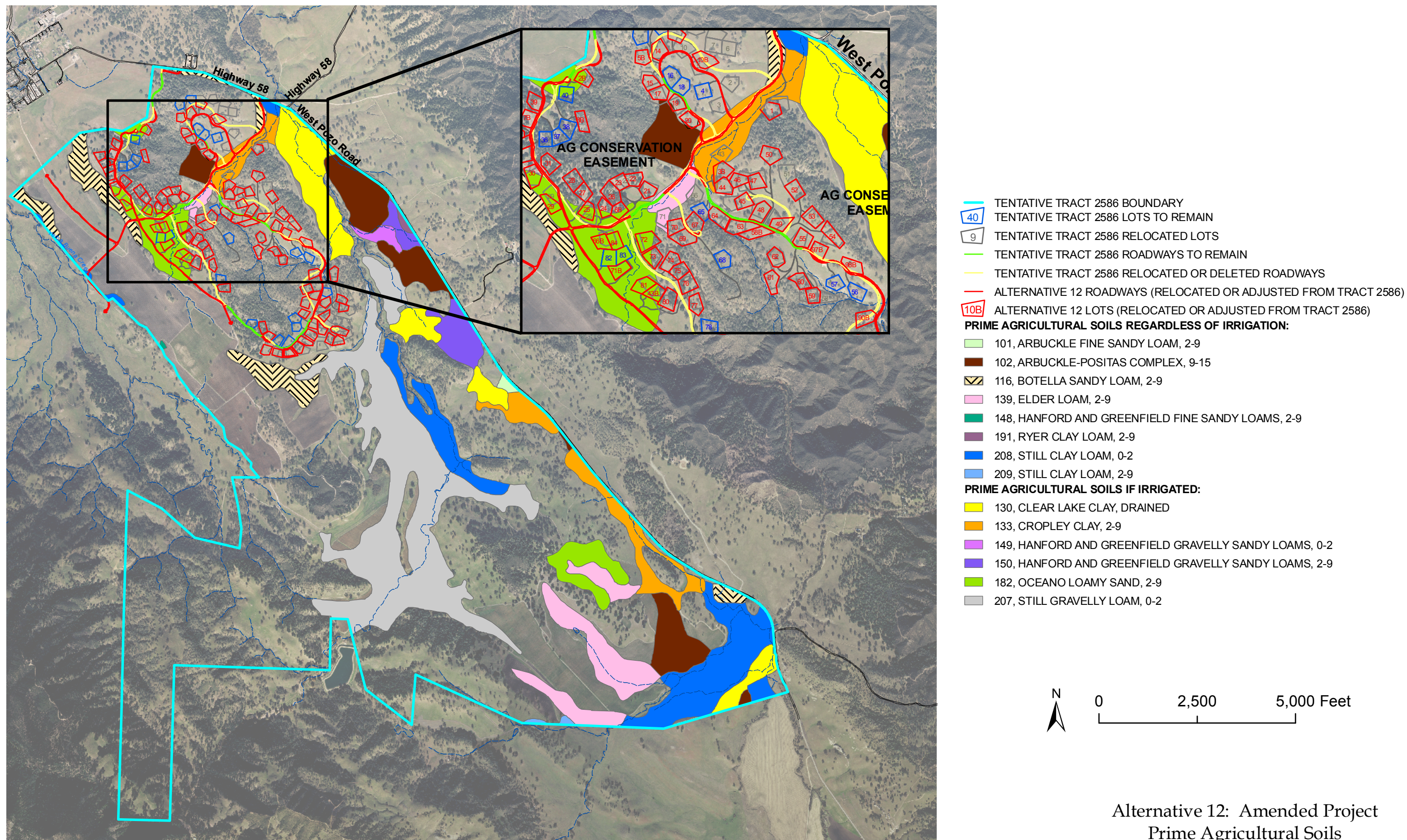


Alternative 12: Amended Project Lot and Roadway Location Comparison to Agricultural Residential Cluster Subdivision









Alternative 12: Amended Project  
 Prime Agricultural Soils





As discussed in Section 2.1, *Agricultural Resources*, all but five Agricultural Residential Cluster Subdivision lots would be located a sufficient distance from existing or future agricultural operations or have adequate topographic features as separation; only Lots 1, 39, 40, 99 and 100 would require relocation or buffered lot locations as approved by the Agricultural Commissioner [refer to revised Agricultural Residential Cluster Subdivision measure AG-2(b) (Agricultural Buffers) under Section 2.1, *Agricultural Resources*]. The Amended Project Alternative would adjust Lot 1 and relocate Lot 99 to increase distance from on-site vineyards. Lot 100 would remain in its currently proposed location. Lot 2 would be relocated northeast of Lot 40.

According to the San Luis Obispo County Agricultural Commissioners' Office, the new location of Lot 1 would not require buffered lot locations while Lots 99 and 100 would still require mitigation (Lynda Auchinachie, San Luis Obispo County Agricultural Commissioners' Office, Personal Communication, October 2, 2007). It should be noted, however, that compared to the Agricultural Residential Cluster Subdivision, Lot 99 is located further from agricultural operations and would therefore result in fewer compatibility impacts, while Lot 100 is located closer to agricultural operations and would therefore result in greater compatibility impacts. The new location of Lot 2 (2B under the Amended Project Alternative) would require relocation similar to that required for Lots 39 and 40 under the Agricultural Residential Cluster Subdivision (Lynda Auchinachie, San Luis Obispo County Agricultural Commissioners' Office, Personal Communication, January 30, 2008). All other revised lot locations would be considered compatible with the adjacent agricultural production areas (Auchinachie, Personal Communication, November 5, 2007).

Impacts related to conflicts between urban and agricultural uses would therefore be slightly reduced, when compared to the Agricultural Residential Cluster Subdivision. In addition, conflicts between residential and grazing uses would be similar to the proposed Agricultural Residential Cluster Subdivision because the same number of units would be located in the same general area as the proposed Agricultural Residential Cluster Subdivision.

Overall, impacts to agricultural fragmentation would be similar to the Agricultural Residential Cluster Subdivision, while impacts to prime soils and conflicts between urban and agricultural uses would be slightly reduced but remain Class I, *significant and unavoidable*.

*Air Quality.* This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below), since it features the same number of residential units. As a result, air contaminant emissions associated with vehicle use would be the same as the proposed Agricultural Residential Cluster Subdivision. In addition, because this alternative would accommodate the same number of residential units, long term emissions associated with electricity and natural gas usage would be identical. Grading- and construction-related emissions and odor nuisance impacts would also be similar when compared to the proposed Agricultural Residential Cluster Subdivision.

The Agricultural Residential Cluster Subdivision is potentially inconsistent with San Luis Obispo APCD's *Clean Air Plan* (CAP) because it does not include sufficient Transportation Control Measures (TCMs) and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. The Amended Project Alternative would similarly not



include sufficient TCMs and would similarly increase trip lengths in the vicinity. In addition, because this alternative would generate the same amount of average daily vehicle trips, the rate of increase in vehicle trips and miles traveled would be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to CAP consistency would be similar under the Amended Project Alternative.

*Biological Resources.* Under the Amended Project Alternative, residential lots would be clustered in the same general area of the site as the proposed Agricultural Residential Cluster Subdivision. As shown in Figure 6-12, this area contains eleven natural plant communities and/or wildlife habitat types. The habitat types include California annual grassland, native perennial grassland (including deergrass (*Muhlenbergia rigens*) and native perennial grassland), central (Lucian) scrub, chamise chaparral, blue oak woodland, coast live oak woodland, valley oak woodland, mixed oak woodland (including blue, coast live and valley oaks, as well as grey pines [*Pinus sabiniana*]), emergent wetland, seasonal pools, and riparian. Ruderal areas, agriculture, seasonal pools and known occurrences of special status species are also shown on Figure 6-12.

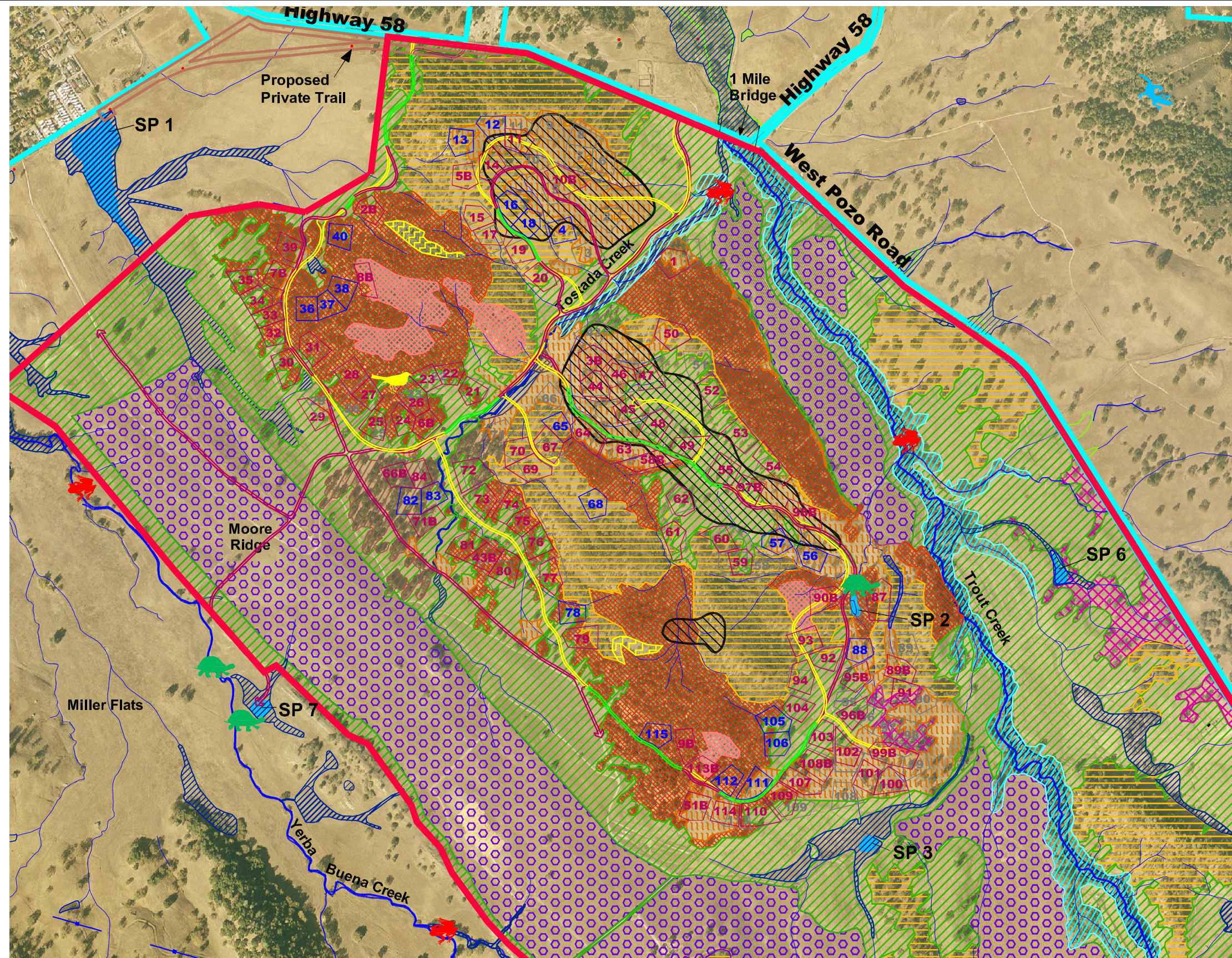
The Amended Project Alternative contains the same number of units and associated landscaping as the Agricultural Residential Cluster Subdivision. Therefore, the overall amount of site disturbance and impacts to natural plant communities would be similar to the proposed Agricultural Residential Cluster Subdivision. However, this alternative incorporates building envelopes which restrict development to approximately ½ acre of each lot.

To estimate oak tree impacts from the Amended Project Alternative, ½-acre building envelopes were placed to avoid oak trees and topographical constraints where feasible while still accommodating anticipated development. Their placement was therefore based on a reasonable worst case methodology using aerial photography and topographical mapping. Based on these estimated building envelope locations, oak trees expected to be removed and/or impacted were counted. “Impacted trees” are those which would not require removal but for which the development footprint, site grading and/or driveway would be within the edge of the canopy; also defined as 1.0 times the distance from the edge of the canopy to the trunk. Although counting oak trees from aerial photography is imprecise due to difficulty in determining individual trees with converging canopies, since the same method was used for the Agricultural Residential Cluster Subdivision, it is a valid method of comparison.

To evaluate the difference in oak tree impacts between the proposed Agricultural Residential Cluster Subdivision and the Amended Project Alternative, oak tree impacts were assessed on those lots and roadways that were different between the two proposals. Under the proposed Agricultural Residential Cluster Subdivision, 192 oak trees would be removed and 130 impacted in those areas within these areas where the proposals differed (refer to the Section 6.12.1 discussion above and Figure 6-10). In contrast, the Amended Project Alternative would remove an estimated 142 oak trees and impact an estimated 90 oak trees within these areas. Therefore, impacts to oak trees would be reduced under the Amended Project Alternative. It should be noted, however, that the Amended Project Alternative would result in more oak removal in the northern portion of the project site than the Agricultural Residential Cluster Subdivision (i.e., in the vicinity of Lots 1 through 39).







- Habitats**
- Native Perennial Grassland
  - CA Annual Grassland
  - Central (Lucian) Coastal Scrub
  - Chamise Chaparral
  - Blue Oak Woodland
  - Coast Live Oak Woodland
  - Valley Oak Woodland
  - Mixed Oak Woodland
  - Ruderal
  - Emergent Wetland
  - Waters of the U.S.
  - Seasonal Pools
  - Riparian
  - Agriculture (Vineyard/Dry Farm)

- ALTERNATIVE 12 : AMENDED PROJECT**
- Agricultural Residential Cluster Subdivision Boundary
  - Ranch Property Boundary
  - Tentative Tract 2586 Lots to Remain
  - Tentative Tract 2586 Relocated Lots
  - Tentative Tract 2586 Roadways to Remain
  - Tentative Tract 2586 Relocated or Deleted Roadways
  - Alternative 12 Roadways (Relocated or Adjusted From Tract 2586)
  - Alternative 12 Lots (Relocated or Adjusted From Tract 2586)

- SPECIAL-STATUS SPECIES**
- = California Red-legged Frog
  - = Coast Horned Lizard
  - = Southwestern Pond Turtle
  - = White Tailed Kite
  - = San Luis Obispo Mariposa Lily

Alternative 12: Amended Project  
 Biological Impact Map



Source: EDA Design Professionals, 2005, Rincon Consultants, Inc., June 2006, and October 2007.





The overall effect of the Amended Project Alternative on oak trees was also estimated by counting the total number of oak trees expected to be removed and/or impacted by the entire project footprint (as opposed to a portion of it, as discussed above). Impacts to oak trees within the portions of the lots outside of the building envelopes are expected due to grading or compaction within the root zone; limbing or thinning per CalFire requirements; changes to water regime due to landscape irrigation, leach fields, or creation of impervious surfaces; decreased reproduction due to browsing by livestock, mowing, and other ground disturbance; and other types of residential activities that would affect the soil fungi with which oak trees are associated. In total, the Amended Project Alternative is estimated to remove or impact between 250 and 350 oak trees, depending on the ultimate location of building envelopes. Although impacts would be reduced compared to the Agricultural Residential Cluster Subdivision, due to the long time period required for replacement trees to possess equivalent habitat values, impacts would be similarly Class I, *significant and unavoidable*.

Impacts to native perennial grassland, which includes the CDFG plant community of special concern native perennial grassland, would be reduced under the Amended Project Alternative. Of the 23 relocated lots, 19 are proposed in native perennial grassland areas under the Agricultural Residential Cluster Subdivision, versus 11 under the Amended Project Alternative. However, Lots 51, 58, and 95 would be located within native perennial grassland areas under the Amended Project Alternative although they were previously outside of this habitat under the proposed Agricultural Residential Cluster Subdivision. Therefore, while the Amended Project Alternative would reduce impacts on native perennial grassland compared to the proposed Agricultural Residential Cluster Subdivision, impacts would remain Class II, *significant but mitigable*.

The impacts of the Amended Project Alternative on the San Luis Obispo mariposa lily, a California Native Plant Society (CNPS) List 1B species that is protected as a rare biological resource by the California Department of Fish and Game (CDFG) and County, would be slightly reduced compared to the proposed Agricultural Residential Cluster Subdivision. Of the 23 relocated lots, nine are proposed for areas known to support the San Luis Obispo mariposa lily under the Agricultural Residential Cluster Subdivision, versus five under the Amended Project Alternative. However, Lots 58, 97 and 98 would be located in areas containing San Luis Obispo mariposa lily under the Amended Project Alternative although they were previously outside of occupied habitat under the Agricultural Residential Cluster Subdivision. Therefore, while the Amended Project Alternative would reduce impacts to San Luis Obispo mariposa lily compared to the proposed Agricultural Residential Cluster Subdivision, impacts would remain Class II, *significant but mitigable*.

Impacts to wetland habitat regulated by the U.S. Army Corps of Engineers (ACOE) would be reduced but not eliminated under the Amended Project Alternative. The adjusted Lot 1 would encompass a larger amount of riparian habitat but would not increase the distance to adjacent emergent wetland habitat. As a result, there is potential for indirect impacts to this habitat through sedimentation and non-native species introductions. The alignment of Road A (the primary project access road, refer to Figure 2-5 in the Draft EIR) has been moved outside of emergent wetland habitat, but since it remains along the edge of the habitat, there is a slight potential for indirect impacts (i.e., sedimentation) to the wetland. Impacts to Waters of the U.S. are similar under the Amended Project Alternative. Of the 23 relocated lots, 5 would impact Waters of the U.S. under the proposed Agricultural Residential Cluster Subdivision, versus 3



under the Amended Project Alternative. The Road A realignment would have greater impacts to Waters of the U.S. as it would traverse a drainage for approximately 300 feet near Lot 39 instead of crossing this drainage under the proposed Agricultural Residential Cluster Subdivision. The realignment of Road C (the northerly looping roadway; refer to Figure 2-5 in the Draft EIR) under the Amended Project Alternative eliminates one crossing of a Waters of the U.S. The realignment of Road D increases impacts to Waters of the U.S. because of the need for enhancement of a crossing over Tostada Creek near Lot 81, whereas this route would not have been used under the proposed Agricultural Residential Cluster Subdivision. The alignment of Road D (the southerly looping roadway; refer to Figure 2-5 in the Draft EIR) under the proposed Agricultural Residential Cluster Subdivision would remain as a driveway under the Amended Project Alternative, which would require a new crossing of Tostada Creek. Additional impacts from Road D under the Amended Project Alternative include creating a crossing of a Waters of the U.S. east of Lot 90B. Under the proposed Agricultural Residential Cluster Subdivision, Road D would avoid drainages in this area.

The Amended Project Alternative would have greater impacts to the southwestern pond turtle, which is a State Species of Special Concern. This species is known to occupy Seasonal Pond 2, which may be impacted under the Amended Project Alternative. With the Amended Project Alternative, an existing road would be used to access Lots 87 through 111. The road currently is narrow and is located on a steep slope above Seasonal Pond 2. Under the Agricultural Residential Cluster Subdivision, an alternate route is proposed that would by-pass Seasonal Pond 2. Road construction impacts would be greater under the Amended Project Alternative than the proposed Agricultural Residential Cluster Subdivision due to increased proximity to habitat known to be occupied by the southwestern pond turtle. The Amended Project Alternative road construction would take place approximately 30 feet from the pond edge, whereas the Agricultural Residential Cluster Subdivision road construction would take place 220 to 525 feet from the pond edge. Impacts to southwestern pond turtle during road construction could include mortality due to vehicular traffic and construction activities; decreased water quality from sedimentation and other construction runoff; and disruption of basking, feeding and breeding activities. Long-term impacts from the use of the road, including increased mortality from vehicle strikes, effects on water quality, potential for impacts from human use (i.e., collecting, non-native species introductions, pets, etc.), effects of road maintenance activities (i.e., grading a dirt road or resurfacing a paved road) and fragmentation of dispersal habitat, would be greater under the Amended Project Alternative. The Amended Project Alternative also proposes an additional lot (Lot 90B) directly to the west of Seasonal Pond 2, and relocates one lot (Lot 95) closer to the pond. These lots would be located in areas that are likely to be used by the southwestern pond turtle for nesting and overland dispersal. If a habitat mitigation and monitoring plan for the southwestern pond turtle is not implemented, the impacts of the Amended Project Alternative on southwestern pond turtle would be greater than for the proposed Agricultural Residential Cluster Subdivision.

Impacts to special-status animal species, including the California red-legged frog, South/Central California Coast Steelhead (Steelhead), white-tailed kite, golden eagle, Cooper's hawk, sharp-shinned hawk, pallid bat, American badger, and legless lizard would be similar. Because development under this alternative would occur in relatively the same portion of the site, impacts to vernal pool fairy shrimp and impacts related to the reduction of migration corridors for special-status and common wildlife species would also be similar.





Overall, this alternative would result in slightly reduced impacts related to biological resources when compared to the proposed Agricultural Residential Cluster Subdivision. Impacts to one special status species, the southwestern pond turtle, would be increased under the Amended Project Alternative.

*Cultural Resources.* Thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site (refer to Draft EIR Section 4.4, *Cultural Resources*). The Amended Project Alternative would relocate or adjust seven lots to avoid these sites. It should be noted that the boundaries of cultural resource sites were identified based on surface visibility, which is limited by vegetative coverage in many areas, and precise boundaries are unknown. Therefore, while the Mitigated Project Alternative is likely to avoid identified cultural resources sites to a greater degree than the proposed Agricultural Residential Cluster Subdivision, relocated lots may nevertheless affect the identified sites because precise boundaries are unknown. Draft EIR Agricultural Residential Cluster Subdivision measure CR-2(a), which requires formal identification of the boundaries of all cultural resources sites within or adjacent to the housing cluster through a program of systematic subsurface boundary testing using shovel probes, surface test units, and other appropriate sampling units, would continue to apply to the Mitigated Project Alternative. In addition, because the same number of units would be constructed, overall site disturbance would be similar when compared to the proposed Agricultural Residential Cluster Subdivision. Since this alternative would generate the same number of new residents, there would be a similar likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites. Because several lots would still be located in areas containing known archaeological resources, impacts would remain Class I, *significant and unavoidable*.

Nevertheless, overall, this alternative would result in reduced impacts to identified cultural resources and similar impacts to previously unidentified resources and relic collecting/vandalism when compared to the proposed Agricultural Residential Cluster Subdivision.

*Drainage, Erosion and Sedimentation.* This alternative would result in the same number of residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to erosion, sedimentation, and pollutant discharges during construction would be similar to the proposed Agricultural Residential Cluster Subdivision. However, the Amended Project Alternative would eliminate several roadways and realign several others to follow existing Ranch roads. Overall, the amount of paved areas under this alternative would be slightly reduced when compared to the proposed Agricultural Residential Cluster Subdivision. Therefore, permanent increases in surface runoff and accelerated erosion, as well as storm water transport of pollutants, bacteria, and sediment into downstream facilities, would be slightly reduced under the Amended Project Alternative.

As discussed in Draft EIR Section 4.5, *Drainage, Erosion and Sedimentation*, the eastern reaches of the proposed Agricultural Residential Cluster Subdivision site, just south of the east driveway, would be located within the flood zone associated with Trout Creek. The Amended Project Alternative would also include disturbance in this area. However, similar to the Agricultural



Residential Cluster Subdivision, it would not place habitable structures in this flood zone. Therefore, impacts related to flood hazard exposure would be similarly less than significant.

Geologic Stability. The Amended Project Alternative would accommodate the same number of residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, development under this alternative would expose the same number of units and residents to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch.

Under the Amended Project Alternative, lots would be clustered in the same general portions of the site as the proposed Agricultural Residential Cluster Subdivision. As discussed in Draft EIR Section 4.6, *Geologic Stability*, the Agricultural Residential Cluster Subdivision site is subject to soil-related hazards (expansive soils, erosive soils and settlement); moderate to high landslide potential; and moderate to high liquefaction potential (refer to Figures 4.6-3, 4.6-5 and 4.6-6, respectively). As a result, this alternative would result in similar geologic stability impacts as the proposed Agricultural Residential Cluster Subdivision.

Overall, impacts would be similar to the proposed Agricultural Residential Cluster Subdivision.

Land Use. This alternative would result in the same number of dwelling units, and would convert a similar amount of open land, as the proposed Agricultural Residential Cluster Subdivision. Therefore, the Amended Project Alternative would result in similar land use impacts and construction activity would result in similar temporary noise, air quality and visual impacts compared to the Agricultural Residential Cluster Subdivision.

Noise. This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby major roadways would be similar to the Agricultural Residential Cluster Subdivision. In addition, because this alternative would accommodate the same number of residential units, residents would similarly be exposed to nuisance noise generated by aircraft flying overhead or by passing trains on the Union Pacific Railroad (UPRR). This alternative would generate similar construction-related noise impacts, since the area of disturbance and number of units would be the same.

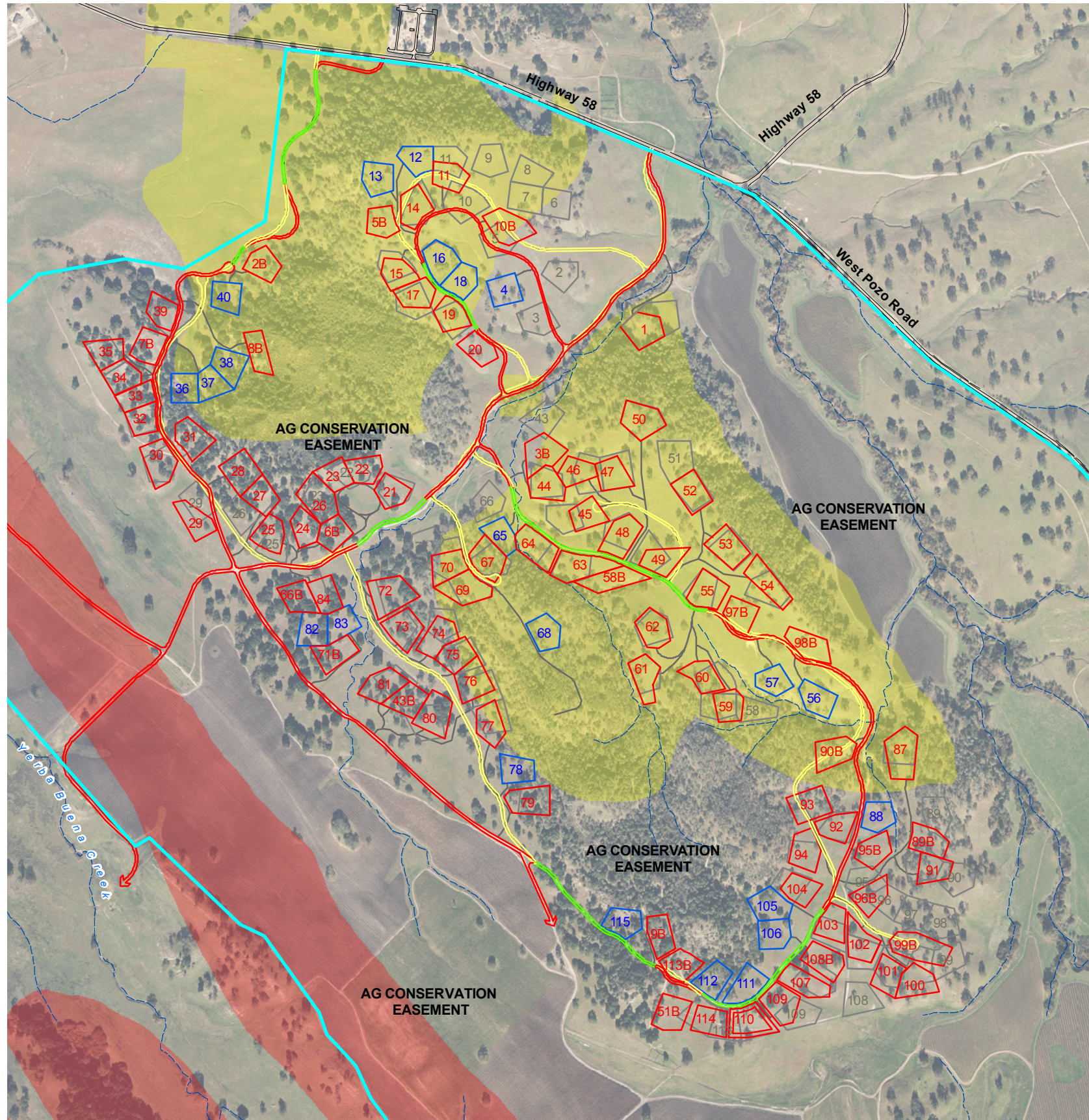
Overall, noise impacts would be similar to the proposed Agricultural Residential Cluster Subdivision.










Public Safety. Under this alternative, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. As with the Agricultural Residential Cluster Subdivision, site disturbance would not occur in an area of historical croplands. Therefore, impacts related to residual agricultural chemicals would be similarly less than significant.

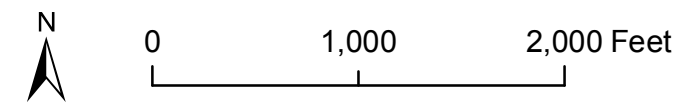
Since this alternative would accommodate the same number of residential units as the proposed Agricultural Residential Cluster Subdivision, the same number of residents would be exposed to other public safety hazards overall. In addition to residual agricultural chemicals, this includes: exposure to contaminants from highway and railway accidents that involve hazardous materials; the use, transport, or storage of hazardous chemicals; traffic safety hazards







-  TENTATIVE TRACT 2586 BOUNDARY
-  TENTATIVE TRACT 2586 LOTS TO REMAIN
-  TENTATIVE TRACT 2586 RELOCATED LOTS
-  TENTATIVE TRACT 2586 ROADWAYS TO REMAIN
-  TENTATIVE TRACT 2586 RELOCATED OR DELETED ROADWAYS
-  ALTERNATIVE 12 ROADWAYS (RELOCATED OR ADJUSTED FROM TRACT 2586)
-  ALTERNATIVE 12 LOTS (RELOCATED OR ADJUSTED FROM TRACT 2586)
-  HIGH LANDSLIDE POTENTIAL
-  MODERATE LANDSLIDE POTENTIAL



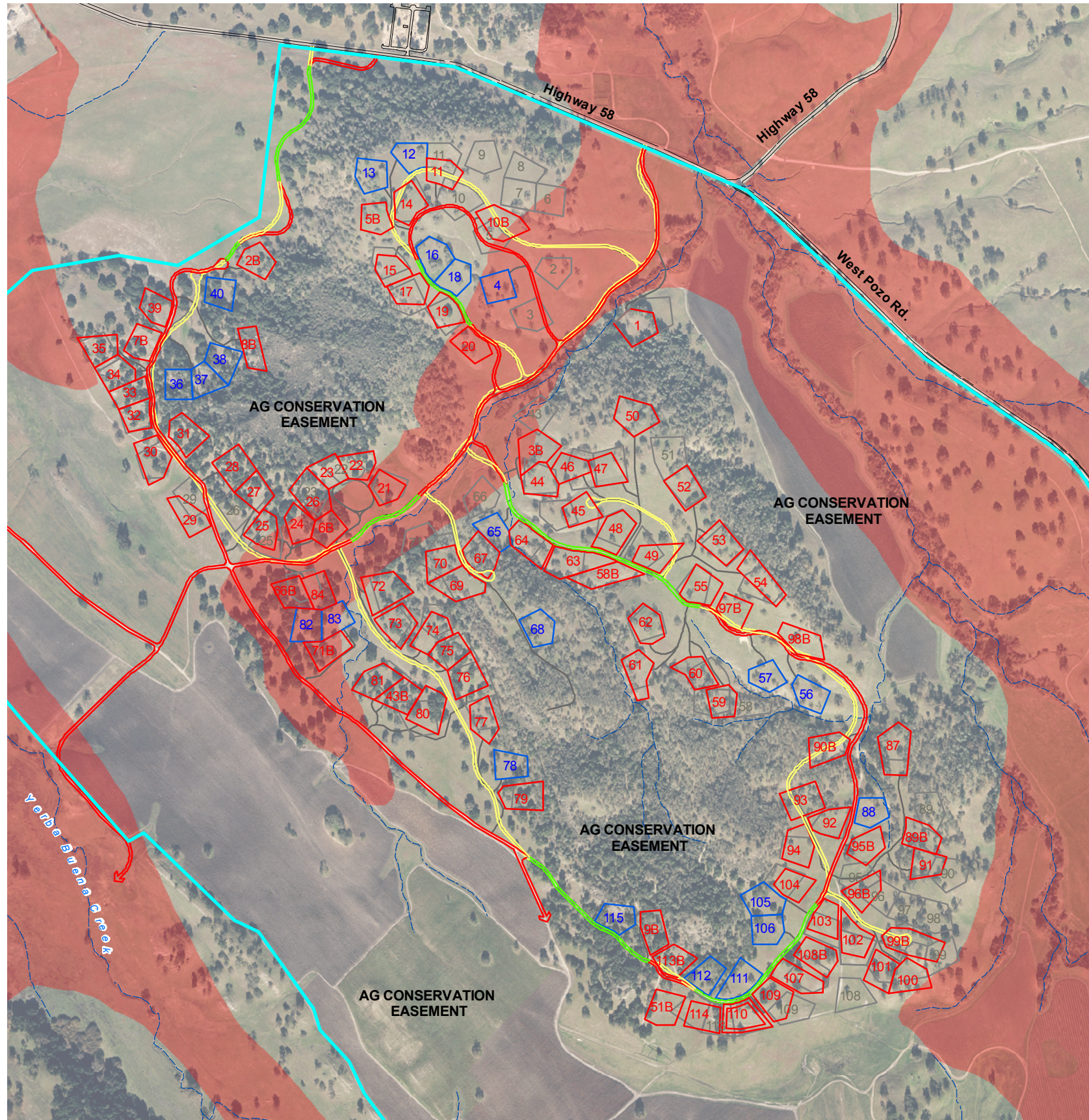
Alternative 12: Amended Project  
 Landslide Hazards

Source: SSURGO, 2004, RRM Design Group, September 2007, and Orrin Sage, Site Reconnaissance, 2006.









- TENTATIVE TRACT 2586 BOUNDARY
- 40 TENTATIVE TRACT 2586 LOTS TO REMAIN
- 9 TENTATIVE TRACT 2586 RELOCATED LOTS
- TENTATIVE TRACT 2586 ROADWAYS TO REMAIN
- TENTATIVE TRACT 2586 RELOCATED OR DELETED ROADWAYS
- ALTERNATIVE 12 ROADWAYS (RELOCATED OR ADJUSTED FROM TRACT 2586)
- 10B ALTERNATIVE 12 LOTS (RELOCATED OR ADJUSTED FROM TRACT 2586)
- HIGH LIQUEFACTION POTENTIAL



0 1,000 2,000 Feet

Alternative 12: Amended Project  
 Liquefaction Hazards





due to conflicts between proposed uses and existing off-site mining operations and on-site agricultural operations; hazards related to potential aircraft accidents, and exposure to valley fever.

This alternative would not relocate the water tanks proposed as part of the Agricultural Residential Cluster Subdivision. In addition, although the Mitigated Project Alternative would alter several of the lot boundaries surrounding the proposed tank site, it would not relocate lots to or from the area. Potential public safety impacts associated with water tank failure would therefore be similar to the proposed Agricultural Residential Cluster Subdivision.

Overall, the Amended Project Alternative would result in impacts which are similar to the proposed Agricultural Residential Cluster Subdivision.

Public Services. This alternative would result in the same number of residential units as the Agricultural Residential Cluster Subdivision. Consequently, the increase in demand for law enforcement, fire protection, school, solid waste, and library services would be identical. However, according to the Uniform Fire Code, access roads must have an unobstructed by parking minimum width of 20 feet. The Amended Project Alternative would reduce roadway widths to 18 feet, which would not meet these requirements and could therefore provide for inadequate emergency response. It should be noted, however, that the California Department of Forestry and Fire Protection (CalFire) has the authority to reduce roadway widths in certain situations, and could potentially reduce widths to 18 feet in this instance. However, such a reduction cannot be assured. Although the applicant would be required to comply with the most recent Uniform Fire Code and implement County fire protection standards, which would ensure less than significant impacts, impacts would nonetheless be greater than the Agricultural Residential Cluster Subdivision since no such impacts were identified for the proposed project.

Overall, this alternative would result in both similar and more adverse public service impacts compared to the proposed Agricultural Residential Cluster Subdivision.

Recreation. This alternative would result in the same number of residential units as the Agricultural Residential Cluster Subdivision. Consequently, the need for recreational facilities would be identical. Therefore, this alternative would have similar impacts related to parkland demand when compared to the proposed Agricultural Residential Cluster Subdivision.

Transportation and Circulation. This alternative would result in the same number of residential units as the Agricultural Residential Cluster Subdivision. Therefore, this alternative would generate the same number of average daily trips. As a result, traffic impacts on local roadway and highway segments and intersections would be similar to the proposed Agricultural Residential Cluster Subdivision. Impacts related to railroad crossings and pedestrian, bicycle and transit demand would also be similar.

As noted in Draft EIR Section 4.12, *Transportation and Circulation*, stopping site distance from the proposed west driveway was determined to be inadequate, resulting in a potentially significant impact. Agricultural Residential Cluster Subdivision measure T-2(a) (West Driveway Relocation) requires that the proposed west driveway be relocated at least 590 feet east of its currently proposed location. The Amended Project Alternative would relocate the west driveway





approximately 480 feet east. Although this would partially reduce impacts related to stopping site distance, it would not fully implement measure T-2(a). Impacts would remain Class II, *significant but mitigable*.

Visual Resources. This alternative would result in the same number of dwelling units as the proposed Agricultural Residential Cluster Subdivision. However, the Amended Project Alternative would relocate 11 lots and adjust the boundaries of two additional lots which were identified as being visible from existing roadways in the Draft EIR. This alternative also places height restrictions on 10 lots and establishes ½ acre building envelopes for all lots. As a result, fewer residential lots would be visible from public viewpoints under this alternative. Relocating Lots 2, 3, and 5 through 11 (proposed for the northernmost portion of the site near State Route 58) would eliminate visibility of a relatively dense cluster of residences, thereby reducing a “neighborhood” effect. Because the Amended Project Alternative would preserve the rural nature of the site to a greater extent than the Agricultural Residential Cluster Subdivision, impacts would be reduced. Although Lots 2B, 4, 10B, 11, 14, 52, 54, and 91 would still be partially visible from off-site viewpoints, the reduction of visual prominence of future residences as viewed from off-site public viewpoints would reduce impacts related to adverse changes in visual character to a Class II, *significant but mitigable*, level.

Water and Wastewater. Water service under the Amended Project Alternative would be provided by a connection to the Nacimiento Water Project. The untreated Nacimiento water delivered to the Ranch would be treated on-site and used for the Alternative 12 residences. As a result, impacts related to groundwater use and overdraft of the aquifer system would be eliminated. It should be noted, however, that importing and treating water for residences outside of an urban reserve line would be potentially inconsistent with the County’s Framework for Planning (Inland) goal of maintaining “a distinction between urban and rural development by providing for rural uses outside of urban and village areas...” The objective of this goal, as noted in the Framework, is to restrict urban services outside of urban or village reserve lines.

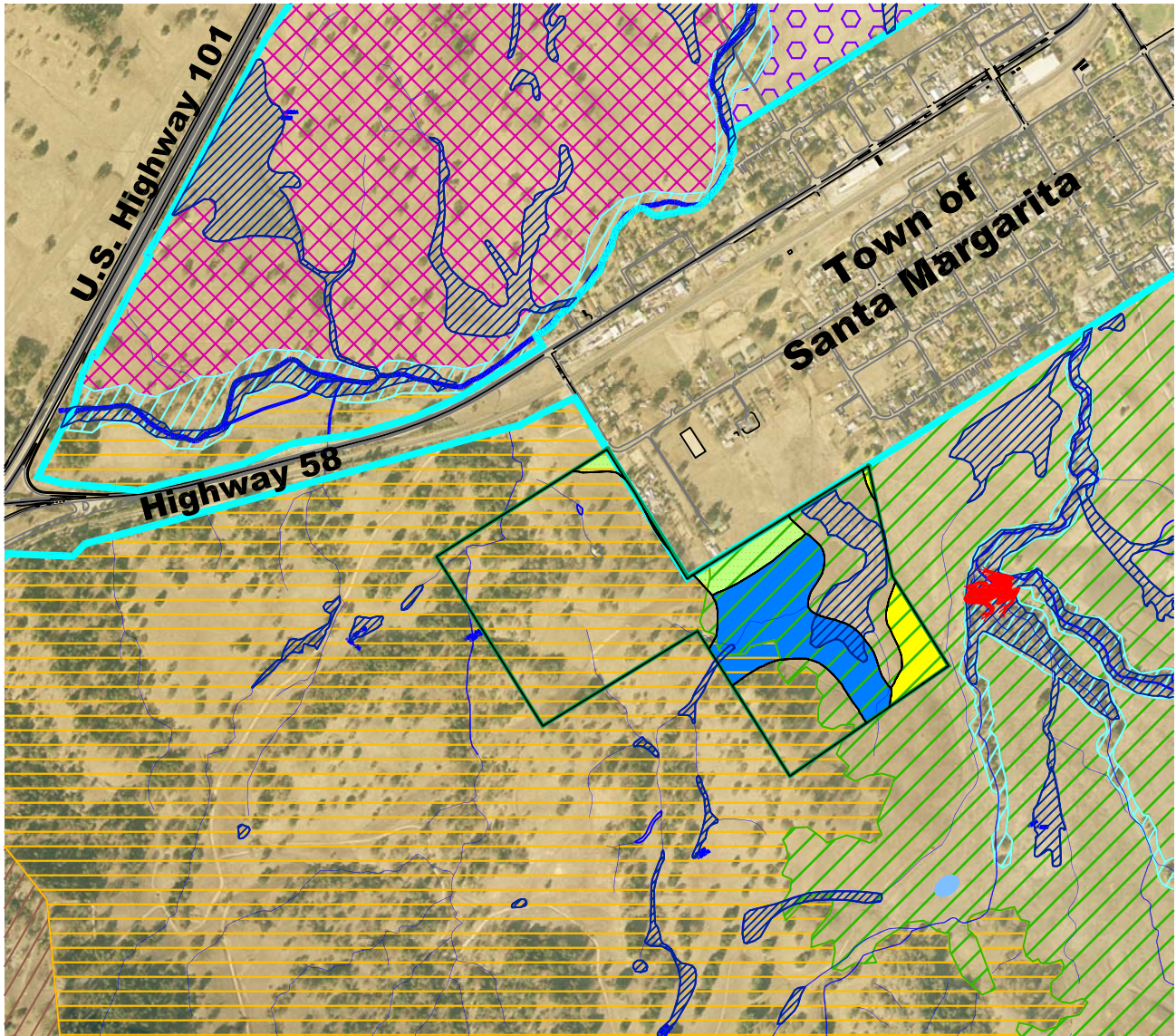
This alternative assumes that sewer services would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision. Impacts related to improper disposal field design, on-site recharge of water softeners and household wastes, and septage load would therefore be similar to the proposed Agricultural Residential Cluster Subdivision.

## **6.13 ALTERNATIVE 13: Santa Margarita Town Expansion**

### **6.13.1 Description**

Similar to Alternative 6 (Revised Cluster Location 3), this alternative assumes that the proposed Agricultural Residential Cluster Subdivision is relocated south of El Camino Real and west of the community of Santa Margarita. However, this alternative would arrange lots in a reversed L-shape extending from the southwest corner of the community of Santa Margarita (refer to Figure 6-15). Alternative 13 would serve as an extension of the existing community. The location and configuration of this alternative uses Smart Growth Principles of compact urban development and preservation of rural land and agricultural resources. In addition, although





Source: EDA Design Professionals, 2005, Rincon Consultants, Inc., June 2006.

- ALTERNATIVE 13: SANTA MARGARITA TOWN EXPANSION
- RANCH PROPERTY BOUNDARY

**HABITATS**

- CA ANNUAL GRASSLAND
- BLUE OAK WOODLAND
- COAST LIVE OAK WOODLAND
- VALLEY OAK WOODLAND
- EMERGENT WETLAND
- WATERS OF THE U.S.
- SEASONAL POOLS
- RIPARIAN
- URBAN / RESIDENTIAL
- AGRICULTURE (VINYARD/DRY FARM)

**PRIME AGRICULTURAL SOILS REGARDLESS OF IRRIGATION:**

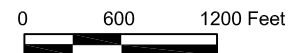
- 101 ARBUCKLE FINE SANDY LOAM, 2-9
- 209, STILL CLAY LOAM, 2-9

**PRIME AGRICULTURAL SOILS IF IRRIGATED:**

- 130, CLEAR LAKE CLAY, NA

**SPECIAL-STATUS SPECIES**

- CALIFORNIA RED-LEGGED FROG



Alternative 13: Santa Margarita Town Expansion

Figure 6-15



the same number of lots would be included as the proposed Agricultural Residential Cluster Subdivision (i.e., 112 lots), 22 of the lots would be designated for affordable housing.

This alternative would place approximately 2,500 acres in an agricultural conservation or open space easement. This alternative would additionally include a 5-acre community park, located in the northern portion of the alternative site adjacent to the community of Santa Margarita, as well as a trail connecting the community of Santa Margarita to the Los Padres National Forest.

Access to the alternative site would be provided via an extension of Wilhelmina Avenue. Water service would be provided by a connection to the Nacimiento Water Project and sewer service would be provided through connections to a new wastewater treatment plant. Connection to the Nacimiento waterline would occur at the northern extent of Encina Avenue within the community of Santa Margarita. A pipeline would be constructed within the existing Encina Avenue right-of-way to the southern extent of the roadway at the Ranch boundary. The untreated Nacimiento water delivered to the Ranch would be treated on-site and used for Santa Margarita Town Expansion Alternative residences. The wastewater treatment plant would be constructed with sufficient capacity to serve the project and be designed to expand to serve the community of Santa Margarita in the future. The exact capacity, features and location of the treatment plant would be determined in consultation with the County and Regional Water Quality Control Board. Water tanks would be relocated from the southern portion of the Agricultural Residential Cluster Subdivision to a hilltop within the alternative location.

### **6.13.2 Impact Analysis**

*Agricultural Resources.* This alternative would relocate the Agricultural Residential Cluster Subdivision to extend from the southwest corner of the community of Santa Margarita (refer to Figure 6-15). As discussed in Section 2.1, *Agricultural Resources*, the proposed Agricultural Residential Cluster Subdivision would permanently convert 21.2 acres containing prime soils to non-agricultural uses and would permanently compromise the viability of a 676.7-acre grazing unit. Approximately 24.4 acres of prime soils occur in this Alternative 13 area, although the small portion of prime soils that occur in emergent wetland habitat would not be used for agriculture (refer to Figure 6-15). Impacts related to the direct conversion of prime soil areas would nonetheless be greater than the Agricultural Residential Cluster Subdivision. However, this alternative would not compromise the sustainability of the 676.7 acre grazing unit. Additionally, because this alternative uses Smart Growth Principles of compact urban development and preservation of rural land and agricultural resources, it would reduce impacts related to grazing unit fragmentation. As noted under Agricultural Residential Cluster Subdivision Impact AG-1 in Section 2.1, *Agricultural Resources*, Section 22.22.152(D) of the County Land Use Ordinance requires that the open space area of an agricultural residential cluster subdivision be at least 95% of the gross site area, with clustered development allowed on the remaining 5%. While the proposed Agricultural Residential Cluster Subdivision would convert approximately 17.9% of the gross site area, placing only 82.1% of the site in open space, the Santa Margarita Town Expansion Alternative would convert approximately 4.1% of the gross site area (2,606 acres, or 106 acres of development and 2,500 acres of open space), thereby exceeding the 95% open space area requirement.

Because lots would be relocated away from existing vineyards in the southern portion of the Ranch property, fewer lots would be located adjacent to existing cultivated agricultural operations. As a result, conflicts between urban and agricultural uses, including agricultural



burning, would be incrementally reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

Overall, the Santa Margarita Town Expansion Alternative would result in increased prime soil conversion but reduced impacts to grazing unit fragmentation and conflicts.

*Air Quality.* This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). As a result, air contaminant emissions associated with vehicle use would be the same as the proposed Agricultural Residential Cluster Subdivision. In addition, because this alternative would accommodate the same number of residential units, long term emissions associated with electricity and natural gas usage would be identical. Grading- and construction-related emissions would also be similar under this alternative.

The Santa Margarita Town Expansion Alternative would be served by a new wastewater treatment plant. Although the exact capacity, features and location of the treatment plant have not yet been determined, as a reasonable worst case scenario, the plant could be located adjacent to and upwind from existing and future residences. Depending on the size, design, and operational characteristics of the wastewater treatment plant, adjacency to residential uses could result in odor nuisance impacts which would be greater than those expected for the Agricultural Residential Cluster Subdivision.

The Agricultural Residential Cluster Subdivision is potentially inconsistent with San Luis Obispo APCD's 2001 *Clean Air Plan* (CAP) because it exceeds population growth assumptions, does not include sufficient Transportation Control Measures (TCMs), and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. Although the Santa Margarita Town Expansion Alternative would result in the same number of residential units and therefore similarly exceed population growth assumptions, the location and configuration of the alternative uses Smart Growth Principles of compact urban development, which would reduce vehicle trips and miles traveled compared to the

Agricultural Residential Cluster Subdivision. Impacts related to CAP consistency would therefore be reduced under the Santa Margarita Town Expansion Alternative.

Overall, air quality impacts would be similar, greater, and reduced when compared to the Agricultural Residential Cluster Subdivision.

*Biological Resources.* This alternative would relocate the Agricultural Residential Cluster Subdivision to extend from the southwest corner of the community of Santa Margarita. As shown in Figure 6-15, this area is composed of blue oak woodland, California annual grassland, and emergent wetland habitat types. Since the same number of units would be constructed, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. However, the Santa Margarita Town Expansion Alternative site is more compact than the Agricultural Residential Cluster Subdivision site. As a result, overall impacts to blue oak woodland and California annual grassland would be slightly reduced. The compact design of this alternative would similarly result in less fragmentation of habitat overall. However, despite the more compact design, the alternative location contains a larger area of emergent wetland habitat than the Agricultural Residential Cluster Subdivision. Therefore, impacts to this





habitat type would be increased, Impacts to native perennial grassland, central (Lucian) sage scrub, chamise chaparral, coast live oak woodland, valley oak woodland, mixed woodland and riparian habitat types would be eliminated, since these habitat types do not occur on this alternative site. In addition, the San Luis Obispo Mariposa Lily, a CNPS List 1B plant species, does not occur in this alternative location. As a result, impacts to this special-status plant species would be reduced.

The proposed Agricultural Residential Cluster Subdivision would result in potentially significant impacts to Vernal Pool Fairy Shrimp (VPFS), a Federally Threatened species, because of direct and indirect impacts to seasonal pools. As shown in Figure 6-15, no seasonal pools are located within this alternate location. Therefore, impacts to seasonal pools and VPFS would be reduced when compared to the proposed Agricultural Residential Cluster Subdivision. Similarly, because this alternative would not be located near any on-site creeks, direct take of the federally-threatened South/Central California Coast Steelhead (Steelhead) and California red-legged frogs (CRLF) would be reduced compared to the Agricultural Residential Cluster Subdivision.

Because this alternative would be located closer to the community of Santa Margarita and developed in a more compact area, impacts related to the reduction of migration corridors for special-status and common wildlife species would also be reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

Overall, biological resource impacts would be both better and worse than the proposed Agricultural Residential Cluster Subdivision.

*Cultural Resources.* Thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site (refer to Draft EIR Section 4.4, *Cultural Resources*). This alternative would relocate the Agricultural Residential Cluster Subdivision to extend from the southwest corner of the community of Santa Margarita. However, several other prehistoric and historical archaeological sites are located within the alternative location. Although development in this area would avoid some of the resources on the proposed Agricultural Residential Cluster Subdivision site, it would nonetheless impact cultural resources on the revised location. As a result, impacts related to damage or destruction of prehistoric and historical archaeological sites, and disruption of their setting and feeling, would be similar to the proposed Agricultural Residential Cluster Subdivision.

Since the same number of units would be constructed, site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision. This alternative would therefore result in similar impacts related to disturbing previously unidentified buried archeological deposits or human remains. Because this alternative would generate the same number of new residents, there would be a similar likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites. Overall, impacts related to identified resources, previously unidentified buried archeological deposits or human remains, and relic collecting and/or vandalism under this alternative would be similar to the proposed Agricultural Residential Cluster Subdivision.



Drainage, Erosion and Sedimentation. This alternative would result in the same number of residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, impacts related to erosion, sedimentation, and pollutant discharges during construction would be similar to the proposed Agricultural Residential Cluster Subdivision. The amount of paved areas under this alternative would also be similar to the proposed Agricultural Residential Cluster Subdivision. Therefore, permanent increases in surface runoff and accelerated erosion, as well as storm water transport of pollutants, bacteria, and sediment into downstream facilities, would be similar under the Santa Margarita Town Expansion Alternative.

Portions of the Agricultural Residential Cluster Subdivision are located in a 100-year flood zone. However, no habitable structures would be located in these areas under the proposed Agricultural Residential Cluster Subdivision. The Santa Margarita Town Expansion Alternative avoids flood zones altogether (refer to Figure 4.5-1 in Draft EIR Section 4.5, *Drainage, Erosion and Sedimentation*). Both the Agricultural Residential Cluster Subdivision and the Santa Margarita Town Expansion Alternative would result in less than significant impacts.

Overall, impacts related to drainage, erosion and sedimentation would be similar to the proposed Agricultural Residential Cluster Subdivision.

Geologic Stability. This alternative would relocate the Agricultural Residential Cluster Subdivision to extend from the southwest corner of the community of Santa Margarita. The Santa Margarita Town Expansion Alternative would accommodate the same number of residential units as the proposed Agricultural Residential Cluster Subdivision. Therefore, it would expose the same number of units and residents to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch.

The previous location for the Agricultural Residential Cluster Subdivision was subject to soil-related hazards (expansive soils, erosive soils and settlement), moderate landslide potential, and high liquefaction potential (refer to Figures 4.6-3, 4.6-5 and 4.6-6 in Draft EIR Section 4.6, *Geologic Stability*). The area immediately south and west of the community of Santa Margarita is subject to similar soil-related hazards (expansive soils, erosive soils and settlement), high landslide potential, and high liquefaction potential. Because the same number of units would be exposed to similar hazards, this alternative would result in similar soil-related hazards and liquefaction impacts as the proposed Agricultural Residential Cluster Subdivision.

Overall, this alternative would result in similar geologic stability impacts when compared to the proposed Agricultural Residential Cluster Subdivision.

Land Use. This alternative would relocate the Agricultural Residential Cluster Subdivision to extend from the southwest corner of the community of Santa Margarita. Because this alternative would be located closer to the community of Santa Margarita, temporary noise, air quality and visual impacts from construction would be greater than the Agricultural Residential Cluster Subdivision. However, because this alternative uses Smart Growth Principles of compact urban development and preservation of rural land and agricultural resources, it would convert a lesser amount open land compared to the proposed Agricultural Residential Cluster Subdivision. Land use impacts would therefore be both greater and lesser than the proposed Agricultural Residential Cluster Subdivision.





*Noise.* This alternative would generate the same amount of average daily vehicle trips as the proposed Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby major roadways would be similar to the Agricultural Residential Cluster Subdivision. Due to the alteration in trip distribution patterns, traffic noise impacts on Wilhelmina Avenue would be increased, while traffic noise impacts on Estrada Avenue would be reduced, when compared to the proposed Agricultural Residential Cluster Subdivision. Because this alternative would locate residential units closer to the private airstrip, private railroad, and Union Pacific Railroad (UPRR), exposure to periodic high noise levels would be greater under this alternative. Similarly, although this alternative would generate similar construction-related noise impacts due to the similar level of development, construction would occur in closer proximity to existing residences. Construction-related noise impacts would therefore be greater than the Agricultural Residential Cluster Subdivision. The wastewater treatment plant, a new use not currently proposed as part of the Agricultural Residential Cluster Subdivision, would not be considered a substantial noise generator. However, as a reasonable worst case scenario, the plant could be located directly adjacent to existing and future residences, which could result in some operational noise at these sensitive receptors, depending on the size and operational characteristics of the facility. Impacts would therefore be slightly greater than the Agricultural Residential Cluster Subdivision.

Overall, noise impacts would be both similar to and worse than the proposed Agricultural Residential Cluster Subdivision.

*Public Safety.* This alternative would relocate the Agricultural Residential Cluster Subdivision to extend from the southwest corner of the community of Santa Margarita. As discussed in Draft EIR Section 4.9, *Public Safety*, site disturbance associated with the proposed Agricultural Residential Cluster Subdivision would not occur in an area of historical croplands. Site disturbance associated with the Santa Margarita Town Expansion Alternative would similarly not occur in an area of historical croplands. Both the Agricultural Residential Cluster Subdivision and the Santa Margarita Town Expansion Alternative would result in less than significant impacts. Impacts related to valley fever exposure would also be similar.

Because this alternative would locate residential units closer to the private airstrip, State Route 58, and the UPRR, exposure of people to exposure to contaminants from highway and railway accidents that involve hazardous materials, and hazards related to potential aircraft accidents would be increased when compared to the proposed Agricultural Residential Cluster Subdivision. However, implementation of existing federal, state, and local regulations pertaining to the use, containment, and transport of hazardous materials would minimize the possibility of an accident, thereby ensuring less than significant impacts.

Overall, the Santa Margarita Town Expansion Alternative would result in public safety impacts both similar to and greater than the proposed Agricultural Residential Cluster Subdivision.

*Public Services.* This alternative would result in the same number of residential units as the Agricultural Residential Cluster Subdivision. Consequently, the need for law enforcement, fire protection, school, solid waste, and library services would be similar. Therefore, this alternative



is considered to have similar public service impacts compared to the proposed Agricultural Residential Cluster Subdivision.

Recreation. Because this alternative would result in the same number of residential units as the Agricultural Residential Cluster Subdivision, it would similarly generate the need for 0.9 acres of parkland. However, this alternative would include a 5-acre community park which would more than offset this incremental demand. Alternative 13 would additionally include a trail connecting the community of Santa Margarita to the Los Padres National Forest. Impacts related to recreation would therefore be reduced when compared to the Agricultural Residential Cluster Subdivision, and would be considered Class IV, *beneficial*.

Transportation and Circulation. This alternative would result in the same number of residential units as the Agricultural Residential Cluster Subdivision. However, because this alternative uses Smart Growth Principles of compact urban development, it would encourage pedestrian and bicycle transportation. Average daily vehicle trips would therefore be slightly reduced when compared to the Agricultural Residential Cluster Subdivision.

Since access to this alternative would be provided via Wilhelmina Avenue, the majority of project trips, which would be distributed toward U.S. Highway 101, bypassing most of the community of Santa Margarita and existing traffic operational deficiencies in the eastern portion of the community [refer to Section 4.12.1(f) in Section 4.12, *Transportation and Circulation*, of the Draft EIR]. Impacts to El Camino Real and Estrada Avenue, El Camino Real west of Pinal Avenue, El Camino Real from Estrada Avenue to Pozo Road, Estrada Avenue and H Street, and Estrada Avenue south of J Street would therefore be reduced. However, impacts to U.S. 101 off-ramps to SR 58 (which also have existing deficiencies) would remain, while impacts to Wilhelmina Avenue and the intersection of Wilhelmina Avenue and El Camino Real would increase due to the alteration of trip distribution patterns.

Overall, impacts would be both better and worse when compared to the Agricultural Residential Cluster Subdivision.

Visual Resources. This alternative would relocate the Agricultural Residential Cluster Subdivision to extend from the southwest corner of the community of Santa Margarita. The visual context of this alternative therefore differs from the Agricultural Residential Cluster Subdivision, since development would be located immediately adjacent to existing urban development rather than undisturbed, rural hillsides. Although more homes may be visible from roadways within the community of Santa Margarita and State Route (SR) 58 west of the community of Santa Margarita, no development would be visible from public viewsheds south of the community, including Estrada Avenue, State Route 58 and West Pozo Road (refer to Draft EIR Section 4.13, *Visual Resources*). Therefore, overall visual impacts would be both better and worse under the Santa Margarita Town Expansion Alternative.

Water and Wastewater. Water service under the Santa Margarita Town Expansion Alternative would be provided by a connection to the Nacimiento Water Project. The untreated Nacimiento water delivered to the Ranch would be treated on-site and used for Santa Margarita Town Expansion Alternative residences. As a result, impacts related to groundwater use and overdraft of the aquifer system would be eliminated. It should be noted, however, that



importing and treating water for residences outside of an urban reserve line would be potentially inconsistent with the County's Framework for Planning (Inland) goal of maintaining "a distinction between urban and rural development by providing for rural uses outside of urban and village areas..." The objective of this goal, as noted in the Framework, is to restrict urban services outside of urban or village reserve lines.

Sewer service under the Santa Margarita Town Expansion Alternative would be provided through connections to new sewer lines connecting to a new wastewater treatment plant. As a result, impacts related to improper septic disposal field design, on-site recharge of water softeners and household wastes, and septage load would be eliminated. The wastewater treatment plant would be under the regulatory jurisdiction of the California Regional Water Quality Control Board (RWQCB), Central Coast Region. The RWQCB sets treated effluent quality limits to protect the groundwater basin quality for present and future beneficial uses. Because this alternative's wastewater treatment plant would be subject to approval by the RWQCB, this alternative would not be expected to impact water quality.

## **6.14 ALTERNATIVE 14: Reduced Project**

### **6.14.1 Description**

This alternative would cluster 40 lots (including 39 residential lots and one open space lot) in the northernmost portion of the Agricultural Residential Cluster Subdivision site, in the currently proposed Phase One location. This alternative would slightly reorganize the currently proposed Phase One configuration to achieve a higher-density, more compact cluster and further minimize the overall project footprint (refer to Figure 6-16).

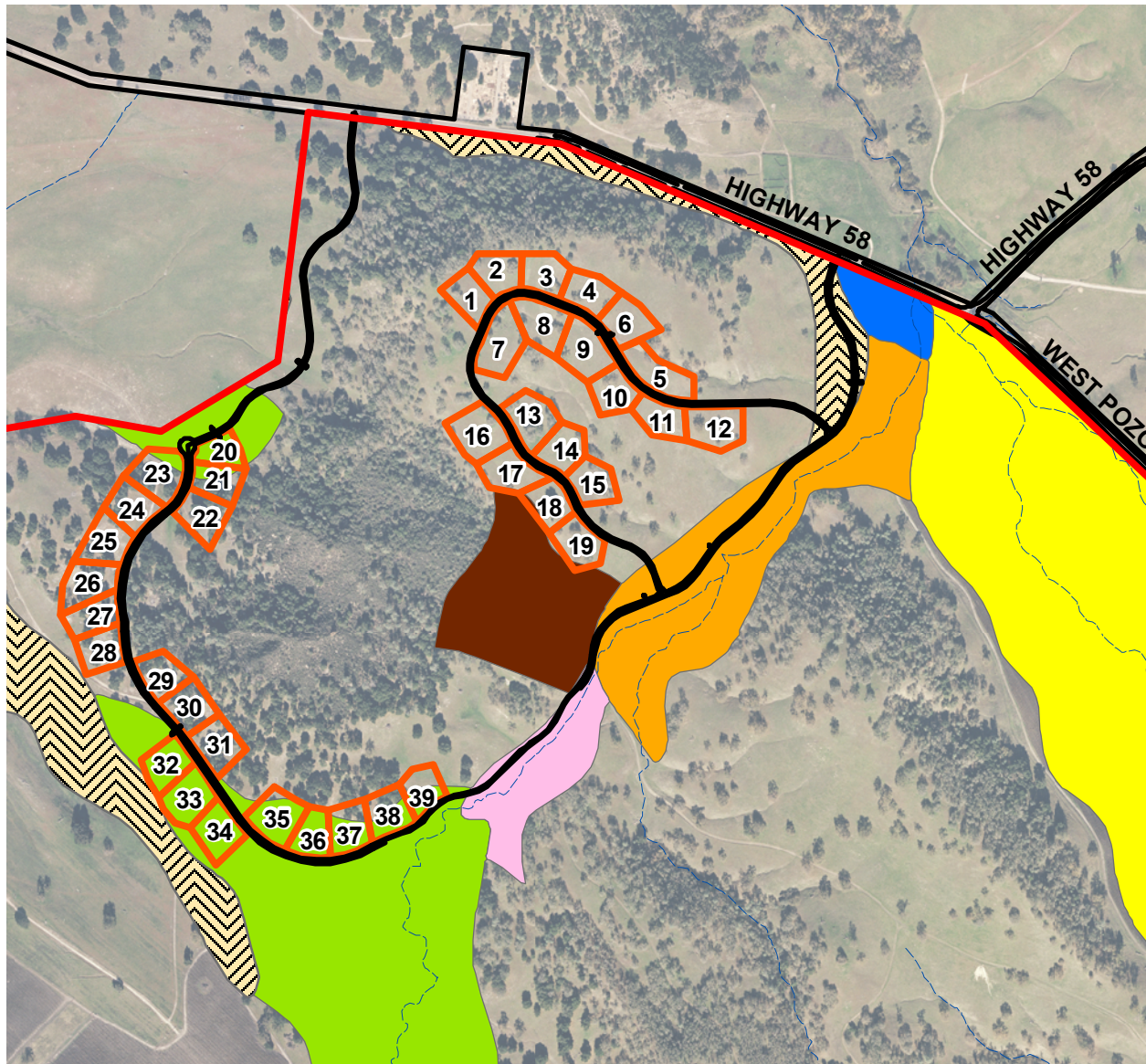
Access would be provided via one existing driveway and one new driveway from West Pozo Road, as proposed. Internal circulation would be similar to the proposed Agricultural Residential Cluster Subdivision Phase One. Roads south of this area would be eliminated. The permanent agricultural conservation easements (ACE) would remain southwest of the community of Santa Margarita, as proposed. However, the amount of land preserved in ACE's would be reduced to approximately 800 acres. Sewer service would be provided by individual septic systems and water service would be provided by a connection to the Nacimiento Water Project. This alternative would connect to the Nacimiento waterline at El Camino Real just west of the community of Santa Margarita. Water tanks would remain as proposed. The untreated Nacimiento water would be treated on-site and used for the Reduced Project Alternative.

The amount of site disturbance would be reduced by approximately 64 65%, and the overall project area would be reduced by 75%, compared to the proposed Agricultural Residential Cluster Subdivision. Further development of the Ranch property, including other portions of the proposed Agricultural Residential Cluster Subdivision site, would require preparation of a Specific Plan and additional environmental review.



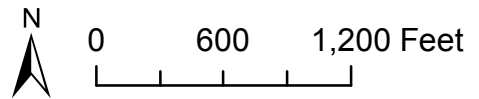
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Source: SSURGO, 2004; EDA Design Professionals, 2005 and Rincon Consultants, 2007.

- TENTATIVE TRACT 2586 BOUNDARY
- ALTERNATIVE 14 LOTS
- PRIME AGRICULTURAL SOILS REGARDLESS OF IRRIGATION:**
- 102, ARBUCKLE-POSITAS COMPLEX, 9-15
- 116, BOTELLA SANDY LOAM, 2-9
- 139, ELDER LOAM, 2-9
- 208, STILL CLAY LOAM, 0-2
- PRIME AGRICULTURAL SOILS IF IRRIGATED:**
- 130, CLEAR LAKE CLAY, DRAINED
- 133, CROPLEY CLAY, 2-9
- 182, OCEANO LOAMY SAND, 2-9



Alternative 14:  
 Reduced Project

Figure 6-16



### 6.14.2 Impact Analysis

*Agricultural Resources.* This alternative would decrease the number of lots by 65%, thereby decreasing the amount of site disturbance. In addition, the overall project footprint would be reduced by approximately 75% compared to the proposed Agricultural Residential Cluster Subdivision. As discussed in Section 2.1, *Agricultural Resources*, the proposed Agricultural Residential Cluster Subdivision would permanently convert 21.2 acres containing prime soils to non-agricultural uses and would permanently compromise the viability of a 676.7-acre grazing unit. In contrast, Alternative 14 would convert approximately 12.5 acres of prime soils (refer to Figure 6-16). Impacts related to the conversion of prime soil areas would therefore be less than the proposed Agricultural Residential Cluster Subdivision. In addition, because lots would be configured in a more compact manner, this alternative would reduce impacts related to grazing unit fragmentation. Similarly, because lots would be relocated away from existing vineyards in the southern portion of the Ranch property, fewer lots would be located adjacent to existing cultivated agricultural operations. Although some vineyards are located west and southeast of this alternative area, overall distance to vineyard operations would be increased. Conflicts between residential and vineyard uses would be proportionately reduced. In addition, because there would be fewer overall lots, conflicts between residential and grazing uses would also be reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

*Air Quality.* This alternative would generate 402 average daily trips; a 65% reduction compared to the Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). Air contaminant emissions associated with vehicle use would therefore be less than the proposed Agricultural Residential Cluster Subdivision. In addition, because this alternative would accommodate 73 fewer residential units, long term emissions associated with electricity and natural gas usage would also be reduced. Grading- and construction-related emissions and odor nuisance impacts would be slightly reduced due to the reduced area of disturbance compared to the proposed Agricultural Residential Cluster Subdivision. The Agricultural Residential Cluster Subdivision is potentially inconsistent with San Luis Obispo APCD's 2001 *Clean Air Plan* (CAP) because it does not include sufficient Transportation Control Measures (TCMs) and because the rate of increase in vehicle trips and miles traveled may exceed population growth rates for the area. The Reduced Project Alternative would similarly exclude sufficient TCMs and would similarly increase trip lengths in the vicinity. However, because this alternative would generate 65% fewer daily vehicle trips, the rate of increase in vehicle trips and miles traveled would be less than the proposed Agricultural Residential Cluster Subdivision.

Overall, air quality impacts would be reduced under the Reduced Project Alternative.

*Biological Resources.* Under the Reduced Project Alternative, lots would be clustered in the northernmost portion of the Agricultural Residential Cluster Subdivision site, in the currently proposed Phase One location. As shown in Figure 2-3, this area contains ten natural plant communities and/or wildlife habitat types. The habitat types include California annual grassland, native perennial grassland (including deergrass (*Muhlenbergia rigens*) and native perennial grassland), central (Lucian) scrub, chamise chaparral, blue oak woodland, coast live oak woodland, valley oak woodland, mixed oak woodland (including blue, coast live and valley oaks, as well as grey pines [*Pinus sabiniana*]), emergent wetland, and riparian. Ruderal areas, agriculture, seasonal pools and known occurrences of special status species are also shown on Figure 6-12. The San Luis





Obispo Mariposa Lily, a CNPS List 1B plant species, also occurs within the Reduced Project Alternative site, similar to the proposed Agricultural Residential Cluster Subdivision site as a whole. The Reduced Project Alternative would avoid several habitat types located on the proposed Agricultural Residential Cluster Subdivision site, including chamise chaparral and valley oak woodland.

Because this alternative would accommodate 73 fewer residential units, site disturbance would be reduced when compared to the proposed Agricultural Residential Cluster Subdivision. As a result, this alternative would result in fewer impacts related to habitat conversion, oak tree removal and San Luis Obispo Mariposa Lily removal when compared to the proposed Agricultural Residential Cluster Subdivision. Similarly, impacts to special-status animal species, including the California red-legged frog (CRLF), South/Central California Coast Steelhead (Steelhead), white-tailed kite, golden eagle, Cooper's hawk, sharp-shinned hawk, pallid bat, American badger, legless lizard, and southwestern pond turtle, would be reduced. Because development in the southern portion of the proposed Agricultural Residential Cluster Subdivision site would be eliminated, impacts to Vernal Pool Fairy Shrimp (VPFS) and impacts related to the reduction of migration corridors for special-status and common wildlife species would also be reduced.

Overall, this alternative would result in reduced impacts related to biological resources when compared to the proposed Agricultural Residential Cluster Subdivision.

*Cultural Resources.* Thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site (refer to Draft EIR Section 4.4, *Cultural Resources*). This alternative would cluster 40 lots (including 39 residential lots and one open space lot) in the northernmost portion of the Agricultural Residential Cluster Subdivision site, in the currently proposed Phase One location. All development south of this area would be eliminated. As a result, impacts related to damage or destruction of the important associations of these sites, and disruption of their setting and feeling, would be reduced compared to the Agricultural Residential Cluster Subdivision.

In addition, because this alternative would accommodate 73 fewer residential units, site disturbance would be reduced when compared to the proposed Agricultural Residential Cluster Subdivision. Impacts related to disturbing previously unidentified buried archeological deposits or human remains would therefore be reduced. Similarly, because this alternative would generate fewer new residents, there would be less likelihood for relic collecting and/or vandalism that could potentially impact archaeological and historical sites.

Overall, this alternative would result in reduced impacts related to cultural resources when compared to the proposed Agricultural Residential Cluster Subdivision.

*Drainage, Erosion and Sedimentation.* This alternative would decrease the amount of site disturbance by 65%. Impacts related to erosion, sedimentation, and pollutant discharges during construction would therefore be reduced. The amount of paved areas under this alternative would also be reduced when compared to the proposed Agricultural Residential Cluster Subdivision. Therefore, permanent increases in surface runoff and accelerated erosion, as well



as storm water transport of pollutants, bacteria, and sediment into downstream facilities, would be reduced under the Reduced Project Alternative.

As discussed in Draft EIR Section 4.5, *Drainage, Erosion and Sedimentation*, the eastern reaches of the proposed Agricultural Residential Cluster Subdivision site, just south of the east driveway, would be located within the flood zone associated with Trout Creek (refer to Draft EIR Figure 4.5-1). The Reduced Project Alternative would not be located in this area. Both the Agricultural Residential Cluster Subdivision and the Reduced Project Alternative would result in less than significant impacts.

*Geologic Stability.* The Reduced Project Alternative would accommodate 73 fewer residential units than the proposed Agricultural Residential Cluster Subdivision. Therefore, development under this alternative would expose fewer units and residents to strong ground shaking resulting from the presence of active and potentially active faults in the vicinity of the Santa Margarita Ranch.

Under the Reduced Project Alternative, lots would be clustered in the currently proposed Phase One location. As discussed in Draft EIR Section 4.6, *Geologic Stability*, this portion of the site is subject to soil-related hazards (expansive soils, erosive soils and settlement); moderate to high landslide potential; and moderate to high liquefaction potential (refer to Draft EIR Figures 4.6-3, 4.6-5 and 4.6-6, respectively) similar to the Agricultural Residential Cluster Subdivision site as a whole. However, because fewer lots and therefore fewer residents would be subject to these hazards, impacts would be reduced under the Reduced Project Alternative.

Overall, geologic stability impacts would be less than the proposed Agricultural Residential Cluster Subdivision.

*Land Use.* The Reduced Project Alternative would accommodate 73 fewer residential units than the proposed Agricultural Residential Cluster Subdivision and would reduce site disturbance by approximately 65%. The reduced construction activity would reduce temporary noise, air quality and visual impacts compared to the Agricultural Residential Cluster Subdivision. In addition, this alternative would not convert as much open land as the proposed Agricultural Residential Cluster Subdivision. Land use impacts would be reduced compared to the proposed Agricultural Residential Cluster Subdivision.

*Noise.* This alternative would generate 402 average daily trips; a 65% reduction compared to the Agricultural Residential Cluster Subdivision (see *Transportation and Circulation* discussion below). Therefore, noise levels on nearby major roadways would be incrementally reduced. In addition, because this alternative would accommodate fewer residential units, fewer residents and site occupants would be exposed to nuisance noise generated by passing trains on the Union Pacific Railroad (UPRR). This alternative would generate less severe construction-related noise impacts, since the area of disturbance and number of units would be reduced.

*Public Safety.* As with the Agricultural Residential Cluster Subdivision, site disturbance associated with the Reduced Project Alternative would not occur in an area of historical croplands. Therefore, impacts related to residual agricultural chemicals would be similarly less than significant.



Since this alternative would accommodate 73 fewer residential units as the proposed Agricultural Residential Cluster Subdivision, fewer residents would be exposed to other public safety hazards overall. This includes: exposure to contaminants from highway and railway accidents that involve hazardous materials; the use, transport, or storage of hazardous chemicals; traffic safety hazards due to conflicts between proposed uses and existing off-site mining operations and on-site agricultural operations; hazards related to potential aircraft accidents, and exposure to valley fever.

Under this alternative, lots would be clustered in the currently proposed Phase One location, while the water tanks would remain as proposed. Since no residences would be located near the water tanks under this alternative, potential public safety impacts associated with the unlikely event of water tank failure would be eliminated.

Overall, the Reduced Project Alternative would result in impacts which are both similar and reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

*Public Services.* This alternative would accommodate 73 fewer residential units as the proposed Agricultural Residential Cluster Subdivision. Consequently, lesser demand for law enforcement, fire protection, school, solid waste, and library services would occur. Therefore, this alternative is considered to have fewer public service impacts compared to the proposed Agricultural Residential Cluster Subdivision.

*Recreation.* This alternative would accommodate 73 fewer residential units as the proposed Agricultural Residential Cluster Subdivision. Consequently, the need for recreational facilities would be reduced. Therefore, this alternative is considered to have fewer impacts related to parkland demand when compared to the proposed Agricultural Residential Cluster Subdivision.

*Transportation and Circulation.* This alternative would include 40 lots (including 39 residential lots and one open space lot) in the northernmost portion of the Agricultural Residential Cluster Subdivision site. Based on the trip rates used in the Draft EIR (refer to Table 4.12-9 in Draft EIR Section 4.12, *Transportation and Circulation*), Alternative 14 would generate 402 average daily trips, 31 AM peak hour trips, and 42 PM peak hour trips. This represents a 65% decrease compared to the Agricultural Residential Cluster Subdivision. Traffic impacts on local roadway and highway segments and intersections would therefore be reduced. Impacts related to pedestrian, bicycle and transit demand would also be reduced. Because access to the Reduced Project Alternative would be the same as the Agricultural Residential Cluster Subdivision, impacts related to access would be similar.

*Visual Resources.* This alternative would reduce site disturbance by approximately 65% compared to the proposed Agricultural Residential Cluster Subdivision, and the overall project footprint would be approximately  $\frac{1}{4}$  that of the proposed Agricultural Residential Cluster Subdivision. The associated preservation of open space would maintain more of the rural character of the site than the proposed Agricultural Residential Cluster Subdivision. In addition, although the Phase One portion of the Agricultural Residential Cluster Subdivision would be visible from area roadways and the community of Santa Margarita, the Reduced



Project Alternative would exclude development south of this area. As a result, overall impacts related to the alteration of visual character under this alternative would be reduced when compared to the proposed Agricultural Residential Cluster Subdivision.

*Water and Wastewater.* Water service under the Reduced Project Alternative would be provided by a connection to the Nacimiento Water Project. The untreated Nacimiento water would be treated on-site and used for the Reduced Project Alternative. As a result, impacts related to groundwater use and overdraft of the aquifer system would be eliminated. In addition, this alternative would accommodate 73 fewer residential units than the proposed Agricultural Residential Cluster Subdivision. Therefore, this alternative would result in less net consumptive water use overall. It should be noted, however, that importing and treating water for residences outside of an urban reserve line would be potentially inconsistent with the County's Framework for Planning (Inland) goal of maintaining "a distinction between urban and rural development by providing for rural uses outside of urban and village areas..." The objective of this goal, as noted in the Framework, is to restrict urban services outside of urban or village reserve lines.

This alternative assumes that sewer would be provided by individual septic systems, similar to the proposed Agricultural Residential Cluster Subdivision. Impacts related to improper disposal field design, on-site recharge of water softeners and household wastes, and septage load would also therefore be less than the proposed Agricultural Residential Cluster Subdivision.

## **6.15 ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

This section evaluates the findings for the proposed Agricultural Residential Cluster Subdivision and Future Development Program and the two (2) alternatives under consideration for the Agricultural Residential Cluster Subdivision and Future Development Program combined, eight (8) alternatives under consideration for the Agricultural Residential Cluster Subdivision, and four (4) alternatives under consideration for the Future Development Program. It then identifies the environmentally superior alternative for each issue area, as shown on Tables 6-7 and 6-8. In accordance with the State CEQA Guidelines, if the No Project/No Development Alternative or the No Project/Existing Zoning Alternative is identified as the Environmentally Superior Alternative, the alternative among the remaining scenarios that is environmentally superior must also be identified. In addition, Tables 6-7 and 6-8 show whether each alternative's environmental impact is greater, lesser, or similar to the proposed Agricultural Residential Cluster Subdivision and/or Future Development Program for each issue area.

The No Project/No Development Alternative (Alternative 1) is considered environmentally superior overall, since no development that could result in significant environmental impacts would occur. The No Project/Existing Zoning Alternative (Alternative 2) is also environmentally superior to the proposed Agricultural Residential Cluster Subdivision and Future Development Program. However, the No Project/Existing Zoning Alternative would not preclude future development on the Santa Margarita Ranch. The current land use designation that governs the Ranch would keep the possibility of development open, pursuant to the County's agricultural cluster subdivision ordinance and other development regulations.



Among the other development alternatives, Alternative 14 (Reduced Project Alternative) is environmentally superior overall, while Alternatives 12 (Amended Project), 7 (Tighter Cluster Alternative), 3 (Revised Cluster Design), and 13 (Santa Margarita Town Expansion) are all superior to the proposed Agricultural Residential Cluster Subdivision in certain respects. Each of the Alternative Future Development Program Scenarios (Alternatives 8, 9, and 10) would be environmentally superior to the Future Development Program.

### **6.15.1 Environmentally Superior Alternative to the Agricultural Residential Cluster Subdivision**

As noted above, Alternative 14 (Reduced Project Alternative) is environmentally superior overall, followed by Alternatives 12 (Amended Project), 7 (Tighter Cluster Alternative), 3 (Revised Cluster Design), and 13 (Santa Margarita Town Expansion). These environmentally superior alternatives are discussed below.

Alternative 14 (Reduced Project Alternative) is environmentally superior to the Agricultural Residential Cluster Subdivision because it would reduce the size of the project from 112 to 40 lots and would reduce associated site disturbance by approximately 64%. The reduced site disturbance would result in fewer impacts related to agricultural resources, biological resources, drainage, erosion and sedimentation, and visual resources. Fewer lots and an associated decrease in project residents would further reduce impacts to air quality, noise, public safety, public services, recreation, transportation and circulation, and water and wastewater. Remaining impact areas (cultural resources, geologic stability and land use) would be reduced through a combination of the lesser site disturbance and fewer project residents. Overall, this alternative would be environmentally superior to the proposed Agricultural Residential Cluster Subdivision for 12 of the 14 issue areas, and environmentally superior/equal to the Agricultural Residential Cluster Subdivision for the remaining two issue areas.

Alternative 12 (Amended Project) is environmentally superior to the proposed Agricultural Residential Cluster Subdivision primarily because it avoids or reduces disturbance associated with environmental constraints identified in the Draft EIR. Compared to the proposed Agricultural Residential Cluster Subdivision, this alternative would relocate 23 lots, adjust the boundaries of 65 lots, add ½ acre building envelopes to all lots, and place height restrictions on 10 lots. These adjustments would slightly reduce impacts related to agricultural resources, and would reduce impacts related to biological resources, cultural resources, drainage, erosion and sedimentation, and transportation and circulation (access), and visual resources. However, because this alternative would generate the same number of lots and therefore the same number of new residents, impacts based on a per capita generation would be equal to the proposed Agricultural Residential Cluster Subdivision. Overall, this alternative would be environmentally superior to the proposed Agricultural Residential Cluster Subdivision.

Alternative 7 (Tighter Cluster Alternative) is environmentally superior to the proposed Agricultural Residential Cluster Subdivision primarily because it would reduce the overall project footprint by 78%. Under this alternative, all Lots (excluding one ranch headquarters unit located on Parcel 42) would be clustered in the remainder parcel, north of the proposed



Agricultural Residential Cluster Subdivision and south of the community of Santa Margarita, and in the northernmost portion of the Agricultural Residential Cluster Subdivision site (refer to Figure 6-5). Although the amount of site disturbance would be similar to the proposed Agricultural Residential Cluster Subdivision, the overall project footprint would be reduced by approximately 78%. The reduced project footprint would partially reduce impacts to nine (9) of the 14 issue areas, including: agricultural resources, air quality, biological resources, cultural resources, drainage, erosion and sedimentation, geologic stability, land use, public safety and visual resources. However, all nine of these issue areas would also result in impacts either similar to or greater than the Agricultural Residential Cluster Subdivision due to the similar amount of site disturbance and placement of lots in a more sensitive area (i.e. with regards to prime soils and riparian/wetland habitat). For the remaining five (5) issue areas, Alternative 7 would result in similar impacts to the Agricultural Residential Cluster Subdivision because it would generate the same number of new residents. These issue areas include: noise, public services, recreation, transportation and circulation, and water and wastewater. Overall, this alternative would be environmentally superior to the proposed Agricultural Residential Cluster Subdivision.

Alternative 3 (Revised Cluster Design) may also be considered environmentally superior in certain respects. This alternative analyzes an alternate site plan for the proposed Agricultural Residential Cluster Subdivision. The overall development potential of this alternative would be the same as for the proposed Agricultural Residential Cluster Subdivision. However, this alternative would reconfigure the 112 lots so as to reduce to the overall project footprint. Under this alternative, Lots 1 and 43 through 115 would be relocated north of the proposed East Driveway, within the currently proposed Phase 1 development area (refer to Figure 6-1). Due to the reduced project footprint, this alternative is superior to the proposed Agricultural Residential Cluster Subdivision for five (5) issue areas related to site disturbance, including: agricultural resources, biological resources, cultural resources, drainage, erosion and sedimentation and land use. The reduced project footprint would partially reduce impacts to air quality (grading- and construction-related impacts and odor nuisance impacts). However, because this alternative would generate the same number of lots and therefore the same number of new residents, impacts based on a per capita generation would be equal to the proposed Agricultural Residential Cluster Subdivision. Geologic stability impacts would be similar to the proposed Agricultural Residential Cluster Subdivision because the same number of units would be exposed to similar hazards. Impacts related to the alteration of visual character under this alternative would be both better and worse when compared to the proposed Agricultural Residential Cluster Subdivision. Although the reduced footprint would preserve additional open space and maintain the rural character of the site, more homes may be visible from roadways within the community of Santa Margarita. Overall, this alternative would be environmentally superior to the proposed Agricultural Residential Cluster Subdivision.



**Table 6-7 Agricultural Residential Cluster Subdivision Alternative Impact Comparison**

Issue	Proposed Agricultural Residential Cluster Subdivision	Alt. 1* No Project/No Development	Alt. 2* No Project/Existing Zoning	Alt. 3 Revised Cluster Design	Alt. 4 Revised Cluster Location 1	Alt. 5 Revised Cluster Location 2	Alt. 6 Revised Cluster Location 3	Alt. 7 Tighter Cluster Alternative	Alt. 12 Amended Project Alternative	Alt. 13 Town Expansion	Alt. 14 Reduced Project Alternative
Agricultural Resources	=	+	+	+	+ / -	+ / -	+ / =	+ / -	+ / =	+ / -	+
Air Quality	=	+	+	+ / =	=	=	=	+ / =	=	+ / = / -	+
Biological Resources	=	+	+	+	+ / -	+ / = / -	+ / -	+ / -	+ / =	+	+
Cultural Resources	=	+	+	+	+ / =	+ / =	=	+ / =	+ / =	=	+
Drainage, Erosion and Sedimentation	=	+	+	+	= / -	= / -	+ / =	+ / =	+ / =	=	+
Geologic Stability	=	+	+	=	+ / = / -	= / -	=	+ / =	=	=	+
Land Use	=	+	+	+	= / -	= / -	=	+ / =	=	+ / -	+
Noise	=	+	+	=	= / -	= / -	= / -	=	=	= / -	+
Public Safety	=	+	+	+ / =	-	= / -	= / -	+ / =	=	= / -	+ / =
Public Services	=	+	+	=	=	=	=	=	= / -	=	+
Recreation	=	+	+ / -	=	=	=	=	=	=	+	+
Transportation and Circulation	=	+	+	=	+ / -	-	=	=	+ / =	+ / =	+ / =
Visual Resources	=	+	+	+ / -	+ / -	+ / -	+ / -	+ / -	+	+ / -	+
Water and Wastewater	=	+	+ / = / -	=	=	=	=	=	+ / =	+	+
<b>Overall</b>	<b>=</b>	<b>+</b>	<b>+</b>	<b>+ / =</b>	<b>=</b>	<b>=</b>	<b>=</b>	<b>+ / =</b>	<b>+ / =</b>	<b>+ / =</b>	<b>+</b>

- Inferior to the proposed Agricultural Residential Cluster Subdivision  
 + Superior to the proposed Agricultural Residential Cluster Subdivision  
 +/- Characteristics both better and worse than the proposed Agricultural Residential Cluster Subdivision  
 = Similar impact to the proposed Agricultural Residential Cluster Subdivision  
 \* As compared to the Agricultural Residential Cluster Subdivision and Future Development Program combined





**Table 6-8 Future Development Program Alternative Impact Comparison**

<b>Issue</b>	<b>Future Development Program</b>	<b>Alternative 8 <i>Alternative Future Development Program Scenario 1</i></b>	<b>Alternative 9 <i>Alternative Future Development Program Scenario 2</i></b>	<b>Alternative 10 <i>Alternative Future Development Program Scenario 3</i></b>	<b>Alternative 11 <i>Alternative Location for Livestock Sales</i></b>
Agricultural Resources	=	+	+	+	= / -
Air Quality	=	+	+	+	= / -
Biological Resources	=	+	+	+	+ / =
Cultural Resources	=	+	+	+	= / -
Drainage, Erosion and Sedimentation	=	+	+	+	=
Geologic Stability	=	+	+	+	+ / -
Land Use	=	+	+	+	-
Noise	=	+	+	+	= / -
Public Safety	=	+	+	+	+ / = / -
Public Services	=	+	+	+	=
Recreation	=	-	+	+	=
Transportation and Circulation	=	+	+	+	+ / -
Visual Resources	=	+	+	+	-
Water and Wastewater	=	+	+	+	=
<b>Overall</b>	<b>=</b>	<b>+</b>	<b>+</b>	<b>+</b>	<b>-</b>

- *Inferior to the Future Development Program*
- + *Superior to the Future Development Program*
- +/- *Characteristics both better and worse than the Future Development Program*
- = *Similar impact to the Future Development Program*



Alternative 13 (Santa Margarita Town Expansion) would utilize Smart Growth Principles of compact urban development and preservation of rural land and agricultural resources, and would therefore reduce impacts related to agricultural resources, air quality, biological resources, cultural resources, and transportation and circulation. In addition, because this alternative includes a park, recreation impacts would also be reduced. However, because this alternative would generate the same number of lots and therefore the same number of new residents, impacts based on a per capita generation would be equal to the proposed Agricultural Residential Cluster Subdivision. In addition, although the reduced footprint would preserve additional open space and maintain the rural character of the site, more homes may be visible from roadways within the community of Santa Margarita. Overall, this alternative would be environmentally superior and equal to the proposed Agricultural Residential Cluster Subdivision.

Alternative 4 (Revised Cluster Location 1), which involves the relocation of the Agricultural Residential Cluster Subdivision north of and immediately adjacent to the community of Santa Margarita, is characterized by environmental impacts that are better, worse and equal to the proposed Agricultural Residential Cluster Subdivision. Impacts related to grazing unit fragmentation would be reduced because this alternative would be contiguous with the community of Santa Margarita; however, this alternative would permanently convert more prime soils to non-agricultural use than the Agricultural Residential Cluster Subdivision. Biological resource impacts would be both better and worse than the proposed Agricultural Residential Cluster Subdivision. Although impacts to valley oak woodland, emergent wetland/seasonal pool, riparian/riverine, and agriculture habitat types would be greater than the proposed Agricultural Residential Cluster Subdivision, impacts to other habitat types, and impacts to special-status plant and animal species, would be reduced. This alternative would result in fewer impacts related to the alteration of the cultural landscape and similar impacts related to damage or destruction of prehistoric and historical archaeological sites. This alternative would result in fewer impacts related to landslide potential, but greater impacts related to surface rupture and similar impacts related to groundshaking and soil-related hazards. Alternative 4 would reduce impacts related to railroad crossings because fewer trips would require crossing the UPRR rail line when compared to the proposed Agricultural Residential Cluster Subdivision, but would generate the same number of average daily trips. However, additional traffic would be added to side streets in the community of Santa Margarita, thereby increasing impacts compared to the Agricultural Residential Cluster Subdivision. Lastly, this alternative would reduce visual changes viewed from the south side of the community, but would result in greater visibility of the residential uses from viewpoints on the north side of the community. Overall, the impacts of this alternative would be both better and worse than the proposed Agricultural Residential Cluster Subdivision.

Alternative 5 (Revised Cluster Location 2), which involves the relocation of the Agricultural Residential Cluster Subdivision south of and immediately adjacent to the community of Santa Margarita, is characterized by environmental impacts that are better, worse and equal to the proposed Agricultural Residential Cluster Subdivision. Most issue areas would be similar to Alternative 4. However, impacts to several special-status species, including Vernal Pool Fairy Shrimp (VPFS), South/Central California Coast Steelhead (Steelhead) and California red-legged frog (CRLF), would be similar to the proposed Agricultural Residential Cluster Subdivision. In addition, because this alternative would relocate development south of the community of Santa



Margarita as opposed to north, geologic stability impacts would be similar to or greater than the Agricultural Residential Cluster Subdivision. Due to its proximity to the proposed Agricultural Residential Cluster Subdivision, this alternative would result in similar impacts related to exposure to residual agricultural chemicals. Similarly, impacts related to railroad crossings would be similar to the proposed Agricultural Residential Cluster Subdivision because this alternative would similarly require crossing the UPRR rail line. Overall, the impacts of this alternative would be both better and worse than the proposed Agricultural Residential Cluster Subdivision.

Alternative 6 (Revised Cluster Location 3), which involves the relocation of the Agricultural Residential Cluster Subdivision south of El Camino Real and west of the community of Santa Margarita, is also characterized by environmental impacts that are better, worse and equal to the proposed Agricultural Residential Cluster Subdivision. Most issue areas would be similar to Alternatives 4 and 5. However, this alternative would avoid impacts to prime soils, since none are located on the alternative site. In addition, this alternative would result in similar impacts related to the alteration of cultural landscapes and similar impacts related to damage or destruction of prehistoric and historical archaeological sites. Revised Cluster Location 3 would also eliminate flood hazard impacts, and would result in similar geologic stability impacts as the Agricultural Residential Cluster Subdivision. In addition, this alternative would be located a sufficient distance from existing residential uses to preclude significant temporary noise, air quality and visual impacts from construction, thereby resulting in similar land use impacts to the proposed Agricultural Residential Cluster Subdivision. Overall, the impacts of this alternative would be both better and worse than the proposed Agricultural Residential Cluster Subdivision.

Alternative 14 (Reduced Project Alternative) is environmentally superior overall, while Alternatives 12 (Amended Project), 7 (Tighter Cluster Alternative), 3 (Revised Cluster Design), and 13 (Santa Margarita Town Expansion) are all superior to the Agricultural Residential Cluster Subdivision in certain respects. Alternatives 4 through 6, which all analyze alternate locations for the Agricultural Residential Cluster Subdivision, would result in impacts that are both better and worse when compared to the proposed Agricultural Residential Cluster Subdivision, and are therefore not considered environmentally superior.

### **6.15.2 Environmentally Superior Alternative to the Future Development Program**

Alternative 9 (Alternative Future Development Program Scenario 2) and Alternative 10 (Alternative Future Development Program Scenario 3) are both environmentally superior to the Future Development Program for all 14 issue areas. Of the two, Alternative 10 is more environmentally superior because it reduces development potential to a greater extent.

Alternative 10 (Alternative Future Development Program Scenario 3) would eliminate Future Development Program land uses in the most sensitive cultural resource areas. This would involve the elimination of the following uses: a 12-room Bed and Breakfast, 6,000 square foot café, 600 seat amphitheater, 9,000 square feet of craft studios, galleries, an interpretive center, and gift shops, and a 40,000 square foot winery on the existing Ranch headquarters parcel; a 347-unit residential village, 250-unit guest ranch and lodge with a 24,000 square foot restaurant, 40,000 square foot winery including an additional 6,000 square foot retail component, and a 36-hole



golf course on 280 acres, including a 25,000 square foot clubhouse and shop located southwest of the community of Santa Margarita; one Ranch headquarter located northwest of SR 58 (after SR 58 curves northerly); and one winery/Ranch headquarter located in the southern portion of the Ranch property, west of West Pozo Road. Due to the extent of eliminated envisioned uses, impacts related to construction and long-term site disturbances, such as biological resources, cultural resources, geologic stability and visual resources would decrease considerably. In addition, since 942 fewer residents (68% less) would be added to area, impacts based on a per capita generation would also decrease considerably. These issues include public services, recreation, and water and wastewater. In addition, this alternative would result in a decrease of approximately 6,843 daily trips (74% less) as compared to the currently envisioned Future Development Program. Air quality, noise, and transportation and circulation would therefore be reduced. Because 942 fewer residences would be developed, fewer additional residents or property would be exposed to geologic or other public safety hazards. Overall, this alternative would be environmentally superior to the currently envisioned Future Development Program.

Alternative 9 (Alternative Future Development Program Scenario 2) would eliminate Future Development Program land uses in the most sensitive biological areas. This would involve the elimination of the following uses: a 347-unit residential village; a 250-unit guest ranch and lodge with a 24,000 square foot restaurant; a 40,000 square foot winery including an additional 6,000 square foot retail component; and a 36-hole golf course on 280 acres, including a 25,000 square foot clubhouse and shop. By eliminating these uses, impacts related to construction and long-term site disturbances, such as biological resources, cultural resources, geologic stability and visual resources would decrease considerably. In addition, since 937 fewer residents (67% less) would be added to area, impacts based on a per capita generation would also decrease considerably. These issues include public services, recreation, and water and wastewater. In addition, this alternative would result in a decrease of approximately 5,206 daily trips (56% less) as compared to the currently envisioned Future Development Program. Air quality, noise, and transportation and circulation would therefore be reduced. Because 937 fewer residences would be developed, fewer additional residents or property would be exposed to geologic or other public safety hazards. Overall, this alternative would be environmentally superior to the currently envisioned Future Development Program. However, it would not be as environmentally superior as Alternative 10.

Alternative 8 (Alternative Future Development Program Scenario 3) is environmentally superior to the Future Development Program for all issue areas except recreation. This alternative would eliminate Future Development Program land uses envisioned for location in the approximately 2,500 acre northeastern quadrant of the Ranch (north of SR 58 and east of El Camino Real). This would involve the elimination of the following uses: a 5-acre park and community pool, three 20,000 square foot worship centers, 50 units of work force housing, two wineries and two Ranch headquarters. Although this alternative would reduce parkland demand by approximately 9.5% compared to the Future Development Program, it would eliminate recreation facilities envisioned in the Future Development Program. As a result, the reduced recreation demands would not be met under this alternative. All remaining issue areas would be reduced similar to Alternatives 9 and 10, although to a lesser degree.

Alternative 11 (Alternative Location for Livestock Sales) is characterized by environmental impacts that are equal to, better, or worse than the currently envisioned Future Development



Program. This alternative would relocate the livestock sales yard approximately 625 feet north of the community of Santa Margarita and 625 to 1,250 feet west of El Camino Real (refer to Figure 6-9). Other Future Development Program land uses would remain. Since the same number of residents would be added to area, impacts based on a per capita generation would be similar to the Future Development Program. These issues include public services, recreation, and water and wastewater. In addition, because the same site disturbance would occur, impacts to drainage, erosion and sedimentation would also be similar. However, due to the location of the livestock sales yard in closer proximity to the community of Santa Margarita, this alternative would result in greater impacts to sensitive receptors. These issue areas include agricultural resources (urban and agricultural conflicts), air quality (odor nuisances), land use (construction nuisances), noise and visual resources. Because this alternative would avoid impacts to coast live oak woodland, impacts to this habitat type would be reduced when compared to the currently envisioned Future Development Program. However, impacts to sensitive aquatic species associated with Santa Margarita Creek would be greater when compared to the envisioned Future Development Program. Impacts related to identified cultural resources, previously unidentified buried archeological deposits or human remains would be greater than the currently envisioned Future Development Program due to the increased cultural sensitivity of this alternative location (i.e., near the existing Ranch headquarters). The Alternative Location for Livestock Sales contains low erosion hazards but high liquefaction hazards. As a result, geologic stability impacts would be both better and worse than the Future Development Program. In addition, due to its location north of the community of Santa Margarita, the Alternative Location for Livestock Sales would eliminate significant access impacts associated with the location of the livestock sales yard envisioned in the Future Development Program, which requires an unsafe turning movement on SR 58. However, it would also introduce impacts to Encina Avenue in the northern portion of the community of Santa Margarita, which would serve as an access point for the Alternative Location for Livestock Sales. Overall, the impacts of this alternative would be both better and worse when compared to the Future Development Program.

Either Alternative 9 (Alternative Future Development Program Scenario 2) or Alternative 10 (Alternative Future Development Program Scenario 3) could be considered environmentally superior, although Alternative 10 would reduce impacts from the Future Development Program to a greater extent. In addition, Alternative 8 (Alternative Future Development Program Scenario 1) would be considered environmentally superior for 13 of the 14 issue areas. Alternative 11 (Alternative Location for Livestock Sales), which relocates the livestock sales yard, would result in impacts that would be both better and worse than the Future Development Program, and is therefore not considered environmentally superior.





## **7.0 SIGNIFICANT IRREVERSIBLE CHANGES**

The environmental effects of the proposed Agricultural Residential Cluster Subdivision and Future Development Program are discussed in Section 4.0 of this EIR and are summarized in the executive summary. Section 15126.2(c) of the State CEQA Guidelines requires a discussion of “significant irreversible environmental changes which would be caused by the proposed project should it be implemented. Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as a highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.”

### **7.1 AGRICULTURAL RESIDENTIAL CLUSTER SUBDIVISION SIGNIFICANT IRREVERSIBLE CHANGES**

Construction and use of the residences in the Agricultural Residential Cluster Subdivision would irreversibly commit construction materials and non-renewable energy resources. These energy resource demands would be used for construction, heating and cooling of buildings, transportation of people and goods, as well as lighting and other associated energy needs. Non-renewable and slowly renewable resources used by Agricultural Residential Cluster Subdivision residences and improvements would include, but are not limited to, lumber and other forest products; sand and gravel; asphalt; petrochemical construction materials; steel; copper; lead and other metals, water; etc. A marginal increase in the commitment of facility maintenance services would also be required. Primary Agricultural Residential Cluster Subdivision impacts related to consumption of non-renewable and slowly renewable resources are considered to be less than significant because Agricultural Residential Cluster Subdivision implementation would not use unusual amounts of energy or construction materials.

The Agricultural Residential Cluster Subdivision could induce development as a result of removal of obstacles to growth. This could result in secondary environmental impacts (e.g., additional noise and traffic), and may increase the use of nonrenewable resources and energy to serve new development. However, as described in Section 5.0, *Growth Inducing Impacts*, Agricultural Residential Cluster Subdivision measure GI-1(a) (Infrastructure Capacity Limitations) would reduce the potential to induce further growth and ensure less than significant impacts. In addition, the environmental impacts of any additional growth would depend upon the type, location, and magnitude of new development.

The proposed Agricultural Residential Cluster Subdivision would permanently compromise the sustainability of a 676.7-acre grazing unit and would permanently convert 5 acres containing prime soils to non-agricultural uses. Because no feasible measures are available that would mitigate impacts to the grazing unit and prime soils located on the Agricultural Residential Cluster Subdivision site without substantial redesign of the proposed Agricultural Residential Cluster Subdivision, impacts related to agricultural conversion would be Class I, *significant and unavoidable*. In addition, given the non-contiguous design of proposed lots and the intensity of existing agricultural activities on the site (vineyards), impacts related to conflicts between





proposed urban uses and existing and future agricultural uses would also be Class I, *significant and unavoidable*.

The proposed Agricultural Residential Cluster Subdivision will result in operational air pollutant emissions, primarily from vehicular traffic. This would result in an exceedance of the APCD thresholds, and would be a Class I, *significant and unavoidable*, impact. In addition, due to the distance of the Agricultural Residential Cluster Subdivision site from services, Agricultural Residential Cluster Subdivision implementation would result in a substantial increase in vehicle miles traveled. Therefore, the Agricultural Residential Cluster Subdivision is inconsistent with the 2001 Clean Air Plan (CAP). Since no mitigation measures are feasible to sufficiently reduce vehicle miles traveled, impacts related to consistency with the CAP would be Class I, *significant and unavoidable*.

The proposed Agriculture Residential Cluster Subdivision would result in the removal of an estimated 200 to 400 blue oak, coast live oak, and valley oak trees within the Blue Oak Woodland, Coast live Oak Woodland, Valley Oak Woodland, Valley Needlegrass Grassland, and California Annual Grassland habitats on the site. In the short term, oak trees that are removed can be replaced, but the quality of their habitat values will not be the same until the new trees mature, the timeframe of which cannot be accurately determined. Thus impacts to oak woodlands are considered a Class I, *significant and unavoidable* impact.

The Santa Margarita Ranch is a rural historic district eligible for the California Register of Historic Resources (CRHR). The proposed Agricultural Residential Cluster Subdivision is located in one of the character-defining areas of the ranch. Development of the proposed residential cluster in this area would substantially diminish the integrity of the design, setting, materials, feeling, and association of this important character-defining area. In addition, implementation of the Agricultural Residential Cluster Subdivision would adversely impact traditional Native American values. This is considered a Class I, *significant and unavoidable*, impact. In addition, thirty-two prehistoric and historical archaeological sites and six isolates are located within or immediately adjacent to the Agricultural Residential Cluster Subdivision site. Damage to or destruction of the important associations of these sites, and disruption of their setting and feeling, is a Class I, *significant and unavoidable* impact. Although impacts would be reduced through implementation of Agricultural Residential Cluster Subdivision measures CR-2(a) (Avoidance) and CR-2(b) (Mitigative Data Recovery Excavation), no mitigation is available to avoid significantly impacting identified cultural resources. Impacts would remain *significant and unavoidable*.

Development of the Agricultural Residential Cluster Subdivision would result in the addition of 1,154 average daily trips (88 AM peak hour and 119 PM peak hour trips) to study-area roadways and intersections. Although this would not result in exceedances of roadway or intersection LOS standards, the Agricultural Residential Cluster Subdivision will add traffic to locations with existing hazards and operational problems. Implementation of proposed mitigation measures would improve hazards and operational problems. However, due to uncertainty regarding Caltrans approval of facilities within State jurisdiction, Class I, *significant and unavoidable*, impacts would result.

In addition, long-term traffic generated by the Agricultural Residential Cluster Subdivision would incrementally increase noise levels at existing receptors located adjacent to roadways in



the Santa Margarita Ranch vicinity. The implementation of structural measures (e.g., sound walls, solid core doors, and/or double paned windows) would be infeasible due to physical, economic, or other constraints, and would rely upon the cooperation of off-site property owners, which cannot be assured. Therefore, no feasible measures are available that would mitigate impacts to existing sensitive receptors. The effect of this noise on off-site sensitive receptors in the area is a Class I, *significant and unavoidable*, impact.

The Agricultural Residential Cluster Subdivision proposes to cluster the residential units in a generally north-south orientation in the central portion of the site, which would reduce visual impacts from viewpoints east and west of the site. Regardless, the proposed Agricultural Residential Cluster Subdivision has the potential to alter the aesthetic character of the site vicinity by changing the scenic views from public viewing locations, introducing community design elements that may be aesthetically inconsistent with the surrounding area and introducing new light and glare generators into the area. Implementation of Agricultural Residential Cluster Subdivision measures AES-1(a) (Prohibition of Structural Silhouetting), AES-1(b) (Architectural and Landscape Guidelines), AES-1(c) (Oak Tree Removal), AES-1(d) (Bury Water Tanks), AES-1(e) (Lighting), AES-1(f) (Street Light Limitations), AES-1(g) (Clear Excess Debris), AES-1(h) (Grading), and AES-1(i) (Accessory Structures/Infrastructure) would reduce impacts. However, no mitigation is available to avoid changing the site from its rural condition to a more suburban condition. This is Class I, *significant and unavoidable*, impact to the aesthetic character of the area.

The Agricultural Residential Cluster Subdivision would increase the use of water from area aquifer units, including the Paso Robles and Santa Margarita Formations, by 96 acre-feet per year (afy). This net consumptive use may contribute to overdraft of the aquifer system. Implementation of Agricultural Residential Cluster Subdivision measures W-1(a) (Groundwater and Surface Water Monitoring Programs) and W-1(b) (Water Conservation Measures) would reduce the overall water system demand for the Agricultural Residential Cluster Subdivision by approximately 13 percent. However, additional water supply would still be required. Additional water may be available for the Agricultural Residential Cluster Subdivision through the State Water Project and/or the Nacimiento Water Project, as outlined in Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply). However, due to uncertainty regarding timing and availability of these sources, additional water supply cannot be assured at this time. Groundwater use associated with the Agricultural Residential Cluster Subdivision is therefore a Class I, *significant and unavoidable*, impact.

## **7.2 FUTURE DEVELOPMENT PROGRAM SIGNIFICANT IRREVERSIBLE CHANGES**

Construction and land uses contemplated in the Future Development Program would irreversibly commit construction materials and non-renewable energy resources. These energy resource demands would be used for construction, heating and cooling of buildings, transportation of people and goods, as well as lighting and other associated energy needs. Non-renewable and slowly renewable resources used by the Future Development Program land uses and improvements would include, but are not limited to, lumber and other forest products; sand and gravel; asphalt; petrochemical construction materials; steel; copper; lead and other metals, water; etc. A marginal increase in the commitment of facility maintenance services would also be required. Primary Future Development Program impacts related to consumption



of non-renewable and slowly renewable resources are considered to be less than significant because Future Development Program buildout would not use unusual amounts of energy or construction materials.

The Future Development Program could induce development as a result of removal of obstacles to growth. This could result in secondary environmental impacts (e.g., additional noise and traffic), and may increase the use of nonrenewable resources and energy to serve new development. However, as described in Section 5.0, *Growth Inducing Impacts*, Agricultural Residential Cluster Subdivision measure GI-1(a) (Infrastructure Capacity Limitations) would apply to all Future Development Program land uses. In addition, infrastructure planning and coordination for Future Development Program land uses would be accomplished with a Specific Plan and through the individual development project review process. The environmental impacts of any additional growth would also depend upon the type, location, and magnitude of new development.

Development in accordance with the Future Development Program could permanently convert existing grazing lands and 573 acres containing prime soils to non-agricultural uses. Impacts related to agricultural conversion would be Class I, *significant and unavoidable*. In addition, the Future Development Program would create conflicts between proposed urban uses and existing and future agricultural uses. Potential land use conflicts are also a Class I, *significant and unavoidable*, impact.

Many of the Future Development Program conceptual land uses are inconsistent with the land use designations and population assumptions of the San Luis Obispo County General Plan. In addition, Future Development Program implementation would result in a substantial increase in vehicle miles traveled. Therefore, the Future Development Program is inconsistent with the 2001 Clean Air Plan (CAP). This is a Class I, *significant and unavoidable* impact.

Implementation of the Future Development Program would result in the removal of oak woodland habitat and an unknown number of native coast live oak, blue oak, and valley oak trees within the Coast live Oak Woodland, Blue Oak Woodland, Valley Oak Woodland and California annual grassland habitat types. In the short term, oak trees that are removed can be replaced, but the quality of their habitat values will not be the same until the new trees mature, the timeframe of which cannot be accurately determined. Thus impacts to oak woodlands are considered a Class I, *significant and unavoidable* impact.

Future development in accordance with the Future Development Program could adversely impact the Santa Margarita Ranch Rural Historic District and could adversely impact traditional Native American values. This is considered a Class I, *significant and unavoidable* impact. In addition, the Future Development Program would adversely impact identified and previously unidentified archeological deposits. These resources contribute to the significance of the Santa Margarita Ranch Rural Historic District and are eligible for the California Register of Historic Resources (CRHR) under multiple significance criteria. Recovery of the important information in these sites through excavation would lessen the impacts. However, damage to or destruction of the important associations of these sites, and disruption of their setting and feeling, is a Class I, *significant and unavoidable* impact.



The Future Development Program would result in the addition of 8,137 average daily weekday trips (655 AM peak-hour and 818 PM peak-hour trips) to the study-area roadways and intersections. This would cause two local roadway segments, four U.S. 101 mainline segments, all four U.S. 101/SR 58 interchange ramps, and four intersections to operate at unacceptable levels of service during peak hours. Implementation of proposed mitigation measures would partially reduce impacts. However, due to uncertainty regarding Caltrans approval of facilities within State jurisdiction, impacts would be Class I, *significant and unavoidable*. The Future Development Program may also result in inadequate site access and/or internal circulation conflicts. This would also generate a Class I, *significant and unavoidable*, impact.

In addition, long-term traffic generated by the Future Development Program would incrementally increase noise levels at existing receptors located adjacent to roadways in the Santa Margarita Ranch vicinity. The effect of this noise on off-site sensitive receptors in the area is a Class I, *significant and unavoidable*, impact. Agricultural Residential Cluster Subdivision measure N-2(a) (Off-site Residence Noise Attenuation) would apply to all Future Development Program applicants subsequent to the Agricultural Residential Cluster Subdivision. However, the implementation of this mitigation measure may not be feasible due to physical, economic, or other constraints, and would rely upon the cooperation of off-site property owners, which cannot be assured. Therefore, impacts would remain Class I, *significant and unavoidable*.

The current visual character of the Santa Margarita Ranch property and surrounding area is highly scenic and rural. The Future Development Program envisions potential future development throughout the Ranch, which would permanently alter the rural character of the area and introduce new development along viewing corridors. The introduction of light and glare would also contribute to a change in visual character. Buildout of the Future Development Program would significantly alter the existing rural visual character of the Santa Margarita Ranch. Impacts would be *significant and unavoidable*. Implementation of mitigation measures outlined in Section 4.13, *Visual Resources*, would reduce impacts. However, due to the extent of the Future Development Program and the amount of visual conversion of the existing rural nature of the Santa Margarita Ranch, impacts would remain *significant and unavoidable*.

The Future Development Program would increase the use of water from area aquifer units, including the Paso Robles and Santa Margarita Formations, by 926 acre-feet per year (afy). This net consumptive use may contribute to overdraft of the aquifer system. Water supply would need to be acquired prior to issuance of grading permits for individual Future Development Program land use components, and would be coordinated through the required Specific Plan. The Specific Plan will also be required to include a comprehensive water supply analysis pursuant to California Senate Bill (SB) 610 [Water Code §10910(g)(3), Water Supply Assessments] and California Senate Bill (SB) 221 [Government Code §66473.7(b)(2), Written Verifications of Water Supply]. However, additional water supply would still be required. Additional water may be available for the Future Development Program land uses through the State Water Project and/or the Nacimiento Water Project, as outlined in Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply). However, due to uncertainty regarding timing and availability of these sources, additional water supply cannot be assured at this time. Groundwater use associated with the Future Development Program is therefore a Class I, *significant and unavoidable*, impact.





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### 8.1 REFERENCES

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### **8.1.2 Agencies/Individuals Contacted**

Doug Filipponi, Santa Margarita Ranch, LLC (Contacted by Sage Associates).  
Jackie Martin, Asst. Superintendent of Business Services, Atascadero Unified School District.  
James L. Stecher, Superintendent, Atascadero Unified School District.  
Jan Di Leo, San Luis Obispo County Parks.  
Jason Dart, Biologist, Althouse and Meade, Inc.  
Jeff Hackett, California Integrated Waste Management Board.  
Jeff Werst, Hydraulic Planning Unit Senior Engineer.  
John Rodgers, Superintendent, Atascadero Unified School District.  
Joyce Ambrosius, National Marine Fisheries Service  
Julie Vanderwier, U.S. Fish and Wildlife Office  
Lew Rosenberg, San Luis Obispo County Geologist.  
Lynda Auchinachie, San Luis Obispo Agricultural Commissioner's Office.  
Lynne Dee Althouse, Principal, Althouse and Meade, Inc.  
Mike Hill, California Department of Fish and Game.  
Paavo Ogren, Deputy Public Works Director, San Luis Obispo County.  
Patrick Hedges, Sheriff-Coroner, San Luis Obispo County Sheriff's Department.  
Paul Collins, Santa Barbara Museum.  
Randy Johnson, Crime Prevention, San Luis Obispo County Sheriff's Department.  
Robert Lewin, Fire Marshall, San Luis Obispo County Fire Department.  
Royce Larsen, RCD, UC Extension

## **8.2 LIST OF PREPARERS**

This EIR was prepared by Rincon Consultants, Inc. under contract to the County of San Luis Obispo. Mr. James Caruso served as project manager for the County of San Luis Obispo. Persons involved in data gathering analysis, project management, and quality control include:

### **Rincon Consultants, Inc.**

Stephen Svete, AICP, Principal-in-Charge  
John Rickenbach, AICP, Quality Assurance/Quality Control  
Richard Daulton, Senior Planner/Project Manager



Walt Hamann, Senior Geologist  
Duane Vander Pluym, Principal Biologist  
Kevin Merk, Senior Plant Ecologist/Restoration Specialist  
Susan Christopher, Senior Biologist  
John Davis IV, Associate Biologist  
Megan Edgar, Assistant Project Manager  
Trevor Keith, Environmental Planner  
Tim Dodson, Environmental Planner  
Joanne Dramko, Associate Planner/Graphic Designer  
Katherine Warner, Graphic Designer  
Kathy Babcock, Graphic Designer  
Craig Huff, Graphic Designer

**Applied Earthworks, Inc. (Cultural Resources Survey, Cultural Landscape Report, and Native American Consultation)**

Barry A. Price, Principal Archaeologist  
Jay B. Lloyd, Associate Archaeologist  
Peggy Beedle, Landscape Historian  
Mark Kile, Field Technician  
David Price, Field Technician  
Neil Rhodes, Field Technician

**Boyle Engineering Corporation (Drainage and Wastewater Analysis)**

Michael K. Nunley, Branch Manager

**Fehr & Peers, Inc. (Traffic Study)**

Sohrab Rashid, San Jose Office Manager  
Norman Wong, Transportation Planner

**Hopkins Groundwater Consultants, Inc. (Hydrogeological Study and Water Supply Study)**

Curtis J. Hopkins, Principal Hydrogeologist

**Interacta (Photo Simulations)**

Ron Stevens, Principal

**Sage Associates (Agricultural Resources)**

Orrin Sage, Principal  
Cindy Sage, Owner



