

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 the timing of required improvements **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 ~~but~~ ~~mitigable~~, 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.



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) ¹	5,000	6,250	7,750	10,000	11,250
2-Lane Collector/Local Street ¹	3,500	4,750	6,000	6,750	8,500

Source: Highway Capacity Manual, Transportation Research Board, 2000.

¹ 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 ¹	Ramp Junction Density ¹
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:

¹ 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 ¹	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

¹ 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

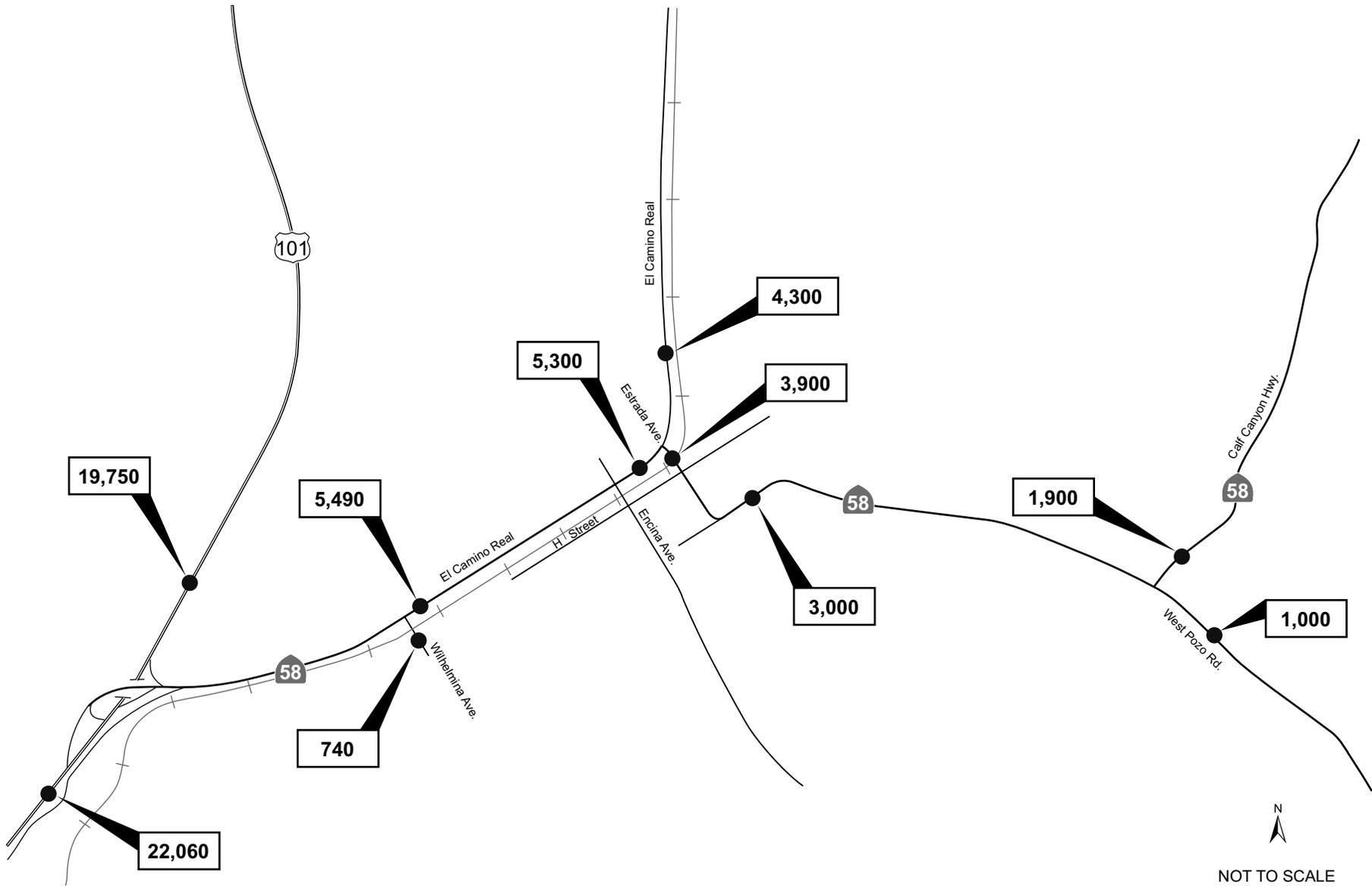
As shown in Table 4.12-7, the merge and diverge ramp operations at the U.S. 101/SR 58 interchange, except for the northbound off-ramp during the PM peak hour, are projected to operate at acceptable levels of service (above Caltrans’ LOS C/D threshold) during the AM and PM peak hours.

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.

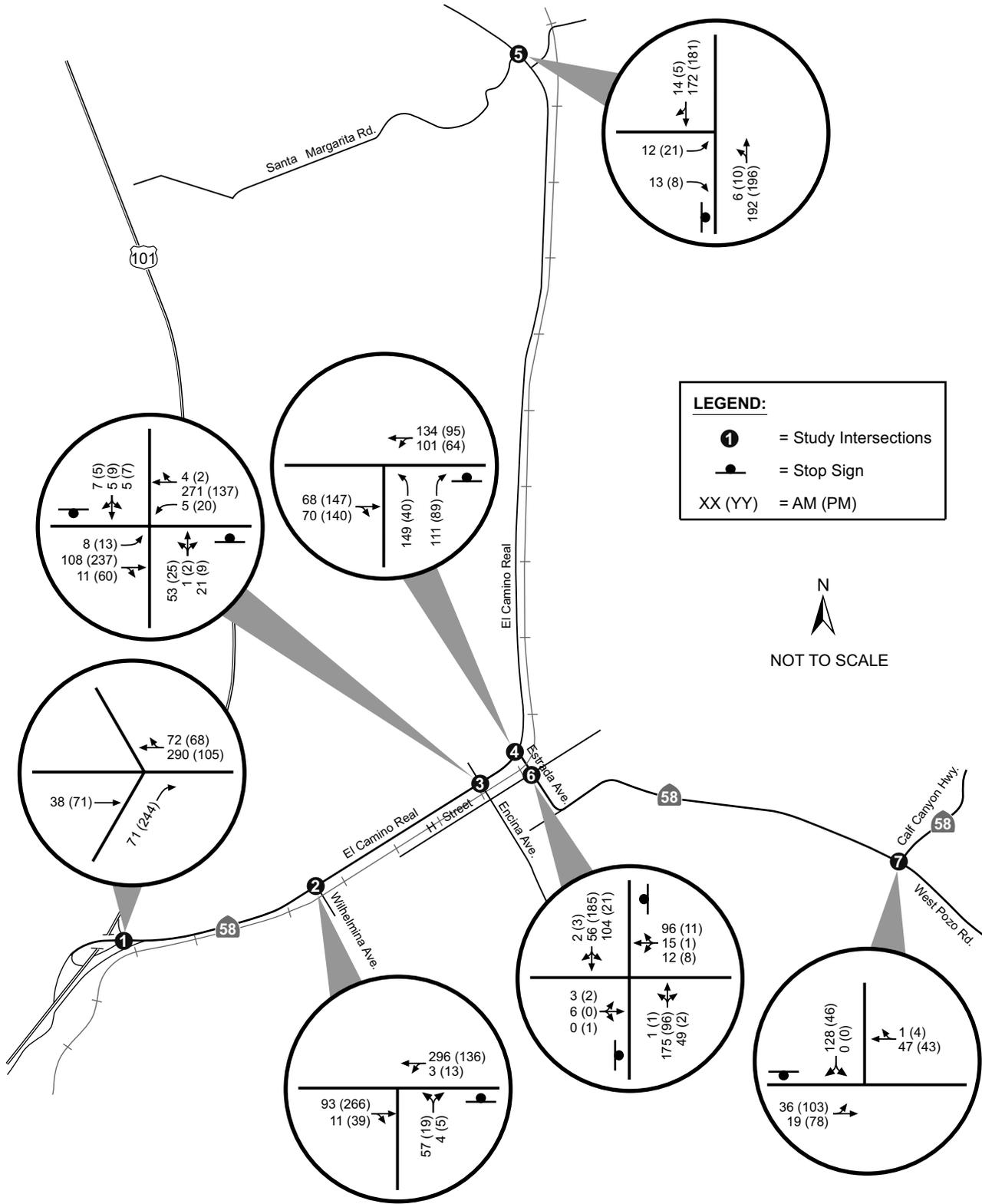




Existing Street Network and Average Daily Traffic Volumes

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 ~~to north from~~ Santa Margarita operates Monday through Friday from ~~6:41 59 AM to 8:41 59 PM~~ with ~~nine a total of 14 trips, in each direction and Saturdays from 8:27 9:36 AM to 5:34 6:36 PM~~ with ~~three a total of four trips in each direction and Sundays from 9:36 AM to 5:36 PM~~ with a total of three trips. ~~There are no Sunday or holiday services.~~ 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

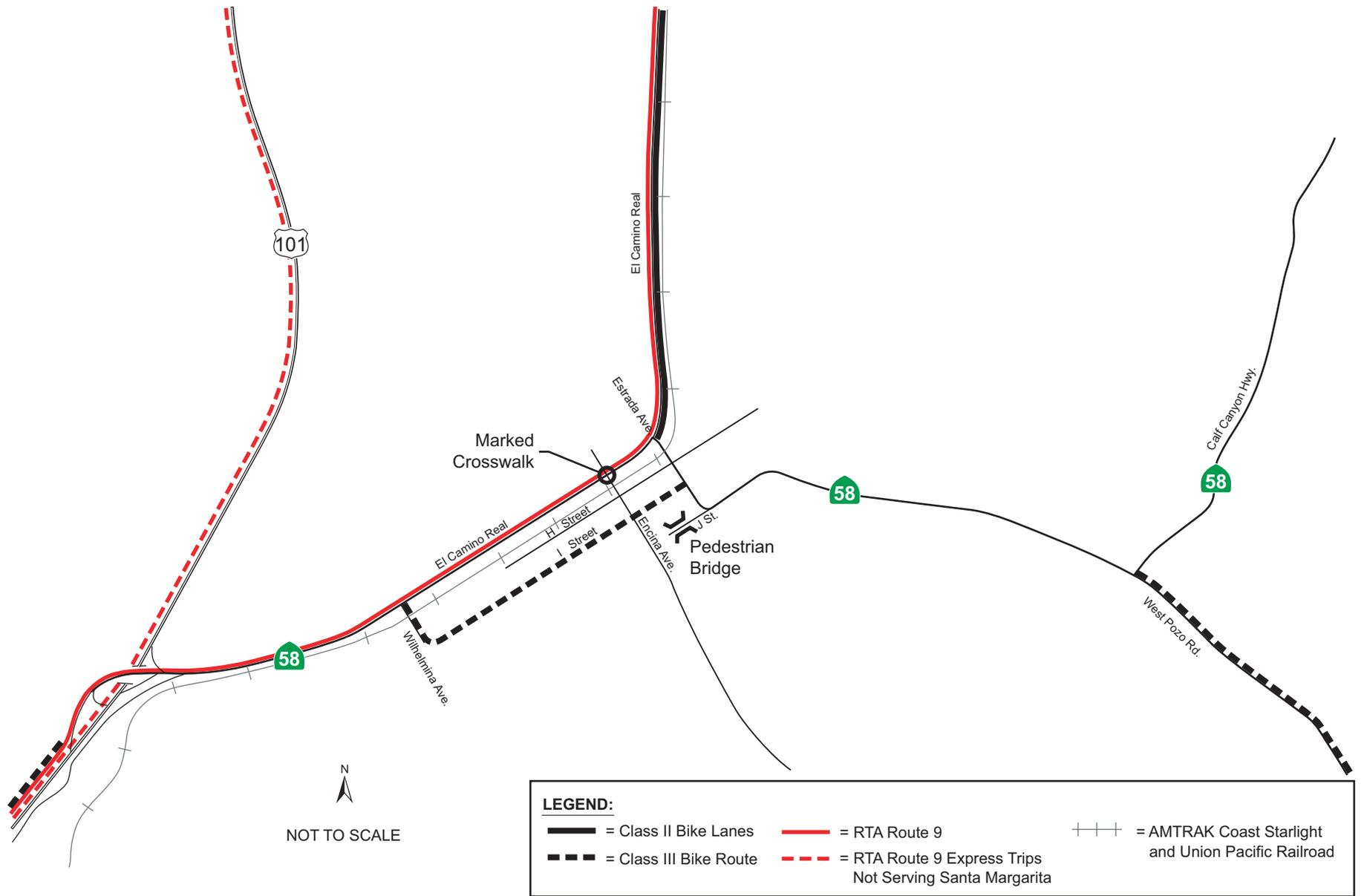
a. Methodology and Significance Thresholds. In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in any of the following:

- *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).*





Existing Pedestrian, Bicycle, and Transit Facilities

Figure 4.12-3

Source: Fehr & Peers, 2006.

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.

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
Trip Rates (per dwelling unit)							
Single-Family Residential	10.30	0.20	0.59	0.79	0.67	0.39	1.06
Trip Estimates							
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.

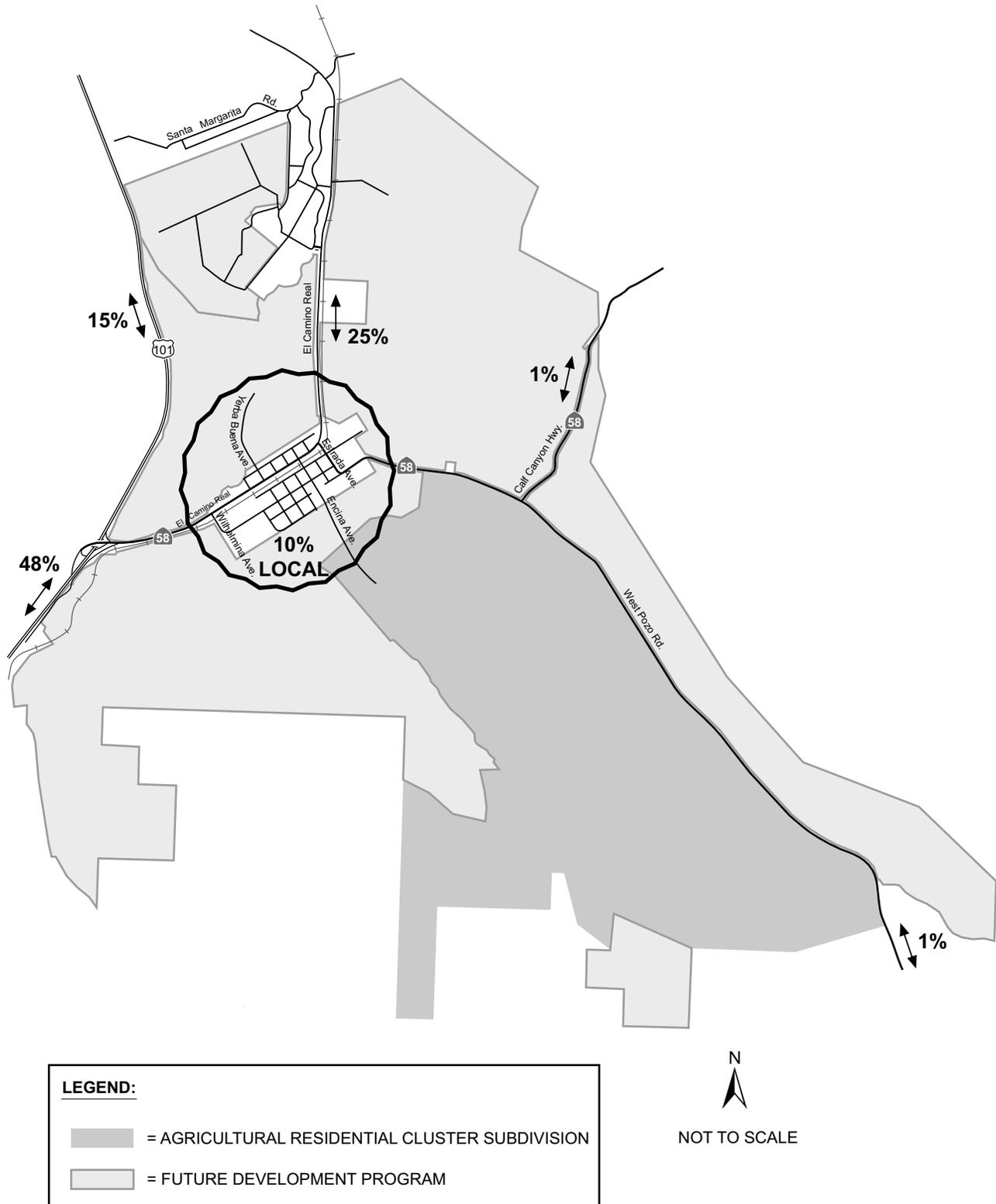
c. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures. The following section reviews the impacts of the Agricultural Residential Cluster Subdivision assuming the forecasted *Existing + Agricultural Residential Cluster Subdivision* volumes shown in Figures 4.12-6 and 4.12-7.

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.

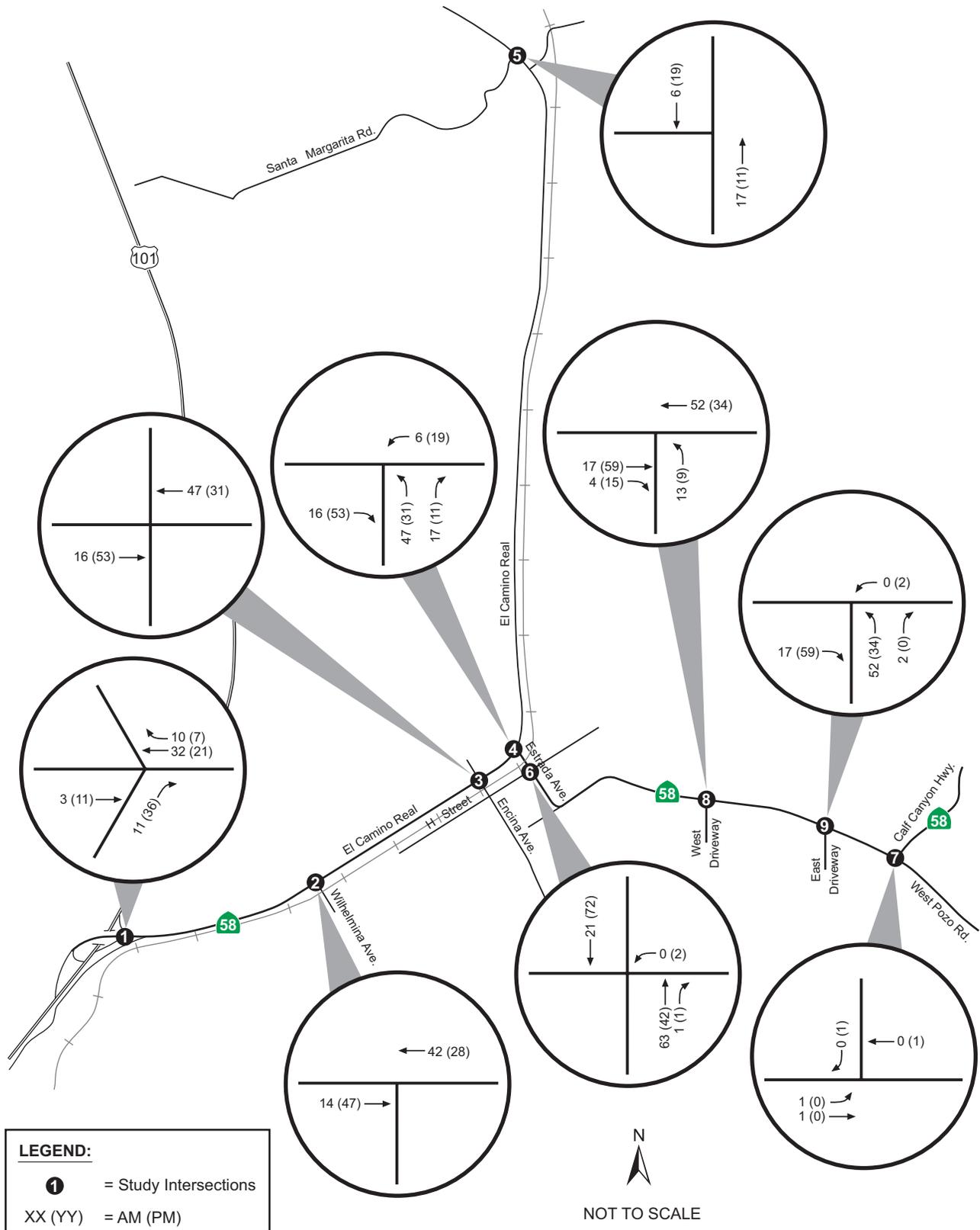
Existing + Agricultural Residential Cluster Subdivision Roadway Operations. *Existing + Agricultural Residential Cluster Subdivision* daily roadway segment traffic operations have been quantified utilizing roadway ADT-based LOS thresholds presented in Tables 4.12-2 through 4.12-4 and the projected daily 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

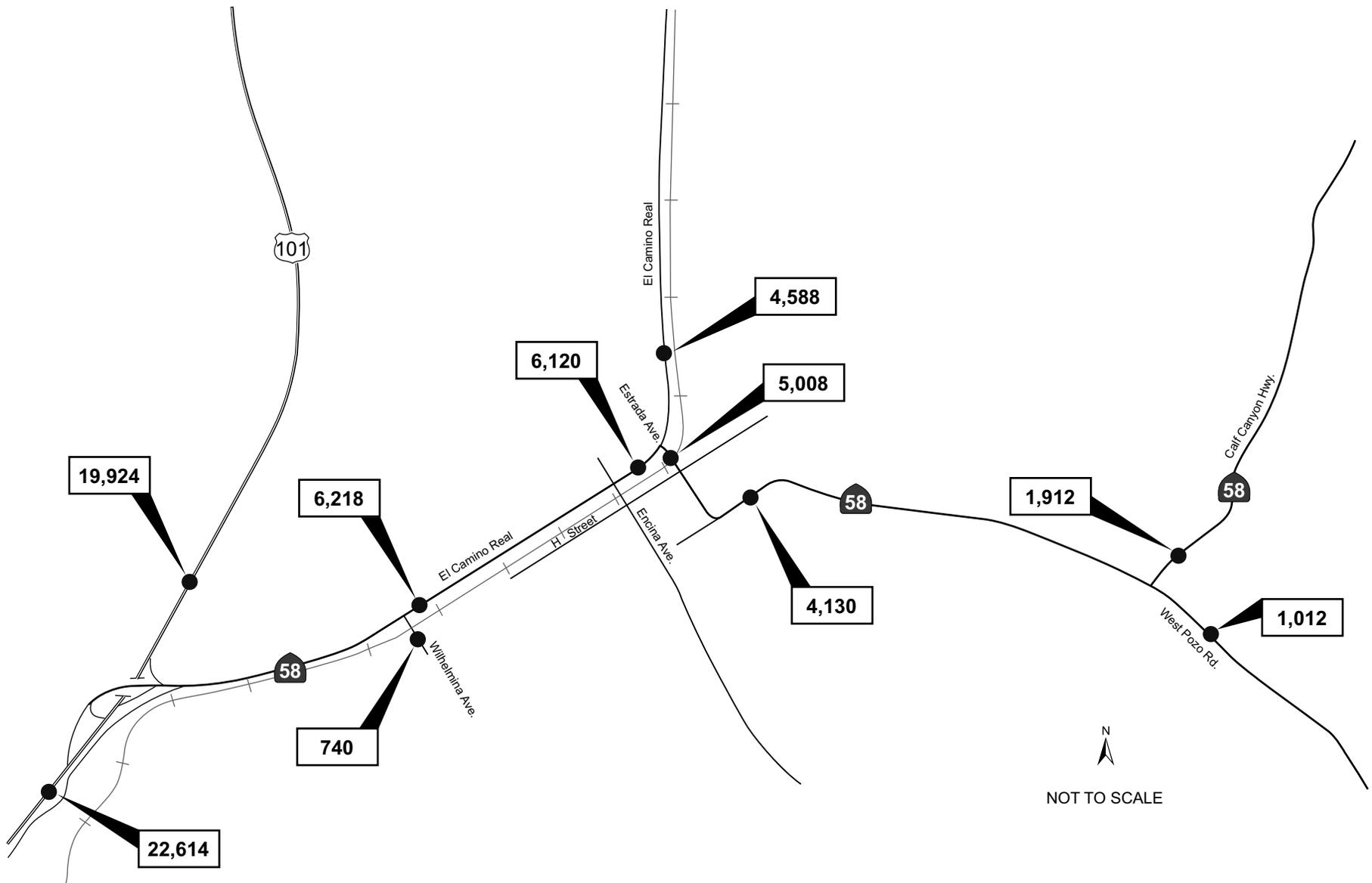
Figure 4.12-4



Proposed Agricultural Residential Cluster Subdivision
 Trip Assignment

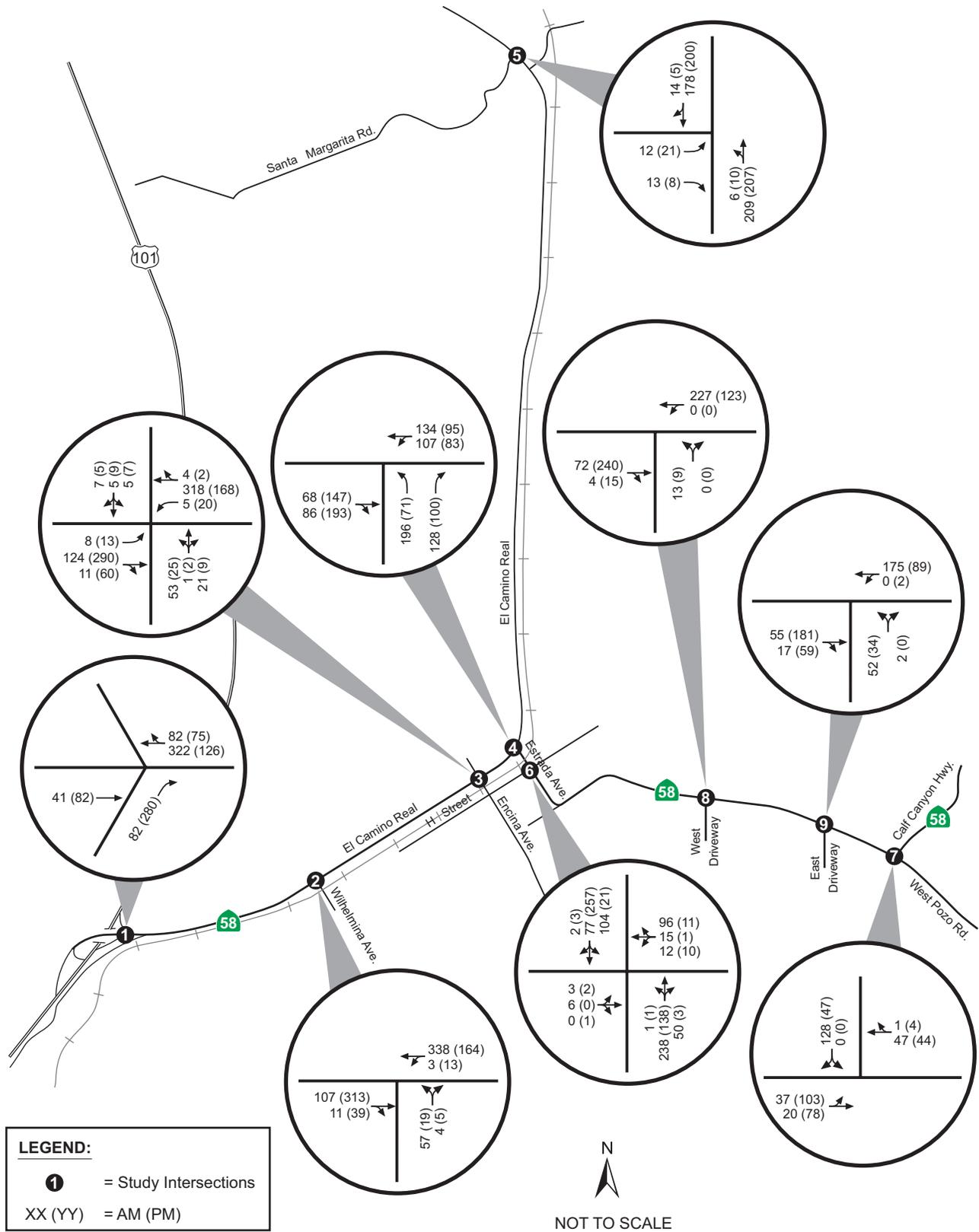
Source: Fehr & Peers, 2006.

Figure 4.12-5



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 ¹	LOS	PTSF ¹	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

¹ 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 ¹	LOS	Volume ¹	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

¹ 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 ¹	LOS	Density ¹	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

¹ 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 ¹	LOS	Density ¹	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

¹ 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. ~~Both sides of SR 58 (from El Camino Real to the Agricultural Residential Cluster Subdivision site access) shall be widened to provide shoulders and/or bike lanes in accordance with County standards. In addition, the following improvement shall be implemented to reduce impacts related to the contribution of the Agricultural Residential Cluster Subdivision to existing operational problems: To mitigate the project's impacts to the two 90-degree curves on SR 58 near J Street, the following improvements are required:~~

- ~~1. Realign SR 58 along a tangent south of J Street to the Agricultural Residential Cluster Subdivision development. The realignment would make the SR 58/J Street intersection into more of a typical intersection layout.~~
- 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.**
- 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 ~~contribute fair share fees toward the installation of the improvements~~ **construct and implement the alternate improvements under a Caltrans encroachment permit or Project Study Report. Monitoring.** Caltrans and the County of San Luis Obispo ~~Public Works~~ 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 ~~pay fair share fees toward applicable Caltrans project development, including a Project Study Report (PSR), and~~ **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 reconstruction of 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. It should be noted that if the costs of the improvements can be completed for one million dollars or less, the work can be completed under an encroachment permit from Caltrans and a PSR would not be required. 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. The applicant shall contribute towards reconfiguration of the northbound off-ramp and/or park and ride facilities to provide additional merge distance. A Project Study Report (PSR) is required to select an appropriate design and to identify all potential environmental impacts. The PSR shall address upgrades to the entire interchange to current design 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. ~~A PSR shall be prepared by a qualified traffic consultant. The County of San Luis Obispo and Caltrans shall review the PSR prior to approval of Land Use~~



~~Permits. The applicant shall contribute fair share fees toward the preparation of applicable studies and reconstruction of the U.S. 101/SR 58 interchange. Improvements shall be installed prior to occupancy clearance. The applicant shall construct and implement the improvements under a Caltrans encroachment permit. Monitoring. Caltrans and County Public Works shall site inspect during construction of the new interchange modifications to ensure compliance with approved plans, as outlined in the PSR. 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 applicant shall pay fair share fees toward applicable Caltrans project development, including a PSR, and lengthening of the U.S. 101 Southbound Off-ramp deceleration length to meet current Caltrans standards. Redesign of the southbound off-ramp to accommodate a larger loop radius and higher design speed can be accomplished by relocating the ramp further north and west. A PSR is required to select an appropriate design. The PSR will also address the LOS deficiency for the northbound off-ramp. 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. A PSR shall be prepared by a qualified traffic consultant. The County of San Luis Obispo and Caltrans shall review the PSR prior to approval of Land Use Permits. The applicant shall contribute fair share fees toward the preparation of applicable studies and reconstruction of the US 101/SR 58 interchange. Improvements shall be installed prior to occupancy clearance. The applicant shall construct and implement the improvements under a Caltrans encroachment permit. Monitoring. Caltrans and County Public Works shall site inspect during construction of the new interchange modifications to ensure compliance with approved plans, as outlined in the PSR. Caltrans and the County of San Luis Obispo shall site inspect to ensure installation improvements prior to occupancy clearance.**~~

**Agricultural Residential
Cluster Subdivision**

El Camino Real/Estrada Avenue Redesign. The applicant shall



T-1(d)

~~pay fair share fees toward the redesign of the El Camino Real/Estrada Avenue intersection so that both roadways are at the same grade. Consideration should be given to the railroad tracks, which are located 60 feet from the intersection. The redesign of the intersection should not preclude construction of the westbound left-turn and eastbound right-turn pockets.~~ **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 P~~plans for redesign of 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 pay fair share fees to fund the redesign of this intersection to eliminate the grade differential. Because the intersection is within State jurisdiction (El Camino Real/SR 58), this measure would require Caltrans approval~~ **implement the improvements under a Caltrans encroachment permit. Monitoring.** Caltrans and County Public Works shall site inspect during construction



~~to ensure compliance with approved plans~~ 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 ~~to face 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 ~~pay fair share fees to~~ fund and install the required **both** advanced warning beacons ~~on Estrada Avenue.~~

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 ~~pay fair share fees to~~ fund and install the required advance warning beacons on Estrada Avenue **under a Caltrans encroachment permit prior to occupancy clearance.**
Monitoring. Caltrans and ~~County Public Works~~ **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.** ~~However, because of the uncertainty of timing of the proposed improvements,~~ 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.

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 ~~in a Caltrans Project Study Report (PSR)~~ **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 ~~pay fair share fees to~~ 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 ~~pay fair share fees to~~ 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 ~~the pathway shall be dedicated as a public trail~~ **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.

d-f. Cumulative Plus Agricultural Residential Cluster Subdivision Plus Future Development Program-Generated 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 (7th 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
Trip Rates								
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
Trip Estimates								
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
Total Future Development Program Estimates		8,137	297	358	655	446	372	818

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.

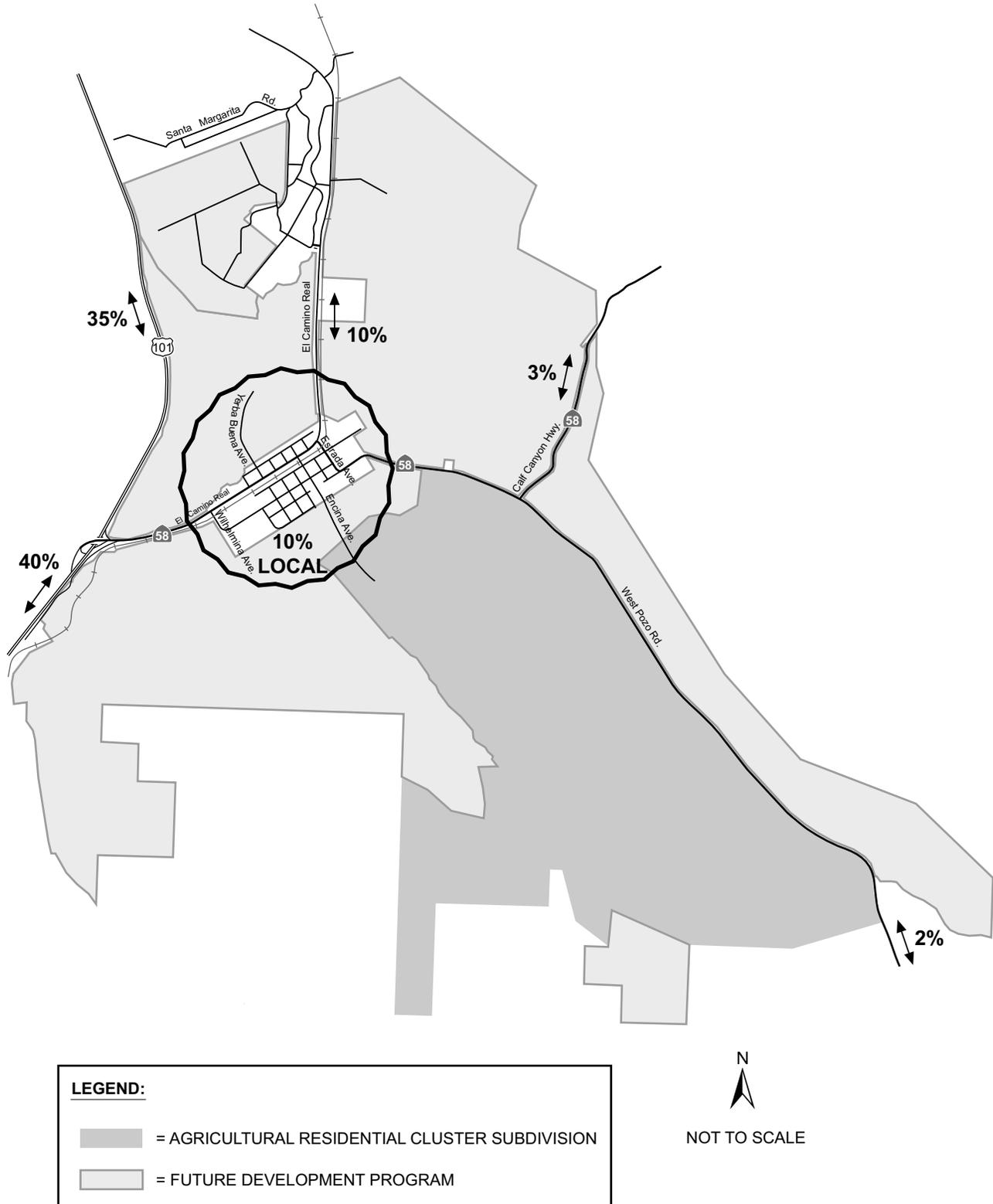
e.g. Future Development Program Cumulative Impacts and Mitigation Measures. The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.12.2(c) for a discussion of transportation 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** assuming the forecasted ~~Cumulative + Agricultural~~



~~Residential Cluster Subdivision + Future Development Program~~ volumes shown in Figures 4.12-9 and 4.12-10. 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

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 + ~~Future Development Program~~ 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	Existing Cumulative No Project		Cumulative + Agricultural Residential Cluster Subdivision		Cumulative + ARCS + Future Development Program			
			PTSF ¹	LOS	PTSF ¹	LOS	PTSF ¹	LOS		
El Camino Real North of Estrada Avenue	I	AM	37.4	46.0	B	C	47.5	C	54.4	C
		PM	31.7	39.4	B	C	41.2	C	48.8	C
West Pozo Road (SR 58) between J Street and West Driveway	II	AM	45.5	50.2	B	B	54.6	B	57.4	C
		PM	45.9	52.0	B	B	58.2	C	60.1	C
West Pozo Road southeast of Calf Canyon Highway (SR 58)	II	AM	30.2	32.6	A	A	32.7	A	36.3	A
		PM	28.5	31.7	A	A	31.8	A	35.7	A
Calf Canyon Highway (SR 58) northeast of West Pozo Road	II	AM	51.0	55.3	B	C	55.6	C	57.0	C
		PM	46.3	51.4	B	B	51.5	B	53.7	B

¹ PTSF = Percent time-spent-following.



**Table 4.12-14(b) Cumulative + Future Development Program
 Local Roadway Levels of Service**

Roadway Segment	Roadway Type	Existing Cumulative No Project		Cumulative + Agricultural Residential Cluster Subdivision		Cumulative + ARCS + Future Development Program	
		Volume ¹	LOS	Volume	LOS	Volume	LOS
El Camino Real (SR 58) between Wilhelmina Avenue and Maud Avenue	2-Lane Arterial (no left-turn lane)	5,490 7,250	B 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)	5,300 7,000	B C	7,820	D	10,332	E
Estrada Avenue (SR 58) south of El Camino Real	2-Lane Arterial (no left-turn lane)	3,900 5,100	A B	6,258	C	7,712	C
Wilhelmina Avenue between El Camino Real and I Street	2-Lane Collector/Local Street	740 980	A	980	A	5,932	C

¹ Average daily traffic.

**Table 4.12-14(c) Cumulative + Future Development Program
 U.S. 101 Mainline Levels of Service**

Travel Direction	Segment	Peak Hour	Existing Cumulative No Project		Cumulative + Agricultural Residential Cluster Subdivision		Cumulative + ARCS + Future Development Program	
			Density ¹	LOS	Density ¹	LOS	Density ¹	LOS
Northbound	South of SR 58	AM	46.5 12.0	B	12.1	B	46.6 13.3	B
		PM	36.5 31.2	D E	31.7	D E	36.8 34.8	D E
Southbound	North of SR 58	AM	44.8 12.1	B	12.1	B	44.9 12.9	B
		PM	30.8 28.3	D	28.4	D	30.9 29.6	D
Southbound	South of SR 58	AM	30.6 25.7	C D	25.7	C D	30.6 26.6	D
		PM	20.2 16.3	B C	16.4	B C	20.3 17.4	B C
Southbound	South of SR 58	AM	34.3 29.3	D	29.7	D	34.6 31.8	D
		PM	49.4 16.7	B	16.9	B	49.6 18.3	C B

¹ 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**

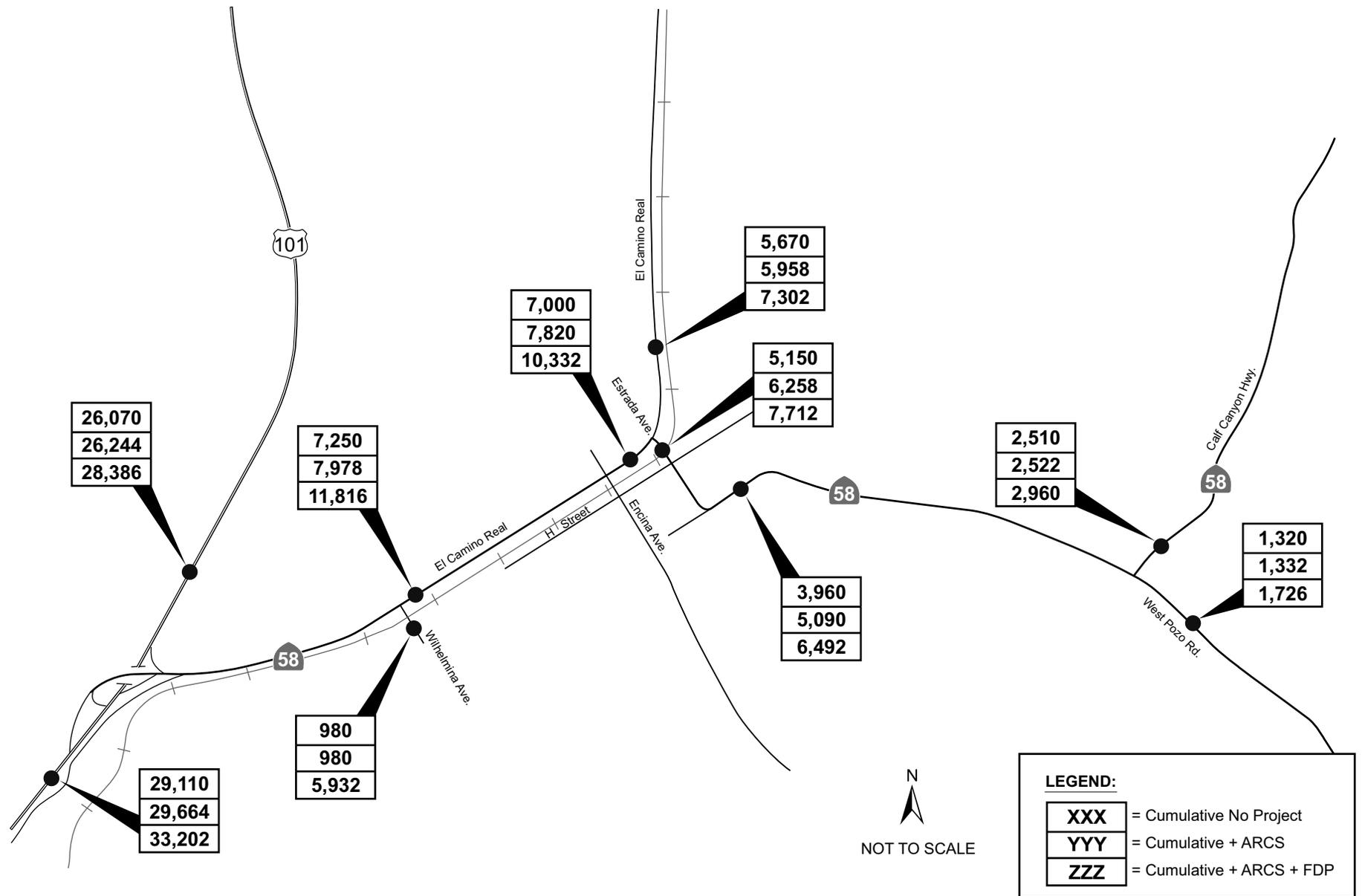
Cluster Subdivision, and Cumulative + Future Development Program conditions.

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.

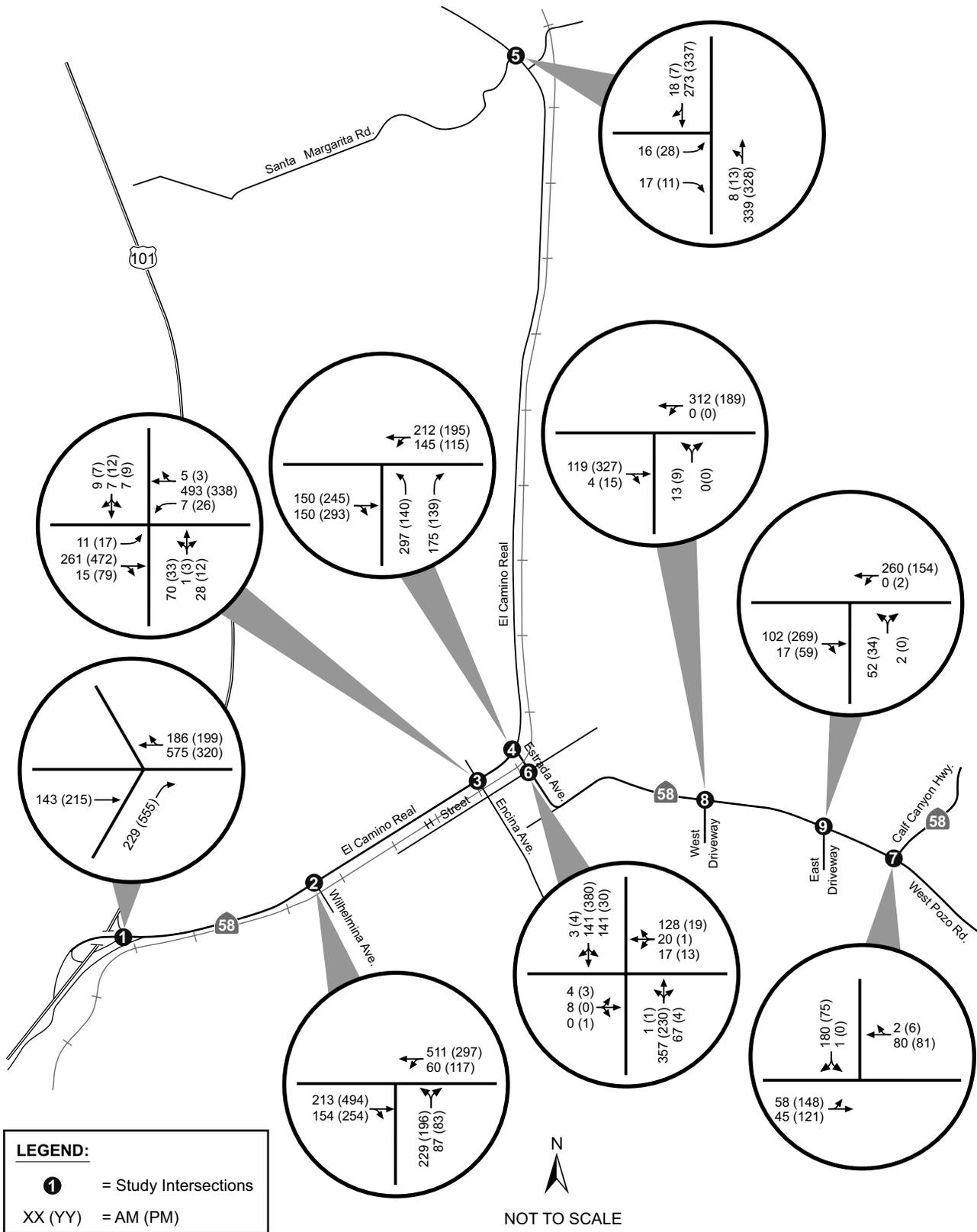




Baseline Cumulative and Cumulative + Future Development Program
 Average Daily Traffic Volumes

Source: Fehr & Peers, 2006.

Figure 4.12-9



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	Existing Cumulative No Project		Cumulative + Agricultural Residential Cluster Subdivision		Cumulative + ARCS + Future Development Program	
			Density ¹	LOS	Density ¹	LOS	Density ¹	LOS
Northbound	Diverge (Off-ramp)	AM	42.8	16.5 B	16.6	B	47.3	17.8 B
		PM	27.4	36.5 C E	36.8	E	37.4	38.8 E
	Merge (On-ramp)	AM	44.5	14.8 B	14.9	B	45.4	15.6 B
		PM	23.2	30.8 C D	30.9	D	30.6	31.7 D
Southbound	Diverge (Off-ramp)	AM	22.8	30.6 C D	30.6	D	30.4	31.5 D
		PM	45.3	20.2 B C	20.3	C	20.7	21.4 C
	Merge (On-ramp)	AM	23.5	31.3 C D	31.6	D	34.8	32.9 D
		PM	44.8	19.4 B	19.6	B	20.3	20.9 C

¹ Measured in vehicles per mile per lane.

As shown in Table 4.12-15, the addition of Future Development Program traffic will cause the U.S. 101 northbound off-ramp to SR 58 to degrade to an unacceptable level of service (LOS E) and will cause the and U.S. 101 northbound on-ramp to from SR 58 to degrade to an unacceptable level of service (LOS D) 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 cause exacerbate unacceptable operations at the U.S. 101 southbound off-ramps to SR 58 to degrade to unacceptable levels of service. 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 + Future Development Program 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	Intersection Control	Existing Cumulative No Project		Cumulative + Agricultural Residential Cluster Subdivision		Cumulative + ARCS + Future Development Program	
			Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²
U.S. 101 Northbound Ramps and State Route 58	AM	Uncontrolled	8.9	9.1	9.1	A	11.0	B
	PM		40.4	11.1	11.7	B	22.8	C
El Camino Real (SR 58) and Wilhelmina Avenue	AM	Side Street Stop	42.2	14.5	15.6	B	>100	F
	PM		41.7	13.5	14.5	B	>100	F
El Camino Real (SR 58) and Encina Avenue	AM	Side Street Stop	42.8	15.9	17.5	B C	25.3	D
	PM		43.0	15.9	17.7	B C	25.3	D
El Camino Real (SR 58) and Estrada Avenue	AM	Side Street Stop	43.8	21.2	31.5	B C	>100	F
	PM		41.0	12.5	14.4	B	24.0	C
El Camino Real and Santa Margarita Road	AM	Side Street Stop	40.4	11.3	11.5	B	12.4	B
	PM		41.0	12.2	12.5	B	14.2	B
Estrada Avenue (SR 58) and H Street	AM	Side Street Stop	45.6	20.1	22.9	C	27.9	D
	PM		40.7	11.7	12.9	B	14.8	B
Calf Canyon Highway (SR 58) and West Pozo Road	AM	Side Street Stop	9.2	9.6	9.6	A	9.9	A
	PM		8.8	8.9	8.9	A	9.1	A
West Pozo Road (SR 58) and West Driveway	AM	Side Street Stop	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	Side Street Stop	Future Intersection		11.2	B	11.9	B
	PM		Future Intersection		11.5	B	12.3	B

¹ 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.

² 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. ~~The following mitigation~~ **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 ~~250~~ 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 Caltrans encroachment permit and/or 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.~~

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(a-d)

El Camino Real/Estrada Avenue Signalization. ~~Future applicants shall pay fair share fees to install a~~ A traffic signal at the intersection of El Camino Real and Estrada Avenue **shall be installed.** ~~This shall be~~



completed 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. ~~Future applicants shall contribute fair share fees toward the installation of~~ **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 ~~issuance of occupancy permits~~ **clearance**, Caltrans and County Public Works shall verify implementation of approved plans.

Future Development Program T-1(b-e)

El Camino Real/Wilhelmina Avenue Signalization. ~~Future applicants shall pay fair share fees to install a~~ **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. ~~Future applicants shall contribute fair share fees toward installation of~~ **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 ~~issuance of~~ occupancy ~~permits~~ **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. ~~Future applicants shall pay fair share fees toward~~ 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 ~~issuance of~~ occupancy ~~permits~~ **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 funding plan finance district shall be created to implement the improvements identified under the Future Development Program measures T-1(a) through T-1(f). The funding plan finance district may consist of an area wide fee where projects that are located within the Future Development Program Specific Plan Area would 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 prepare 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 occupancy grading permits, the County of San Luis Obispo shall approve 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. Impacts related to study area U.S. 101 segments and U.S. 101 off-ramps to SR 58 would be Class I, significant and unavoidable. 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, However, because of the uncertainty of timing of the proposed improvements, and 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.** ~~Future applicants shall contribute fair share fees to pay for~~ **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. ~~Plans shall also include requirements for payment of fees and timing of installation of required bicycle facilities.~~ **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 issuance of occupancy permits clearance, Caltrans and County Public Works shall verify implementation of approved plans.

Future Development Program T-4(b)

Pedestrian Facilities. ~~The applicant shall pay fair share fees for the installation of a~~ 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. ~~The applicant shall also pay fair share fees for the installation of~~ In-pavement lighting at crosswalks **shall also be installed, which can 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 issuance of occupancy permits clearance, Caltrans and County Public Works shall verify implementation of approved plans.

Future Development Program T-4(c)

Transit Facilities. ~~Future applicants shall contribute in-lieu fees to pay for the installation of~~ 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 future Specific Plan~~



~~shall specify~~ 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 ~~issuance of~~ occupancy ~~permits~~ 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.

