

3.12 TRANSPORTATION AND TRAFFIC

This section describes transportation facilities and operations and analyzes the potential environmental effects of the proposed Avila Ranch Development Project (Project) on transportation and traffic as defined by the California Environmental Quality Act (CEQA) and the City of San Luis Obispo's (City) regulations and policies.

This section is based on the Transportation Impact Study (TIS) prepared by Central Coast Transportation Consulting for the proposed Project (see Appendix P; Central Coast Transportation Consulting 2016). The scope of the TIS was developed to be in conformance with the standards set forth in the City General Plan, Circulation Element (2014). Careful consideration was given to which intersections and transportation facilities could be substantially impacted by the Project and the likely outer boundary of such impacts. Additional data for this section was derived from the review of the City General Plan, Circulation Element; Land Use and Circulation Elements Update Environmental Impact Report (LUCE Update EIR); numerous Project site visits; and review of the Project Design Guidelines (Appendix F).

3.12.1 LUCE Update EIR

The 2014 LUCE Update EIR analyzed citywide transportation impacts related to future development permitted under the 2014 LUCE. The LUCE Update EIR identified significant impacts to transportation as a result of traffic and demand for transportation facilities associated with development of planned citywide land uses allowed under the LUCE, including potential development of the Project site. The LUCE EIR addressed the impacts of development of the Project site with up to 700 housing units and 15,000 to 25,000 square feet (sf) of commercial space. The EIR found that additional traffic congestion from projected full buildout of the land use plan under the 2014 LUCE Update would result in unacceptable levels of service (LOS) at several roadways and intersections and, as a result, would have significant impacts. Specifically, Broad Street and Prado Road would experience a significant increase in traffic volume, and intersections in the Project vicinity would experience significant delays, including Higuera Street/Tank Farm Road, Broad Street/Tank Farm Road, and Broad Street/Airport intersections. The LUCE Update EIR found that although implementation of City policies would reduce traffic volumes and intersection delay, impacts would remain significant. Additionally, the LUCE Update EIR found that increases in traffic would create significant impacts by further degrading operations on U.S. Highway 101.

3.12.2 Environmental Setting

3.12.2.1 Area Roadway Network

Regional access to southern areas of the City is provided via U.S. Highway 101 and State Route (SR) 227, both of which are north-south regional highways (see Figure 3.12-1). Regional access into the Project site is via the interchanges of U.S. Highway 101 with Los Osos Valley Road and South Higuera Street, as well as SR 227 and its intersection with Buckley Road. Local arterial access to the Project site is provided via Los Osos Valley Road, Tank Farm Road, and Buckley Road, which are east-west arterial roadways. Local north-south access is provided only by South Higuera Street and SR 227/Broad Street.

The Project site is currently undeveloped with limited access via unimproved agricultural roads. Existing vehicle access to the Project site is limited to the western and southern site boundaries, with road access unavailable from the north or east. Access is currently available off of Buckley Road, which traverses the southern site boundary; Vachell Lane which borders the western boundary of the southern end of the site; and Venture Drive, which stubs out at the western site boundary. From the north of the site, Earthwood Lane and Horizon Lane both provide access off of Suburban Road, but currently terminate north of the Project site property line and do not provide improved access.

Key streets and highways that provide vehicle access to the Project site and vicinity are described below. Pedestrian, bicycle, and transit facilities along these roadways are described below in Section 3.12.2.4, *Alternative Transportation*.



Buckley Road is a two-lane rural roadway providing east-west access into the southern region of the City. Buckley Road provides primary southern access to the Project site.



South Higuera Street/Vachell Lane intersection. Vachell Lane is a two-lane road bordering the site and South Higuera Street, to the west of the site, is a four-lane road with a center turn-lane and sidewalk on the west side of the road.

- *U.S. Highway 101*, located 0.5 mile west of the Project site, is a multiple-lane divided interstate highway that extends through the City of San Luis Obispo, south to City of Los Angeles, and north to City of San Francisco and beyond. Within the Project vicinity, U.S. Highway 101 is relatively level and contains four lanes. Primary access to the Project vicinity is provided via full-access interchanges at South Higuera Street and Los Osos Valley Road, a partial interchange with northbound on/off ramps at Prado Road, and further north at the Madonna Road interchange. Currently U.S. Highway 101 experiences moderate levels of congestion in the vicinity of Los Osos Valley Road.
- *SR 227 (Broad Street)*, located 1.5 miles to the east of the Project site, is a north-south regional road connecting the Cities of San Luis Obispo and Arroyo Grande. Within the City, SR 227 (Broad Street) has been relinquished to City control; in the vicinity and south of the Airport, SR 227 is under the California Department of Transportation (Caltrans) jurisdiction. SR 227 is a two-lane highway that connects to Buckley Road as Broad Street with a two-way left-turn lane where it connects to Higuera Street as South Broad Street. SR 227 serves residential, commercial, and agricultural areas, as well as the Airport. SR 227 has varying grades and at-grade intersections.
- *Los Osos Valley Road*, located 0.25 mile northwest of the Project site, is a two- to six-lane arterial roadway with a roughly east-west alignment extending between South Higuera Street in the City and the unincorporated coastal communities of Los Osos and Morro Bay. Los Osos Valley Road serves as both a state highway carrying through traffic to Los Osos and beyond and provides access to residential neighborhoods and commercial centers at the City's southern end, particularly the regional shopping center at Irish Hills Plaza. Los Osos Valley Road is four lanes west of U.S. Highway 101 and two lanes east of U.S. Highway 101 towards South Higuera Street. Recently completed improvements to the Los Osos Valley Road/U.S. Highway 101 interchange expanded the facility to four lanes; however, these interchange improvements were completed after the TIS was completed.
- *South Higuera Street*, located 0.25 mile west of the Project site, is a four-lane north-south arterial to the north of Los Osos Valley Road with a speed limit of 45 miles per hour (mph), which narrows to two lanes to the south. South Higuera Street extends north from its interchange with U.S. Highway 101 to the City's Downtown. South Higuera Street serves retail, commercial, and industrial use areas in the Project vicinity.
- *Madonna Road*, located 1.5 miles north of the Project site, is an east-west, four-lane arterial roadway with a speed limit of 35 mph. Madonna Road connects Higuera Street to U.S. Highway 101 and Los Osos Valley Road serving mostly residential and retail land uses. Madonna Road includes an interchange with U.S. Highway 101 and provides access to the Madonna Plaza and San Luis Obispo Promenade retail centers.
- *Prado Road*, located 1.0 mile north of the Project site, is a two lane east-west road with a speed limit of 40 mph. Prado Road currently has a limited connection to U.S. Highway 101 via a northbound on/off ramp, although a full interchange including

southbound access is planned for this location. Prado Road currently extends for approximately one mile from U.S. Highway 101 east to a partially developed light industrial area and serves residential and commercial uses.

- *Tank Farm Road*, located 0.75 mile to the north of the Project site, is an east-west arterial with of four-lanes near South Higuera Street, narrowing to two lanes near Long Street, and has a posted speed limit of 45 mph. Tank Farm Road connects South Higuera Street to SR 227 and continues west to Orcutt Road, serving commercial, retail, and residential areas.
- *Buckley Road*, bordering the Project site to the south, is a two-lane east-west arterial, under the County’s jurisdiction, that extends from Vachell Lane almost 3 miles east to SR 227 with a speed limit of 40 mph. Buckley Road serves residential, commercial, and agricultural areas, as well as the Airport. Access to the site is currently available off Buckley Road via a dirt driveway.
- *Vachell Lane*, bordering the Project site to the west, is a two-lane north-south 0.5-mile long local roadway with a speed limit of 40 mph. Vachell Lane connects Buckley Road to South Higuera Street serving commercial areas.
- *Suburban Road*, located to the north of the Project site, is a two-lane local street that serves commercial and industrial uses and runs for 0.5 mile east from South Higuera Street to Horizon Lane. West of Earthwood Lane, Suburban Road is generally developed as with a paved width of 36 to 40 feet. East of Earthwood Lane, paved road widths become more variable, diminishing to nearly 20 feet at the far eastern end at Horizon Lane.
- *Venture Drive* runs for 600 feet east from Vachell Lane where it stubs out at a barricade at the Project site’s western boundary. Venture Drive is developed as a 38-foot wide two-lane street with continuous curb, gutter and sidewalks along the south side, and a curb on the north. Venture Drive currently serves industrial properties.



Horizon Lane, north of the site, is generally limited to a paved width of 20 feet in poor paving conditions and sidewalks limited to roughly 400 feet along the east side of the southern end of this roadway.



Venture Drive (aspect west), is currently stubbed out to the west of the Project site, but is proposed to be extended to provide access west to Vachell Lane.

- *Horizon Lane and Earthwood Lane* are small local roads. Earthwood Lane extends from Suburban Road south approximately 420 feet where it terminates 580 feet north of the Project site. Horizon Lane is a degraded paved narrow roadway with approximately 20 feet of paved width and dirt shoulders in places. This road extends 1,000 feet between the Project site and Suburban Road.

Circulation and traffic flow in the Project vicinity is constrained due to the limited number of north-south arterials parallel to U.S. Highway 101, which funnels traffic onto a limited number of major streets. Additionally, the non-standard design and spacing of some intersections also constrains the transportation network. Intersection operation and congestion is discussed in further detail below in Section 3.12.2.2.

Los Osos Valley Road Interchange Project



The recently completed improvements to the Los Osos Valley Road/U.S. Highway 101 interchange project, including widening of the interchange, have substantially improved traffic flows in the vicinity.

The TIS was conducted prior to completion of the Los Osos Valley Road/U.S. Highway 101 interchange project. Therefore “existing conditions” as evaluated in the TIS represent the configuration of the interchange prior to the recent interchange expansion project. The improved operations associated with the interchange are represented in the identified mitigation measures and where interchange improvements have corrected deficiencies, they are noted in this discussion.

3.12.2.2 Traffic Operations at Intersections

Existing conditions for the following 14 intersections within the Project vicinity were evaluated to determine potential impacts associated with Project-generated and cumulative traffic (see Figure 3.12-1 for existing conditions). Traffic counts were collected at each of these intersections during weekday mornings (7:00 AM to 9:00 AM) and evenings (4:00 PM to 6:00 PM) in March, June, and July of 2015 and January and February of 2016 (see Appendix P):

1. Los Osos Valley Road/U.S. Highway 101 Southbound (SB) Ramps (Caltrans)
2. Los Osos Valley Road/U.S. Highway 101 Northbound (NB) Ramps (Caltrans)
3. South Street/Higuera Street (City)
4. Madonna Road/Higuera Street (City)
5. Prado Road/South Higuera Street (City)
6. Tank Farm Road/South Higuera Street (City)
7. Tank Farm Road/Horizon Lane (City)
8. Suburban Road/South Higuera Street (City)
9. Vachell Lane/South Higuera Street (City)
10. Los Osos Valley Road/South Higuera Street (City)
11. Buckley Road/South Higuera Street (Future Intersections, County)
12. Buckley Road/Vachell Lane (City)
13. Buckley Road/Project Entrance (Future Intersection, County)
14. Buckley Road/SR 227 (San Luis Obispo County)¹

Because traffic flow on arterials is most constrained at intersections, traffic analyses focuses on operation of critical intersections during peak travel periods, typically the AM and PM peak hours. Intersection operations can be described by measuring the LOS, a quantitative method for describing operational conditions within a traffic stream or at an intersection. The Transportation Research Board (TRB) 2010 Highway Capacity Manual (HCM) is the standard used for evaluating all types of LOS (e.g., signalized, unsignalized, freeway intersections). LOS is generally described in terms such as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. In rating intersection operations, LOS A through LOS F are used, where LOS A indicates free-flow operations and LOS F indicates congested operations (see Table 3.12-1). The City's Circulation Element identifies LOS D as the minimum acceptable operating standard for signalized and unsignalized intersections in the City during peak hour traffic (City of San Luis Obispo 2014a). For a more detailed discussion of thresholds of significance, see Section 3.12.4.1.

The LOS criteria for stop sign-controlled intersections have different threshold values than those for signalized intersections primarily because drivers expect different levels of performance from different types of transportation facilities. A signalized intersection is designed to carry higher traffic volumes than a stop sign-controlled intersection. Thus, a higher level of control-related delay is acceptable at a signalized intersection for the same LOS.

¹ The signal at the Buckley Road/SR 227 intersection is controlled by Caltrans (Central Coast Transportation Consulting 2016).

Table 3.12-1. LOS Criteria for Signalized and Unsignalized Intersections

LOS	Description	Control Delay Per Vehicle (seconds)	
		Signalized	Unsignalized
A	Uncongested operations; all vehicles clear in a single cycle.	≤ 10	≤ 10
B	Uncongested operations; all vehicles clear in a single cycle.	10.1 – 20	10.1 – 15
C	Light congestion; occasional backups on critical approaches.	20.1 – 35	15.1 – 25
D	Congestion on critical approaches, but intersection functional. Vehicles wait through more than one cycle during short peaks. No long-standing lines formed.	35.1 – 55	25.1 – 35
E	Severe congestion with some long-standing lines on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements.	55.1 – 80	35.1 – 50
F	Total breakdown with stop-and-go operations.	> 80	> 50

Source: TRB 2010.

LOS was calculated for the 14 intersections using the SYNCHRO 9 LOS analysis software program, which implements the HCM methodology. The methodology accounts for geometry, traffic controls, signal timing, and the mix of traffic using the facility, including autos, trucks, buses, bicycles, and pedestrians. Existing traffic signal timing information was provided by the City and Caltrans and was then input into a traffic model by Central Coast Transportation Consulting to represent the existing conditions at the signalized intersections (see Table 3.12-2). It should be noted that improvements to the Los Osos Valley Road/U.S. Highway 101 interchange were completed after the TIS and therefore LOS depicted below represents pre-improvement conditions.

Based on this modeling, the majority of existing signalized intersections in the Project vicinity operate at acceptable conditions of LOS D or better. The intersection of Buckley Road/SR 227 is the only signalized intersection that currently operates at LOS D during the PM peak hour. Caltrans thresholds for state facilities establishes this as an unacceptable LOS. All other intersections, with the exception of Vachell Lane/South Higuera Street operate at LOS C or better. Although this unsignalized intersection operates at an overall LOS C, the approach delay off Vachell Lane to South Higuera Street in both AM and PM peak hours is an unacceptable LOS F for this leg of the intersection. Specifically, high traffic volumes along South Higuera Street with minimal gaps in traffic causes significant delay for left turns in and out of Vachell Lane. The close proximity of this intersection to South Higuera Street with Los Osos Valley Road limits the ability to effectively signalize this intersection.

Table 3.12-2. Existing Peak Hour Intersection LOS

Intersection Number	Intersection	Peak Hour	V/C ¹	Delay ²	LOS ³
1	Los Osos Valley Road/ U.S. Highway 101 SB ⁴	AM	0.81	18.1	B
		PM	0.91	29.0	C
2	Los Osos Valley Road/ U.S. Highway 101 NB ⁴	AM	0.83	12.5	B
		PM	0.72	11.9	B
3	South Street/ Higuera Street	AM	0.59	20.9	C
		PM	0.75	24.9	C
4	Madonna Road/ Higuera Street	AM	0.59	12.9	B
		PM	0.81	21.4	C
5	Prado Road/ South Higuera Street	AM	0.55	16.7	B
		PM	0.73	21.3	C
6	Tank Farm Road/ South Higuera Street	AM	0.62	25.8	C
		PM	0.70	23.9	C
7	Tank Farm Road/ Horizon Lane ⁵	AM	0.49	0.4 (16.3)	A (C)
		PM	0.46	0.6 (18.3)	A (C)
8	Suburban Road/ South Higuera Street	AM	0.50	5.6	A
		PM	0.70	11.1	B
9	Vachell Lane/ South Higuera Street	AM	1.41	24.9 (>200)	C (F)
		PM	1.44	21.5 (>200)	C (F)
10	Los Osos Valley Road/ South Higuera Street	AM	0.74	16.8	B
		PM	0.83	17.6	B
11	Buckley Road/ South Higuera Street	AM PM	Future Intersection		
12	Buckley Road/ Vachell Lane	AM	0.38	0.0	A
		PM	0.27	0.0	A
13	Buckley Road/ Project Entrance	AM PM	Future Intersection		
14	Buckley Road/ SR 227	AM	0.76	19.1	B
		PM	0.88	35.7	D

Note: Unacceptable operations shown in **bold**.

¹ Volume-to-capacity (V/C) ratio reported for worst movement.

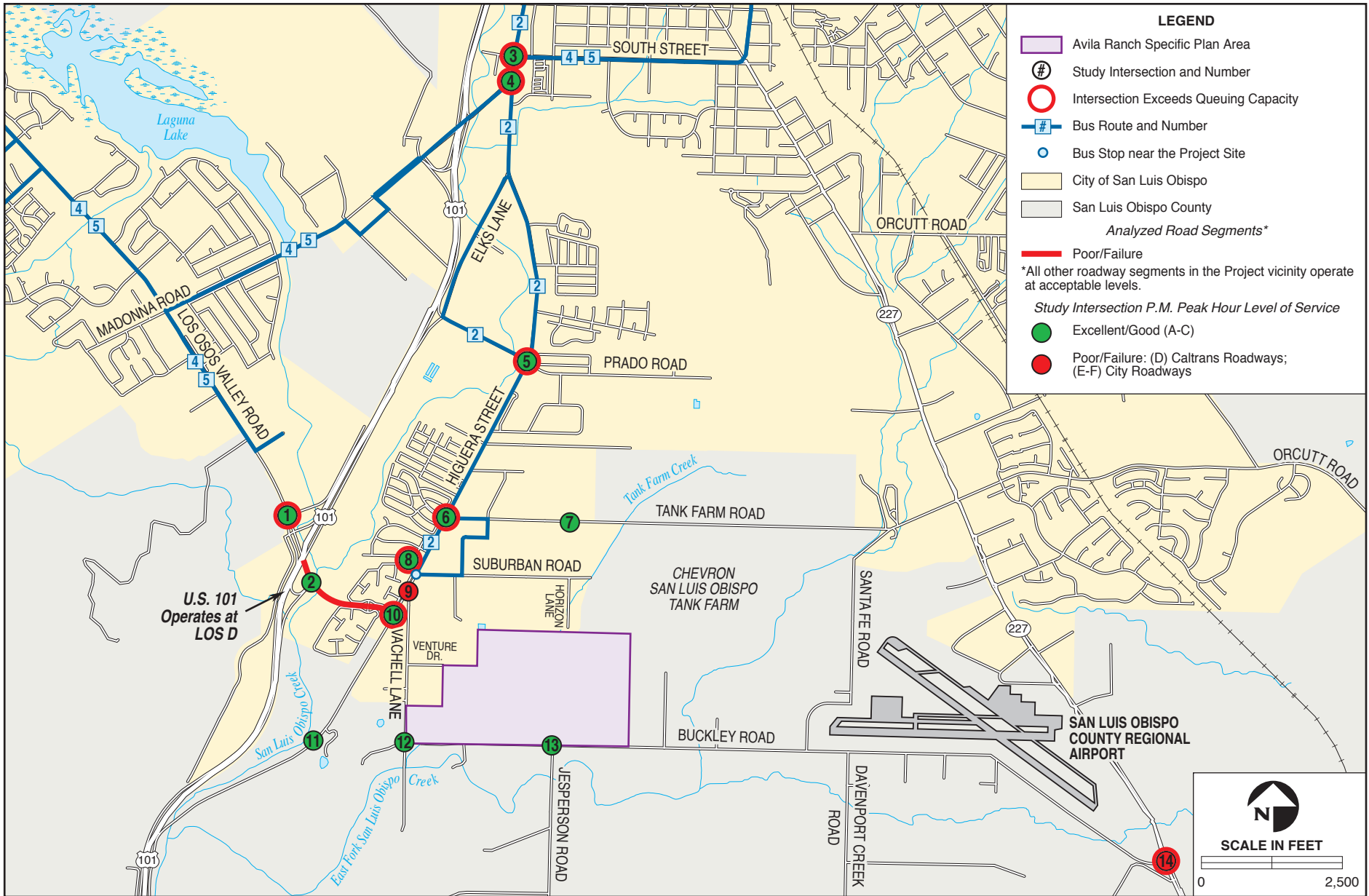
² HCM 2010 average control delay in seconds per vehicle.

³ For side-street-stop controlled intersections the worst approach's delay is reported in parenthesis next to the overall intersection delay.

⁴ These LOS are pre-improvements to the Los Osos Valley Road/U.S. Highway 101 interchange.

⁵ This is currently a driveway that is planned to be upgraded to an intersection.

Source: Central Coast Transportation Consulting 2016; see Appendix P.



Existing Traffic Conditions

FIGURE 3.12-1

Aside from LOS, vehicle queuing, or the stacking of vehicles at an intersection, particularly in turn-lanes, is another metric that is used to evaluate the intersection operations. Vehicle queues indicate the storage capacity for turn lanes and determine if traffic from those lanes spills into other roadway facilities, which can result in safety issues. Queue impacts are based on the 95th percentile queue (i.e., queues meeting or exceeding the 95th percentile queue could potentially result in unstable conditions at the intersection). The 95th percentile peak hour queues were evaluated for the signalized study intersections using the SYNCHRO 9 software, which implements HCM operations procedures (see Table 3.12-3).

A review of the 95th percentile queue at each of the signalized study intersections indicates that several intersections currently exceed capacity and/or 95th percentile queues, resulting in unstable conditions, including the following:

- The westbound left-turn and southbound through queues at intersection of Los Osos Valley Road/U.S. Highway 101 southbound ramp exceeded capacity, however, recently completed improvements to the Los Osos Valley Road/U.S. Highway 101 interchange have improved conditions to acceptable levels.
- The northbound right-turn lane queues at the intersection of South Street/Higuera Street currently exceed storage during PM peak hour.
- The northbound left-turn lane queues at the intersection of Madonna Road/Higuera Street exceed storage during PM peak hour.
- The northbound left-turn queues at the intersection of Prado Road/South Higuera Street exceed storage during PM peak hour and results in spillbacks into the two-way left-turn lane.
- The southbound left-turn lane queues and the westbound left-turn approach (PM peak hour) at the intersection of Tank Farm Road/South Higuera Street currently exceed capacity.
- The eastbound left-turn lane movement (AM peak hour) and the southbound right-turn lane (PM peak hour) at the intersection of Los Osos Valley Road/South Higuera Street exceed capacity.
- The northbound left-turn lane (PM peak hour), northbound through movement (AM peak hour), and southbound through movement (PM peak hour) currently exceed capacity at the intersection of Buckley Road/SR 227.

Table 3.12-3. Existing Queues at Intersections in the Project Vicinity

Intersection Number	Intersection	Movement ³	Storage Length ²	Peak Hour	Existing 95 th Percentile Queues (feet) ¹
1	Los Osos Valley Road/ U.S. Highway 101 SB ⁴	WBL	150	AM PM	381 195
		SBT	Trap	AM PM	413 648
2	Los Osos Valley Road/ U.S. Highway 101 NB ⁴	NBL	200	AM PM	34 54
3	South Street/ Higuera Street	NBR	130	AM PM	28 169
4	Madonna Road/ Higuera Street	NBL	160	AM PM	109 338
5	Prado Road/ South Higuera Street	NBL	250	AM PM	142 363
6	Tank Farm Road/ South Higuera Street	WBL	Trap	AM PM	196 430
		SBL	250	AM PM	279 319
8	Suburban Road/ South Higuera Street	WBL / R	170	AM PM	61 185
		SBL	160	AM PM	24 27
10	Los Osos Valley Road/ South Higuera Street	EBL	Trap	AM PM	398 221
		SBR	Trap	AM PM	82 331
14	Buckley Road/ SR 227	NBL	360	AM PM	227 144
		NBT	Trap	AM PM	1,092 207
		SBT	Trap	AM PM	299 1,014

Note: **Bold** represents intersections where 95th percentile volume exceeds capacity, queue may be longer.

¹ Queue length that would not be exceeded 95 percent of the time. Queues are reported only for turning movements where queues exceed storage capacity.

² 'Trap' denotes design where the thru-lane terminates in a turn-lane.

³ Westbound thru-lane (WBL); Westbound right-turn lane (WBR); Eastbound thru-lane (EBL); Northbound thru-lane (NBL); Northbound right-turn lane (NBR); Northbound trap (NBT); Southbound thru-lane (SBL); Southbound trap (SBT); Southbound right-turn lane (SBR).

⁴ These existing queues are pre-improvement of Los Osos Valley Road/U.S. Highway 101 interchange project. Source: Central Coast Transportation Consulting 2016; see Appendix P.

3.12.2.3 Traffic Operations Along Roadway Segments

Existing conditions for the following six roadway segments within the Project vicinity were evaluated to determine potential Project specific and cumulative impacts associated with potential increases in traffic congestion. In order to determine existing operational characteristics and levels of congestion, traffic counts were collected at each of these roadway segments during weekday mornings (7:00 AM to 9:00 AM) and evenings (4:00 AM to 6:00 PM) in March, June, and July of 2015 and January and February of 2016 (see Appendix P):

1. South Higuera Street – Buckley Road to Los Osos Valley Road
2. South Higuera Street – Los Osos Valley Road to Suburban Road
3. South Higuera Street – Suburban Road to Tank Farm Road
4. Los Osos Valley Road – South Higuera Street to 450 feet north of Los Verdes Drive
5. Los Osos Valley Road – 450 feet north of Los Verdes Drive to U.S. Highway 101 NB Ramps
6. Buckley Road – South Higuera Street to Project Site Entrance

Currently, all roadway segments in the Project vicinity generally operate at acceptable LOS. However, the northbound lane of Los Osos Valley Road operates at LOS F from South Higuera Street to 450 feet north of Los Verdes Drive during the PM peak hour. This condition is due to volumes exceeding calculated capacity along this single-lane segment (see Table 3.12-4) because it is currently striped for one northbound lane and operations exceed the one-lane capacity volumes. The current one-lane configuration is intended to facilitate turning movement access to Los Verdes Drive for residents of the Los Verdes neighborhood as recognized in a settlement agreement between the City and the Los Verdes Condominiums homeowners association. This segment can be restriped for a second lane at any time that would remove the calculate deficiency of the segment. However, it is proposed to be retained for the foreseeable future until a second lane is needed either due to the addition of a second right-turn lane from Higuera Street or a second northbound left-turn lane is need at this intersection.

In addition, the segment of Los Osos Valley Road from 450 feet north of Los Verdes Drive to U.S. Highway 101 northbound ramp operated at LOS F during both AM and PM peak hours prior to completion of the Los Osos Valley Road/U.S. Highway 101 interchange project; however, completion of these improvements rectified this congestion through road widening and this segment now operates at acceptable LOS.

Table 3.12-4. Existing Peak Hour Segment LOS

Segment	Peak Hour	Direction	V/C	LOS
South Higuera Street – Buckley Road to Los Osos Valley Road	AM	NB	0.49	B
		SB	0.41	B
	PM	NB	0.29	B
		SB	0.75	B
South Higuera Street – Los Osos Valley Road to Suburban Road	AM	NB	0.44	C
		SB	0.24	C
	PM	NB	0.33	C
		SB	0.52	C
South Higuera Street – Suburban Road to Tank Farm Road	AM	NB	0.34	C
		SB	0.20	C
	PM	NB	0.32	C
		SB	0.38	C
Los Osos Valley Road – South Higuera Street to 450 feet north of Los Verdes Drive ¹	AM	NB	0.68	C
		SB	0.80	C
	PM	NB	1.32	F
		SB	0.58	C
Los Osos Valley Road – 450 feet north of Los Verdes Drive to U.S. Highway 101 NB Ramps ¹	AM	NB	0.68	C
		SB	1.59	F
	PM	NB	1.32	F
		SB	1.17	F
Buckley Road – South Higuera Street to Project Entrance	AM	NB	0.26	B
		SB	0.47	B
	PM	NB	0.26	B
		SB	0.33	B

Source: Central Coast Transportation Consulting 2016; see Appendix P.

¹ The existing LOS represent conditions prior to completion of the improvements for the Los Osos Valley Road/U.S. Highway 101 interchange project.

3.12.2.4 Alternative Transportation

Transit Services

San Luis Obispo Regional Transit Authority (SLORTA) operates bus service within the City and throughout the County of San Luis Obispo, with limited service to the Project site via SLORTA Route 10. SLORTA Route 10 is the only regional transit route with service to Project vicinity. SLORTA Route 10 travels north-south along U.S. Highway 101 from the City of San Luis Obispo to the City of Santa Maria in Santa Barbara County. The bus makes minimal stops each way, including the stop at South Higuera Street and Suburban Road. Weekday service has 1-hour headways, Saturday service has near 3-hour headways, and Sunday service has near 4-hour headways (see Table 3.12-5). SLORTA also operates

Runabout, the County-wide Americans with Disabilities Act (ADA) transportation service, and Dial-A-Ride, an affordable curb-to-curb transportation service.

The City of San Luis Obispo Transit Division (SLO Transit) provides bus services within the City. SLO Transit Routes 2, 4, and 5 (three of the seven fixed SLO Transit routes) serve the Project vicinity; however, only SLO Transit Route 2 is proximate to the Project site. SLO Transit Route 2 provides service from Downtown San Luis Obispo to Suburban Road, with stops along South Higuera Street at Suburban Road and Tank Farm Road in the Project vicinity. SLO Transit Route 2 provides service with 40-minute headways, as well as 1-hour headways in the weekday evenings from Labor Day to mid-June (see Table 3.12-5).

The nearest transit stop to the Project site lies north of the Project site at South Higuera Street/Suburban Road, which provides a shelter and bench for riders. This stop is a minimum 0.25-mile walk from the closest northwest corner of the Project site, which minimally meets the generally recognized standard of 0.25 mile for reasonable access to transit since a majority of the site does not have access to transit stops within walking distance. Further, there is no direct transit service to the Project site and there are no fully developed sidewalks between the Project site and this location.

Table 3.12-5. Existing Transit Service

Route	Service To Project Site	Day of Week	Service Span	Headway ¹ (minutes)
SLO Transit				
2	From Downtown along South Higuera Street ²	Mon – Fri	6:03 AM – 5:40 PM	40
		Mon – Fri ³	6:50 PM – 9:18 PM	60
		Sat & Sun	8:03 AM – 5:40 PM	40
4	From Downtown along Madonna Road and Los Osos Valley Road	Mon – Fri	6:34 AM – 6:08 PM	30
		Mon – Fri ³	6:20 PM – 10:44 PM	60
		Sat & Sun	8:10 AM – 6:05 PM	60
5	From Downtown along Madonna Road and Los Osos Valley Road	Mon – Fri	6:20 AM – 7:17 PM	30
		Sat & Sun	8:20 AM – 6:17 PM	60
SLORTA				
10	San Luis Obispo – Santa Maria	Mon – Fri	6:33 AM – 9:43 PM	60
		Sat	8:33 AM – 8:43 PM	180
		Sun	9:33 AM – 6:43 PM	240

¹ Headway is the amount of time elapsed between pick-ups at any given transit stop.

² This service ends approximately 0.4 mile from the proposed Project Site.

³ This service does not operate from June 11th to Labor Day.

Sources: SLORTA 2016; City of San Luis Obispo 2016.

Hours of operation and service frequencies for SLORTA and SLO Transit routes in the Project vicinity are not well suited to transit-dependent individuals or of sufficient frequency to encourage non-transit dependent individuals to utilize transit. As described above for SLORTA Route 10 and SLO Transit Route 2, transit service frequency (also known as headway) in the Project vicinity is limited. Extended headways can cause long delays for transit-dependent individuals and do not make public transportation an attractive option for non-transit-dependent individuals.

Transit Operations

SLORTA Route 10 and SLO Transit Route 2, which serve Project vicinity, provide service to the Downtown Transit Center. SLO Transit Route 2 operates at acceptable loading levels, and does not exceed 45 passengers (25 percent standees) at any time. The average passenger loading at the South Higuera Street/Suburban Road stop is 8 passengers with a peak of 17 passengers. A total of 89 daily boardings are reported for this stop. SLORTA Route 10 occasionally has standing load trips due to heavier service demand. The average passenger load at the South Higuera Street/Suburban Road stop is 17 passengers, with a peak of 30 passengers. A total of 36 daily boardings are reported for this route.

Regional Rail and Bus Services

Amtrak provides intercity rail and bus service at the San Luis Obispo Amtrak Train and Thruway Bus Station located at 1011 Railroad Avenue, approximately 4.0 miles north of the Project site. The station can be reached using SLO Transit Route 5. Amtrak's Coast Starlight line operates one train daily from the station to points south and north of the City. Amtrak Pacific Surfliner line operates two trains daily from the station to destinations south of San Luis Obispo and Amtrak Thruway bus service provides four additional trips daily to destinations south and five additional trips daily to destinations north (Amtrak 2016). SLO Transit Route 5 (which encompasses portions of the Project vicinity) provides bus service between the Downtown Transit Center and the Amtrak station.

Existing regional rail and bus services mainly provide regional long-distance or through travel and are not necessarily designed or scheduled to address growing intercity commuter traffic within the Five Cities area, northern Santa Barbara County to the south, and San Luis Obispo County communities to the north.

Bicycle Facilities

The City of San Luis Obispo is the only jurisdiction in the County that has adopted bicycle LOS thresholds for environmental review. For this analysis, bicycle LOS is reported for applicable County and State facilities to identify potential deficiencies in the bike system. In general, bicycle facilities can include Class I – physically separated bicycle paths; Class II – on-street striped bicycle lanes; and Class III – on-street routes. Currently Vachell Lane and Buckley Road, which border the Project site, have no bicycle paths or lanes adjacent to the Project site. The nearest Class I bicycle path to the Project site is the Bob Jones Trail, which runs for approximately 1.0 mile from the Prado Road south to Los Osos Valley Road, roughly 0.5 mile northwest of the Project site. Class II bicycle lanes generally north of the Project site are provided along all or part of Los Osos Valley Road, South Higuera Street, Madonna Road, Tank Farm Road, and SR 227. South Higuera Street supports Class II bicycle lanes from Los Osos Valley Road to Nipomo Street in the Downtown. Los Osos Valley Road supports Class II bicycle lanes from the western City limits to South Higuera Street. Madonna Road supports Class II bicycle lanes from Los Osos Valley Road to South Higuera Street and Tank Farm Road from South Higuera Street to the eastern City limits. The entire reach of SR 227 in the Project vicinity supports Class II bicycle lanes. The nearest Class III bicycle route is along Margarita Avenue, north of the Project site.

The City’s Bicycle Transportation Plan (BTP) and the Airport Area Specific Plan (AASP) propose Class I bicycle paths along Buckley Road and across the Project site along Tank Farm Creek. Class II bicycle lanes are proposed along the Vachell Lane, Buckley Road, and along the proposed Buckley Road extension. The BTP also proposes bicycle path connections to the Bob Jones Trail.

Bicycle Facility Operations

All studied intersections and segments in the Project vicinity operate at acceptable LOS for bicycle facilities except the southbound approach at the Los Osos Valley Road/U.S. Highway 101 southbound ramp intersection, which operates at LOS E. However, completion of the Los Osos Valley Road interchange project since the TIS was completed has improved operations to an acceptable LOS C.

Pedestrian Facilities

The City of San Luis Obispo is the only jurisdiction in the County that has adopted pedestrian LOS thresholds for environmental review. Pedestrian LOS is, however, reported for applicable County and State facilities to identify potential deficiencies. Pedestrian

facilities include sidewalks, crosswalks, multi-use paths, and pedestrian signals at signalized intersections that are intended to provide safe and convenient routes for pedestrians. Neither Buckley Road or Vachell Lane, which border the Project site, have developed sidewalks, nor does the southern end of Vachell Lane, Horizon Lane, and much of South Higuera Street. The only sidewalks near the site are along Vachell Lane and Venture Drive bordering the Lockheed Martin Corporate Office property to the west and along the northern end of Vachell Lane. Other major roadways north of the Project site vicinity have paved sidewalks on all or part of the roadway, as well as pedestrian signals and/or crosswalk facilities at signalized study intersections..

In general, the Project vicinity is relatively undeveloped. Most uses in the area consist of commercial, industrial, and agricultural buildings set back from the street and fronted by landscape buffers or parking areas with very limited street side commercial uses. As a result, pedestrian volumes around the site are low.

Pedestrian Facility Operations

Two intersections currently operate in unacceptable levels of pedestrian service; Vachell Lane/South Higuera Street and Tank Farm Road/Horizon Lane. The intersection of Vachell Lane/South Higuera Street is stop sign-controlled on the Vachell Lane approach only, lacks crosswalks, and lacks sidewalks on the east side of South Higuera Street, between Vachell Lane and Los Osos Valley Road. As a result, pedestrians seeking to cross South Higuera Street are diverted to the intersection of South Higuera Street/Suburban Road. The intersection of Tank Farm Road/Horizon Lane is currently a driveway serving industrial uses with sidewalks limited to the south side of Tank Farm Road, with no crosswalk across Tank Farm Road. The north side of Tank Farm Road is currently fenced-off farmland and pedestrian activity east of this location along Tank Farm Road is minimal; therefore, there is very limited pedestrian demand for crossing facilities.

Three pedestrian segments along existing roads in the Project vicinity currently operate at unacceptable LOS primarily due to lack of sidewalk connectivity. Because South Higuera Street from Buckley Road to Los Osos Valley Road lacks continuous sidewalks, this segment operates at LOS D in both directions during the AM peak hour and in the southbound during the PM peak hour. Buckley Road from Vachell Lane to SR 227 operates at unacceptable LOS D and LOS E due to lack of, and separated sidewalks along Buckley Road and lack of pedestrian connectivity through to South Higuera Street.

3.12.3 Regulatory Setting

3.12.3.1 Federal

Americans with Disabilities Act (1990)

Title III of the ADA (codified in Title 42 of the U.S. Code [USC]), prohibits discrimination on the basis of disability in places of public accommodation (i.e., businesses and non-profit agencies that serve the public) and commercial facilities (i.e., other businesses). This regulation includes Appendix A to Part 36, Standards for Accessible Design, which establishes minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warning for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travel way, and a vibration-free zone for pedestrians.

3.12.3.2 State

California Department of Transportation (Caltrans)

Caltrans manages the operation of state highways, including the U.S. Highway 101 and SR 277, which pass through the San Luis Obispo area and the Project vicinity.

Senate Bill (SB) 743

To further the state's commitment to the goals of SB 375, Assembly Bill (AB) 32, and AB 1358, SB 743 adds Chapter 2.7, Modernization of Transportation Analysis for Transit-Oriented Infill Projects, to Division 13 (Section 21099) of the Public Resources Code. Key provisions of SB 743 include reforming aesthetics and parking CEQA analysis for urban infill projects and eliminating the measurement of automobile delay, including LOS, as a metric that can be used for measuring traffic impacts in transit priority areas. Under SB 743, the focus of transportation analysis will shift from driver delay to reduction of greenhouse gas (GHG) emissions, creation of multi-modal networks, and promotion of a mix of land uses.

Pursuant to SB 743, the Office of Planning Research (OPR) released a Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in January 2016. OPR's Draft of Updates proposes vehicle miles traveled (VMT) as the replacement metric for LOS in the context of CEQA. While OPR emphasizes that a lead agency has the discretionary authority to establish thresholds of significance, the Draft of Updates suggest criteria that indicate when a project may have a significant, or less than significant,

transportation impact on the environment. For instance, a project that results in VMTs greater than the regional average for the land use type (e.g., residential, employment, commercial) may indicate a significant impact. Alternatively, a project may have a less than significant impact if it is located within 0.5 mile of an existing major transit stop, or results in a net decrease in VMTs compared to existing conditions. At this time OPR has not officially adopted VMT thresholds and measures under SB 743 are still in draft form, therefore VMT is only reported in the TIS and no findings of significance are made.

3.12.3.3 Local

City of San Luis Obispo General Plan

The City General Plan sets objectives and policies for all City resources. Those associated with the standards of streets and highways incorporated within the City are managed through the Circulation Element of the General Plan.

Circulation Element

The City adopted a Circulation Element in 1994, and it was updated and amended in 2014. The following policies are relevant to the proposed Project.

Policy 2.1.1 Multi-level Programs. The City shall support County-wide and community-based efforts aimed at substantially reducing the number of vehicle trips and parking demand.

Policy 2.1.2 Flexible Work Schedules. The City shall support flex time programs and alternative work schedules to reduce peak hour traffic demand.

Policy 2.1.3 Work-based Trip Reduction. The City shall encourage employers within the City limits and work with the county to work with employers outside of the City limits to participate in trip reduction programs.

Policy 2.1.5 Long-term Measure. The City shall support programs that reduce traffic congestion and maintain air quality. If air quality degrades below legal standards or LOS standards are exceeded, the City will pursue more stringent measures to achieve its transportation goals.

Policy 4.1.4 New Development. The City shall require that new development provide bikeways, secure bicycle storage, parking facilities and showers consistent with City plans and development standards. When evaluating transportation impacts, the City shall use a Multi-Modal Level of Service (MMLOS) analysis.

Policy 6.1.1 Complete Streets. The City shall design and operate City streets to enable safe, comfortable, and convenient access and travel for users of all abilities including pedestrians, bicyclists, transit users, and motorists.

Policy 6.1.2 Multi-Modal LOS Objectives, Service Standards, and Significance Criteria. The City shall strive to achieve LOS objectives and shall maintain LOS minimums for all four modes of travel; pedestrians, bicyclists, transit, and vehicles.

Policy 6.1.3 Multi-Modal Priorities. In addition to maintaining minimum LOS, MMLOS should be prioritized in accordance with the established modal priorities, such that construction, expansion, or alteration for one mode should not degrade the service level of a higher priority mode.

Policy 6.1.4 Defining Significant Circulation Impact. Any degradation of the LOS shall be minimized to the extent feasible in accordance with the modal priorities established. If the LOS degrades below thresholds established in Policy 6.1.2, it shall be determined a significant impact for purposes of environmental review under the CEQA. For roadways already operating below the established MMLOS standards, any further degradation to the MMLOS score will be considered a significant impact under CEQA.

Where a potential impact is identified, the City in accordance with the modal priorities established, can determine if the modal impact in question is adequately served through other means e.g., another parallel facility or like service. Based on this determination, a finding of no significant impact may be determined by the City.

Policy 6.1.5 Mitigation. For significant impacts, developments shall be responsible for their fair share of any improvements required. Potential improvements for alternative mode may include, but are not limited to:

Pedestrian: Provision of sidewalk, providing or increasing a buffer from vehicular travel lanes, increased sidewalk clear width, providing a continuous barrier between pedestrians and vehicle traffic, improved crossings, reduced signal delay, traffic calming, no right turn on red, reducing intersection crossing distance.

Bicycle: Addition of a bicycle lane, traffic calming, provision of a buffer between bicycle and vehicle traffic, pavement resurfacing, reduced number of access points, or provision of an exclusive bicycle path, reducing intersection crossing distance.

Transit: For transit-related impacts, developments shall be responsible for their fair share of any infrastructural improvements required. This may involve provision of street

furniture at transit stops, transit shelters, and/or transit shelter amenities, pullouts for transit vehicles, transit signal prioritization, provision of additional transit vehicles, or exclusive transit lanes.

Policy 6.1.6 City Review. When new projects impact the existing circulation system, the City shall review the effectiveness and desirability of “direct fix” mitigation improvements to address MMLOS impacts. Where a significant impact is found, alternative system-wide project mitigations may be submitted for consideration to the City in accordance with the modal priorities established in Policy 6.1.2. Exceptions shall be based on the physical conditions of the right-of-way to support additional improvements. If the right-of-way in question cannot address on-site mitigation, appropriate off-site improvements that have direct nexus to and effectively address the specific impacts created by the project may be considered.

Policy 7.1.1 Peak Hour and Daily Traffic. The City shall cooperate with County and State government to institute programs that reduce the levels of peak-hour and daily vehicle traffic.

Policy 7.1.2 Street Network. The City shall manage to the extent feasible the street network so that the standards are not exceeded. This will require new development to mitigate the traffic impacts it causes or the City to limit development that affects streets where congestion levels may be exceeded. The standards may be met by strengthening alternative modes over the single occupant motor vehicle. Where feasible, roundabouts shall be the City’s preferred intersection control alternative due to the vehicle speed reduction, safety, and operational benefits of roundabouts.

Policy 7.1.3 Growth Management & Roadway Expansion. The City shall manage the expansion of roadways to keep pace with only the level of increased vehicular traffic associated with development planned for in the Land Use Element and under the City’s growth management policies and regional transportation plans.

Policy 7.1.4: Transportation Funding. In order to increase support for non-automobile travel, the City shall strive to allocate transportation funding across various modes approximately proportional to the modal split objectives for 2035.

Policy 7.1.5 Vehicle Speeds. To the extent permitted under the California Vehicle Code (CVC), the City shall endeavor to maintain and reduce speeds where possible in residential neighborhoods.

Policy 7.2.7 Traffic Access Management. The City shall adopt an access management policy to control location, spacing, design and operation of driveways, median openings, crosswalks, interchanges and street connections to a particular roadway including navigation routes to direct traffic in a manner that preserves the safety and efficiency of the transportation system. Navigation routing and other smart access technologies should be considered as part of the update to the Access and Parking Management Plan.

Policy 8.1.1 Through Traffic. The City shall design its circulation network to encourage through traffic to use regional routes, highways, arterials, parkway arterials, and residential arterial streets and to discourage through traffic use of collectors and local streets.

Policy 8.1.2 Residential Streets. The City should not approve commercial development that encourages customers, employees or deliveries to use residential local or residential collector streets.

Policy 8.1.3 Neighborhood Traffic Speeds. To the extent permitted under the CVC, the City shall endeavor to reduce and maintain vehicular speeds in residential neighborhoods.

Policy 8.1.4 Neighborhood Traffic Management. The City shall ensure that neighborhood traffic management projects:

- Provide for the mitigation of adverse impacts on all residential neighborhoods.
- Provide for adequate response conditions for emergency vehicles.
- Provide for convenient and safe through bicycle and pedestrian traffic.

Policy 8.1.5 Neighborhood Traffic Management Guidelines. The City shall update its Neighborhood Traffic Management Guidelines to address voting, funding, and implementation procedures and develop an outreach program on the availability of the program.

Policy 8.1.6 Non-Infill Development. In new, non-infill developments, dwellings shall be set back from regional routes and highways, parkway arterials, arterials, residential arterials, and collector streets so that interior and exterior noise standards can be met without the use of noise walls.

Policy 11.1.1 Interstate Air Service. The City shall support and encourage expansion of air transportation services, as forecasted in the Airport Master Plan and approved by the Federal Aviation Administration (FAA).

Policy 11.1.2 County Aircraft Operations. The City shall work with the County to continue to address aircraft operations so that noise and safety problems are not created in developed areas or areas targeted for future development by the City's Land Use Element.

Policy 11.1.3 Public Transit Service. The City shall encourage improved public transit service to the County airport soon as practical.

Airport Area Specific Plan

Chapter 6 of the AASP, *Circulation and Transportation*, includes the classifications of major roadways within the AASP Plan Area (Table 6.1 of the AASP), identifies proposed improvements consistent with the City of San Luis Obispo General Plan Circulation Element (Figure 6-1, 6-2, and Table 6.2 of the AASP), describes circulation plan improvement programs and outlines design guidelines and standards for roadways. The following are proposed circulation improvements identified within the AASP within the Project vicinity:

- Prado Road/South Higuera Street intersection improvements;
- Tank Farm Road/South Higuera Street intersection improvements;
- Buckley Road Extension from Vachell Lane to South Higuera Street; and
- Widening of Tank Farm Road to four lanes from South Higuera to Broad Street/

The following are programs, goals, and policies within the AASP applicable to the Project:

Program 6.3.G Development Review Requirements. In order to mitigate air, noise and traffic impacts associated with development of the AASP, ensure private development participation in the implementation of the plan by requiring the construction of on-street bicycle lanes as part of development street frontage improvements, and require development to dedicate and construct off-street paths where their alignments are within private property. Require development adjacent to bus stops to construct turnouts and bus stops (including shelters) conforming to the bus stop standards in SLO Transit's Short Range Transit Plan. Project may be required to construct intersection and other street improvements in proportion to their development size and location.

Program 6.3.I Class I and Class II Bicycle Lanes. Class I bicycle paths and Class II bicycle lanes shall be constructed, signed and marked to meet or exceed the minimum standards established by the Caltrans Highway Design Manual and the City of San Luis Obispo design standards. Class I paths should be a minimum of 12 feet in width with 2-

foot shoulders, except in hillside areas where grading would cause visual impacts or along creeks where space is limited. Class II bicycle lanes shall be designed in accordance with the City Bicycle Plan and should be 6 to 7 feet in width.

Program 6.3.L Transit Facility Requirements. As part of the development review process, the City will require new development to provide for transit facilities along or adjacent to the project frontage.

Goal 6.4.3. Improve Buckley Road to arterial standards while maintaining a street character consistent with the area's rural setting.

Standard 6.4.3.1. Buckley Road shall be extended as a two-lane rural arterial from its currently western terminus at Vachell Lane to South Higuera Street. Timing of extension will be based on achieving traffic volumes and conditions that justify the improvements or when the intervening properties between Vachell Lane and South Higuera Street are redeveloped. Setbacks shall be provided on both sides of the road to allow for expansion to a four-lane roadway if future traffic volumes and conditions justify additional lanes.

Standard 6.4.3.2. The roadway shall be design to minimize impact to adjacent creeks and open space where possible. Setbacks shall be provided on both sides of the road to allow for expansion to a four-lane roadway if future traffic volumes and conditions justify additional lanes.

Standard 6.4.3.3. On the north side of Buckley Road in undeveloped areas, outside of the 20-foot graded shoulder, there shall be a 12-foot wide multi-use path.

Standard 6.4.4.1. Commercial and industrial collectors without center turn lanes shall have a minimum of two 13-foot travel lanes and two 6-foot bicycle lanes. Each side of the road will have 7-foot tree-lined parkways between the curb and a 5-foot wide sidewalk unless an alternative cross section is approved by the Director of Public Works.

City of San Luis Obispo Bicycle Transportation Plan (2013)

The BTP was prepared and adopted by the City in 1985 and it was updated in 2013 to improve and encourage bicycle and pedestrian transportation within the City. This plan works to establish a comprehensive design and development of bikeway facilities in compliance with State, County, and City regulations and policies.

3.12.4 Environmental Impact Analysis

3.12.4.1 Thresholds of Significance

In accordance with Appendix G of the 2016 CEQA Guidelines, the proposed Project would result in a significant effect under CEQA if it were to:

- a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- b) Conflict with an applicable congestion management program (CMP), including but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- c) 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 risk;
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- e) Result in inadequate emergency access; or
- f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

City of San Luis Obispo Thresholds:

Signalized intersections:

- Project traffic causes an intersection operating at LOS A, B, C, or D to degrade to LOS E or F for bicycles or autos or causes an intersection operating at LOS A, B, or C to degrade to LOS D, E, or F for pedestrians;
- Project traffic increases auto volume-to-capacity (V/C) ratio by 0.01 or more at an intersection currently operating at LOS E or F;
- Project traffic degrades bicycle or pedestrian LOS at an intersection currently operating at an unacceptable level (LOS E or F for bicycles, LOS D, E, or F for pedestrians); or
- Project causes or exacerbates existing conditions where the 95th percentile turning movement queues exceeding available turn pocket capacity.

Unsignalized intersections:

- Project traffic causes an intersection operating at LOS A, B, C, or D to degrade to unacceptable traffic conditions of LOS E or F; and V/C ratio is increased by .01 or more and signal warrants are met; or

- Project causes or exacerbates 95th percentile turning movement queues exceeding available turn pocket capacity.

Segments:

Project traffic causes a segment operating at LOS A, B, C, or D to degrade to LOS E or F for bicycles or causes an intersection operating at LOS A, B, or C to degrade to LOS D, E, or F for pedestrians.

Pedestrian and Bicycle Facilities:

The 2010 HCM's Bicycle and Pedestrian LOS is a measure of comfort based on many different factors. The model used to calculate the LOS score, under certain conditions, be very sensitive to minor changes that would otherwise not be noticed by pedestrians or cyclists. Professional engineering judgement is used to determine the significance threshold of a bicycle and pedestrian LOS impact based on the context and perceptibility of that impact. Therefore, while a LOS deficiency may be calculated for bicycle or pedestrian LOS, the Project's direct contribution to that deficiency may require qualitative discussions and conclusions. Required Project mitigations for these deficiencies may be whole or only part depending upon the individual characteristics of each location.

Caltrans Facilities Thresholds

Operations degrade from LOS C or better to LOS D, E, or F; or the addition of project traffic increases delay at an intersection or segment operating at LOS D, E, or F.

County Facilities Thresholds

The County's Traffic Impact Study policies provide guidelines for identifying transportation impacts, with different standards for urban and rural areas. The Project is located within the San Luis Obispo Urban Reserve Line, where LOS D is acceptable but LOS E or F is not.

3.12.4.2 Impact Assessment Methodology

As described in Section 2.0, *Project Description*, the proposed Project would require development of a substantial network of onsite roads, bicycle paths, sidewalks and integration of this remote site into the transit network; a number of offsite road, bicycle, and pedestrian improvements are also included as part of the Project. The timing of completion of these improvement, their coordination with Project phasing, and ability to

accommodate increased traffic flows and demand for pedestrian and bike facilities and transit service are key to both successful Project completion and accurate impact analysis.

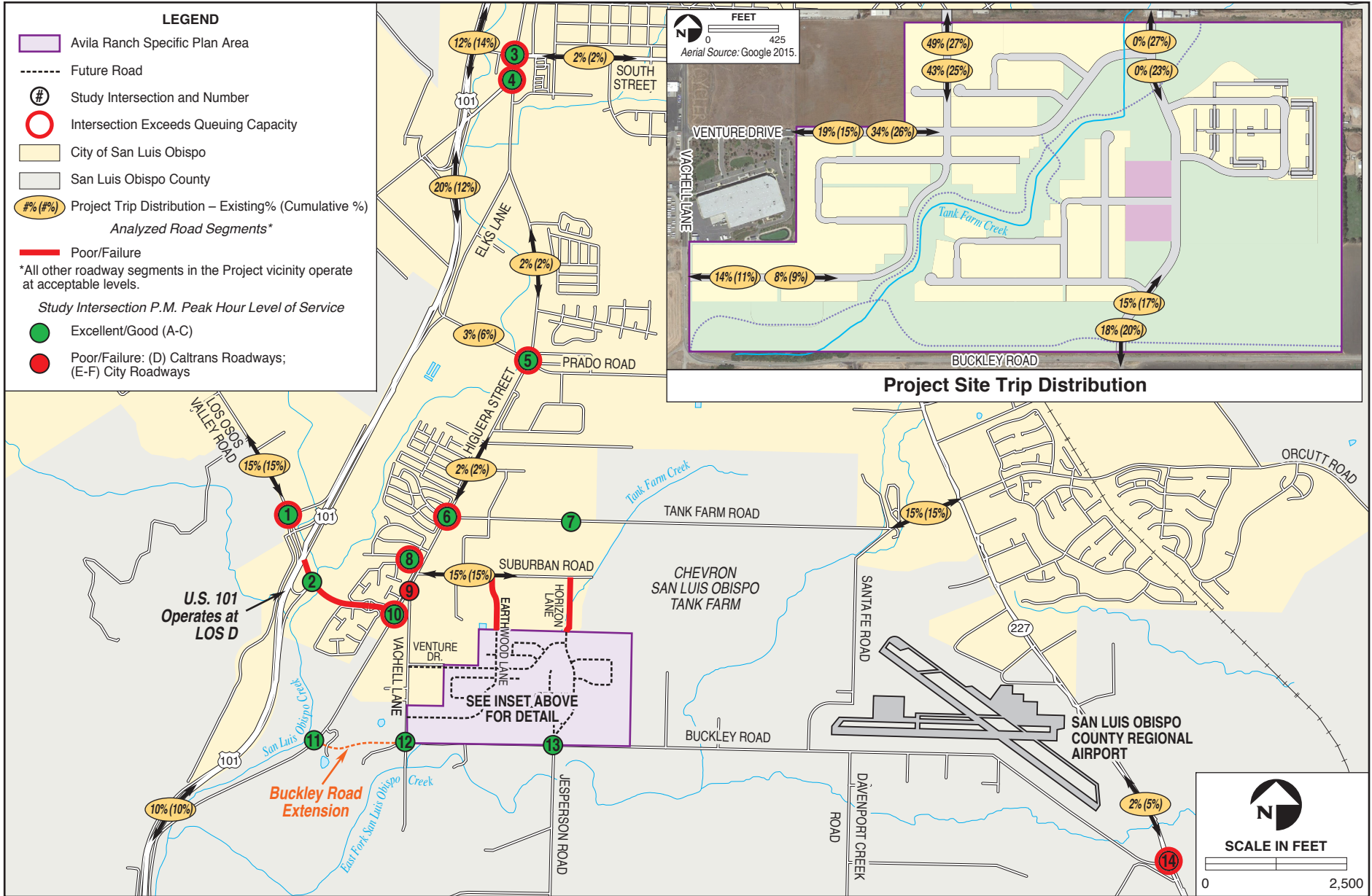
Based on the City's adopted thresholds and those of other agencies where appropriate, the TIS addressed and analyzed the following scenarios to describe the impacts associated with implementation of the proposed Project (see Appendix P):

- **Existing Conditions** reflect traffic counts for March, June, and July of 2015, and January and February of 2016 and the existing transportation network;
- **Existing plus Projects Conditions** add Project-generated traffic to Existing Conditions volumes;
- **Near-term Conditions** reflect 2014 traffic counts and the existing transportation network plus roadway improvements and approved and pending projects in the Project vicinity;
- **Near-term plus Project Conditions** add Project-generated traffic to the Near-term Conditions volumes;
- **Cumulative Conditions** represent future traffic conditions reflective of the buildout of land uses in the area, not including the proposed Project; and
- **Cumulative plus Project Conditions** represent future traffic conditions reflective of the buildout of land uses in the area, including the proposed Project.

The impacts of the proposed Project related to traffic were estimated in the TIS using trip generation, trip distribution, and trip assignment. Trip generation estimates the amount of added traffic to the roadway network. Trip distribution estimates the direction of travel to and from the Project site. Trip assignment allocates trips to specific street segments and intersection turning movements.

Project Vehicle Trip Generation

The amount of traffic added to the surrounding roadway system by the proposed Project was estimated by applying the applicable trip generation rates to the development proposal. Project trip generation estimates were calculated based on data presented in the Institute of Transportation Engineers (ITE) Trip Generation Report (9th Edition). The trip generation accounts for internal capture rate reductions (i.e., trips that are internal within the development and will complement each other).



Existing Plus Project Traffic Impacts

FIGURE 3.12-2

Table 3.12-6. Proposed Project Trip Generation

Land Use	Size	Daily Trip Rate	Number of Trips		
			Daily	Peak Hour	
				AM	PM
Low Density Housing	105 units	10.46	1,098	83	110
Medium Density Housing	305 units	5.56	1,697	126	150
High Density Housing	310 units	6.46	2,002	156	188
Neighborhood Commercial	15,000 sf	0.13	1,979	49	168
Net New Trips		--	6,776	414	616
Internal Capture Trips ¹		--	-872	-8	-62
Trips added to adjacent streets			5,904	406	554

¹ Internal capture estimates use ITE method for Daily trips and NCHRP method for AM and PM trips.
Source: Central Coast Transportation Consulting 2016; see Appendix P.

Project Vehicle Trip Distribution and Assignment

The City developed and maintains a citywide travel demand model (TDM) for use in forecasting travel demand. The TDM was used to estimate the directions of approach and departure for Project trips using a select zone analysis, which tracks trips to and from a specific Traffic Analysis Zone (TAZ) in the TDM. The volumes attributable to each land use type proposed by the Project were estimated using the select zone analysis within the TDM.²

Segment and Intersection Operations

Using vehicle trip generation and distribution data, the TIS analyzed the multi-modal transportation effects of the Project on roadway segments and intersections. The LOS and queuing results are provided in Tables 3.12-7, 3.12-8, and 3.12-9 below. Existing conditions were compared with Existing plus Project conditions to determine the degree of change projected for each of the intersections and roadway segments. The Existing plus Project LOS was also compared with City thresholds to determine where significant impacts may occur as a result of Project implementation. A description of the LOS and queuing results is provided below.

Intersections

The TIS analyzed 14 intersections within the Project vicinity. As shown in Table 3.12-8, with implementation of the proposed Project, 9 of the 14 study intersections are anticipated to be adversely affected, two with forecasted overall intersection deficiencies and eight with deficiencies on individual turning lanes or approaches.

² A select zone analysis follows traffic volumes from a single selected zone to all other zones.

Table 3.12-7. Existing Plus Project Intersection Impact Summary

Intersection Number	Intersection	Peak Hour	Existing No Project			Existing + Project			
			V/C ¹	Delay ²	LOS ³	V/C ¹	V/C Delta	Delay ²	LOS ³
1	Los Osos Valley Road/U.S. Highway 101 SB	AM	0.81	18.1	B	0.82	0.01	18.8	B
		PM	0.91	29.0	C	0.95	0.04	33.8	C
2	Los Osos Valley Road/U.S. Highway 101 NB	AM	0.83	12.5	B	0.94	0.11	21.3	C
		PM	0.72	11.9	B	0.87	0.15	14.1	B
3	South Street/ Higuera Street	AM	0.59	20.9	C	0.59	0.00	21.4	C
		PM	0.75	24.9	C	0.76	0.01	25.0	C
4	Madonna Road/ Higuera Street	AM	0.59	12.9	B	0.59	0.01	12.9	B
		PM	0.81	21.4	C	0.82	0.02	21.5	C
5	Prado Road/ South Higuera Street	AM	0.55	16.7	B	0.56	0.01	17.2	B
		PM	0.73	21.3	C	0.75	0.01	18.3	B
6	Tank Farm Road/ South Higuera Street	AM	0.62	25.8	C	0.63	0.02	25.9	C
		PM	0.70	23.9	C	0.71	0.02	29.6	C
7	Tank Farm Road/ Horizon Lane	AM	0.49	0.4 (16.3)	A (C)	0.51	0.05	0.4 (16.7)	A (C)
		PM	0.46	0.6 (18.3)	A (C)	0.48	0.25	0.6 (18.8)	A (C)
8	Suburban Road/ South Higuera Street	AM	0.50	5.6	A	0.55	-0.97	0.9 (17.3)	B
		PM	0.70	11.1	B	0.95	-0.99	0.5 (14.7)	B
9	Vachell Lane/ South Higuera Street ⁴	AM	1.41	24.9 (>200)	C (F)	0.44	-0.97	50.0 (>200)	A (C)
		PM	1.44	21.5 (>200)	C (F)	0.45	-0.99	30.4 (>200)	A (B)
10	Los Osos Valley Road/South Higuera Street	AM	0.74	16.8	B	0.88	0.14	21.8	C
		PM	0.83	17.6	B	0.85	0.02	20.1	C
11	Buckley Road/ South Higuera Street	AM	Future Intersection			0.34	0.34	5.7	A
		PM				0.90	0.90	7.1	A
12	Buckley Road/ Vachell Lane	AM	0.38	0.0	A	0.57	0.08	9.8 (15.7)	A (C)
		PM	0.27	0.0	A	0.49	0.15	8.3 (15.2)	A (C)
13	Buckley Road/ Project Entrance	AM	Future Intersection			0.08	0.08	7.6 (8.8)	A
		PM				0.15	0.15	1.3 (11.0)	A (B)
14	Buckley Road/ SR 227	AM	0.76	19.1	B	0.76	0.00	19.5	B
		PM	0.88	35.7	D	0.88	0.00	36.5	D

¹ Volume-to-capacity ratio reported for worst movement.

² HCM 2010 average control delay in seconds per vehicle.

³ For side-street-stop controlled intersections the worst approach's delay is reported in parenthesis next to the overall intersection delay. Unacceptable operations shown in **bold**.

⁴ Improvements for the Vachell Lane/South Higuera Street intersection are included as part of the Project.

Source: Central Coast Transportation Consulting 2016; see Appendix P.

Table 3.12-8. Existing plus Project Intersection Queueing Impact Summary

Intersection Number	Intersection	Movement ³	Storage Length ²	Peak Hour	Existing 95 th Percentile Queues (feet) ¹	
					Existing	Existing + Project
1	Los Osos Valley Road/ U.S. Highway 101 SB	WBL	150	AM PM	381 195	411 236
		SBT	Trap	AM PM	413 648	429 717
2	Los Osos Valley Road/ U.S. Highway 101 NB	NBL	200	AM PM	34 54	53 75
3	South Street/ Higuera Street	NBR	130	AM PM	28 169	40 177
4	Madonna Road/ Higuera Street	NBL	160	AM PM	109 338	109 338
5	Prado Road/ South Higuera Street	NBL	250	AM PM	142 363	158 367
6	Tank Farm Road/ South Higuera Street	WBL	Trap	AM PM	196 430	202 463
		SBL	250	AM PM	279 319	299 319
8	Suburban Road/ South Higuera Street	WBL / R	170	AM PM	61 185	55 222
		SBL	160	AM PM	24 27	90 159
10	Los Osos Valley Road/ South Higuera Street ⁴	EBL	Trap	AM PM	398 221	409 263
		SBR	Trap	AM PM	82 331	73 343
14	Buckley Road/SR 227	NBL	360	AM PM	227 144	225 161
		NBT	Trap	AM PM	1,092 207	1,099 208
		SBT	Trap	AM PM	299 1,014	315 1,017

¹ Queue length that would not be exceeded 95 percent of the time. Queues are reported only for turning movements where queues exceed storage capacity.

² 'Trap' denotes design where the thru-lane terminates in a turn-lane.

³ Westbound thru-lane (WBL); Westbound right-turn lane (WBR); Eastbound thru-lane (EBL); Northbound thru-lane (NBL); Northbound right-turn lane (NBR); Northbound trap (NBT); Southbound thru-lane (SBL); Southbound trap (SBT); Southbound right-turn lane (SBR).

⁴ These projected queues do not include the recently completed improvements of Los Osos Valley Road/U.S. Highway 101 interchange project.

Bold: 95th percentile volume exceeds capacity, queue may be longer.

Source: Central Coast Transportation Consulting 2016; see Appendix P.

Table 3.12-9. Existing Plus Project Roadway Segment Impact Summary

Segment	Peak Hour	Direction	Existing		Existing + Project	
			V/C	LOS	V/C	LOS
South Higuera Street – Buckley Road to Los Osos Valley Road	AM	NB	0.49	B	0.70	B
		SB	0.41	B	0.40	B
	PM	NB	0.29	B	0.35	B
		SB	0.75	B	0.83	B
South Higuera Street – Los Osos Valley Road to Suburban Road	AM	NB	0.44	C	0.46	C
		SB	0.24	C	0.24	C
	PM	NB	0.33	C	0.34	C
		SB	0.52	C	0.53	C
South Higuera Street – Suburban Road to Tank Farm Road	AM	NB	0.34	C	0.38	C
		SB	0.20	C	0.21	C
	PM	NB	0.32	C	0.35	C
		SB	0.38	C	0.43	C
Los Osos Valley Road – South Higuera Street to 450 feet north of Los Verdes Drive ¹	AM	NB	0.68	C	0.83	C
		SB	0.80	C	0.82	C
	PM	NB	1.32	F	1.42	F
		SB	0.58	C	0.67	C
Los Osos Valley Road – 450 feet north of Los Verdes Drive to U.S. Highway 101 NB Ramps ¹	AM	NB	0.68	C	0.83	C
		SB	1.59	F	1.65	F
	PM	NB	1.32	F	1.42	F
		SB	1.17	F	1.35	F
Buckley Road – South Higuera Street to Project Entrance	AM	NB	0.26	B	0.42	B
		SB	0.47	B	0.54	B
	PM	NB	0.26	B	0.11	B
		SB	0.33	B	0.15	B

Source: Central Coast Transportation Consulting 2016; see Appendix P.

¹ These projected LOS do not include the recently completed improvements of the Los Osos Valley Road/U.S. Highway 101 interchange project.

Roadway Segments

The TIS analyzed six road segments within the Project vicinity. As described above in Section 3.12.2, Environmental Setting, currently two of the six road segments analyzed operate at unacceptable LOS F. As shown in Table 3.12-9, implementation of the proposed Project would increase the V/C ratio on most of all road segments, but would only result in significant impacts at two of the six segments. The segments of Los Osos Valley Road from South Higuera Street to 450 feet north of Los Verdes Drive, and from 450 feet north of Los Verdes Drive to U.S. Highway 101 northbound ramps currently operate and would continue to operate under the Project at LOS F. The Project would further degrade the V/C ratio of the northbound segment from South Higuera Street to 450 feet north of Los Verdes

Drive during PM peak hour; and to the southbound and northbound segments from 450 feet north of Los Verdes Drive to U.S. Highway 101 northbound ramps during both AM and PM peak hour. As previously mentioned, the TIS analysis was conducted prior to recently completed improvements as part of the Los Osos Valley Road/U.S. Highway 101 interchange project.

Relationship of SB 743 to Project Vehicular Analysis

A key provision of SB 743, passed in September 2013, is the elimination of vehicle delay and LOS as CEQA significance criterion in urban areas. However, since the proposed Project is not within a transit priority area and OPR has not yet adopted new CEQA Guidelines for replacement criteria to LOS thresholds, the Project is not subject to VMT impact thresholds. However this section does report VMT analysis for the Project below.

Vehicle Miles Traveled

In respect to SB 743, the TIS evaluated the forecasted VMT for the Project using the TDM. According to the City's TDM, the forecasted 2035 VMT for the County is approximately 12 million miles with an average VMT per household of 80, and for the City it is approximately 1.5 million miles with an average VMT per household of 54. For the Project, the TIS forecasted that the Project would add a total of approximately 65,000 daily VMT, with an average VMT per household of 72 within the Project site (see Table 3.12-10 below). These additional VMT would result in an increase of only approximately 4 percent within the City and 0.5 percent within the County. Although the Project would have a VMT below the regional average, the VMT per household for the Project is forecasted to be approximately 33 percent higher than the average for the City sphere of influence.

Table 3.12-10. Average estimated VMT for the City, County, and Project

Descriptions	Daily VMT	VMT per HH ¹
San Luis Obispo County (County)	12,000,000	80
City of San Luis Obispo (City)	1,500,000	54
Avila Ranch Project (Project)	65,000	72

¹ Reported VMT per household.

Source: Central Coast Transportation Consulting 2016; see Appendix P.

Bicycle, Pedestrian, and Transit Operations

Bicycle, pedestrian, and transit facilities were evaluated using the 2010 HCM methodology and multi-modal thresholds established in the City's Circulation Element. For bicycle and

pedestrian facilities, trip generation and distribution calculations were modeled to evaluate the operational conditions. LOS for these facilities was primarily evaluated based on operational conditions, gaps in circulation, safety, and City design criteria. Transit service was analyzed based on the service standards listed in the City's current Short Range Transit Plan, which states that in residential areas 90 percent of the population should be within 0.25 mile of a bus stop. In accordance with the City's Multi-Modal Transportation Guidelines, transit LOS was primarily predicated on the presence of shelters and benches at bus stops, as well as the frequency and on-time performance of each route.

Relation to the Airport Area Specific Plan

Any development within the AASP area will be required to pay the Citywide Transportation Impact Fees (TIF). In addition, projects located in the AASP area are required to participate in the AASP Public Facilities Financing Plan, which collects AASP Sub Area fees to help fund improvements. Since the Project site is within the adopted AASP boundaries, it is subject to these fees.

Transportation fees under the current AASP Sub Area fee program do not include fees for residential or retail land uses. These uses were allowed in the AASP as part of the LUCE Update, and the AASP Sub Area fee program is being revised to include these uses. As stated in the AASP, the rate and exact development patterns within the AASP area cannot be predicted, thus there is no fixed implementation schedule of overall traffic mitigation measures. The AASP states that any development within the AASP will need to construct adjacent street, bicycle, and transit improvements as part of their development to advance the necessary improvements and seek a reimbursement agreement, as necessary. Therefore, the Applicant is responsible for the construction of all mitigations measures for transportation improvements associated with the Project.

3.12.4.3 Project Impacts and Mitigation Measures

The TIS compared existing, near-term, and cumulative (buildout) traffic conditions to those with the added effects of Project-generated traffic to determine Project-specific and contributing impacts on multi-modal infrastructure within the Project area. The transportation related impacts associated with the proposed Project are summarized in Table 3.12-11.

Table 3.12-11. Summary of Project Impacts

Transportation and Traffic Impacts	Mitigation Measures	Residual Significance	TIS Impact # (see Appendix P) ¹
TRANS-1. Project construction activities would potentially create traffic impacts due to congestion from construction vehicles (e.g., construction trucks, construction worker vehicles, equipment, etc.) as well as temporary traffic lane and sidewalk closures.	MM TRANS-1	Significant but Mitigable	--
TRANS-2. Phased Project development combined with limited site access and related increases in congestion on surrounding roadways would have the potential to cause transportation deficiencies throughout the Project vicinity.	MM TRANS-2a MM TRANS-2b MM TRANS-2c MM TRANS-2d MM TRANS-2e MM TRANS-2f	Significant but Mitigable	30, 31, 32
TRANS-3. Project-generated traffic would potentially create turning movement conflicts at driveways and intersections on the Project site.	MM TRANS-3a MM TRANS-3b	Significant but Mitigable	21
TRANS-4. Project-generated traffic could exceed Circulation Element maximum volume thresholds at Vachell Lane, Earthwood Lane, Horizon Lane, and Suburban Road.	MM TRANS-2a-f MM TRANS-3b MM TRANS-4	Significant but Mitigable	22, 23, 24, 25
TRANS-5. Project-generated traffic would cause increase delays and cause exceedance of intersection capacity at the Buckley Road/SR 227 intersection in both the AM and PM peak hours.	MM TRANS-5	Significant and Unavoidable	9, 10, 11
TRANS-6. Project-generated traffic would exacerbate existing queuing at the South Street/Higuera Street intersection northbound right-turn lane, resulting in significant impacts.	MM TRANS-6	Significant but Mitigable	2
TRANS-7. Project-generated traffic would cause exceedance of storage capacities at several intersections along South Higuera Street.	MM TRANS-7a MM TRANS-7b MM TRANS-7c MM TRANS-7d	Significant but Mitigable	4, 5, 6, 12
TRANS-8. Project-generated traffic would cause delays and exceedance of intersection capacities at several intersections along Los Osos Valley Road.	MM TRANS-8a MM TRANS-8b	Significant but Mitigable	1, 7, 8, 13

Table 3.12-11. Summary of Project Impacts

Transportation and Traffic Impacts	Mitigation Measures	Residual Significance	TIS Impact # (see Appendix P) ¹
TRANS-9. The proposed Project would generate and attract trips to and from U.S. Highway 101, incrementally increasing congestion of the region’s main highway.	None required	Less than Significant	--
TRANS-10. The proposed Project would potentially degrade level of service for various pedestrian facilities serving the Project vicinity.	MM TRANS-3b MM TRANS-4 MM TRANS-8a MM TRANS-10a MM TRANS-10b MM TRANS-10c	Significant but Mitigable	14, 15, 17, 18, 19, 20, 27
TRANS-11. Project development would increase demand for bicycle facilities in an underserved area and would potentially conflict with the City’s Bicycle Transportation Plan regulations and General Plan thresholds.	MM TRANS-2d MM TRANS-8a MM TRANS-11	Significant but Mitigable	16, 26, 29
TRANS-12. The proposed Project would increase demand for transit services in an underserved area, presenting a barrier to both transit dependent and non-transit dependent households for using transit.	MM TRANS-12	Significant but Mitigable	--
TRANS-13. Under near-term plus Project conditions, Project-generated traffic would cause delays and exceedance of storage capacities at Buckley/SR 227 and Los Osos Valley Road/South Higuera Street and contribute to road segment congestion.	MM TRANS-5 MM TRANS-13	Significant but Mitigable	33
TRANS-14. Under near-term conditions, the proposed Project would cumulatively contribute incrementally to increased demand for bicycle and pedestrian facilities, potentially conflicting with the City’s BTP regulations and General Plan thresholds.	MM TRANS-10b MM TRANS-14	Significant but Mitigable	35, 37, 38, 39
TRANS-15. Under long-term cumulative plus Project conditions, Project-generated traffic would result in a cumulatively considerable contribution to potentially significant impacts to the operational conditions at four intersections.	MM TRANS-5 MM TRANS-7a MM TRANS-15a MM TRANS-15b MM TRANS-15c MM TRANS-15d	Significant and Unavoidable	40, 41, 42, 43

Note: Impacts #34, #36, #44, and #45 from the TIS have not been included per communications with Central Coast Transportation Consulting and the City in April 2016. See Memorandum within Appendix P.

Impact TRANS-1 Project construction activities would potentially create traffic impacts due to congestion from construction vehicles (e.g., construction trucks, construction worker vehicles, equipment, etc.) as well as temporary traffic lane and sidewalk closures (Significant but Mitigable).

The location and intensity of construction-related increases in traffic would vary by construction phase (refer to Section 2.7, *Project Construction* for a detailed description of construction activities occurring within each phase); however, each phase would incrementally contribute to road or intersection congestion over the planning horizon (2019 to 2028). Construction is divided into six phases that range between one to three years each, for a total construction period of approximately 10 years.

Increased construction traffic, particularly large haul trucks and other heavy equipment, may disrupt local traffic flows, congest limited turn lane capacities, and generally slow traffic movement. Construction activity during site preparation typically includes use of cement trucks, material and equipment delivery trucks, and worker vehicles. These vehicles would likely use U.S. Highway 101 to travel to and from the site. Further, construction activities would require parking onsite for construction workers. While construction-related traffic would be ongoing for approximately 10 years, construction traffic could create potentially significant impacts. The Project's grading plan details that all excavated soils would be leveled onsite and there would be no soils export or import haul trips.

Other potential construction-related impacts include idling, parked, or queued heavy trucks that could potentially obstruct visibility, traffic flows, and interfere with pedestrian and bicycle flows. Construction may also require the temporary or extended closure of traffic lanes to accommodate parked vehicles, operation of construction equipment, installation of Project improvements, including offsite trenching for utilities along Earthwood Lane, Suburban Road, Tank Farm Road, Vachell Lane, etc. Depending on final construction plan details, such lane and sidewalk closures could extend from a single day to several weeks. However, intensity of construction-related traffic issues would vary by phase, with highest intensity occurring during Phase 1 and 2; this would possibly result in periodic road closures for construction of onsite and offsite development, such as road improvements on Buckley Road and Vachell Lane, and the Buckley Road extension. This would cause delays and disrupt cyclist and pedestrian flows, requiring travelers of the area to utilize alternative routes.

However, with preparation of a management plan to control construction transportation, impacts could be minimized. Therefore, with implementation of the mitigation measure listed below, construction traffic impacts would be considered ***significant but mitigable***.

Mitigation Measure

MM TRANS-1 The Applicant shall prepare a Construction Transportation Management Plan for all phases of the proposed Project for review and approval by the City prior to issuance of grading or building permits to address and manage traffic during construction. The Plan shall be designed to:

- *Prevent traffic impacts on the surrounding roadway network;*
- *Restrict construction staging to within the Project site;*
- *Minimize parking impacts both to public parking and access to private parking to the greatest extent practicable;*
- *Ensure safety for both those construction vehicles and works and the surrounding community; and*
- *Prevent substantial truck traffic through residential neighborhoods.*

The Construction Transportation Management Plan shall be subject to review and approval by the Public Works Director to ensure that the Plan has been designed in accordance with this mitigation measure. This review shall occur prior to issuance of grading or building permits. It shall, at a minimum, include the following:

Ongoing Requirements throughout the Duration of Construction:

- *A detailed Construction Transportation Management Plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, bicycle lanes, and parking lanes. The Plan shall include specific information regarding the Project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such Plan shall be reviewed and approved by the Community Development Department and implemented in accordance with this approval.*
- *Work within the public right-of-way shall be reviewed and approved by the City on a case by case basis based on the magnitude and type of construction activity. Generally work shall be performed between*

8:30 AM and 4:00 PM. This work includes dirt hauling and construction material delivery. Work within the public right-of-way outside of these hours shall only be allowed after the issuance of an after-hours construction permit administered by the Building and Safety Division. Additionally restrictions may be put in place by Public Works Department depending on particular construction activities and conditions.

- Streets and equipment shall be cleaned in accordance with established Public Works requirements.
- Trucks shall only travel on a City-approved construction route. Limited queuing may occur on the construction site itself.
- Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be onsite, with a minimum amount of materials within a work area in the public right-of-way, subject to a current Use of Public Property Permit.
- Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City.

Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction:

- The traveling public shall be advised of impending construction activities that may substantially affect key roadways or other facilities (e.g., information signs, portable message signs, media listing/notification, and implementation of an approved Construction Impact Mitigation Plan).
- A Use of Public Property Permit, Excavation Permit, Sewer Permit, or Oversize Load Permit, as well as any Caltrans permits required for any construction work requiring encroachment into public rights-of-way, detours, or any other work within the public right-of-way shall be obtained.
- Timely notification of construction schedules shall be provided to all affected agencies (e.g., Police Department, Fire Department, Public Works Department, and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of ¼ mile.
- Construction work shall be coordinated with affected agencies in advance of start of work. Approvals may take up to two weeks per each submittal.

- *Public Works Department approval of any haul routes for construction materials and equipment deliveries shall be obtained.*

Plan Requirements and Timing. The Applicant shall submit the Construction Transportation Management Plan to the City for review and approval prior to issuance of grading or building permits. The Construction Transportation Management Plan shall be updated as needed to reflect changing conditions over the Project's 10-year construction schedule. The Applicant shall conduct necessary construction employee training prior to the commencement of construction. The City Public Works Department, Community Development Department, Police Department, and Fire Department, and nearby residences and businesses shall be notified of the construction schedule prior to initiation of construction. The Applicant shall submit individual traffic control plans and part of encroachment permits for work within the public right-of-way.

Monitoring. The City shall ensure compliance with the Construction Transportation Management Plan with periodic inspections of the Project site during construction. Complaints related to construction traffic at the site shall be directed to the City Public Works Department.

Residual Impact

Preparation of a Construction Transportation Management Plan as part of MM TRANS-1 would reduce construction-related traffic impacts to the maximum extent feasible by establishing truck routes and parking locations for construction workers. Residual impacts would be less than significant.

Impact TRANS-2 *Phased Project development combined with limited site access and related increases in congestion on surrounding roadways would have the potential to cause transportation deficiencies throughout the Project vicinity (Significant but Mitigable).*

Project development would occur in six phases over approximately 10 years. Each phase would involve construction of the proposed Project's internal streets and connections to the existing road network (refer to Section 2.0, *Project Description*). Increased traffic congestion on existing roads and neighborhood volumes in excess of General Plan thresholds is forecasted during Phases 1, 2, and 4 as described below.

Table 3.12-12. Trip Generation per Proposed Development Phase

Phase Number	Average Daily Trips (ADT)
1	1,029
2	161
3	1,314
4	1,195
5	1,098
6	1,979

Note: These ADT are planning level estimates displayed in Appendix G of the TIS.

Source: Central Coast Transportation Consulting 2016; see Appendix P.

Phase 1 Project Improvements (On- and Offsite)

The following transportation improvements are proposed as part of Phase 1 of the Project:

- Extension of Earthwood Lane to connect from Suburban Road to Vachell Lane (refer to Figure 2-14).
- Extension of Venture Drive to the proposed Earthwood Lane/Venture Drive roundabout intersection within the site.
- Class II bicycle lanes along both sides of Venture Drive and Earthwood Lane.
- A portion of the Class I bicycle path from the southwest corner of the site through the Phase 1 development area and 800 feet of the Tank Farm Creek Class I bicycle path, including construction of the Class I bicycle path bridge over Tank Farm Creek (Class I Tank Farm Bridge No. 1).
- Completion of internal residential roads within Phase 1 development area.
- Left turn restrictions at the South Higuera Street/Vachell Lane intersection.
- Restriping the Suburban Road/South Higuera Street intersection to make the westbound right turn-lane into a shared right/left turn-lane.
- Approximately 1,000 feet of frontage improvements along Buckley Road, and 650 feet of frontage improvements along Vachell Lane.

Phase 1 development is estimated to generate approximately 1,030 ADT. With Project-generated traffic under Phase 1, all intersections would operate at acceptable overall LOS except the Buckley Road/SR 227 intersection which would continue to operate at unacceptable LOS D (Project change in v/c of 0.1) as discussed further in Impact TRANS-5 and mitigation measure MM TRANS-5. However the addition of Project traffic starting

in Phase 1 and continuing thru phase 6 would incrementally exacerbate queue capacities at 9 intersections as discussed further in Impact TRANS-6, 7, and 8. The combination of Project trip generation, existing volumes, and the proposed street network under Phase 1 would result in neighborhood traffic volumes on Venture Drive and Earthwood Lane that may exceed General Plan volumes thresholds for residential streets. This would also cause commercial trucks, trailers, and other heavy vehicles to route through new residential streets which would be undesirable from a livability standpoint and not consistent with the structural section residential collector roads are designed to accommodate.

In addition, bicycle facilities along the extension of Venture Drive and Earthwood Lane proposed as part of Phase 1 would lack connectivity with the regional network as no bicycle facilities exist on Vachell Lane, Buckley Road, or Suburban Road. This would force Project-generated cyclists to travel along sometimes narrow or unimproved road shoulders to reach the regional network and result in inconsistencies with the BTP.

Phase 2 Project Improvements (On- and Offsite)

The following transportation improvements are proposed as part of Phase 2 of the Project:

- Buckley Road Extension from Vachell Lane to South Higuera Street, with a Class I bicycle path to the north of the road and Class II bicycle lanes on both sides of the road.
- Class II bicycle lanes along Vachell Lane from Buckley Road north to approximately 250 feet north of the Earthwood Lane/Vachell Lane intersection.
- Continuation of the Tank Farm Creek Class I bicycle path through the Phase 2 development area.

Phase 2 development is estimated to generate approximately 161 ADT, resulting in an estimated total of 1,190 ADT for Phases 1 and 2. With completion of the Buckley Road Extension as part of Phase 2, no traffic is forecasted to reroute through the site; as such, internal roadways would adequately serve the Project. In addition, Phase 1 and 2 development would generate bicycle trips using vicinity roads, including Buckley Road. The Class I bicycle path and Class II bicycle lanes along the Buckley Road Extension would provide connection to the regional system, in accordance with the BTP.

Phase 3 Project Improvements (On- and Offsite)

The following transportation improvements are proposed as part of Phase 3 of the Project:

- Completion of internal residential roads within Phase 3 development, including the extension of Venture Drive from the roundabout east about 1,500 feet to the end of the Phase 3 development area.

Phase 3 development is estimated to generate approximately 1,314 ADT, resulting in a total of approximately 2,500 ADT between Phases 1 to 3. This amount of trips would be distributed through the residential collector roads and adjacent street network, which are expected to remain under Circulation Element thresholds through this phase, adequately serving the site.

Phase 4 Project Improvements (On- and Offsite)

The following transportation improvements are proposed as part of Phase 4 of the Project:

- Completion of the Jespersen Road Extension from Buckley Road to the northern boundary with Class II bicycle lanes on both sides of the roadway.
- Buckley Road entrance improvements.
- Construction of the vehicle and pedestrian bridge from Venture Drive to Jespersen Road.

Phase 4 development is estimated to generate 1,195 ADT, and total Project trip generation would increase to approximately 3,700 ADT. With Earthwood Lane being the only access to Suburban Road, traffic volumes using this road are forecast to exceed Circulation Element thresholds with the addition of Phase 4 traffic.

In addition, with the primary Project entry on Buckley Road being constructed as part of Phase 4, pedestrian and bicycle facilities would be constructed along the internal collector road. However, since Buckley Road does not contain any pedestrian or bicycle facilities, the construction of this entry would result in discontinuity between pedestrian and bicycle facilities, with Project-generated pedestrian and cyclists having to utilize unimproved and narrow road shoulders along the relatively high speed Buckley Road.

To address potential impacts, a phasing plan for transportation improvements would specify timing and location of improvements to ensure vehicle, bicycle, and pedestrian trips generated by the Project can be accommodated consistent with City standards. Overall, transportation impacts during Project Phases 1 through 4 would be ***significant but mitigable***.

Mitigation Measures

MM TRANS-2a The Applicant shall create and submit a Transportation Improvement Phasing Plan to the City for review and approval, and shall ensure that construction of the Project follows the sequential phasing order utilized in the TIS for such improvements. The Plan shall address the timing and general design of all on and offsite transportation improvements.

Plan Requirements and Timing. The Applicant shall submit a final Transportation Improvement Phasing Plan to the City for review and approval prior to acceptance of the final Development Plan and recordation of the final Vesting Tract Map (VTM). The City shall review grading and development plans and offsite transportation improvements for each phase prior approval of permits for each phase.

Monitoring. The City shall ensure that construction per phase occurs sequentially through periodic construction monitoring.

MM TRANS-2b The Applicant shall defer installation of turn restrictions on Vachell Lane/South Higuera Street until the Buckley Road Extension is completed and operational under Phase 2. This measure shall be completed simultaneously with the removal measures of temporary NTM closures discussed in MM TRANS-2c.

Plan Requirements and Timing. The Transportation Improvement Phasing Plan shall include requirements for the turn restriction to be installed following completion of Buckley Road Extension.

Monitoring. The City shall verify that the Applicant installs the turn restriction upon completion of the Buckley Road Extension.

MM TRANS-2c As part of Phase 1 development, the Applicant shall initially restrict ingress and egress to only emergency vehicles, transit, bicycles, and pedestrians at the border of the Project site on Venture Drive and at the intersection of Vachell Lane and Earthwood Lane.

These measures shall be removed upon the completion of the Buckley Road Extension in Phase 2 and implemented concurrently with those measures required in MM TRANS-2b to allow full access into the subdivision.

The City shall work with SLO Transit to establish an interim route in the Project vicinity during Phase 1. The Applicant shall install an interim turn-around location within the Project site or other measures as deemed appropriate by the City to accommodate this interim transit access due to required site access limitations noted above.

Plan Requirements and Timing. Prior to approval of grading and building permits for Phase 1, the Applicant shall submit an Ingress and Egress Management Plan for restrictions at Venture Drive and at the intersection of Vachell Lane/Earthwood Lane for review and approval by the City. Construction of circulation improvements shall be completed and operational prior to occupancy of Phase 1 development. The interim transit route and bus turn around location or other measures acceptable by the City shall be installed by the Applicant prior to issuance of the occupancy permit for the first residential unit of Phase 1 development.

Monitoring. The City shall verify that the Applicant installs the circulation improvements and interim transit route prior to occupancy of Phase 1 development, and removes them upon completion of Buckley Road Extension in Phase 2.

MM TRANS-2d To remain consistent with proposed bicycle facilities listed in the BTP, the Applicant shall design and construct Class II bicycle lanes that connect to the regional bicycle network along the entire stretch of Vachell Lane, between Buckley Road and South Higuera Street, as part of Phase 1. The City Public Works Department shall ensure improvements meet design standards.

Plan Requirements and Timing. Prior to acceptance of the final Development Plan and recordation of the final VTM, the Applicant shall submit a Bicycle Facility Improvement Plan for review and approval by the City. Construction of bicycle facilities shall be completed and operational prior to issuance of occupancy permits for the first residential unit of Phase 1 development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved design plans.

MM TRANS-2e The Applicant shall design and construct the Jespersen Road/Horizon Lane connection as part of Phase 4 between Suburban Road and the Project boundary. The City Public Works Department shall ensure improvements meet safety design criteria.

Plan Requirements and Timing. Prior to acceptance of the final Development Plan and recordation of the final VTM, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Construction of roadway connections to the Project site shall be completed and open to travel prior to the issuance of an occupancy permit for the 100th residential unit of Phase 4 development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans.

MM TRANS-2f To remain consistent with the BTP and City policies, the Applicant shall design and construct all Buckley Road improvements along the Project frontage, from the Tank Farm Creek Bridge to the eastern site boundary, including but not limited to, the proposed Class I bicycle path, and Class II bicycle lanes as part of Phase 4.

Plan Requirements and Timing. Prior to issuance of occupancy permits for Phase 4, the Applicant shall submit the updated Development Plan and Transportation Improvement Phasing Plan for review and approval by the City. Construction of the entire Buckley Road frontage shall be completed and operational prior to occupancy of Phase 4 development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved design plans.

Residual Impact

Implementation of MM TRANS-2a would require the Applicant to follow the sequencing of the approved phasing construction plan, which would ensure that any potential impacts during Phase 1, 2, and 4 are mitigated, as also described below.

Phase 1

As the Applicant proposes to install left-turn restrictions at the intersection of Vachell Lane/South Higuera Street, MM TRANS-2b would require the Applicant to defer the installation of turning restrictions on Vachell Lane/South Higuera Street intersection until the completion of the Buckley Road Extension. MM TRANS-2c would restrict private vehicular access to the site through Venture Drive and at the intersection of Vachell Lane/Earthwood Lane, with access limited to emergency vehicles, pedestrians, and cyclists. These mitigations would prevent outside traffic from being rerouted into the Project, and allowing site access on Earthwood Lane to adequately serve the development in Phase 1. MM TRANS-2d would require installations of Class II bicycle lanes along the entire stretch of Vachell Lane, this would provide connectivity between the bicycle facilities proposed as part of Phase 1 with the regional bicycle network.

Phase 2

Completion of the Buckley Road Extension would provide an additional access way through to South Higuera Street and U.S. Highway 101, as well as bicycle route connectivity to the regional network. Therefore, upon completion of the extension, left-turn restrictions proposed for the Vachell Lane/South Higuera Street intersection shall be implemented to maintain the operation of this intersection at acceptable levels.

Phase 4

With the completion of the Jespersen Road/Horizon Lane Extension to the site, and the completion of the primary site access on Buckley Road as part of Phase 4, MM TRANS-2f would require the entire frontage along Buckley Road to be constructed as part of Phase 4. This would provide a Class I bicycle path that would ensure connectivity of pedestrian and bicycle facilities with regional facilities. MM TRANS-2e would require the connection of Jespersen Road/Horizon Lane to occur in Phase 4; however, as described in further detail in Impact TRANS-4 below, existing conditions for the entire stretch of Horizon Lane and the eastern end of Suburban Road do not meet City standards for either residential collectors (Horizon Lane) or commercial collectors (Suburban Road), which typically require 44 to 60 feet of paved width with curbs, gutters and sidewalks. Horizon Lane is of substandard width (approximately 20 feet of paving), with paving in poor condition, as well as supporting only dirt shoulders and lacking curb, gutters, sidewalks and street trees, which are inadequate to support estimated Project-generated traffic. The eastern segment of Suburban Road is also of substandard width, with approximately 20 feet of paved width and intermittent sidewalks. With implementation of these mitigations the residual impact would be less than significant.

Impact TRANS-3 Project-generated traffic would potentially create turning movement conflicts at driveways and intersections on the Project site (Significant but Mitigable).

Due to the closely spaced intersections along collector roadways at Venture Drive/Earthwood Lane and Venture Drive/Horizon Lane, potential safety impacts associated with vehicular speeds, line of sight, and vehicular pedestrian or cyclist conflicts could potentially occur. In particular, the geometry and road alignment of both Earthwood Lane and Venture Drive are conducive to higher speed traffic. These two factors could create potentially adverse safety impacts for future residents living along these streets as higher speed traffic passes through these residential neighborhoods. With a redesign of the

proposed street network to comply with the City's engineering standards as well as restricting access and providing adequate access spacing so as not to conflict with functional areas of intersections, impacts associated with conflicts at internal roadways would be *significant but mitigable*.

Mitigation Measures

MM TRANS-3a Project roadway and driveway design shall be reviewed and approved by the City to ensure compliance with City engineering standards and not conflict with intersection functional areas (e.g., aligning driveways on opposite sides of the roadway, position driveways as far upstream from intersections as possible).

Plan Requirements and Timing. The Applicant shall submit a final roadway design plan to the City for review and approval prior to acceptance of the final Development Plan and recordation of the final VTM that demonstrates compliance with City roadway design standards.

Monitoring. The City shall review Project plans to ensure that they meet City roadway design and safety standards. The City shall review development and grading plans for each phase of the Project to ensure compliance with City design standards. The City shall conduct periodic inspections of the Project site during construction to ensure compliance.

MM TRANS-3b The Applicant shall install traffic calming measures (e.g., speed bumps, pedestrian bulb-outs, etc.) to control speed levels along internal roadways of the Project site, including the extensions of Venture Drive, Horizon Lane, and Jespersen Road as required by Policy 8.1.3.

Plan Requirements and Timing. The Applicant shall modify the Development Plan and VTM to incorporate traffic calming measures to maintain a speed level consistent with City General Plan thresholds along internal roadways. The Applicant shall submit a final roadway design plan to the City for review and approval prior to acceptance of the final Development Plan and recordation of the final VTM, to ensure roadway design meets City standards.

Monitoring. The City shall review and approve the final Development Plan and final VTM to ensure these plans are consistent with City standards. The City shall ensure compliance with the design plan with periodic inspections of the Project site during construction.

Residual Impact

Mitigation measure MM TRANS-3a would require City review to ensure that roadway design meets City engineering standards and does not conflict with intersection functional areas. This would require adequate spacing of intersections and driveways within the Project site, such as placing driveways on lower volume roadways and aligning driveways on opposite sides of the roadway. To reduce the tendency of travelers from proceeding at high speeds along these roads, MM TRANS-3b would require incorporation of traffic calming measures (e.g., bulb outs, speed bumps) prior to occupancy of each phase of the proposed development in compliance with Policy 8.1.3, Neighborhood Traffic Speeds. Implementation of MM TRANS-3a and -3b, would ensure that the design and operation of these roads are consistent with safety regulations on residential roads and this impact would be less than significant.

Impact TRANS-4 Project-generated traffic could exceed Circulation Element maximum volume thresholds at Vachell Lane, Earthwood Lane, Horizon Lane, and Suburban Road (Significant but Mitigable).

Project development would generate an increase of approximately 5,904 ADT on area roads over a 10-year period. Because of its location at the far southern end of the City, primary Project access would be via completion of several partially developed roads, including Venture Drive, Earthwood Lane, and eventually Horizon Lane. At buildout, based on the TIS, 23 to 27 percent of Project-generated traffic would utilize Horizon Lane (1,358 to 1,594 ADT), 25 to 43 percent would utilize Earthwood Lane (1,476 to 2,539 ADT), and 15 to 34 percent would utilize Venture Drive (887 to 2,007 ADT). This would be a significant increase in traffic volumes along each of these roadways in excess of General Plan maximum volume thresholds. This would result in potentially significant impacts to roadway operations.

Horizon Lane currently extends from Suburban Road south for roughly 1,000 feet to its terminus about 100 feet north of the Project site. This roadway is not designed to support up to 1,595 ADT of Project-generated traffic as it provides only about 20 feet of paved width. The paving is in poor condition and does not support pedestrian or bicycle facilities. With Project-generated traffic, the roadway would operate at unacceptable LOS for all forms of transportation. The roadway would need to be widened to approximately a 40-foot section, repaved, and improved to include continuous sidewalk to adequately serve the Project. Road widening may be constrained due to potentially limited right-of-way, although there do not appear to be major structures that would physically impede widening

or require demolition. Acquisition of the property if feasible by the Applicant or, if needed, the City could lend power of eminent domain to acquire land and widen the road. Due to the increase in traffic volumes, the intersection of Horizon Lane/Suburban Road will need to be improved to City standards when the connection is made. Further, segments of Suburban Road, proximate to Horizon Lane, are limited to approximately 20 feet of paved width and lack sidewalks or bicycle paths.

Currently, Earthwood Lane only extends approximately 420 feet south from Suburban Road to its terminus more than 500 feet north of the Project site. It is proposed to be extended south into the Project site. This existing segment is relatively new and constructed to modern standards with roughly 40 feet of paved width and sidewalks along both sides. Earthwood Lane is expected to be the most heavily used access route in and out of the Project site. With the increase in traffic from the proposed Project, this roadway is expected to exceed the threshold for its designation as a Local Road. As such, the roadway will need to be reclassified to properly service the Project. The amount of traffic expected to use this roadway would also potentially cause impacts at the intersection of Earthwood Lane/Suburban Road.

Although sidewalks are present along the north end of Earthwood Lane and Horizon Lane, they are intermittent along Suburban Road and therefore do not provide adequate paths for future Project residents to access pedestrian destinations, such as adjacent employment and commercial centers.

Increased traffic of up to approximately 1,594 ADT along the eastern reach of Suburban Road may cause deficiencies due to narrow paved widths in places and the lack of sidewalks on this reach of roadway. In addition, although the roadway is fully developed west of Horizon Road, the addition of up to 4,100 ADT would significantly increase traffic volumes. Therefore, impacts would be *significant but mitigable*.

Mitigation Measures

MM TRANS-2a through 2f shall apply.

MM TRANS-3b shall apply.

MM TRANS-4 The Applicant shall prepare an improvement plan for Horizon Lane, Earthwood Lane, and Suburban Road, including roadway, bicycle, and pedestrian improvements. Improvements shall be constructed by the Applicant in coordination with the phasing plan required by MM TRANS-2a, to ensure the Applicant constructs all offsite roadway

improvements in a timely manner consistent with Project phasing. The Project Applicant shall:

- *Prepare a detailed improvement plan for Horizon Lane to bring this road into conformance with City standards for a commercial collector of width between 44 to 60 feet from Suburban Road to the Project boundary. This plan shall be developed in coordination with adjacent property owners and the City Public Works Department. Horizon Lane shall not be connected to the Project site until such a plan has been completed and improvements are completed in accordance with the phasing plan, as part of Phase 4. The section of Horizon Lane/Jespersen Road from the Project boundary to Buckley Road shall be designated as a residential collector with a width of roadway between 40 and 60 feet.*
- *Design and improve the intersection of Horizon Lane/Suburban Road to be consistent with City Uniform Design Criteria and Municipal Code Standards.*
- *Coordinate with the property owners along Earthwood Lane and City staff to complete the Earthwood Lane Extension to the Project site as part Phase 1. Earthwood Lane shall be developed to full City standards for a residential collector. Residential collectors shall be 44 to 60 feet wide as required by the City's Uniform Design Criteria.*
- *Coordinate with the property owners along Suburban Road and City staff to prepare a detailed improvement plan for Suburban Road to bring this road into conformance with City standards. This plan shall address widening of substandard sections near the east end of this roadway, completion of missing sidewalk segments, installation of street trees, pedestrian crossings (e.g., Suburban Road at Earthwood Lane) and other improvements required to bring this road into compliance with City standards for a commercial collector road. In accordance to the City's Uniform Design Criteria, a commercial collector road shall be 44 to 68 feet wide to effectively serve commercial and industrial uses. Improvements from Earthwood Lane to Higuera Street shall be done as part of Phase 1. Improvements from Earthwood Lane to Horizon Lane shall be done as part of Phase 4 development, prior to the connection of Horizon Lane with the Project site.*

- *Prepare a detailed phasing plan that identifies reasonable timing of such improvements. The phasing plan shall be developed in close coordination with City staff.*

Plan Requirements and Timing. The Applicant shall submit a Public Street Improvement Plan for Horizon Lane, Earthwood Lane, and Suburban Road, including a phasing plan, to the City for review and approval prior to the final map of the respective phase Development Plan approval and recordation of the final VTM. The plan shall be subject to review and approval by the City.

Monitoring. The City shall ensure compliance with the design plan with periodic inspections of the Project site during construction.

Residual Impact

Implementation of MM TRANS-3b and MM TRANS-4 would reduce or eliminate Project impacts. MM TRANS-3b would require speed calming measures on internal roadways to ensure speed limits do not exceed thresholds. The construction of these roadways is described in Impact TRANS-2 and associated mitigation measures address phasing impacts on these roadways. To assure Suburban Road operates at acceptable levels, MM TRANS-4 would require widening of the roadway. These measures may require minor right-of-way acquisitions but are considered to be feasible. In addition, MM TRANS-4 would require improvements of these roadways to be designed to City Uniform Design Criteria, with improvements linked to respective phases. Therefore, residual impacts would be less than significant.

Impact TRANS-5 Project-generated traffic would cause increase delays and cause exceedance of intersection capacity at the Buckley Road/SR 227 intersection in both the AM and PM peak hours (Significant and Unavoidable).

Project-generated traffic would cause increased delays at the signalized intersection of Buckley Road/SR 227, which would continue to operate at an unacceptable LOS D during the PM peak hour, resulting in a potentially significant impact (refer to Table 3.12-7). Project-generated traffic would also exacerbate existing queuing capacity on problems multiple lanes at this intersection. With the addition of Project-generated traffic queues, exceed northbound left-turn lane, northbound thru-lane, and the southbound thru-lane capacity. The northbound left-turn lane volume currently exceeds capacity and added Project-related traffic would exacerbate existing queues. Project-generated traffic would

exacerbate queues heading northbound during the AM peak hour and the southbound during the PM peak hour, with queues exceeding 1,000 feet for both movements. These are considered potentially significant impacts.

The San Luis Obispo Council of Governments (SLOCOG) 2014 Regional Transportation Plan (RTP) proposes adding a second southbound and northbound thru-lane on SR 227 to eliminate the queuing deficiencies at the intersection. A project study report was prepared in 2006 to evaluate the potential widening of SR 227. Additionally, the SR 227 Operational Analysis Study currently under way is being led by SLOCOG in coordination with the County, City, and Caltrans. The study is focused on analyzing short- and long-term improvements along SR 227 to improve traffic congestion and safety, including improvements to this intersection. Planned improvements to thru- and turn-lane capacity at this intersection would address Project-created congestion issues. Even with additional mitigation for monetary contribution to the improvements, impacts at this intersection would be *significant and unavoidable*.

Mitigation Measure

MM TRANS-5 The AASP shall be amended to include a fee program for improvements to the Buckley Road/SR 227 intersection. Upon establishment of a fee program for improvements to this intersection within the AASP, the Applicant shall pay a pro-rata fair share fee to fund the installation of additional northbound and southbound lanes at the Buckley Road/SR 227 intersection. The City shall collect the fair share fee and coordinate payment of Project fair share fees to help fund improvements with the County and/ or Caltrans.

Plan Requirements and Timing. A proposed fee program shall be included in the amended AASP for City review and approval. Prior to issuance occupancy permits for each phase of the Project, the Applicant shall contribute fair share fees to the City for improvements at this intersection.

Monitoring. The City shall verify the inclusion of the fee program within the AASP shall collect the pro-rated fee.

Residual Impacts

MM TRANS-5 would require the Applicant to pay a pro-rata fair share fee to fund improvements at this intersection. While this mitigation would offset the Project's relatively minor contribution to impacts at the Buckley Road/SR 227 intersection, the

Project would still contribute to an exceedance of thresholds at this intersection in the short-term as development of Phase 1, and potentially other phases, may occur in advance of completion of any improvements. Therefore residual impact would be significant.

Impact TRANS-6 Project-generated traffic would exacerbate existing queuing at the South Street/Higuera Street intersection northbound right-turn lane, resulting in significant impacts (Significant but Mitigable).

The northbound right-turn lane queues currently exceed storage capacity during the PM peak hour. The addition of Project-generated traffic of up to 750 ADT would substantially exacerbate this deficient condition. Improvement to increase storage capacity would address this issue. Therefore, this impact is considered *significant but mitigable*.

Mitigation Measure

MM TRANS-6 The Applicant shall design and construct the extension of the northbound right turn-lane at the South Street/Higuera Street intersection, to provide more storage capacity.

Plan Requirements and Timing. Prior acceptance of the final Development Plan and recordation of the final VTM, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. These improvements may be eligible for credits for Project payments of the Citywide TIF program. Construction of roadway improvements shall be completed and operational prior to the issuance of occupancy permits for the first residential unit for Phase 1 development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved design plans.

Residual Impact

MM TRANS-6 would require the Applicant to construct the extension of the northbound turn-lane at South Street/Higuera Street. Adequate right-of-way across the property on 157 Higuera Street has been dedicated to the City to facilitate completion of this improvement. Extending the northbound turn-lane would mitigate this impact to an acceptable level by providing more storage capacity. Although additional right-of-way has been offered for dedication, it would be in close proximity to an existing gas station, which is approximately 20 to 30 feet from the road/sidewalk. Due to the infrastructure of the gas

station, including underground fuel storage tanks, implementing this mitigation could result in indirect adverse impacts associated with past contamination or required clean up. However, such impacts could be addressed through standard regulatory measures for hazards and hazardous materials management and, therefore, this option is feasible mitigation (see also, Section 3.6, *Hazards and Hazardous Materials*). With implementation of this mitigation, residual impacts would be less than significant.

Impact TRANS-7 Project-generated traffic would cause exceedance of storage capacities at several intersections along South Higuera Street (Significant but Mitigable).

Project development would increase traffic along South Higuera Street as South Higuera Street parallels U.S. Highway 101 and provides regional and local access within the City. This increase in traffic would cause exceedance of turn-lane storage capacities at several intersections along South Higuera Street, which are considered potentially significant impacts.

Prado Road/South Higuera Street

The addition of Project-generated traffic would substantially exacerbate existing queues at the northbound left-turn lane, which currently exceeds capacity. The AASP standards and AASP fee program include the addition of a second northbound left-turn lane at South Higuera Street/Prado Road intersection to provide for adequate queuing capacity. The City's Transportation Fee Program includes the widening of Prado Road Creek Bridge west of South Higuera Street to facilitate these improvements and further improve traffic flows at this location.

Tank Farm Road/South Higuera Street

The southbound left-turn queue currently exceeds storage capacity and the additional Project-related traffic would exacerbate the existing queue, exceeding the 95th percentile queue for both AM and PM peak hours. The westbound left-turn lane currently exceeds, and with the addition of Project-generated traffic is projected to further exceed, the 95th percentile queues during the PM peak hour.

South Higuera Street/Suburban Road

The addition of Project traffic would exacerbate existing queues at the westbound right-turn lane exceeding capacity.

Vachell Lane/South Higuera

The addition of traffic would substantially exacerbate existing approach delays on Vachell Lane in both AM and PM peak hours, with this approach operating at LOS F. This deficient condition is due to high traffic volumes along South Higuera Street that interfere with turning movements to and from Vachell Lane, leading to unacceptable delays. The Project proposes to implement left-turn restrictions into and out of Vachell Lane in advance of Phase 2 of project development.

With turn-lane improvements to address queuing issues, this impacts is considered ***significant but mitigable***.

Mitigation Measures

MM TRANS-7a The Applicant shall design and construct a second northbound left-turn lane at the intersection of South Higuera Street/Prado Road. The Applicant shall also pay a fair share fee for the widening of Prado Road Creek Bridge west of South Higuera Street by participating in the citywide transportation impact fee program.

Plan Requirements and Timing. As part of Phase 1 development, the Applicant shall submit a Public Street Improvement Plan that details improvement to South Higuera Street/Prado Road intersection for review and approval by the City. These improvements are part of the AASP financing plan and may be eligible for fee credits or reimbursements. Construction of these improvements shall occur only after completion of the City widening of the Prado Road Creek Bridge. Construction of roadway improvements shall be completed and operational prior to the issuance of an occupancy permit for the first residential unit of Phase 1 development. However, if the SLO Creek Bridge widening project has been delayed, the Public Works Director shall have the authority to defer these improvements until that work can be completed.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved design plans and pays its fair share fee for the widening of Prado Road Creek Bridge.

MM TRANS-7b The Applicant shall design and construct a second southbound left-turn lane at the Tank Farm Road/South Higuera Street intersection.

Plan Requirements and Timing. As part of Phase 1 development, the Applicant shall submit a Public Street Improvement Plan for

construction of a second southbound left-turn lane at the Tank Farm Road/South Higuera Street intersection for review and approval by the City. These improvements are part of the AASP financing plan and may be eligible for fee credits or reimbursements. Construction of roadway improvements shall be completed and operational prior to the issuance of an occupancy permit for the first residential unit of Phase 1 development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance with approved design plans.

MM TRANS-7c The Applicant shall design and install the restriping of Suburban Road to extend the length of the westbound left- and right-turn lane at the Suburban Road/South Higuera Street intersection.

Plan Requirements and Timing. Prior to acceptance of the final Development Plan and recordation of the final VTM, the Applicant shall submit a Public Street Improvement Plan to address improvements to the Suburban Road and South Higuera Street intersection for review and approval by the City. Construction of roadway improvements shall be completed and operational prior to the issuance of occupancy permits the first unit of Phase 1 development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved design plans.

MM TRANS-7d In coordination with the opening of the Buckley Road Extension as part of Phase 2, the Applicant shall design and install measures to restrict left turns into and out of the Vachell Lane/South Higuera Street intersection.

Plan Requirements and Timing. Prior to acceptance of the final Development Plan and recordation of the final VTM, the Applicant shall submit a Public Street Improvement Plan to address improvements to the Vachell Lane and South Higuera Street intersection for review and approval by the City. Construction of roadway improvements shall be completed and operational prior to issuance of occupancy permits for the first residential unit of Phase 2 Project development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved design plans.

Residual Impact

Implementation of MM TRANS-7a, -7b, -7c, and -7d would require the Applicant to install roadway improvements at multiple intersections along South Higuera Street. MM TRANS-7a would require the Applicant to construct a second northbound left-turn lane at the intersection of South Higuera Street/Prado Road. Adding a second northbound left-turn lane in addition to the currently ongoing widening Prado Road Creek Bridge west of South Higuera Street would accommodate forecasted Project traffic. These measures are feasible as the City owns property on the southwest corner; however, acquisition of some landscape area may be needed from the property at the southeast corner. Residual impacts would be less than significant.

Impact TRANS-8 Project-generated traffic would cause delays and exceedance of intersection capacities at several intersections along Los Osos Valley Road (Significant but Mitigable).

Project-generated traffic would increase congestion along Los Osos Valley Road, the major access to U.S. Highway 101 in the southern part of the City. Recent improvements completed as part of the Los Osos Valley Road interchange improvements have improved conditions to an acceptable LOS; however, Project-generated traffic would impact roadway segment capacity of Los Osos Valley Road between South Higuera Street and the U.S. Highway 101 interchange.

Los Osos Valley Road/U.S. Highway 101 southbound ramps

Although the TIS identified deficiencies along this corridor, the TIS was completed prior to completion of the Los Osos Valley Road interchange. These improvements have improved conditions to acceptable policy thresholds.

Los Osos Valley Road from South Higuera Street to U.S. Highway 101

The reconstruction of the Los Osos Valley Road/U.S. Highway 101 interchange included widening of the entire segment, which mitigated deficient LOS conditions. However, the segment from 450 feet north of Los Verdes to South Higuera Street was widened but remains striped for one lane in the westbound direction, which results in the exceedance of calculated one-lane capacity volumes. Operational conditions are acceptable with relatively free flowing traffic along Los Osos Valley Road in this direction. Sufficient road width exists for the City to restripe this segment for two lanes in the future, if necessary. Further, the current one-lane configuration is an attempt to facilitate turning movement

access to Los Verdes Drive for residents of the Los Verdes neighborhood as recognized in a settlement agreement between the City and the Los Verdes Condominiums homeowners association. If needed, the City would have the option to restripe two westbound lanes within this segment. While the Project would contribute to the exceedance of capacity volumes along this segment, no additional mitigation is necessary at this time.

Los Osos Valley Road/South Higuera Street

The addition of Project-generated traffic would exacerbate existing queues at the eastbound left-turn lane and the southbound right-turn lane, exceeding capacity in the AM peak hour for the eastbound left-turn lane and in the PM peak hour for the southbound right-turn lane. Retiming the traffic signal at this intersection and installing directional signage at the South Higuera Street/Buckley Road intersection to inform drivers of additional U.S. Highway 101 access at Ontario Road, as part of the Buckley Road extension, would alleviate existing queues by diverting traffic away from this intersection.

Mitigation Measures

MM TRANS-8a The Project is located within the Los Osos Valley Road interchange Sub Area fee program, and, as such, the Applicant shall pay the Los Osos Valley Road subarea fee, for the cost of reconstructing the Los Osos Valley Road/U.S. Highway 101 interchange project and improvements along Los Osos Valley Road. The fee shall be associated with the number of dwelling units and the square footage of commercial development in the Project site.

Plan Requirements and Timing. The Los Osos Valley Road fee program requires payment of fees prior to each building permit issuance. The Applicants shall pay the Los Osos Valley Road subarea fee prior to issuance of permits for all units.

Monitoring. The City shall verify the Applicant has contributed its fair share payment and ensure adequate funding is collected for the improvements.

MM TRANS-8b In coordination with the Applicant, the City shall retime the traffic signal at Los Osos Valley Road/South Higuera Street intersection and installation of signage at the South Higuera Street/Buckley Road intersection to inform drivers of additional access to U.S. Highway 101 at Ontario Road. The City Public Works Department shall ensure the improvements and signage meet safety criteria.

Plan Requirements and Timing. Prior to acceptance of the final Development Plan and recordation of the final VTM, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City, which addresses retiming of the traffic signal. Construction of roadway improvements shall be completed and operational prior to the issuance of occupancy permits for the first residence of Phase 2 development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved design plans.

Residual Impact

Mitigation measure MM TRANS-8a would require the Applicant to pay its fair share fee to the City as part of the Los Osos Valley Road Sub Area fee to offset the Project's contribution of traffic along Los Osos Valley Road. The recently completed Los Osos Valley Road/U.S. Highway 101 interchange project has improved interchange operations to an acceptable LOS that the Project is substantially benefitting from and residual impacts associated with Project traffic would be less than significant.

Although the current one lane configuration of Los Osos Valley Road from South Higuera Street to 450 feet north of Los Verdes Drive exceeds calculated capacity, operational conditions are acceptable, with relatively free traffic flows along Los Osos Valley Road. Further, this configuration facilitates turning movement access to Los Verdes Drive for residents of the Los Verdes neighborhood and is recognized in a settlement agreement between the City and the Los Verdes Condominiums homeowners association, and as such no mitigation is required at this time. Finally, should operational conditions warrant, the City has sufficient road width and right-of-way to restripe this segment to two lanes and is actively monitoring conditions to ensure operations remain acceptable

Retiming of the traffic signal at the intersection of South Higuera Street/Buckley Road and installing directional signage to inform drivers of additional U.S. Highway 101 access at Ontario Road, as part of the Buckley Road Extension, would alleviate existing queues by diverting traffic away from this intersection. All improvements would mitigate impacts to acceptable levels, resulting in a less than significant impact.

Impact TRANS-9 The proposed Project would generate and attract trips to and from U.S. Highway 101, incrementally increasing congestion of the region's main highway (Less than Significant).

Project-generated traffic is projected to add approximately 590 ADT along U.S. Highway 101 southbound and up to 1,200 ADT to U.S. Highway 101 northbound, incrementally contributing to congestion along this reach of freeway. U.S. Highway 101 through the City was estimated to carry approximately 62,000 ADT in 2010, with overall operations at LOS C and peak hour conditions of LOS E (SLOCOG 2014a). According to the LUCE Update EIR, U.S. Highway 101 was operating at LOS D in the Project vicinity in 2014. Project-generated traffic would contribute to an incremental increase in volumes along U.S. Highway 101 in this segment. However, with the jobs to housing imbalance in the City, the addition of project housing would partially offset effects by allowing employees to reside closer to the City, potentially somewhat reducing long distance commuting.

The U.S. Highway 101 Corridor Mobility Management Plan confirmed that U.S. Highway 101 will eventually need to be widened for additional capacity. Based on future funding projections, this is beyond the ability of the region to address (SLOCOG 2014b). Although the Project would contribute up to about 1,180 ADTs to the increasing traffic along U.S. Highway 101 over the long-term, only 10 percent of these trips would occur during more congested peak hour periods, a negligible increase based on the current and projected traffic volumes along U.S. Highway 101. Therefore, Project-generated traffic impacts to U.S. Highway 101 would be *less than significant*.

Impact TRANS-10 The proposed Project would potentially degrade level of service for various pedestrian facilities serving the Project vicinity (Significant but Mitigable).

Project development would increase population in the vicinity, which would increase demand for adequate pedestrian facilities. The increase in pedestrian traffic would degrade the LOS for several pedestrian facilities below the General Plan LOS C threshold, particularly due to the lack of connectivity between pedestrian facilities in the Project vicinity.

Buckley Road from South Higuera Street to Project Entrance

Project development would increase demand for pedestrian facilities along Buckley Road, which lacks developed sidewalks and is projected to operate at LOS D or E during both AM and PM peak hours with the addition of Project-generated pedestrians. Although Buckley Road is outside the City limits and not subject to the City's multi-modal threshold of significance for pedestrians, Project development would include a Class I path/multiple use trail along this entire segment, consistent with the City's BTP, which would address

this deficiency. Therefore, pedestrian facilities along this segment would operate at acceptable levels once the Class I facility is completed.

South Higuera from Buckley Road to Los Osos Valley Road

Completion of the Buckley Road Extension and associated pedestrian facilities as part of Phase 2 would increase pedestrian traffic along both Buckley Road. Increased pedestrian demand would degrade pedestrian facilities to LOS D or E along South Higuera Street from Buckley Road to Los Osos Valley Road, which currently operates at LOS D. This is due to the lack of continuous sidewalks along this segment, which forces pedestrians to use the paved shoulder. Installation of continuous sidewalks and ADA ramps on the east side of South Higuera Street are needed to address this deficiency.

Vachell Lane/South Higuera Street

Project-generated pedestrians would increase demand for pedestrian facilities at the Vachell Lane and South Higuera Street intersection, which currently operates at LOS F due to the lack of crosswalks and pedestrian controls at this intersection. In order to cross South Higuera Street, pedestrians are diverted to the Suburban Road or Los Osos Valley Road intersection; however, the segment of South Higuera Street from Vachell Lane to Los Osos Valley Road lacks sidewalk connectivity, resulting in potentially significant impacts to pedestrian LOS at this location. This impact is considered a Project-specific impact. Installation of continuous sidewalks and ADA ramps on the east side of South Higuera Street are needed to address this deficiency.

Suburban Road from South Higuera Street to Earthwood Lane

Project-generated pedestrians would increase demand for pedestrian facilities along Suburban Road. Suburban Road does not support continuous or fully developed sidewalks, which would further degrade the LOS along this segment. Installation of continuous sidewalks and ADA ramps on the south side of Suburban Road would address impacts to pedestrian facilities that would otherwise be ***significant but mitigable***.

Mitigation Measures

MM TRANS-3b, MM TRANS-4, and MM TRANS-8a shall apply.

MM TRANS-10a The Applicant shall design and construct ADA-compliant sidewalks and ADA ramps on the east side of South Higuera Street to provide continuous paths of travel from the City limit line to Los Osos Valley Road.

Plan Requirements and Timing. Prior to acceptance of the final Development Plan and recordation of the final VTM, the Applicant shall submit a Public Street Improvement Plan for sidewalk improvements along South Higuera Street for review and approval by the City. Construction of pedestrian improvements shall be completed and operational prior to the issuance of an occupancy permits for Phase 2 development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved design plans.

MM TRANS-10b The Applicant shall design and construct continuous sidewalks along the east side of South Higuera Street from Vachell Lane to Los Osos Valley Road including ADA ramps at the Vachell Lane and South Higuera Street intersection.

Plan Requirements and Timing. Prior to acceptance of the final Development Plan and recordation of the final VTM, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Construction of pedestrian improvements shall be completed and operational prior to the issuance of an occupancy permit for the first residence of Phase 1 development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved design plans.

MM TRANS-10c The Applicant shall design and construct continuous ADA-compliant sidewalks and ADA ramps along the segment of Suburban Road from South Higuera Street to Earthwood Lane.

Plan Requirements and Timing. Prior to acceptance of the final Development Plan and recordation of the final VTM, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Construction of pedestrian improvements shall be completed and operational prior to the issuance of an occupancy permit for the first residence of Phase 1 development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved design plans.

Residual Impact

Implementation of MM TRANS-3b, 4, -8a, and -10a, through -10c would require the Applicant to install pedestrian improvements. MM TRANS-10a through 10c requires the Applicant to development continuous sideways along this segment as needed. Installation

of continuous sidewalks and ADA ramps, where needed, would ensure that pedestrian facilities in the Project vicinity operate at acceptable levels. Although some improvements may require the City to lend power of condemnation, all improvements are feasible and would reduce pedestrian facilities' LOS to acceptable levels, resulting in less than significant impacts.

Impact TRANS-11 Project development would increase demand for bicycle facilities in an underserved area and would conflict with the City's Bicycle Transportation Plan regulations and General Plan thresholds (Significant but Mitigable).

Project development would increase demand for bicycle facilities in the Project vicinity, which is an area on the southern edge of the City with limited bicycle facilities. Policy 4.1.4 of the City's Circulation Element requires new developments to provide bikeway connections to the greater transportation network; however, bicycle network connections between the Project and the greater network are incomplete.

Los Osos Valley Road/U.S. Highway 101

Project development would incrementally increase demand for bicycle facilities on Los Osos Valley Road to connect to the Bob Jones Trail where it intersects Los Osos Valley Road near the U.S. Highway 101 northbound ramps; however, the recently completed Los Osos Valley Road/U.S. Highway 101 interchange project have improved operations to acceptable levels.

Buckley Road

The Project proposes installation of Class II bicycle lanes on Buckley Road from Vachell Lane to the eastern boundary of the Project site as part of Phase 6. The westbound Class II bicycle lane on the north side of Buckley Road would terminate approximately 200 feet short of the Tank Farm Creek Bridge and be rerouted to a separate bridge across the creek. Westbound cyclists would be diverted onto the proposed Class I path. This aspect of the Project is inconsistent with the AASP and the BTP, which propose Class II lanes across the bridge. Additionally, the bridge would require widening in order to accommodate the Class II bicycle lanes. In the long-term, the bridge widening to accommodate the bicycle lanes would be consistent with the BTP and AASP, but the cost may be high and the potential impacts to the creek could be significant. MM TRANS-11 requires construction of single bridges for bicycles instead of the roadway widening, which would ensure consistency with the BTP and AASP. Widening of Buckley Road with Class II bike lanes

would still be required between the Tank Farm Creek bridge and the single bridge for bicycles, but this mitigation would have fewer construction effects within the creek and would, as a result, reduce the potential secondary impacts to adjacent creek resources.

Vachell Lane/Buckley Road

Project development would generate increased demand for bicycle facilities along Vachell Lane. The Project would include installation of a Class II bicycle lane along the Project site frontage from the Buckley Road/Vachell Lane intersection north to the southern boundary of the Lockheed Martin Corporate Office property. However, this would not complete the connection to the larger network which is inconsistent with the City's BTP and therefore considered a significant impact. MM TRANS-2d would require the Applicant to complete the Class II bike lanes along Vachell Lane from Buckley Road north to South Higuera Street.

With improvements to connect with the regional bicycle system, this impact would be considered *significant but mitigable*.

Mitigations Measures

MM TRANS-2d and MM TRANS-8a shall apply.

MM TRANS-11 The Applicant shall construct two (2) separated bicycle bridges on each side of Buckley Road at Tank Farm Creek and provide connections to Buckley Road so as to provide continuous and safe bicycle routing along Buckley Road. These sections of roadway and creek crossings are under the jurisdiction of the County and would need to meet both City and County design standards to the greatest extent feasible and are subject to approval of the City's Public Works Director.

Plan Requirements and Timing. Prior to acceptance of the final Development Plan and recordation of the final VTMM, the Applicant shall submit a Public Improvement Plan for the Buckley Road Class II bicycle lanes and the separated bicycle bridges across Tank Farm Creek. These improvements shall occur concurrently with the extension of Buckley Road to South Higuera Street.

Monitoring. The City shall verify that the Applicant has modified the Project design to be in accordance with the BTP and the AASP.

Residual Impact

Implementation of MM TRANS-2d, -8a, and -11 would require that all proposed bicycle lanes are design to meet BTP requirements and ensure consistency with General Plan

thresholds and the BTP goals and guidelines. Although MM TRANS-11 would ensure consistency with the BTP by providing connectivity with the regional bicycle system, this mitigation could result in secondary impacts. Construction of the bicycles bridges to accommodate bicycle riders along Buckley Road could result in the loss of or damage to approximately 700 feet riparian vegetation along the northern side of Buckley Road, including potential mature willow trees, associated with Tank Farm Creek. In addition, in-stream pool habitats which have been identified in proximity to this segment, provide potentially suitable habitat for the western pond turtle. Further, during wet winter conditions or major rainfall events, the pool habitat may also be suitable for the California red-legged frog and steelhead trout. Secondary impacts would be addressed in coordination with County standards for resource protection. Bridge footings would be designed and sited outside the top of the bank of the invert and no activities would occur within the in-stream channel.

Impact TRANS-12 The proposed Project would increase demand for transit services in an underserved area, presenting a barrier to both transit dependent and non-transit dependent households for using transit (Significant but Mitigable).

The proposed Project would increase transit demand in the area and introduce new residential areas that are not within 0.25 mile of a bus route, Circulation Element Policy 3.1.6 Service Standards, which would be considered a significant impact. The Project proposes to construct two bus stops onsite; one at the Town Center and the other along the Venture Drive Extension, within the residential neighborhood north of Tank Farm Creek. With implementation of MM TRANS-12, the Applicant would be required to coordinate with SLO Transit, prior to occupancy of the site, to ensure that the new bus stops are adequately served to be in accordance with Policy 3.1.6, Service Standards. Therefore, this impact would be *significant but mitigable*.

Mitigation Measures

MM TRANS-12 The Applicant shall coordinate with SLO Transit to ensure that adequate service would be provided to the two proposed bus stops. The bus stops shall be constructed by the Applicant within the respective phase's development area. To assure adequate service is provided to the two new bus stops onsite, the Applicant shall pay a fair share to fund any physical improvements needed to accommodate future service to the site. In addition, the proposed transit service onsite shall meet standards stated in Policy 3.1.6, Service Standards.

Plan Requirements and Timing. Prior to issuance of an occupancy permit for the 50th residence of Phase 1 development, the Applicant shall ensure adequate transit service would be available for the Project site.

Monitoring. The City shall verify that the Applicant ensures adequate transit service for the Project site.

Residual Impact

With the two proposed bus stops onsite and implementation of MM TRANS-12, the increased demand for relatively convenient transit service would be met and impacts to transit services would be less than significant.

3.12.4.4 Cumulative Impacts

Near-term Cumulative Impacts

Near-term conditions represent conditions with approved and pending development and roadway improvement projects in place. Based on a list of approved, pending, and reasonably foreseeable projects, future traffic was estimated. The following road improvements are assumed to be in place under near-term conditions:

- Los Osos Valley Road/U.S. Highway 101 interchange improvements in place with a widened overcrossing. This project was recently completed.
- A new north/south connector will be in place between Prado Road and Tank Farm Road.
- The southbound left-turn pocket at the Prado Road/South Higuera Street will be extended to 250 feet and pedestrian countdown heads with audible/tactile pushbuttons will be added. These improvements are a part of the conditions of approval for Tract 2353.

Near-term traffic forecasts were developed using the traffic model to determine near-term cumulative impacts. Project trips were added to the network using the methods described in Section 3.12.4.2, *Impact Assessment Methodology*. The Project trip assignment was modified slightly to reflect changes to traffic patterns expected with the Horizon Lane connector to Tank Farm Road. A summary of the impacts is provided in Table 3.12-13 and 3.12-14; for complete data, refer to Appendix P.

Table 3.12-13. Near-term Plus Project Intersection Impact Summary

Intersection Number	Intersection	Peak Hour	Existing No Project			Existing + Project			
			V/C ¹	Delay ²	LOS ³	V/C ¹	V/C Delta	Delay ²	LOS ³
14	Buckley Road /SR 227	AM	0.80	22.2	C	0.80	0.00	22.8	C
		PM	0.91	45.1	D	0.91	0.00	46.6	D

Notes:

¹. Volume-to-capacity ratio reported for worst movement.

². HCM 2010 average control delay in seconds per vehicle.

³. For side-street-stop controlled intersections the worst approach’s delay is reported in parenthesis next to the overall intersection delay. Unacceptable operations shown in bold.

Source: Central Coast Transportation Consulting 2016; see Appendix P.

Table 3.12-14. Near-term plus Project Segment Impact Summary

Segment	Peak Hour	Direction	Existing	LOS	Existing + Project	
			V/C		V/C	LOS
LOVR – South Higuera Street to 450 feet north of Los Verdes Drive	AM	NB	0.86	C	1.01	F
		SB	0.91	C	0.94	C
	PM	NB	1.58	F	1.68	F
		SB	0.67	C	0.76	C

Source: Central Coast Transportation Consulting 2016; see Appendix P.

Additionally, under near-term forecasts, most pedestrian and transit service impacts would not substantially change from those forecast for the Project. Implementation of the mitigation discussed in Section 3.12.5, *Project Impacts and Mitigation Measures* would ensure acceptable levels of service. However, the Project would have a considerable cumulative contribution to deficiencies on operating conditions at the Buckley Road/SR 227 intersection and the Tank Farm Road/Horizon Lane intersection. In addition, it was determined that the Project would contribute to near-term cumulative deficiencies to bicycle facilities at two intersections along South Higuera Street (intersections with Tank Farm Road and Buckley Road) and deficiencies to pedestrian facilities along the segments of South Higuera Street from Los Osos Valley Road to Suburban Road and Los Osos Valley Road from South Higuera Street to 450 feet north of Los Verdes Drive (Central Coast Transportation Consulting 2016). Impact TRANS-13 and Impact TRANS-14 address near-term cumulative impacts.

Impact TRANS-13 Under near-term plus Project conditions, Project-generated traffic would cause delays and exceedance of storage capacities at Buckley/SR 227 and Los Osos Valley Road/South Higuera Street and contribute to road segment congestion (Significant but Mitigable).

Under the near-term plus Project conditions, the Project would contribute to increases in delays to the Buckley Road/SR 227 intersection. This intersection would continue to operate at LOS D during the PM peak hour under the near-term plus Project conditions, which is an unacceptable level under Caltrans standards. MM TRANS-5 would require the Applicant to participate in a countywide fee program or pay a fair share fee to the City (likely as part of a modified AASP fee program) to improve this intersection to acceptable levels or fund the future improvements at this intersection.

The vehicle queuing conditions under the near-term plus Project conditions are all similar to the Project-specific impacts addressed above in Section 3.12.5, *Project Impacts and Mitigation Measures*. All mitigation measures required for the Project above would apply to the impacts in the near-term plus Project conditions, improving conditions to acceptable levels. A new cumulative impact would occur at the Los Osos Valley Road/South Higuera Street intersection, where Project-generated traffic and that from near-term growth would exacerbate queues at the southbound right-turn lane during the PM peak hour. Installing a second southbound right-turn lane at the Los Osos Valley Road/South Higuera Street intersection would improve conditions; however, this could impact driveways along Los Osos Valley Road that serve the Los Verdes residential developments. Due to the Project's cumulatively considerable contribution, MM TRANS-13a would require the City to include this improvement in the updated TIF and require the Applicant to contribute its fair share fee to fund these improvements.

Under the near-term plus Project conditions the segment of Los Osos Valley Road from South Higuera Street to 450 feet north of Los Verdes Drive would operate at an unacceptable LOS. As addressed in Impact TRANS-8, the reconstruction of the Los Osos Valley Road/U.S. Highway 101 interchange alleviated the conditions along this segment; however, the segment from 450 feet north of Los Verdes Drive to South Higuera Street remained as one lane in the westbound direction, which results in capacity issues. As discussed in Impact TRANS-8, the City confirms that this segment continues to operate adequately, but could be feasibly restriped if required to provide two northbound lanes. However, at this time, the City finds such improvements are unneeded and undesirable due

to multiple factors discussed in the residual impact section in Impact TRANS-8. Therefore, with implementation of all mitigations, all roadway impacts would be *significant but mitigable*.

Mitigation Measures

MM TRANS-5 shall apply.

MM TRANS-13 The City shall amend the TIF to include a fee program for the installation of a second southbound right-turn lane at the Los Osos Valley Road/South Higuera Street intersection, or create a separate mitigation fee for this purpose. The Applicant shall pay its fair share fees to the City prior to issuance of an occupancy permit for the first residential unit of each phase of development.

Plan Requirements and Timing. If at the time of building permit issuance the City has not amended the Project into the TIF or other fee program, the Applicant will be required to pay fair share funding for the project as established by the City prior to receiving permit issuance.

Monitoring. The City shall verify that adequate fees are collect to fund the improvements at this intersection.

Residual Impact

As discussed above in the residual impact section for Impact TRANS-5, the Applicant shall participate in a fee program to fund improvements; this contribution would also address the Project's cumulative impact contribution. MM TRANS-13 would require the TIF to be amended to include a fee program for this improvement and would require the Applicant to pay its fair share fees to fund the improvements when necessary. MM TRANS-5 and -13, along with all mitigation measures addressed in the Project-specific impacts would ensure that all study intersections and segments continue to operate at acceptable levels or are programmed at a future time when needed. Therefore, with mitigation, impacts would be less than significant.

Impact TRANS-14 Under near-term conditions, the proposed Project would cumulatively contribute incrementally to increased demand for bicycle and pedestrian facilities, potentially conflicting with the City's BTP regulations and General Plan thresholds (Significant but Mitigable).

The proposed Project would contribute to cumulative degradation of operational conditions of bicycle and pedestrian facilities under the near-term plus Project conditions. Project-

generated pedestrian and bicycle traffic would contribute to declines in LOS for bicycle facilities at the intersections of South Higuera Street/Tank Farm Road, and Buckley Road/South Higuera Street, and for pedestrian facilities on the segment of South Higuera Street from Los Osos Valley Road to Suburban Road and the segment of Los Osos Valley Road from South Higuera Street to 450 feet north of Los Verdes Drive, which would operate at unacceptable LOS with the Project plus near-term cumulative increases in traffic.

South Higuera Street/Tank Farm Road

Project development of Class I bike paths through the Project site and connections to the BTP's regional network would improve conditions to acceptable level. This new bike path would connect to a planned Class I path parallel to Tank Farm Road that would provide cyclists with an alternative route that would allow them to bypass the South Higuera Street/Tank Farm Road intersection, reducing the usage of the intersection and improving conditions to acceptable levels.

Buckley Road/South Higuera Street

With the addition of Project traffic, bicycle LOS at the Buckley Road and South Higuera Street intersection would exceed City General Plan thresholds; however, this intersection is under County jurisdiction, which has no thresholds for bicycle facilities. The BTP proposes bicycle facilities at this intersection and the planned installation of a Class I bike path from Los Osos Valley Road to South Higuera Street and from Higuera Street to Broad Street would alleviate bicycle LOS impacts at Buckley Road/South Higuera Street.

South Higuera Street from Los Osos Valley Road to Suburban Road

With the exception of the east side from Vachell Lane to Los Osos Valley Road, pedestrian facilities are present on both sides of the roadway along this segment of South Higuera Street. The discontinuous sidewalks results in LOS D/E in the northbound direction during the AM/PM peak hour. The poor LOS is due to high vehicle volumes on South Higuera Street. However, Class I bicycle/pedestrian paths proposed within the Project site and along Vachell Lane would offer pedestrians an alternative parallel route to travel and offset the LOS impact along South Higuera Street.

Los Osos Valley Road from South Higuera Street to 450 feet north of Los Verdes Drive

When traffic analysis was conducted in 2015, this segment of Los Osos Valley Road operated at LOS E, but with the recently completed Los Osos Valley Road/U.S. Highway 101 interchange project, which widened this segment, LOS conditions for pedestrian

facilities substantially improved. As a result, the addition of Project-generated traffic is not expected to result in a noticeable degradation of LOS within this segment.

With funding and improvements to address pedestrian and bicycle LOS, near-term plus Project impacts to bicycle and pedestrian facilities would be *significant but mitigable*.

Mitigation Measures

MM TRANS-10b shall apply.

MM TRANS-14 If approved by City Council, the City shall amend the TIF, or some other fee program, to include a fee program for the installation of a Class I bicycle path from Buckley Road/South Higuera Street intersection to Los Osos Valley Road/U.S. Highway 101 southbound ramps intersection, connecting to the Bob Jones Trail. The Applicant shall pay its fair share fee to fund the improvement.

Plan Requirements and Timing. The City shall include this improvement in the updated TIF. The Applicant shall pay its fair share fees to the City prior to issuance of an occupancy permit for the first residential unit of each phase of development. If at the time of building permit issuance the City has not amended the Project into the TIF program, the Applicant will be required to pay fair share funding for the project as established by the City prior to receiving permit issuance.

Monitoring. The City shall verify payment of fair share fees to install the improvement in accordance with the BTP and City requirements.

Residual Impact

Implementation of MM-TRANS-10b would require the Applicant to install continuous sidewalks to improve pedestrian LOS. In addition, MM TRANS-14 would require the Applicant to pay its fair share fee to fund the design and installation of a Class I bike path connection from Buckley Road/South Higuera Street intersection to the Los Osos Valley Road/U.S. Highway 101 southbound ramps intersection. The Class I bicycle path would provide a parallel route to South Higuera Street and avoid intersections along that segment. Therefore, with the installation of Class I bicycle paths and continuous pedestrian facilities, cumulative impacts would be less than significant.

Long-term Cumulative Impacts

Cumulative conditions represent future build-out of the land uses in the region. In addition to network changes assumed under near-term conditions, the following roadway network changes are assumed to be in place under cumulative conditions consistent with the City's Circulation Element:

- A full access freeway interchange will be constructed at Prado Road/U.S. Highway 101.
- Prado Road will be extended to connect Madonna Road to Broad Street. Prado Road and South Higuera Street will be expanded to provide second east and westbound thru-lanes, new north and southbound right-turn lanes, and dual left-turn lanes on all approaches.
- Buckley Road will be extended to South Higuera Street and turn restrictions will be implemented at Vachell Lane/South Higuera Street prohibiting left turns in and out of Vachell Lane.
- Los Osos Valley Road bypass may be an alternative improvement that could be implemented, that will involve an extension dependent on a final feasibility study to be conducted as part of development of the parcels it would cross. The difference between the two scenarios only affects the intersections of Los Osos Valley Road at South Higuera Street and Buckley at South Higuera Street. An operational assessment of both those scenarios is provided in the TIS (see Appendix P).
- Tank Farm Road will be widened to four lanes between South Higuera Street and Broad Street.
- Broad Street will be widened to four lanes between Aero Drive and Los Ranchos Drive.

No other roadway network changes affecting the Project vicinity were assumed to be in place under cumulative conditions. Cumulative traffic forecasts were developed using the TDM. Project trips were added to the network using the methods described in Section 3.12.4.2, *Impact Assessment Methodology*.

For vehicle traffic, the Project would contribute to cumulatively significant operational deficiencies at the following intersections; Tank Farm Road/South Higuera Street, Tank Farm Road/Horizon Lane, Prado Road/South Higuera Street, Buckley/Vachell Lane, and Buckley Road/SR 227. A summary of the impacts is provided in Table 3.12-15; for complete data, refer to Appendix P.

Table 3.12-15. Long-term Cumulative Impact Summary

Intersection Number	Intersection	Peak Hour	Existing No Project			Existing + Project			
			V/C ¹	Delay ²	LOS ³	V/C ¹	V/C Delta	Delay ²	LOS ³
6	Tank Farm Road/ South Higuera Street	AM	1.15	98.4	F	1.19	0.04	97.2	F
		PM	0.77	27.0	C	0.80	0.03	27.5	C
7	Tank Farm Road/ Horizon Lane	AM	0.51	1.8 (34.1)	A (D)	0.53	0.02	2.2 (35.7)	A (E)
		PM	0.47	1.5 (19.7)	A (C)	0.47	0.00	1.9 (20.7)	A (C)
12	Buckley Road/ Vachell Lane	AM	0.41	4.8 (21.2)	A (C)	0.56	0.15	6.6 (24.8)	A (D)
		PM	0.66	6.7 (34.9)	A (D)	1.00	0.34	17.8 (84.2)	B (F)
14	Buckley Road/ SR 227	AM	0.70	16.3	B	0.66	-0.04	19.3	B
		PM	0.92	35.3	D	0.99	0.07	39.8	D

Notes:

¹. Volume-to-capacity ratio reported for worst movement.². HCM 2010 average control delay in seconds per vehicle.³. For side-street-stop controlled intersections the worst approach's delay is reported in parenthesis next to the overall intersection delay. Unacceptable operations shown in bold.

Source: Central Coast Transportation Consulting 2016; see Appendix P.

In addition, the Project would also contribute to cumulative deficiencies to bicycle facilities at the intersections of South Higuera Street with Prado Road and Los Osos Valley Road. Under long-term cumulative conditions, pedestrian and transit services LOS would not change with the addition of Project-generated traffic. Implementation of the mitigations in Section 3.12.5, *Project Impacts and Mitigation Measures* would ensure acceptable LOS, as further described below. Impact TRANS-15 and Impact TRANS-16 address long-term cumulative impacts.

Impact TRANS-15 Under long-term cumulative plus Project conditions, Project-generated traffic would result in a cumulatively considerable contribution to potentially significant impacts to the operational conditions at four intersections (Significant and Unavoidable).

The Project would contribute to the cumulatively considerable degradation of the following intersections:

Prado Road/South Higuera Street

This intersection would operate at acceptable LOS D under the cumulative plus Project conditions; further, the north, south, and westbound left-turn lanes would exceed capacity. The increase in traffic generated by the Project in combination with cumulative development would exacerbate existing queues.

Tank Farm Road/South Higuera Street

This intersection would operate at unacceptable LOS F under the cumulative plus Project conditions. In addition, the southbound left-turn lane and the westbound left-turn approach exceed capacities. Project-related traffic would contribute considerably to further exceeding cumulative capacity issues for the southbound left-turn lane (AM/PM peak hours) and the westbound left-turn lane (PM peak hour). The AASP standards and fee program include the addition of a second southbound left-turn lane, a second westbound right-turn lane, and an extension of the northbound right-turn lane to provide for adequate queuing capacity. The TIS identified an additional mitigation strategy of providing an additional northbound right-turn lane to improve intersection operations. Additional analysis of this location conducted as part of the Traffic Impact Study for the San Luis Ranch Project has identified a more appropriate improvement to meet intersection LOS objectives. This improvement includes maintaining the AASP improvement of lengthening the NB right turn lane but also include a channelized “slip” at the intersection to allow the movement to overlap with the WB left run movement of Tank Farm Road. This improvement would require the installation of a pork chop island to assist pedestrian crossings and widening of the south side of Tank Farm Road from Higuera to the existing bus stop.

Tank Farm Road/Horizon Lane

This section would operate at LOS E during the worst approach delay in the AM peak hour under the cumulative plus Project conditions. The AASP standards and fee program include an additional northbound right-turn lane, which would improve the intersection to acceptable LOS.

Vachell Lane

Vachell Lane extends from Buckley Road to South Higuera Street, and is designated a local commercial street serving commercial areas. The Circulation Element threshold for this road is 5,000 ADT. The TIS forecasted that cumulative plus Project generated traffic of approximately 7,000 ADT is expected on Vachell Lane. This would substantially exceed the thresholds for its road designation; however, the design of this roadway is optimal to adequately serve this amount of trip with no deficiencies. Therefore, no improvements are require for this road. The Applicant would apply to reclassify the road as a commercial collector within the General Plan to accommodate the higher traffic volumes that would occur under cumulative conditions.

Buckley Road/Vachell Lane

This intersection would operate at unacceptable LOS F in the worst approach delays during PM peak hour under the cumulative plus Project conditions and would meet the peak hour signal warrant. The intersection would have to be controlled by a traffic signal or a single-lane roundabout to ensure the intersection operates at acceptable levels.

Buckley Road/SR 227

This intersection is under the jurisdiction of San Luis Obispo County; however, the signal is operated by Caltrans. The intersections would operate at LOS B in the AM peak hour, but would operate at LOS D in the PM peak hour under the cumulative plus Project conditions. With the cumulative increase in traffic from the Project, the Buckley Road/SR 227 intersection would experience an increase in delays and continue to operate at LOS D, which is an unacceptable level under Caltrans standards.

Even with measures to address long-term effects of Project-generated traffic, cumulative impacts for the above intersections would be ***significant and unavoidable***.

Mitigation Measures

MM TRANS-5 shall apply.

MM TRANS-7a shall apply.

MM TRANS-15a The Applicant shall pay its fair share fee to the City to fund the widening of the Prado Road/South Higuera Street intersection to accommodate a dual left-turn lane, dual thru-lanes, and a right-turn lane on all approaches. Due to its size and complexity, individual components of these improvements are contained in various fee programs. The City should consider amending this improvement into one of the City's impact fee programs. If amended into an impact fee program, the Project shall pay impact fees prior to issuance of an occupancy permit for the first residential unit of each phase of development in accordance with the amended fee program.

Plan Requirements and Timing. The Applicant shall pay its fair share fees to the City prior to issuance of an occupancy permit for the first residential unit of each phase of development. The City shall evaluate a fee program for the improvement that may be included within the TIF. This improvement is not included in the City's TIF or the AASP or MASP impact fee programs.

Monitoring. The City shall verify that adequate funding is collected to install these improvements.

MM TRANS-15b The Applicant shall pay its fair share fees to fund the extension of the northbound right-turn lane, the installation of a “pork cop” island to assist pedestrian crossings and widening on the south side of Tank Farm to provide a slip lane for right turning traffic. Improvements would also include second westbound right-turn lane at the Tank Farm Road/South Higuera Street intersection prior to issuance of building permits.

Plan Requirements and Timing. Prior to issuance of an occupancy permit for the first residential unit of each phase of development, the Applicant shall pay its fair share fee to the City, specified in the AASP subarea fee program.

Monitoring. The City shall verify that adequate funding is collect to install these improvements.

MM TRANS-15c The City shall review the cross sections for improvements to Tank Farm Road/Horizon Lane intersection as proposed within AASP to ensure long-term geometrics meet the objectives of the General Plan. The Applicant shall pay its fair share fees to fund the installation of an additional northbound right-turn lane or a roundabout at the Tank Farm Road/Horizon Lane intersection.

Plan Requirements and Timing. Prior to issuance of an occupancy permit for the first residential unit of each phase, the City shall review the AASP to determine the appropriate improvement and the Applicant shall pay its fair share fees to the City, specifically the AASP subarea fee program.

Monitoring. The City shall verify that adequate funding is collected for these improvements.

MM TRANS-15d The Applicant shall pay its fair share fees to fund the installation of a traffic signal or a single-lane roundabout at the Buckley Road/Vachell Lane intersection. While not required, this work may be implemented as part of the Buckley Road extension being installed as part of Phase 2 of the Project.

Plan Requirements and Timing. Prior to issuance of an occupancy permit for the first residential unit of each phase of development, the Applicant shall pay its fair share fees to the City.

Monitoring. The City shall verify that adequate funding is collected for the improvement.

Residual Impacts

Implementation of MM TRANS-5, -13a, -15a, -15b, and -15c would require the Applicant to pay fair share fees for the construction of improvements that would improve the operational conditions at all impacted intersections. MM TRANS-15a would require the Applicant to pay its fair share fee to fund the addition of a second southbound turn-lane at the Prado Road/South Higuera Street intersection to accommodate a dual left-turn lane, dual thru-lane, and a right-turn lane at all approaches. In order to achieve acceptable LOS, all four approaches would need to be widened. This measure would require additional right-of-way not currently under the City's jurisdiction and potential relocation of residences within the northeast corner of the intersection. This measure is not currently funded in any fee program. This measure would slightly worsen the pedestrian LOS at this intersection, but would remain at acceptable LOS C. If the City is not able to obtain additional right-of-way or include the measure within a fee program, residual impacts would be significant and unavoidable.

Likewise, as identified by the Project's TIS, the Project would contribute traffic to regional congestion at Los Osos Valley Road, although the Project's contribution to this regional congestion is not considered cumulatively considerable (Appendix P). With regional traffic, the intersection of Los Osos Valley Road/South Higuera Street would operate at an unacceptable LOS only if a new roadway connection from Los Osos Valley Road to South Higuera Street south of the Octagon Barn near the southwestern corner of the Project site is not constructed in the future. Known as the Los Osos Valley Road Bypass, this conceptual improvement by the City would address regional congestion generated at Los Osos Valley Road. If the City does not construct the Los Osos Valley Road Bypass, installation of a second northbound turn lane in addition to the Project-specific mitigation measures would ensure intersection operations at Los Osos Valley Road/South Higuera Street would maintain acceptable levels under the General Plan.

MM TRANS-15b through -15d, along with mitigation measures addressed in the Project specific impacts (MM TRANS-5 and MM TRANS-7a) would ensure that all other study intersections continue to operate at acceptable levels. Therefore, impacts to roadways under the cumulative plus Project conditions for Tank Farm Road/South Higuera Street, Tank Farm Road/Horizon Lane, and Buckley Road/Vachell Lane would be less than significant after mitigation.