

SUBCHAPTER 2.2
TRANSPORTATION/TRAFFIC

2.2 Transportation/Traffic

Traffic was addressed in Subchapters 3.14 and 7.9 in the 1981 document. That document assumed 9,072 average daily trips (ADT) and concluded that project-generated traffic would have a less than significant impact.

The 1983 EIR identified traffic concerns as significant but mitigable. It analyzed trips generated by a projected 6,500 employees associated with the Hewlett-Packard facility as well as trips related to the mobile-home park, condominiums, golf course and commercial uses. Combined, these uses were projected to total 22,486 ADT at buildout. Proposed mitigation for that number of trips did not extend east of the project or west of Old Highway 395.

Traffic loading on area roads has changed since completion of the 1982 traffic technical study. Overall development density in the area surrounding the Project (although not within the Project) has increased. (As an example, in 1982 there were 2,300 ADT on SR 76 east of I-15. The current Traffic Impact Study [TIS] reports over 9,000 ADT for the same segment.) Although traffic generation under the Proposed Project would be lesser but similar (19,941 ADT as addressed in the Draft EIR and 17,341 under the refined Project) and some internal capture is assumed, the geographic extent of Proposed Project effects is currently assessed as wider, and significant impacts are assessed and mitigation measures are proposed at additional locations. More detailed information is available by both segment and intersection/interchange. Cumulative conditions incorporating traffic generated by off-site conditions through 2030 are also included.

These considerations lead to the need for new subsequent analysis based on substantial changes having occurred with respect to the circumstances under which the Project would be undertaken, as well as the fact that there is new information of substantial importance which would result in significant effects not previously discussed. The reader is referred to text below for new and/or revised evaluation of all issues related to traffic for the Project.

The following summary of transportation and circulation impacts is based on the circulated 2009 TIS for Campus Park prepared by LOS Engineering, Inc. (2009, as amended). Although the refined Project description proposed for approval would generate 2,600 fewer trips than the Project addressed in the Draft EIR, review of circulation impacts associated with the lower ADT did not affect CEQA significance conclusions. Specifically, although the potential effect might lessen in duration, Project-related impacts identified as significant assuming 19,941 trips remained significant assuming 17,341 trips. The following text was therefore not revised with regard to ADT specifics and constitutes a conservative analysis. The information is included within the 2010 TIS, which can be found in its entirety in Appendix C, including all supporting tables, figures, and traffic modeling results (including specifics relating to the refined Project).

2.2.1 Existing Conditions

Existing Setting

Parameters of the transportation/traffic study area were determined using a 50 trip criterion for direct project analyses and 25-trip criterion for cumulative analyses, as required by the County Guidelines for Determining Significance and Report Format and Content Requirements – Transportation and Traffic (December 5, 2007). Specifically, if the Project would add 50 or more peak hour trips in either direction of a roadway, the roadway was included within the study area for direct project analyses and 25 or more peak hour trips in either direction for cumulative analyses. A total of 17 roadway segments, 10 state route segments, 3 freeway segments, and 25 intersections were evaluated in the traffic analysis for direct

impacts, and a total of 26 roadway segments, 15 state route segments, 3 freeway segments, and 37 intersections were evaluated in the traffic analysis for cumulative analyses. Figure 2.2-1a, Existing Roadway Segment Conditions, shows the existing roadway network and Figures 2.2-1b and 2.2-1c, Existing Intersection Conditions, show those intersections that were included in the traffic analysis. A brief description of the existing Project area roadways follows. Speed limits, where available, and 85th percentile speeds (the travel speed which 85 percent of drivers are driving at or below in terms of mph) are identified below. All roadway classifications identified below are cited from the September 2005 San Diego County Circulation Element map.

Existing Roadway Characteristics

I-15 is a generally north-south trending interstate freeway that links the San Diego metropolitan area with the cities of Temecula and Riverside to the north. In the Fallbrook area, I-15 has eight lanes and a center divider. The travel lanes are generally 12 feet in width and the shoulder is generally 10 to 12 feet in width. The posted speed limit is 70 mph along I-15 in the vicinity of the project.

SR 76 (Pala Road) extends east-west between the City of Oceanside and SR 79. From Melrose Drive to South Mission Road, SR 76 is classified as an Expressway. SR 76 is classified as a Prime Arterial with bike lanes from South Mission Road to I-15 and as a Major Road with bike lanes from I-15 to Pala Mission Road and where it fronts on the Proposed Project. From Melrose Drive to South Mission Road, SR 76 is generally constructed as a two-lane undivided roadway (one travel lane of approximately 12 feet in width in either direction) with shoulder widths ranging from 1 to 5 feet, for a total pavement width of approximately 26 to 34 feet. From South Mission Road to Old Highway 395, SR 76 is generally constructed as a two-lane undivided roadway (one travel lane of approximately 12 feet in each direction) with shoulder widths ranging from 2 to 8 feet (total pavement width ranges from approximately 28 feet to approximately 40 feet). From Old Highway 395 to I-15 southbound (SB) ramps, SR 76 is constructed within approximately 76 feet of pavement with a center two-way left-turn lane of approximately 12 feet, two travel lanes in each direction for approximately 24 feet, and a paved shoulder in each direction of approximately 8 feet. From I-15 SB ramps to I-15 northbound (NB) ramps, SR 76 is constructed within approximately 56 feet of pavement with one travel lane of approximately 13 feet in each direction, a back-to-back left turn lane of approximately 14 feet, and a shoulder of approximately 8 feet for each travel direction. From I-15 NB ramps to Pala Mission Road, SR 76 is constructed within approximately 28 feet, with one travel lane of approximately 12 feet, and a shoulder of approximately two feet, in each direction. Speed limit signs of 55 mph were observed between Melrose Drive and North River Road. In addition, several horizontal alignment signs (arrow warning drivers of turns in the road) are posted along SR 76.

SR 76 from the I-15 NB ramps easterly for a distance of approximately 1.4 miles ~~has been is currently being~~ widened from two to four lanes. This widening ~~has recently been is anticipated to be completed in 2010 during the fourth quarter of 2009~~, which is before Campus Park ~~would has requested~~ certificates of occupancy. Therefore, the SR 76 segment analyses used two lanes for existing conditions and four lanes for all other scenarios.

SR 76 has two identified widening projects that include the Caltrans SR 76 Middle Project (from approximately Melrose Drive to South Mission Road) and the Caltrans SR 76 East Project (from approximately South Mission Road to the I-15 NB ramps). On October 24, 2008, the SANDAG Board approved the redistribution of funds between SR 76 corridor projects to fully fund the construction phase of the Caltrans SR 76 Middle Project. The estimated completion date for the Caltrans SR 76 Middle Project is 2012. The Caltrans SR 76 East Project has identified TransNet as a funding source and the current estimation of completion is 2015.

Old Highway 395 is a two-lane, undivided roadway extending north-south between northern Escondido and Temecula. Between Mission Road and Dulin Road, it is classified as a Collector with bike lanes and between Dulin Road and West Lilac Road, it is classified as a Rural Collector with bike lanes. Old Highway 395 has two 12-foot-wide lanes and 2 to 8-foot-wide shoulders on either side. Overall, pavement width ranges from 28 to 40 feet. The posted speed limit along Old Highway 395 between Mission Road and SR 76 is 55 mph. As detailed in the TIS, 85th percentile speeds for Old Highway 395 range from 54 to 63 mph. Old Highway 395 is located on the west side of I-15 in the vicinity of the Project site.

Pankey Road from Stewart Canyon Road to Dulin Road is classified as a Light Collector. From Stewart Canyon Road south to a cul-de-sac approximately 0.7 mile, Pankey Road is constructed with approximately 32 feet of pavement with a NB travel lane of approximately 20 feet and SB travel lane of approximately 12 feet. From SR 76 north to an existing bridge over Horse Ranch Creek and SR 76 south to Shearer Crossing, Pankey Road has a width of approximately 40 feet of pavement and one travel lane in each direction. No posted speed limits were observed. As detailed in the TIS, 85th percentile speed for Pankey Road is 30 mph.

Pala Mesa Drive from its intersection with Sage Road/Wilt Road to Pankey Road is classified as a Light Collector on the September 2005 San Diego County Circulation Element map. Pala Mesa Drive between Sage Road/Wilt Road and Old Highway 395 is generally constructed within approximately 24 feet of pavement with one travel lane in each direction; however, some portions closer to Sage Road/Wilt Road narrow to approximately 19 feet of pavement. A posted speed limit was not observed on this segment. Pala Mesa Drive east of Old Highway 395 only exists as a bridge over I-15 that is closed to traffic.

Stewart Canyon Road is classified as a Collector from Old Highway 395 to Pankey Road. This roadway is a two-lane undivided roadway with 40-foot-wide pavement. No posted speed limits were observed. As detailed in the TIS, 85th percentile speed for Stewart Canyon Road is 41 to 43 mph.

Reche Road is classified as a Rural Collector from its intersection with Green Canyon Road/Green Canyon Norte to Gird Road and as a Rural Collector with bike lanes from Gird Road to Old Highway 395. This roadway is a two-lane undivided street from Green Canyon Road/Green Canyon Norte to Old Highway 395. The pavement width generally ranges from 26 to 28 feet wide which includes 12-foot-wide travel lanes and 1 to 2-foot-wide shoulders. The posted speed is 45 mph. As detailed in the TIS, 85th percentile speeds for Reche Road range from 38 to 50 mph.

Shearer Crossing is classified as a light collector. This road is a two-lane, undivided roadway trending northwest to southeast from Pankey Road (southern extension), terminating after approximately 1,000 feet at its intersection with Dulin Road. This roadway has up to 40 feet of pavement, with each travel lane generally 12 feet in width and shoulder widths varying from 4 to 8 feet.

Dulin Road is classified as a light collector from Old Highway 395 to Shearer Crossing. The northern portion of Dulin Road becomes Shearer Crossing. This road is a two-lane collector that turns west and extends farther southwest, where it joins Old Highway 395 on the west side of I-15. The portion of Dulin Road east of Old Highway 395 is four lanes. Each travel lane is generally 12 feet wide. Shoulder widths vary from four to eight feet, and speeds vary from 25 mph in the residential areas to 40 mph along the generally undeveloped segment. Within the residential community, this roadway has an eight-foot-wide parking lane. As detailed in the TIS, 85th percentile speeds for Dulin Road range from 42 to 44 mph.

Existing Levels of Service

Level of service (LOS) designations comprise a professional industry standard by which the operating condition of a given roadway, state route, or freeway segment, or intersection is measured. LOS is defined using letter designations from “A” to “F,” wherein LOS A represents the best operating conditions and LOS F represents the worst operating conditions (Table 2.2-1a, Level of Service Thresholds for Roadway Segments, Table 2.2-1b, Level of Service Thresholds for State Routes, Table 2.2-1c, Level of Service Thresholds for Freeways, and Table 2.2-1d, Level of Service Thresholds for Intersections). LOS A facilities are characterized as having free-flowing traffic conditions with no restrictions on maneuvering or operating speeds; traffic volumes are low and travel speeds are high. LOS F facilities are characterized as having highly unstable, congested conditions and low operating speeds. LOS E and F generally are not accepted for urban design purposes.

The volume-to-capacity ratio (V/C) is a measure of traffic demand on state and local facilities (expressed as volume; V) compared to its traffic-carrying capacity (C). In evaluating the performance of a roadway segments under the existing conditions, V/C is considered together with LOS.

Traffic volumes on study area segments and intersections during AM and PM peak hours are based on recent daily roadway traffic counts and peak period manual traffic counts at intersections. Data were collected on December 4, 2007 and between November 11, 2008 and January 6, 2009. (Please note that the intersection of SR 76/Pankey Place Road ~~currently was is~~ closed as part of the ~~current~~ SR 76 widening from two to four lanes east of I-15; therefore, the ~~previous count from~~ December 4, 2007 count was utilized.) The freeway segment analysis is based on 2006 Caltrans volume data. Figure 2.2-2a, Existing Average Daily Traffic – Roadway Segments, shows existing ADT for the roadway segments in the study area. Existing roadway, state route, and freeway segment capacities, volumes, and LOS are provided in Table 2.2-2, Road Segment Operations Under Existing and Existing Plus Project Conditions, Table 2.2-3, SR 76 Operations Under Existing and Existing Plus Project Conditions, and Table 2.2-4, I-15 Operations Under Existing and Existing Plus Project Conditions.

Existing Roadway Segments

All of the analyzed local roadway segments currently operate at LOS D or better (Table 2.2-2).

Existing State Route Segments

A total of 12 state route segments currently operate at LOS E and/or F during peak hours, which is considered unacceptable. These 12 segments are represented by stretches itemized below and include SR 76 between:

- Melrose Drive and North River Road (LOS F westbound [WB] during the AM peak hour and LOS F eastbound [EB] during the PM peak hour along two segments)
- North River Road and Olive Hill Road (LOS E EB during the AM peak hour, LOS F WB during the AM peak hour, and LOS F EB during the PM peak hour)
- Olive Hill Road and South Mission Road (LOS F EB and WB during the AM and PM peak hours)
- South Mission Road and Gird Road (LOS E WB during the AM peak hour and LOS F EB during the PM peak hour along two segments)
- I-15 SB ramps and I-15 NB ramps (LOS E EB during the AM peak hour and LOS F WB during the PM peak hour)
- I-15 NB ramps and Couser Canyon Road (LOS E WB during the PM peak hour along four segments)
- Couser Canyon Road and Pala Mission Road (LOS F WB during the PM peak hour)

With ~~ongoing~~ improvements by Granite Construction Company completed, SR 76 between the I-15 NB ramps and Horse Ranch Creek Road beyond Horse Ranch Creek are projected to~~would~~ operate at acceptable levels of service during peak hours (LOS A and B); however, all of the other above-mentioned segments of SR 76 would continue to operate at LOS E or F.

All other state route segments operate at acceptable LOS D or better during peak hours.

Existing I-15 Freeway Segments

All three I-15 freeway segments in the Project study area (between Old Highway 395 and Rainbow Valley Road) currently operate at an acceptable LOS D or better.

Existing Intersections

Intersection LOS for AM and PM peak hour intersection traffic volumes was calculated using procedures identified in the 2000 Highway Capacity Manual (HCM; Transportation Research Board 2000). Figures 2.2-2b and 2.2-2c, Existing Average Daily Traffic – Intersections, illustrates the ADT at intersections within the study area at which the Project would contribute 50 or more peak hour trips. Intersection LOS is based on total vehicle delay (in seconds), with an objective of LOS D or above. Table 2.2-5, Intersection Operations Under Existing and Existing Plus Project Conditions, shows existing AM and PM peak hour intersection traffic volumes in the study area. As shown in Table 2.2-5, four intersections (or elements of intersections) currently operate at LOS E or F during AM and/or PM peak hours:

- SR 76 and Via Monserate (LOS F during AM and PM peak hours for minor leg critical movement; however, overall intersection operates at LOS A during AM and PM peak hours)
- SR 76/East Vista Way (LOS E during AM peak hour)
- SR 76/North River Road (LOS E during AM peak hour)
- Old Highway 395/Reche Road (LOS E during PM peak hour for minor leg critical movement; however, overall intersection operates at LOS B during AM and PM peak hours)

All other intersections operate at acceptable LOS D or better during the peak hours.

Regulatory Framework

Transportation and circulation for the Proposed Project are directed by guidance from the federal government, regional transportation programs, and the County General Plan Circulation Element. Applicable federal, regional, and County programs and regulations are discussed below.

Federal

2000 Highway Capacity Manual

Prepared by the Transportation Research Board, the 2000 Highway Capacity Manual is a collaborative effort between the Transportation Research Board, Federal Highway Administration (FHWA), and American Association of State Highway and Transportation Officials to provide concepts, guidelines, and computational procedures for calculating capacity and quality of service for highway facilities, including freeways, intersections (signalized and unsignalized), and rural highways. In addition, the 2000 Highway Capacity Manual addresses the effects of transit, pedestrians, and bicycles on transportation system performance.

Regional

Regional Transportation Plan

The Regional Transportation Plan (RTP), also called MOBILITY2030, was created and approved by SANDAG on March 23, 2003 and last updated in November 2007, with the intent of addressing challenges to mobility in the San Diego region due to population growth. It also aims to maintain, manage, and improve the existing transportation system in the region.

State Transportation Improvement Program

The 2002 State Transportation Improvement Program (STIP) is a multi-year program of federally and state-funded projects that are developed locally and approved by the California Transportation Commission. Once approved, the STIP is incorporated into the Regional Transportation Improvement Program (RTIP), which includes all other locally funded transportation projects.

Regional Transportation Improvement Program

The RTIP is also a multi-year program that includes all proposed major highway, arterial, transit, and non-motorized projects in the region. The 2008 RTIP was adopted in July 2008, for Fiscal Years 2008 to 2013.

Congestion Management Program

First launched in 1991, the CMP is a state-mandated means for monitoring roadway congestion and assessing overall performance of the region's transportation system. The guidelines, which were developed by SANDAG, contain specific strategies and improvements to reduce traffic congestion and improve performance of the region's multi-modal system. Example strategies include an increased emphasis on public transportation and rideshare programs, mitigation for new development impacts, and better coordination of land use and transportation planning. A 2002 update to the CMP guidelines was adopted in January 2003.

The CMP guidelines stipulate that any development project generating 2,400 or more ADT, or 200 or more peak hour trips, requires enhanced CEQA review. The CMP requires that, as part of the additional CMP analysis, freeway links with 50 or more peak hour project trips (in either direction) must be addressed as part of the traffic impact analysis. Also, a ramp meter analysis would be required if project trips would generate 20 or more trips at freeway on-ramps with existing ramp meters. Although none of the existing ramps have meters, the Proposed Project would generate peak hour trips above the threshold for freeways. As such, enhanced CEQA review is required for the Proposed Project.

Regional Growth Management Strategy

The Regional Growth Management Strategy, as originally adopted in 1993 by SANDAG, is a comprehensive framework for dealing with regional growth impacts in order to preserve and improve the regional quality of life. One facet of quality of life considered in the Regional Growth Management Strategy is transportation and congestion management. The Regional Growth Management Strategy was amended in July 1999, at which time the new growth strategy was titled REGION2020.

Guide for the Preparation of Traffic Impact Studies

Caltrans' Guide for the Preparation of Traffic Impact Studies (2002a) outlines recommended procedures for traffic study contents. While thresholds are not identified in this guide, Caltrans staff have indicated that freeway operations at or above LOS D are considered acceptable. For the San Diego region, Caltrans' staff have previously indicated that an impact to a freeway is generally identified when project traffic causes the operations to drop one letter grade (i.e., from LOS E to LOS F).

County

General Plan Circulation Element

The Circulation Element of the existing County General Plan identifies the general location and extent of existing and proposed major roads and bicycle routes.

The County of San Diego has developed LOS threshold tables based on the different functional street classifications and their ability to carry traffic. In addition, on August 2, 2006, the County Board of Supervisors approved the proposed Year 2020 road standards. Year 2020 road standards, identified as "GP Update" in this subchapter, evaluate road segments on the basis of capacity. A statement of "Under Capacity" (Un) is shown in the LOS threshold tables (no roadways were "Over Capacity"). These capacity statements are used in place of LOS where a proposed road would be implemented that is not part of the current Circulation Element (e.g., the "Boulevard" classification proposed for Horse Ranch Creek Road).¹

The study area for the Existing Plus Project condition is based on the County's criterion of where the Project would add 50 or more peak-hour trips to existing roadway traffic (as opposed to 25 or more peak-hour trips under Existing Plus Cumulative Plus Project conditions, analyzed below). Accordingly, several of the roadway and state route segments, as well as intersections, analyzed in the Existing Plus Cumulative Plus Project scenario do not show as impacts under the Existing Plus Project scenario because there are not 50 or more peak hour trips added by the Project.

County of San Diego Public Facility Element Policy 1.1 of Section 4, Transportation, states that new development shall provide on-site improvements to maintain LOS C on circulation element roads during peak hours. New development shall provide off-site improvements to contribute to the overall achievement of an LOS D on circulation element roads.

2.2.2 Guidelines for the Determination of Significance

Guidelines of Significance

1. A significant transportation/traffic impact would occur if the additional or redistributed ADT generated by the Proposed Project would:
 - a. Cause an adjacent or nearby (off-site) County Circulation Element road to operate below LOS D and significantly increase congestion as identified in Threshold Matrix 1 or cause an on-site County Circulation Element road to operate below LOS C;
 - b. Cause a residential street to exceed its design capacity; or

¹ Actual capacity on some segments may be higher due to intersection widening, restricted access, and/or lane widening.

- c. Significantly increase congestion on a Circulation Element road, state highway, or intersection currently operating at LOS E or LOS F as identified in Threshold Matrix 1.

Threshold Matrix 1			
Measures of Significant Project Traffic Impacts from Congestion Allowable Increases on Congested Roads and Intersections¹			
Road Segments			
LOS	2-lane Road	4-lane Road	6-lane Road
E	200 ADT	400 ADT	600 ADT
F	100 ADT	200 ADT	300 ADT
Intersections			
LOS	Signalized		Unsignalized
E	Delay of 2 seconds		20 peak hour trips on a critical movement ²
F	Delay of 1 second, or 5 peak hour trips on a critical movement ²		5 peak hour trips on a critical movement

¹ Allowable increase measured in terms of ADT

² A critical movement is one that is experiencing excessive queues.

Notes: By adding Proposed Project trips to all other trips from a list of projects, these same tables are used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.

The County may also determine that impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable LOS, when such traffic uses a significant amount of remaining road capacity.

2. A significant impact to Circulation Element roads, signalized intersections, and ramps would occur if the Proposed Project exceeds the thresholds in Threshold Matrix 2.

Threshold Matrix 2							
Measure of Significant Project Traffic Impacts for Circulation Element Roads, Signalized Intersections, and Ramps							
LOS With Project	Allowable Change Due to Project Impact						
	Freeways*		Roadway Segments¹		Signalized Intersections	Ramps	Ramps with >15 min. delay
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.) ²	Delay (min.) ²	Delay (min.) ²
LOS E and F	0.01	1	0.02	1	2	-	2

¹ For County arterials that are not identified in SANDAG's RTP and CMP as regionally significant arterials, significance may be measured based upon an increase in ADT. The allowable change in ADT due to Project impacts in this instance would be identified in Threshold Matrix 1.

² Delay = Average stopped delay per vehicle measured in seconds (sec.) or minutes (min.)

> = greater than

* It is noted that SANDAG does not have jurisdiction over freeways. Caltrans, the agency with jurisdiction over freeways within the study area, considers impacts to freeways significant if additional traffic causes the operations to drop one letter grade. The Caltrans thresholds are used in the analysis below.

3. A significant volume and/or LOS traffic impact on a signalized intersection would occur if additional or redistributed ADT generated by the Proposed Project would:
 - a. Cause a signalized intersection to operate below LOS D and significantly increase congestion as identified in Threshold Matrix 1; or
 - b. Significantly increase congestion on a signalized intersection currently operating at LOS E or LOS F as identified in Threshold Matrix 1.
4. A significant volume and/or LOS traffic impact on an unsignalized intersection would occur if additional or redistributed ADT generated by the Proposed Project would:
 - a. Generate 20 or more peak hour trips to a critical movement of an unsignalized intersection and cause the unsignalized intersection to operate below LOS D, or the unsignalized intersection currently operates at LOS E;
 - b. Generate five or more peak hour trips to a critical movement of an unsignalized intersection and cause the unsignalized intersection to operate below LOS E, or the unsignalized intersection currently operates at LOS F; or
 - c. Generate rates lower than those specified above based on an evaluation of existing accident rates, the signal priority list, intersection geometrics, proximity of adjacent driveways, sight distance, and/or other factors.
5. A significant impact from congestion at a freeway ramp would occur if additional or redistributed ADT generated by the Proposed Project would exceed the thresholds in Threshold Matrix 2. Other factors affecting these values would be considered, including ramp metering, location (rural vs. urban), ramp design, and the proximity of adjacent intersections.
6. A significant traffic hazard impact due to a design feature would occur if the Proposed Project would (on a case-by-case basis):
 - a. Have design features/physical configurations of access roads that would adversely affect the safe transport of vehicles along the roadway;
 - b. Result in a percentage and/or magnitude of increased traffic on the road that would affect the safety of the roadway;
 - c. Result in physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping, or other barriers that could result in vehicle conflicts with other vehicles and/or stationary objects; or
 - d. Not conform to the requirements of the private or public road standards, as applicable.
7. A significant traffic hazard impact to pedestrians and/or bicyclists would occur if the Proposed Project would (on a case-by-case basis):
 - a. Result in design features/physical configurations that would adversely affect the visibility of pedestrians and/or bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists;
 - b. Result in an amount of pedestrian activity at the project access points that may adversely affect pedestrian safety;
 - c. Result in the preclusion or substantial hindrance of the provision of a planned bike lane or pedestrian facility on a roadway adjacent to the project site;
 - d. Result in a percentage and/or magnitude of increased traffic on the road due to the Proposed Project that may adversely affect pedestrian and bicycle safety;

- e. Result in physical conditions on the project site and surrounding area, such as curves, slopes, walls, landscaping, or other barriers that could result in vehicle/pedestrian, vehicle/bicycle conflicts;
- f. Not conform to the requirements of the private or public road standards, as applicable; or
- g. Result in a substantial increase in pedestrian or bicycle activity without the presence of adequate facilities.

Guidelines Sources

Guidelines No. 1 through 7 are based on the County's Guidelines for Determining Significance for Traffic (Part XV-A) and County Report Format and Content Requirements – Transportation and Traffic (December 5, 2007). The County guidelines for potential traffic impacts were based on the San Diego Traffic Engineers' Council (SANTEC) and the Institute of Transportation Engineers (ITE – California Border Section) guidelines for the determination of significance.

Roadway and State Route Segments

The significance guidelines for roadway (including state route) segments (Guidelines No. 1 and 2) and the corresponding threshold matrices are based on a general assessment and average conditions. The roadway segments were analyzed based on the functional classification of the roadway using the County of San Diego Average Daily Vehicle Trips capacity table located in the County's Road Standards (1999), as illustrated in Table 2.2-1a. The state route segments were analyzed using V/C as outlined in the 2000 HCM, as shown in Table 2.2-1b.

Freeway Segments and Ramps

Guidelines Nos. 2 and 5 pertain to freeway segments and ramps. As noted in Caltrans' Guide for the Preparation of Traffic Impact Studies (2002a), the Caltrans-accepted methodology for analysis of freeway sections is to use the most current edition of the HCM. The freeway segments were analyzed based on a multi-lane highway LOS criterion using a V/C ratio, as outlined in the 2000 HCM.

Freeway LOS is determined on a peak hour basis and divided by the capacity of the segment to determine a V/C ratio for each freeway segment. Peak hour data from Caltrans, freeway ADT counts, and grades and truck percentages are used as the basis for existing conditions. The ADT is multiplied by the peak hour percentages and directional splits provided by Caltrans to provide a realistic peak hour volume by direction and peak hour for each freeway segment. Truck factors also are determined so that traffic splits, heavy vehicles, and grades can be taken into effect. Dividing by the capacity and using the LOS definitions based on V/C ratio provided by Caltrans, the LOS for each freeway segment (by direction) in the study area can be determined. The Guide for the Preparation of Traffic Impact Studies (2002a) also documents a maximum service flow rate of 2,350 passenger cars per hour per lane. Freeway LOS operations are based on the SANDAG's 2006 Congestion Management Program Update V/C ratios (Table 2.2-1c).

Signalized Intersections

The significance guidelines for signalized intersections (Guidelines No. 1 through 3) provided above and the criteria identified in the corresponding threshold matrices allow an increase of two seconds in the overall delay at an intersection operating at LOS E. An increased wait time of two seconds would not be noticeable to the average driver and thus would not constitute a significant traffic impact. This same rationale applies to an additional wait of one second at signalized intersections operating at LOS F. For

LOS F conditions, however, an additional guideline based on the number of trips added to a critical movement was used. (A critical movement is defined as a traffic movement that is experiencing excessive queues.) This threshold directly relates to the number of vehicles that can be added to an existing queue forming at an intersection without causing a noticeable disruption. A threshold of five peak hour trips per critical movement was used in Threshold Matrix 1.

“Operational method” procedures from Chapter 9 of the HCM 2000 are used to determine the peak hour LOS for signalized intersections. This method determines and reports LOS based on the total control delay per vehicle for a 15-minute analysis period, expressed in seconds. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Table 2.2-1d, summarizes the control delay and LOS criteria for both signalized and unsignalized intersections.

Unsignalized Intersections

The operating parameters and conditions for unsignalized intersections greatly differ from those of signalized intersections. For unsignalized intersections, LOS is determined by the computed or measured control delay and is defined for each minor movement; it is not defined for the intersection as a whole. Even very small volume increases on one leg or turn/through movement of an unsignalized intersection can substantially affect the calculated delay for the entire intersection. The significance of impacts to unsignalized intersections is based on a minimum overall number of trips added to a critical movement (i.e., a left-turn lane estimated to operate at LOS E or F).

The significance guidelines provided above for unsignalized intersections (Guidelines Nos. 1 and 4) set a minimum overall number of trips added to a critical movement at such an intersection and are supported by a standard also identified in Threshold Matrix 1. These guidelines are based on the number of trips added to a critical movement, since the operations of unsignalized intersections under congested conditions are heavily influenced by traffic volume increases on critical movements. Thus, Guidelines Nos. 1 and 4 relate to the number of vehicles that can be added to an existing queue forming at an intersection. A significance threshold of 20 peak hour trips per critical movement was used for LOS E conditions. A significance threshold of five peak hour trips per critical movement was used for LOS F conditions (i.e., Significance Guidelines 1 and 4).

Direct Versus Cumulative Impacts

The County Guidelines for Determining Significance – Transportation and Traffic (December 5, 2007) further establish criteria for determining project impacts to the road system, including a discussion of direct versus cumulative impacts. A direct impact is an impact “that would result [when one or more of the significance criteria outlined above is exceeded] solely from the implementation of the project.” A cumulative impact would occur as a result of traffic growth both from the project and from other projects in the area. Thus, a direct project impact would potentially occur under the Existing Plus Project conditions, and a cumulative impact would potentially occur under the Existing Plus Cumulative Plus Project or Buildout (Year 2030) Plus Project conditions.

2.2.3 Analysis of Project Effects and Determination as to Significance

Impacts to Road Segments (Guidelines Nos. 1 and 2)

Short-term (Construction) Impacts

As noted in Chapter 1.0, construction traffic is anticipated to primarily access the site via I-15, with minor numbers of workers or delivery trucks using SR 76. A total of 80 workers (worst case) and a maximum

of 25 truck trips per day for delivery of materials were assumed for each construction phase (including off-site improvements). Although construction traffic could slow or interrupt flow along area roadways, there are no plans to close area roads during construction or identify alternative routes for through traffic.

As noted in Subchapter 1.1, Proposed Project grading is projected to be balanced on and off site, and import or export of earthwork is not expected, reducing the number of truck trips to and/or from the site during the construction phase.

Project construction is anticipated to be ongoing over a period of five-to-six years (although market conditions, funding for public facilities, and similar conditions beyond the control of the developer may result in the extension of the construction period). During this period, construction traffic may contribute to temporary congestion and/or traffic delays in the Project vicinity. Due to the length of the construction period and the fact that various components of construction would overlap, projecting the delays on specific road segments and intersections (including off site) for the full six years would be speculative and would not result in a modification to the planned implementation of standard traffic control measures. Off-site roadway improvements would be limited to adding turn/through lanes and traffic signals to existing intersections. The Proposed Project includes the preparation and approval of a Traffic Control Plan (TCP), identified on Table 1-13, which would include measures to reduce traffic delays and minimize public safety impacts both on and off site. The TCP would include measures such as the use of flagmen; traffic cones; k-rails; lane-shifting; small, isolated detours and advanced notification signage; pedestrian/equestrian detours; and movement restrictions, as necessary. Because the Project site is located immediately north of SR 76, no temporary road closures are anticipated. In addition, the construction contractor would provide a means for public liaison/contact information for public inquiries and concerns. The TCP would be part of the Project and is included in the list of discretionary Project approvals, Project Design considerations enumerated on Table 1-13, and Chapter 8.0, List of Mitigation Measure and Environmental Design Considerations. The plan would have to be approved by the Director of County DPW. While construction traffic would be a nuisance to motorists in the Project vicinity (both on and off site) and could result in adverse short-term traffic impacts, these short-term effects would be lowered to a **less than significant** level via Project-mandated implementation of the TCP.

Operational Impacts

Proposed Project Roadway Network Improvements

In addition to each of the entirely on-site roads described in Chapter 1.0 of this EIR, the Project includes the construction or improvement of several Project roadways extending off site, and intersections with abutting off-site roadways as a part of Project design. These improvements are illustrated in Figure 2.2-3a, Existing Plus Project Roadway Segment Conditions, and Figures 2.2-3b and 2.2-2c, Existing Plus Project Intersection Conditions, as well as detailed in Chapter 8.0, List of Mitigation Measures and Environmental Design Considerations. Each of these Project-required design features were assumed to be in place as part of Existing Plus Project modeling. These Project features include the following:

- Segment of Horse Ranch Creek Road from Baltimore Oriole Road to SR 76: Applicant to construct a four-lane roadway per GP Update “Boulevard” standards
- Segment of Pala Mesa Drive from Old Highway 395 to north of Pankey Place Road: Project Applicant to construct (28 feet within a 40-foot roadbed), designed within a two-lane light collector
- Segment of Pankey Road from Pala Mesa Drive from to the Pankey Road bridge is 28 feet wide on a 40-foot roadbed. From the bridge Place to SR 76: Project Applicant to construct ~~four~~two-lane light collector

- Segment of Pankey Place from ~~Pala Mesa Drive~~ Pankey Road to Horse Ranch Creek Road: Project Applicant to construct two-lane light collector
- Intersection of SR 76/Horse Ranch Creek Road: Project Applicant to construct a traffic signal, right and left turn lanes on EB and WB SR 76
- Project Applicant to construct five roadway intersections along Horse Ranch Creek Road at Baltimore Oriole Road, Longspur Road, Harvest Glen Lane, Pardee South Loop, and Pankey Place.
- Project Applicant to construct the intersection of Pankey Place/~~Pala Mesa Drive~~ Pankey Road.

As noted above, SR 76 from I-15 easterly for a distance of approximately 1.4 miles ~~currently is~~ was being widened from two to four lanes during Project analysis. Because ~~this improvements will~~ were be completed prior to ~~occupancy of the~~ Proposed Project approval, the segment of SR 76 between I-15 and Horse Ranch Creek Road was analyzed as a four-lane roadway under Existing Plus Project conditions.

Project Traffic Generation

The Proposed Project would generate 19,941 daily trips, resulting in 1,423 trips during the AM peak hour period and 2,095 trips during the PM peak hour period (LOS Engineering, Inc. 2009, as amended). Table 2.2-6, Proposed Project Trip Generation, provides the trip generation rates for each land use, the projected volumes, and the AM and PM peak hour volumes. The Project's traffic generation rates are based upon 2002 SANDAG trip generation rates for the various types of land uses proposed.

Project Traffic Distribution

Project trips were distributed based on a SANDAG Series 11 traffic model. This traffic model is based on a regional model per the 2007 RTP, which incorporates anticipated traffic associated with all of the cities and unincorporated areas. Project trips were distributed based on existing traffic flow on County roads in the Project site vicinity and SANDAG select zone assignment (SZA). It is noted that under the cumulative scenario, a distribution adjustment to the SANDAG SZA was made. A 16 percent distribution to the Traffic Analysis Zone (TAZ) just south of SR 76 and Pankey Road was redistributed out to and along I-15. The SANDAG select zone is a computerized traffic forecast that has been plotted with Project-only trips from the Project zone shown distributed onto the street network. The traffic model works by matching up productions (i.e., residential units) with attractions (e.g., retail, education, office, etc.). These productions and attractions exist in certain discrete locations called traffic analysis zones that correspond to existing or proposed locations throughout the County of San Diego. The productions and attractions are based on land use data supplied by various agencies for use in planning situations such as population growth and traffic forecasts for the San Diego Region. As indicated above, SANDAG collects these data and maintains a region-wide traffic forecast model.

Because the Proposed Project contains many interacting uses that create the equivalent of a small town, some Proposed Project traffic would remain within the internal roadway system. Therefore, distribution of the Proposed Project traffic was modeled using SANDAG traffic assumptions with an internal capture rate. The internal capture area (northeast of I-15 and SR 76) is divided into multiple TAZs; to include Campus Park, Campus Park West (excluding the commercial area south of SR 76), Meadowood, and Palomar College. It was determined that if the Proposed Project was fully built-out, it would have a 33 percent internal capture rate, regardless of whether or not Campus Park West, Meadowood, and Palomar College are built. To be conservative, however, the 33 percent was rounded down to 30 percent. The use of this conservative capture rate was approved by Caltrans and the County, as documented within the TIS (LOS Engineering, Inc. 2009, as amended).

The Proposed Project would be constructed in phases, which affects the internal capture rate. The residential portion is planned to be constructed first, and the internal capture rate would thus be zero. As commercial development and other uses are added, the internal capture rate would increase. To be conservative, the near-term and long-term distribution scenarios assume that the entire Project would be developed and also assume a 30 percent internal capture rate (refer to Figure 6-7 of the TIS for an illustration of the conservative nature of the modeling).

Existing Plus Project Roadway Segment Impacts

As discussed under the Existing Levels of Service for Road Segments section above, none of the existing local roadway segments currently operates at unacceptable LOS (E or F) without the Project. Figure 2.2-4a, Existing Plus Project Average Daily Traffic – Roadway Segments, illustrates the Existing plus Project roadway ADT distribution. All analyzed roadway segments also would operate LOS D or better under Existing Plus Project conditions, including Old Highway 395, Stewart Canyon Road, Pankey Road, Pala Mesa Drive, Pankey Place, and Horse Ranch Creek Road. A portion of Horse Ranch Creek Road (between Baltimore Oriole Road to SR 76) would be classified as a Boulevard and would operate under capacity. As a result, all impacts to analyzed roadway segments under Existing Plus Project conditions would be **less than significant** per the County Guidelines and CMP.

Existing Plus Project State Route Segment Impacts

Proposed Project traffic would add a significant amount of traffic to six segments of SR 76 in the AM and/or PM peak hours by increasing the V/C by more than 0.02. Overall, the Proposed Project would cause a significant impact per the County Guidelines to the following segments of SR 76:

- South Mission Road to Via Monserate (LOS E WB during the AM peak hour and LOS F EB during the PM peak hour)
- Via Monserate to Gird Road (LOS E EB in the AM peak hour, LOS E WB during the AM peak hour, LOS F EB during the PM peak hour, and LOS E WB during the PM peak hour)
- Sage Road to Old Highway 395 (LOS E WB during the PM peak hour)
- I-15 NB ramps to I-15 NB ramps (LOS E EB during the AM and PM peak hours and LOS F WB during the PM peak hour)
- Horse Ranch Creek Road to Rice Canyon Road (LOS F WB during the PM peak hour)
- Rice Canyon Road to Couser Canyon Road (LOS F WB during the PM peak hour)

The Project would therefore result in direct **significant impacts** to these six state route segments. **(Impact TR-1)**

Impacts to Freeway Segments (Guideline No. 2)

As shown in Table 2.2-4, all three analyzed freeway segments would continue to operate at an acceptable LOS (A to D) with the addition of the Project traffic. In addition, the Project would not exceed Guideline No. 2. The Proposed Project would therefore result in a **less than significant impact** to freeway segments.

Impacts to Signalized Intersections (Guidelines No. 1, 2, and 3)

Figures 2.2-4b and 2.2-4c, Existing Plus Project Average Daily Traffic – Intersections, shows the distribution of all Project trips at each of the analyzed intersections. Table 2.2-5 shows the results of the Existing Plus Project analysis. The results of this analysis are summarized below.

A total of 14 signalized intersections exist within the Existing Plus Project study area. As noted above, the Proposed Project would signalize the intersection of SR 76 and Horse Ranch Creek Road; which is therefore assumed in Project modeling for Existing Plus Project conditions.

Under the existing conditions, all of the signalized intersections operate at acceptable levels. With the addition of the Proposed Project to the existing conditions, LOS at SR 76/I-15 NB ramps would be reduced from D to E during the PM peak hour. All other intersections would continue to operate at acceptable levels. Since the Proposed Project would add a delay greater than two seconds at the intersection of SR 76/I-15 NB ramps in the PM peak hour, the Project would result in a direct **significant impact** on this signalized intersection prior to mitigation. **(Impact TR-2)**

Impacts to Unsignalized Intersections (Guidelines No. 1 and 4)

A total of 11 unsignalized intersections were analyzed to determine Project-related impacts (Table 2.2-5). Under Existing conditions, Old Highway 395/Reche Road operates at LOS C and E during the AM and PM peak hours, respectively. Under Existing Plus Project conditions, this intersection would operate at LOS E and F during the AM and PM peak hours, respectively, and would add more than five trips to a critical movement. The Project would therefore result in a direct **significant impact** to this unsignalized intersection prior to mitigation. **(Impact TR-3)**

Traffic Hazards Due to Design Feature (Guideline No. 6)

Local and neighborhood streets within the Project would be constructed per County standard rights-of-way and specifications. All internal streets would be constructed with streetlights and standard curb and gutter and are designed to accommodate anticipated long-term traffic volumes. On-street parking would be permitted along both sides of most proposed residential roads within the site; parking would not be permitted along Horse Ranch Creek Road, Pankey Place, or Pankey Road/Pala Mesa Drive.

The Proposed Project includes a request for modifications to road standards related to driveway corner sight distance requirements and driveway spacing requirements. These modifications were approved by the County on October 14, 2008. Proposed modifications would not create any traffic hazards. Based on final plan consideration of feasible driveway/intersection separation (where corner landscaping might obscure visibility) to the extent allowed by lot lines, it was determined that the Project would not adversely affect the safety and flow of traffic. All other proposed on- and off-site road improvements would be constructed consistent with County road standards, which ensure safety in use and design, and because the Project site has been designed to ensure a usable and pedestrian-friendly community, complete with pedestrian-friendly roadways and driver-friendly view corridors, traffic hazard impacts relating to design features **would not occur** as a result of Project development.

It is noted that SR 76 has several potential hazards that were previously identified by the SR 76 East Corridor Study prepared by Reservation Transportation Authority (March). The identified potential hazards include a curve correction from Post Mile 18.80 to 19.00 and left-turn channelization at Rice Canyon Road Post Mile 19.39. These hazards currently exist and would not result from the Proposed Project. In addition, new alignments and widening of SR 76 east of ~~I-15~~ Granite Construction variously

proposed by ~~the Granite Construction Company~~, Caltrans, the Pala Band and the Warner Ranch projects would resolve several of these existing traffic hazards.

Traffic Hazard to Pedestrians/Bicyclists (Guideline No. 7)

Sidewalks and/or trails would be provided along all Project roads, which would separate pedestrians/equestrians from vehicular traffic and increase their safety along these roadways. Bike lanes would be provided along Horse Ranch Creek Road and, Pankey Road/Pala Mesa Drive, as well as adjacent to Pankey Place along SR 76 ~~frontage~~ on the north side of the road. Where the Project would complete intersection improvements as part of Project design, all new trails and bikeways would be constructed per County standards. Because of these provisions, impacts to pedestrian and bicyclist safety **would not occur** as a result of the Proposed Project.

2.2.4 Cumulative Impact Analysis

Each project has the potential to contribute vehicle trips and traffic impacts to the same road segments and intersections as those evaluated in the Proposed Project traffic analysis. Two cumulative analysis scenarios are addressed, including near-term development (once the Project is built out) of cumulative projects plus the Proposed Project (Cumulative Plus Project conditions), as well as the Year 2030 traffic forecast (prepared at SANDAG using the Series 10 Year 2030 model) plus development of the Proposed Project (Year 2030 Plus Project conditions).

Cumulative projects were accounted for through a General Plan summary approach where SANDAG provided a Series 10 Year 2030 model that included all cumulative projects that are consistent with the current land use plan, all ~~inconsistent~~ cumulative projects that will require a variance, such as a GPA, and all casino projects that have been submitted to the County. This cumulative traffic model approach is currently being utilized by the County for the General Plan Update.

County roadway traffic volumes for the Year 2030 study area were compared between the Series 10 existing General Plan model, the Series 10 update General Plan model, and the current SANDAG Year 2030 Series 11 model. The higher volumes between the traffic models were used for County roadways.

The reader should note that this is a conservative (i.e., assessed impacts are greater) cumulative analysis in that it includes all of the traffic projected as resulting from cumulative projects but does not assume the mitigation proposed by these other projects. In other words, the analysis is conservative because existing, rather than projected improved roadway conditions, provide the basis for analysis. (The reader should also note that applications submitted to the County, and included within projected cumulative conditions, frequently assume higher densities [with higher associated traffic generation] than what is ultimately permitted during project approval.)

Cumulative Plus Project Impacts

The Existing Plus Cumulative traffic conditions were determined by adding the SANDAG traffic model cumulative traffic volumes onto the existing traffic.

Roadway improvements already ~~under construction~~ constructed (i.e., the widening of SR 76 from two to four lanes by the Granite Construction Company) or roadway improvements needed to achieve access to the Project site (i.e., Horse Ranch Creek Road, Pala Mesa Drive, Pankey Road, Pankey Place, and all associated internal intersections) were incorporated into the cumulative analysis. These configurations are shown on Figure 2.2-5a, Existing Plus Cumulative Roadway Segment Conditions, and Figure 2.2-5b, Existing Plus Cumulative Intersection Conditions. Other roadway improvements are planned by the Pala

Tribe and Caltrans; however, these improvements were not incorporated into the cumulative analysis. The improvements not included in the analysis are:

- Pala Tribe (widening approximately 2,900 feet of SR 76 around the intersection of SR 76/Pauma Reservation Road)
- Caltrans SR 76 Middle Project (widen SR 76 to four lanes from Melrose Drive to South Mission Road)
- Caltrans SR 76 East Project (widen SR 76 to four lanes from South Mission Road to the easterly ramps at I-15)

Unknown improvements from other cumulative projects that would generate significant amounts of traffic also are not included. The other significant cumulative projects that would likely include traffic improvements include:

- Meadowood
- Campus Park West
- Pala Mesa Resort
- Palomar College
- Warner Ranch
- Pauma Tribe
- Pala Shopping Center
- Gregory Landfill

Road Segments (Guidelines No. 1 and 2)

Existing Plus Cumulative Roadway Segment Conditions (Without Proposed Project)

Figure 2.2-6a, Existing Plus Cumulative Average Daily Traffic – Roadway Segments, depicts the ADT distribution on roadways within the cumulative study area. Table 2.2-7, Road Segment Operations Under Existing Plus Cumulative Conditions, demonstrates that nine road segments would operate at an unacceptable LOS (E or F) in the Existing Plus Cumulative scenario (without the Proposed Project). Those roadway segments include seven segments of Old Highway 395 between East Mission Road and West Lilac Road and two segments of Reche Road between Green Canyon Norte and Gird Road.

Existing Plus Cumulative Plus Project Roadway Segment Conditions Before Mitigation

As shown on Figure 2.2-7a, Existing Plus Cumulative Plus Project Average Daily Traffic – Roadway Segments, as well as Table 2.2-8, Road Segment Operations Under Existing and Existing Plus Cumulative Plus Project Conditions, 11 roadway segments would operate at an unacceptable LOS in the Existing Plus Cumulative Plus Project scenario. The Proposed Project traffic in conjunction with cumulative traffic would exceed the ADT limits above levels indicated in Threshold Matrix 1 at each of the 11 roadway segments operating at unacceptable levels (LOS E or F) and exceed the 200 or 100 ADT contribution threshold for LOS E and F, respectively. The roadways that would be cumulatively impacted include:

- Old Highway 395 between:
 - East Mission Road and Reche Road (LOS F)
 - Reche Road and Stewart Canyon Road (LOS F)
 - Stewart Canyon Road and Tecalote Lane (LOS F)
 - Tecalote Lane and Pala Mesa Drive (LOS F)

- Pala Mesa Drive and SR 76 (LOS F)
- SR 76 and Dulin Road (LOS E)
- Dulin Road and West Lilac Road (LOS F)

- Reche Road between:
 - Green Canyon Norte and Live Oak Park Road (LOS E)
 - Live Oak Park Road to Gird Road (LOS E)

- Pankey Road between:
 - SR 76 and Shearer Crossing (LOS E)

- Pala Mesa Drive between:
 - Wilt Road/Sage Road and Old Highway 395 (LOS E)

Based on the preceding analysis, the Proposed Project would contribute to cumulatively **significant impacts** to the above-listed 11 roadway segments prior to implementation of mitigation. **(Impact TR-4)**

State Route Segments (Guidelines No. 1 and 2)

Existing Plus Cumulative State Route Segment Conditions (Without Proposed Project)

Figure 2.2-6a shows the ADT distribution on SR 76 within the cumulative study area. As shown on Table 2.2-9, SR 76 Operations Under Existing Plus Cumulative Conditions, 12 segments of SR 76 would operate at an unacceptable LOS (E or F) in Existing Plus Cumulative conditions (without the Proposed Project). Those segments include eight segments between Melrose Drive and Old Highway 395, I-15 SB ramps and I-15 NB ramps, and three segments between Horse Ranch Creek Road and Pala Mission Road.

Existing Plus Cumulative Plus Project State Route Segment Conditions Before Mitigation

As shown on Figure 2.2-7a and Table 2.2-10, SR 76 Operations Under Existing and Existing Plus Cumulative Plus Project Conditions, the same 12 segments of SR 76 would operate at an unacceptable LOS in the Existing Plus Cumulative Plus Project scenario. Cumulative impacts to these segments would be significant:

- Melrose Drive to Old Highway 395 (LOS F EB and WB during the AM and PM peak hours along eight segments)
- I-15 NB ramps to I-15 SB ramps (LOS F EB and WB during the AM and PM peak hours)
- Horse Ranch Creek Road to Rice Canyon Road (LOS F west bound during the AM peak hour and LOS F EB and WB during the AM and PM peak hours)
- Rice Canyon Road to Couser Canyon Road (LOS F EB and LOS E WB during the AM peak hour and LOS F EB and WB during the PM peak hour)
- Couser Canyon Road to Pala Mission Road (LOS E EB during the AM and PM peak hours and LOS F WB during the PM peak hour)

Based on the preceding analysis, the Proposed Project would contribute to cumulatively **significant impacts** to the above-noted 12 segments of SR 76 prior to mitigation. **(Impact TR-5)**

Freeway Segments (Guideline No. 2)

Existing Plus Cumulative Freeway Segment Conditions (Without Proposed Project)

Under Existing Plus Cumulative conditions (without the Proposed Project), all analyzed I-15 freeway segments within the cumulative study area operate at acceptable levels of service during both the AM and PM peak hours (Table 2.2-11, I-15 Operations Under Existing Plus Cumulative Conditions).

Existing Plus Cumulative Plus Project Freeway Segment Conditions

Table 2.2-12, I-15 Operations Under Existing, Cumulative Plus Project, and Existing Plus Cumulative Plus Project Conditions, shows the peak hour analysis results under cumulative traffic conditions for Project area freeway segments. All freeway segments within the study area would operate at acceptable levels with the addition of cumulative and Proposed Project traffic during AM and PM peak hours. Therefore, impacts would be **less than significant**.

Signalized Intersections (Guidelines No. 1, 2, and 3)

Existing Plus Cumulative Signalized Intersection Conditions (Without Proposed Project)

The intersection configuration and ADT used in the cumulative analysis is illustrated in Figures 2.2-6b and 2.2-6c, Existing Plus Cumulative Average Daily Traffic – Intersections. As shown in Table 2.2-13, Intersection Operations Under Existing Plus Cumulative Conditions, 12 signalized intersections would operate at an unacceptable LOS under Existing Plus Cumulative conditions without the Proposed Project. Those intersections include the following:

- SR 76/Gird Road (LOS F during the PM peak hour)
- SR 76/Old Highway 395 (LOS F during the AM and PM peak hours)
- SR 76/I-15 SB ramps (LOS F during the AM and PM peak hours)
- SR 76/I-15 NB ramps (LOS E during the AM peak hour and LOS F during the PM peak hour)
- Mission Road/Old Highway 395 (LOS F during the PM peak hour)
- Mission Road/I-15 SB ramps (LOS E during the AM peak hour)
- Mission Road/I-15 NB ramps (LOS F during the PM peak hour)
- SR 76/Melrose Drive (LOS F during the AM peak hour and LOS E during the PM peak hour)
- SR 76/East Vista Way (LOS F during the AM and PM peak hours)
- SR 76/North River Road (LOS F during the AM and PM peak hours)
- SR 76/Olive Hill Road (LOS F during the AM and PM peak hours)
- SR 76/South Mission Road (LOS F during the PM peak hour)

Existing Plus Cumulative Plus Project Signalized Intersection Conditions Before Mitigation

Figures 2.2-7b and 2.2-7c, Existing Plus Cumulative Plus Project Average Daily Traffic – Intersections, illustrate the ADT for each intersection analyzed in the Existing Plus Cumulative Plus Project scenario. Under this scenario, 12 signalized intersections would operate at unacceptable LOS with a change in delay of greater than two seconds (Table 2.2-14, Intersection Operations Under Existing and Existing Plus Cumulative Plus Project Conditions). Overall, the Proposed Project, along with other cumulative projects, would cause significant cumulative impacts to the following signalized intersections in the near-term:

- SR 76/Gird Road (LOS F during the PM peak hour)
- SR 76/Old Highway 395 (LOS F during the AM and PM peak hours)

- SR 76/I-15 SB ramps (LOS F during the AM and PM peak hours)
- SR 76/I-15 NB ramps (LOS F during the AM and PM peak hours)
- Mission Road/Old Highway 395 (LOS F during the PM peak hour)
- Mission Road/I-15 SB Ramps (LOS E in the AM peak hour and LOS F during the PM peak hour)
- Mission Road/I-15 NB Ramps (LOS F during the PM peak hour)
- SR 76/Melrose Drive (LOS F during the AM and PM peak hours)
- SR 76/East Vista Way (LOS F during the AM and PM peak hours)
- SR 76/North River Road (LOS F during the AM and PM peak hours)
- SR 76/Olive Hill Road (LOS F during the AM and PM peak hours)
- SR 76/South Mission Road (LOS F during PM peak hour)

The Proposed Project would cause Significance Guidelines No. 1 and 2 to be exceeded at the above intersections; therefore, the Project would contribute to cumulatively **significant impacts** upon the 12 identified signalized intersections before mitigation. **(Impact TR-6)**

Unsignalized Intersections (Guidelines No. 1 and 4)

Existing Plus Cumulative Unsignalized Intersection Conditions (Without Project)

As shown in Table 2.2-13, 10 unsignalized intersections would operate at an unacceptable LOS under Existing Plus Cumulative conditions without the Proposed Project. The unsignalized intersections that would operate at unacceptable levels in the Existing Plus Cumulative scenario include the following:

- SR 76/Via Monserate (LOS F during the AM and PM peak hours)
- SR 76/Sage Road (LOS F during the AM and PM peak hours)
- Old Highway 395/Dulin Road (LOS E during the PM peak hour)
- SR 76/Pankey Road (LOS F during AM and PM peak hours)
- SR 76/Rice Canyon Road (LOS F during the AM and PM peak hours)
- SR 76/Couser Canyon Road (LOS F during the AM and PM peak hours)
- Old Highway 395/Pala Mesa Drive (LOS F during AM and PM peak hours)
- Old Highway 395/Stewart Canyon Road (LOS F during AM and PM peak hours)
- Old Highway 395/Reche Road (LOS F during AM and PM peak hours)
- Reche Road/Live Oak Park Road (LOS E during the AM peak hour)

Existing Plus Cumulative Plus Project Unsignalized Intersection Conditions Before Mitigation

Table 2.2-14 shows that 10 of the analyzed 37 unsignalized intersections would operate at unacceptable LOS E or F with a change in delay of greater than two seconds during the AM and/or PM peak hour periods under the Existing Plus Cumulative Plus Project scenario. The Project, along with other cumulative projects, are expected to add significantly to the unacceptable LOS experienced at 10 unsignalized intersections, which are listed below:

- SR 76/Via Monserate (LOS F during the AM and PM peak hours)
- SR 76/Sage Road (LOS F during the AM and PM peak hours)
- Old Highway 395/Dulin Road (LOS F during the PM peak hour)
- SR 76/Pankey Road (LOS F during AM and PM peak hours)
- SR 76/Rice Canyon Road (LOS F during the AM and PM peak hours)
- SR 76/Couser Canyon Road (LOS F during the AM and PM peak hours)
- Old Highway 395/Pala Mesa Drive (LOS F during AM and PM peak hours)

- Old Highway 395/Stewart Canyon Road (LOS F during AM and PM peak hours)
- Old Highway 395/Reche Road (LOS F during AM and PM peak hours)
- Reche Road/Live Oak Park Road (LOS E during AM peak hour)

It has therefore been determined that the Project would contribute to cumulatively **significant impacts** to 10 unsignalized intersections before mitigation. **(Impact TR-7)**

Buildout (Year 2030) Plus Project Impacts

The Buildout (Year 2030; Horizon Year) traffic analysis evaluates long-term future traffic conditions in the Project area using the SANDAG Series 10 (Year 2030) and SANDAG Series 11 (Year 2030) traffic model and considering traffic with and without development of the Proposed Project. The study area is based on the limit of where 50 peak hour projects would travel. Implementation of the Horse Ranch Creek Road, Pala Mesa Drive, and Pankey Road extensions were assumed for the purposes of the Year 2030 analysis. The model also assumes that all of SR 76 within the study area would be widened to four lanes. The Year 2030 roadway and intersection conditions assumed in the analysis below are illustrated in Figure 2.2-8a, Buildout (Year 2030) Roadway Segment Conditions, and Figure 2.2-8b, Buildout (Year 2030) Intersection Conditions.

Road Segments (Guidelines No. 1 and 2)

Buildout (Year 2030) Roadway Segment Conditions (Without Proposed Project)

Under the Buildout (Year 2030) scenario (without the Proposed Project), 1 of the 17 analyzed roadway segments (Pankey Road between SR 76 and Shearer Crossing) would operate at an unacceptable LOS F (Table 2.2-15, Roadway Segment Operations Under Buildout (Year 2030) and Buildout (Year 2030) Plus Project Conditions, and Figure 2.2-9a, Buildout (Year 2030) Without Project Average Daily Traffic – Roadway Segments).

Buildout (Year 2030) Plus Project Roadway Segment Conditions Before Mitigation

Table 2.2-15 provides a comparison of Buildout (Year 2030) ADT with and without the Proposed Project. Figure 2.2-10a, Buildout (Year 2030) Plus Project Average Daily Traffic – Roadway Segments, illustrates the ADT distribution. As can be seen in Table 2.2-15, 1 of the 17 analyzed roadway segments (Pankey Road between SR 76 and Shearer Crossing) would operate at an unacceptable LOS F under Buildout (Year 2030) Plus Project conditions. In summary, the Project would contribute to cumulatively **significant impacts** to one roadway segment in the Year 2030 before mitigation. **(Impact TR-8)**

State Route Segments (Guidelines No. 1 and 2)

Buildout (Year 2030) State Route Segment Conditions (Without Proposed Project)

As shown in Table 2.2-16, SR 76 Operations Under Buildout (Year 2030) and Buildout (Year 2030) Plus Project Conditions, and Figure 2.2-9a, under the Buildout (Year 2030) scenario (without the Proposed Project), all of the 10 analyzed segments of SR 76 would operate at acceptable levels of service (LOS D or better).

Buildout (Year 2030) Plus Project State Route Segment Conditions

Similar to the Buildout (Year 2030) scenario without the Proposed Project, under Buildout (Year 2030) Plus Project conditions, all analyzed segments of SR 76 would operate at acceptable levels of service

(LOS D or better; Table 2.2-16). Therefore, impacts to SR 76 would be **less than significant** with or without implementation of the Proposed Project.

Freeway Segments (Guideline No. 2)

Buildout (Year 2030) Freeway Segment Conditions (Without Proposed Project)

The three freeway segments within the cumulative study area would operate at LOS E or F under the Buildout (Year 2030) scenario without the Proposed Project (Table 2.2-17, I-15 Operations Under Buildout (Year 2030) and Buildout (Year 2030) Plus Project Conditions). The freeway segments include:

- NB I-15 from Rainbow Valley Boulevard to Mission Road (LOS F in the AM and PM peak hours)
- SB I-15 from Rainbow Valley Boulevard to Mission Road (LOS E in the AM peak hour and LOS F in the PM peak hour)
- NB and SB I-15 from Mission Road to SR 76 (LOS F in the PM peak hour)
- NB I-15 from SR 76 to Escondido Highway (LOS E in the PM peak hour)
- SB I-15 from SR 76 to Escondido Highway (LOS F in the PM peak hour)

Buildout (Year 2030) Plus Project Freeway Segment Conditions

Table 2.2-17 shows a comparison of the peak-hour analysis results under Buildout (Year 2030) Plus Project conditions for the freeway segments within the Project study area. With the addition of the Project, all three freeway segments within the cumulative study area would continue to operate at the same LOS as under the Year 2030 without project conditions, with the exception of one (I-15 from SR 76 to Old Highway 395 NB during the AM peak hour), which would decrease from LOS C to D with the Project. Because the change in V/C would be 0.01 or less for each of these freeway segments, cumulative impacts to I-15 under Buildout (Year 2030) conditions are considered **less than significant**.

Signalized Intersections (Guidelines No. 1, 2, and 3)

Buildout (Year 2030) Signalized Intersection Conditions (Without Proposed Project)

As shown in Table 2.2-18, Intersection Operations Under Buildout (Year 2030) and Buildout (Year 2030) Plus Project Conditions, all signalized intersections would operate at LOS D or better under Buildout (Year 2030) conditions without the Project. The ADT traveling through each intersection under Buildout (Year 2030) conditions without the Proposed Project are displayed in Figure 2.2-9b, Buildout (Year 2030) Without Project Average Daily Traffic – Intersections.

Buildout (Year 2030) Plus Project Signalized Intersection Conditions

As with the Buildout (Year 2030) conditions without the Proposed Project, no signalized intersection would operate at unacceptable levels under the Buildout (Year 2030) Plus Project conditions (Table 2.2-18). The ADT distribution for this scenario is illustrated in Figure 2.2-10b, Buildout (Year 2030) Plus Project Average Daily Traffic – Intersections. The Project would add traffic to the signalized intersections within the traffic study area in the Year 2030. The affected intersections were analyzed with identified circulation element capacities, and each has the capacity to support Project-related traffic. As a result, the Project would have a cumulatively **less than significant impact** to signalized intersections under Buildout (Year 2030) conditions.

Unsignalized Intersections (Guidelines No. 1 and 4)

Buildout (Year 2030) Unsignalized Intersection Conditions (Without Proposed Project)

As shown in Table 2.2-18, all unsignalized intersections would operate at LOS D or better under Buildout (Year 2030) conditions without the Proposed Project.

Buildout (Year 2030) Plus Project Unsignalized Intersection Conditions

Similar to Buildout (Year 2030) conditions without the Proposed Project, no unsignalized intersection would operate at unacceptable levels of service under Buildout (Year 2030) Plus Project conditions (Table 2.2-18). The ADT distributions for this scenario is illustrated in Figure 2.2-10b. The Project would add traffic to the unsignalized intersections within the traffic study area in the Year 2030. The affected intersections were analyzed with identified circulation element capacities, and each has the capacity to support Project-related traffic. As a result, the Project would have a cumulatively **less than significant impact** to unsignalized intersections under Buildout (Year 2030) conditions.

2.2.5 Significance Prior to Mitigation

Prior to mitigation and under current roadway conditions, the Proposed Project would result in significant direct and cumulative impacts to a number of roadway and state route segments and intersections (both signalized and unsignalized).

Impact TR-1 Under Existing Plus Project conditions, direct impacts (both County and CMP impacts) would occur at the following segments of SR 76:

- South Mission Road to Gird Road
- Sage Road to Old Highway 395
- I-15 SB ramps to I-15 NB
- Horse Ranch Creek Road to Couser Canyon Road

Impact TR-2 Under Existing Plus Project conditions, direct impacts (both County and CMP impacts) would occur at the following signalized intersection:

- SR 76/I-15 NB ramps (PM peak hour)

Impact TR-3 Under Existing Plus Project conditions, direct impacts (both County and CMP impacts) would occur at the following unsignalized intersection:

- Old Highway 395/Reche Road (AM and PM peak hours)

Impact TR-4 Under Existing Plus Cumulative Plus Project conditions, the Proposed Project would contribute to significant cumulative impacts to the following local roadway segments:

- Old Highway 395 from East Mission Road to West Lilac Road
- Reche Road from Green Canyon Norte to Gird Road
- Pankey Road from SR 76 to Shearer Crossing
- Pala Mesa Drive from Wilt Road/Sage Road to Old Highway 395

- Impact TR-5 Under Existing Plus Cumulative Plus Project conditions, the Proposed Project would contribute to significant cumulative impacts to the following segments of SR 76:
- Melrose Drive to Old Highway 395
 - I-15 SB ramps to I-15 NB ramps
 - Horse Ranch Creek Road to Pala Mission Road
- Impact TR-6 Under Existing Plus Cumulative Plus Project conditions, the Proposed Project would contribute to significant cumulative impacts to the following 12 signalized intersections:
- SR 76/Gird Road (PM peak hour)
 - SR 76/Old Highway 395 (AM and PM peak hours)
 - SR 76/I-15 SB ramps (AM and PM peak hours)
 - SR 76/I-15 NB ramps (AM and PM peak hours)
 - Mission Road/Old Highway 395 (PM peak hour)
 - Mission Road/I-15 SB ramps (AM and PM peak hours)
 - Mission Road/I-15 NB ramp (PM peak hour)
 - SR 76/Melrose Drive (AM and PM peak hours)
 - SR 76/East Vista Way (AM and PM peak hours)
 - SR 76/North River Road (AM and PM peak hours)
 - SR 76/Olive Hill Road (AM and PM peak hours)
 - SR 76/South Mission Road (PM peak hour)
- Impact TR-7 Under Existing Plus Cumulative Plus Project conditions, the Proposed Project would add a cumulatively significant amount of traffic to the following 10 unsignalized intersections:
- SR 76/Via Monserate (AM and PM peak hours)
 - SR 76/Sage Road (AM and PM peak hours)
 - SR 76/Pankey Road (AM and PM peak hours)
 - SR 76/Rice Canyon Road (AM and PM peak hours)
 - SR 76/Couser Canyon Road (AM and PM peak hours)
 - Old Highway 395/Pala Mesa Drive (AM and PM peak hours)
 - Old Highway 395/Stewart Canyon Road (AM and PM peak hours)
 - Old Highway 395/Reche Road (AM and PM peak hours)
 - Old Highway 395/Dulin Road (PM peak hour)
 - Reche Road/Live Oak Park Road (AM peak hour)
- Impact TR-8 Under Year 2030 plus Project conditions, the Proposed Project would significantly contribute to cumulative impacts at the following roadway segment:
- Pankey Road from SR 76 to Shearer Crossing

2.2.6 Mitigation

As enumerated in Section 2.2.5, the Proposed Project would result in significant direct and cumulative impacts to both local roadway and state route segments and intersections. Mitigation measures proposed to address Project-specific impacts as well as the Project contribution to cumulative impacts are identified below and summarized in Tables 2.2-19, Summary of Traffic Impacts and Mitigation. Mitigation

measures for direct impacts are shown in Figures 2.2-11a, Key Map – Project Features and Mitigation Measures, and Figures 2.2-11b through 2.2-11d, Project Features and Mitigation Measures. Mitigation phasing on these figures is based on implementation of residential units. In order to address phasing of non-residential uses, the square footage of those commercial/business uses would be converted to ADT.

All cumulative impacts are mitigated by the Project Applicant paying into the County TIF. The County's TIF Program provides a mechanism for mitigating the impacts created by future growth within the unincorporated area. The TIF is a fee offered to developers to facilitate compliance with the CEQA mandate that development projects mitigate their cumulative traffic impacts. The County TIF Program assesses the fee on all new development that results in new/added traffic. The primary purpose of the TIF is twofold: (1) to fund the construction of identified roadway facilities needed to reduce, or mitigate, projected cumulative traffic impacts resulting from future development within the County; and (2) to allocate the costs of these roadway facilities proportionally among future developing properties based upon their individual cumulative traffic impacts.

TIF fees are collected into 23 local Community Planning Area accounts, 3 regional accounts, and 3 regional freeway ramp accounts. TIF funds are only used to pay for improvements to roadway facilities identified for inclusion in the TIF Program, which include both County roads and Caltrans highway facilities. TIF funds collected for a specific local or regional area must be spent in the same area. For example, TIF fees collected in the North Region TIF account may only be used for improvements to TIF facilities in the North Region. By ensuring TIF funds are spent for the specific roadway improvements identified in the TIF Program, the CEQA mitigation requirement is satisfied and the Mitigation Fee Act nexus is met.

As part of the TIF Program process, the transportation infrastructure needs are characterized as existing deficiencies, direct impacts of future development, or indirect (cumulative) impacts of future development. Existing roadway deficiencies are the responsibility of existing developed land uses and government agencies and cannot be financed with impact fees. The TIF Program is not intended to mitigate direct impacts, which will continue to be the responsibility of individual development projects. Therefore, the TIF Program is only designed to address the cumulative impacts associated with new growth.

The County TIF Program enables projects to complete CEQA compliance and move forward by paying a fair share of the cost of improving roads in the future as the levels of service become unacceptable due to increased traffic volume caused by the cumulative impacts of various developments. The County's TIF Program goes into great detail in identifying anticipated development, affected roads, roadway costs, and the existing and projected levels of service on those roads. As sufficient funds become available, the County will implement the improvements to which it has committed.

In general, contribution to the TIF Program will mitigate a project's cumulative impacts within the unincorporated area. However, there will be some development projects that do not conform to the County's existing or proposed land use plan (e.g., GPAs and SPAs), which would result in increases in density or intensity where the adopted TIF projections did not analyze their cumulative impacts, and which would prevent the County's planned Circulation Element road system from operating at its planned levels of service at buildout. If approved, GPA, Specific Plan, and SPA projects resulting in increased densities will need to fully mitigate their direct and cumulative impacts. The direct impact mitigation required for the non-conforming projects are expected to address cumulative roadway deficiencies not envisioned as part of the TIF Program and/or the County's planned Circulation Element roadway system.

M-TR-1 Direct impacts to SR 76 from I-15 SB ramps to I-15 NB ramps shall be mitigated by Project Applicant construction of a loop on-ramp at the intersection of SR 76/I-15 SB ramps and

restriping of the bridge to four lanes at the point that 344 residential units (multi- and single-family) are occupied.

Direct impacts to other segments of SR 76 shall require the following mitigation:

- SR 76 from South Mission Road to Gird Road Under TransNet SR 76 Widening, SR 76 shall be widened to four lanes. Due to timing considerations, the Project Applicant would require a Statement of Overriding Considerations if the Proposed Project is occupied before TransNet improvements.
- SR 76 from Sage Road to Old Highway 395 Under TransNet SR 76 Widening, SR 76 shall be widened to four lanes. Due to timing considerations, the Project Applicant would require a Statement of Overriding Considerations if the Proposed Project is occupied before TransNet improvements.
- SR 76 from Horse Ranch Creek Road to Couser Canyon Road Under Caltrans, SR 76 shall be widened to four lanes. Due to timing considerations, the Project Applicant would require a Statement of Overriding Considerations if the Proposed Project is occupied before Caltrans improvements.

M-TR-2 Direct impacts to the SR 76/I-15 NB ramps signalized intersection shall be mitigated by Project Applicant construction of an EB to NB loop ramp and restriping of the bridge to four through lanes (two lanes in each direction). A NB right-turn lane and WB right-turn lane shall be added to the SR 76 and I-15 NB on- and off-ramps.

M-TR-3 Direct impacts to the Old Highway 395/Reche Road unsignalized intersection shall be mitigated by Project Applicant installation of a traffic signal.

M-TR-4 Existing Plus Cumulative Plus Project impacts to roadway segments listed below shall be mitigated through Project Applicant participation in the Transportation Impact Fee (TIF) Program:

- Old Highway 395 from East Mission Road to West Lilac Road
- Reche Road from Green Canyon Norte to Gird Road
- Pankey Road from SR 76 to Shearer Crossing
- Pala Mesa Drive from Wilt Road/Sage Road to Old Highway 395

M-TR-5 Existing Plus Cumulative Plus Project impacts to segments of SR 76 listed below shall be mitigated through Project Applicant participation in the TIF Program:

- Melrose Drive to Old Highway 395
- I-15 SB ramps to I-15 NB ramps
- Horse Ranch Creek Road to Pala Mission Road

M-TR-6 Existing Plus Cumulative Plus Project impacts to the signalized intersections listed below shall be mitigated through Project Applicant participation in the TIF Program:

- SR 76/Gird Road
- SR 76/Old Highway 395
- SR 76/I-15 SB ramps
- SR 76/ I-15 NB ramps
- Mission Road/Old Highway 395
- Mission Road/I-15 SB ramps
- Mission Road/I-15 NB ramp
- SR 76/Melrose Drive
- SR 76/East Vista Way
- SR 76/North River Road
- SR 76/Olive Hill Road
- SR 76/South Mission Road

M-TR-7 Existing Plus Cumulative Plus Project impacts to the unsignalized intersections listed below shall be mitigated through Project Applicant participation in the TIF Program:

- SR 76/Via Monserate
- SR 76/Sage Road
- Old Highway 395/Dulin Road
- SR 76/Pankey Road
- SR 76/Rice Canyon Road
- SR 76/Couser Canyon Road
- Old Highway 395/Pala Mesa Drive
- Old Highway 395/Stewart Canyon Road
- Old Highway 395/Reche Road
- Reche Road/Live Oak Park Road

M-TR-8 Buildout (Year 2030) Plus Project impacts to roadway segment listed below shall be mitigated through Project Applicant participation in the TIF Program:

- Pankey Road from SR 76 to Shearer Crossing (suggested mitigation: widen roadway to four-lane collector)

In response to community concerns raised at Planning Group Meetings, the Project Applicant is also proposing an alternative mitigation approach for the cumulative and buildout (Year 2030) impacts addressed in M-TR-6 through M-TR-8, above, in conjunction with TIF payments. This alternative proposal is presented as M-TR-6a to 8a, below.

M-TR-6a to 8a

Existing Plus Cumulative Plus Project and Buildout (Year 2030) Plus Project impacts to signalized and unsignalized intersections, as well as roadway segments, would be mitigated through the Project Applicant allocating the monies identified as TIF payments for the Proposed Project to design and construct specific intersection improvements, thereby providing the community with completed intersection upgrades when needed rather than waiting until all the TIF payments by others are collected and design efforts are completed. The improvements completed by the Project Applicant under this scenario would include:

- ~~SR 76/Old Highway 395~~ Project Applicant shall construct NB to WB and SB to EB left turn lanes, and complete signal modifications.
- Old Highway 395/ Pala Mesa Drive Project Applicant shall install a traffic signal, and construct additional NB and SB through lanes and EB to NB and WB to SB left-turn lanes.
- Old Highway 395/ Stewart Canyon Road Project Applicant shall install a traffic signal and add a WB to SB left-turn lane.
- SR 76/Pala Mesa Drive Pankey Road Project Applicant shall ~~install a traffic signal and add NB to WB and SB to EB left turn lanes~~ revamp Pankey Road to tie into existing SR 76.

2.2.7 Conclusion

Development of the Proposed Project would result in potentially significant direct and cumulative traffic impacts to a number of study area road segments and intersections. The mitigation measures proposed above would mitigate all direct Project-related effects to roadway segments and intersections (through improvement to an acceptable LOS) to below a level of significance with the exception of SR 76 segments between South Mission Road and Gird Road, Sage Road and Old Highway 395, and Horse Ranch Creek Road and Couser Canyon Road, which would be completed by others (Table 2.2-19, Summary of Traffic Impacts and Mitigation) and are additionally discussed below. Cumulative impacts would be mitigated through participation in the TIF Program or, alternatively, through participation in the TIF Program and partial construction of selected intersection improvements.

To mitigate the direct impacts to intersections, the Project proposes to complete intersection improvements (M-TR-2 and M-TR-3). Under M-TR-2, direct impacts to the SR 76/I-15 NB ramps signalized intersection shall be mitigated by Project Applicant construction of an EB to NB loop ramp and restriping of the bridge to four through lanes (two lanes in each direction). A NB right-turn lane and WB right-turn lane shall be added to the SR 76 and I-15 NB on- and off-ramps. Under M-TR-3, direct impacts to the Old Highway 395/Reche Road unsignalized intersection shall be mitigated by Project Applicant installation of a traffic signal. This improvement would reduce intersection overall delay (wait time), resulting in improved intersection LOS. The proposed improvements would improve all the intersections to operate at acceptable levels, as shown in Table 2.2-20, Mitigation for Direct Impacts to Intersections, thereby appropriately mitigating the impacts.

As noted above, there are several projects in the vicinity that have either recently completed or plan to be completed ~~or are currently to widening~~ SR 76 (Table 2.2-21, Mitigation for Direct Impacts to SR 76 to be Completed by Other Responsible Parties). Once the roadway is widened, its capacity would increase and Project-related ADT would no longer contribute to unacceptable LOS. Specifically, improvements associated with widening of SR 76 from I-15 to east of the Proposed Project (just east of the Granite Construction driveway) are ~~almost~~ completed at this time. The Caltrans TransNet SR 76 Widening Project (TransNet), which would widen SR 76 from South Mission Road to Old Highway 395 to four lanes, including the I-15/SR 76 interchange, is under design and EIR review. The Warner Ranch project would widen SR 76 from the Granite driveway to Couser Canyon Road; and the County is reviewing a preliminary design for this improvement. Because the TransNet and the Warner Ranch projects are still in planning stages and improvements to SR 76 are under the jurisdiction of Caltrans, the impacts to SR 76 from South Mission Road to Old Highway 395 and from the Granite Construction driveway to Couser Canyon Road would remain significant and unmitigated at this time.

~~It should be noted that the Project would account for approximately five percent of the existing ADT along SR 76. This is already a percentage substantially reduced from traffic loading associated with the existing and adopted General Plan and Specific Plan for this Project. In other words, the Proposed Project already constitutes a reduced traffic alternative. In addition, and a~~ To fully alleviate the short-term direct impacts to SR 76 within the study area, the road would need to be widened to four lanes along all of the impacted segments (a total of approximately 4.1 miles). Given the magnitude and ongoing nature of the projects/plans summarized above, widening SR 76 along these affected segments would require detailed engineering and construction beyond the capability of a single private applicant (including extensive conversion of existing land uses beyond their purview/ability). These improvements would require regional highway modifications of a magnitude and scope disproportionate to the current development project and outside the jurisdiction of the County to approve. The resolution of the existing and projected inadequate service capacities along SR 76, which is a designated state highway, must occur on a regional level. As noted, the lead agency with authority to approve and implement these improvements is Caltrans, and they are already underway in planning and coordination with others regarding focused segment improvements. The County, Caltrans and the Project Applicant have met and conferred regarding Project impacts and appropriate mitigation and Caltrans has confirmed that proposed Project mitigation is appropriate (Armstrong, pers. comm., October 25, 2010). Also as noted in the text above, impacts would be partially mitigated by implementation of required intersection Project design features and mitigation measures. Intersections create “choke points” along a roadway, and intersection improvements facilitate better traffic flow overall as a result of better flow through the improved intersection. Turn pockets at future Horse Ranch Creek Road would be implemented by the Project in order to move turning traffic out of through lanes on SR 76 and the SR 76 and I-15 on-ramps would be improved by the Project (or others as partially funded as mitigation by the Applicant) prior to Project implementation. Additionally, completion of east-west Pankey Place as a Circulation Element light collector would be expected to remove some traffic accessing future Campus Park West, Campus Park and/or Meadowood traffic from SR 76. To fully alleviate the direct impacts to SR 76 within the study area, however, the road would need to be widened to four lanes along all of the impacted segments. These improvements would be beyond the purview/ability of a private applicant. The resolution of the existing and projected inadequate service capacities along SR 76, which is a designated state highway, must occur on a regional level.

Despite the ~~intersection~~ mitigative elements discussed above, ~~on,~~ short-term impacts to SR 76 would temporarily remain significant and unmitigated. A Statement of Overriding Considerations would be required for the direct segment Project impacts identified above and that cannot be mitigated by the Applicant. The reader should note, however, that these unmitigated impacts would occur over the short-term and ultimately would be addressed, as described in the paragraph below.

With regard to all roadway and state route segments and associated intersections impacted under Existing Plus Cumulative Plus Project and Buildout (Year 2030) Plus Project conditions, the Project would mitigate impacts through the participation in the TIF program (Table 2.2-19). The TIF program was specifically designed to address cumulative issues (i.e., those impacts not great enough on a project level to require mitigation, but which, when combined with the incremental adverse effects of other area-wide projects, reach a level of impact requiring mitigation). The TIF program addresses improvements required to support adequate circulation through Year 2030. Required improvements are specified and funds are collected from projects coming on line in order to collect fees to cover costs of those improvements when implemented. Since the TIF program was designed to address cumulative concerns and the associated appropriate payment for specified improvements, participation in the TIF program constitutes effective and adequate mitigation for this issue. With participation in the TIF program, the Proposed Project would reduce cumulative impacts to below a level of significance.

Alternatively, as stated in M-TR-6a to 8a in Section 2.2.6 of this subchapter, the Project Applicant would construct improvements at ~~two intersections with the SR 76 (at Old Highway 395 and Pankey Road/Pala Mesa Drive) intersection~~ and at two intersections with Old Highway 395 (at Pala Mesa Drive and Stewart Canyon Road). This proposal would not improve the additional intersections and segments noted in M-TR-6 through M-TR-8; however, it would accelerate implementation of the stated improvements so that the community could utilize and benefit from them within a quicker time-frame. This is because under a straight TIF program mitigation implementation would be deferred until enough additional projects come online/TIF payments are made to complete costs of design and construction. Although this alternative mitigation would not directly address the other affected intersections and roadway segments, because it would free existing or future TIF payments by others to address those items, it is considered an acceptable alternative mitigation; with the same or better immediate effect as that cited for more traditional TIF program implementation.

Table 2.2-1a LEVEL OF SERVICE THRESHOLDS FOR ROADWAY SEGMENTS						
Circulation Element Road Classification	Cross Sections	Daily Capacity				
		LOS A	LOS B	LOS C	LOS D	LOS E
Expressway	126/146	<36,000	<54,000	<70,000	<86,000	<108,000
Prime Arterial	102/122	<22,200	<37,000	<44,600	<50,000	<57,000
Major Road	78/98	<14,800	<24,700	<29,600	<33,400	<37,000
Collector	64/84	<13,700	<22,800	<27,400	<30,800	<34,200
Town Collector	54/74	<3,000	<6,000	<9,500	<13,500	<19,000
Light Collector	40/60	<1,900	<4,100	<7,100	<10,900	<16,200
Rural Collector	40/84	<1,900	<4,100	<7,100	<10,900	<16,200
Rural Light Collector	40/60	<1,900	<4,100	<7,100	<10,900	<16,200
Recreational Parkway	40/100	<1,900	<4,100	<7,100	<10,900	<16,200
Rural Mountain	40/100	<1,900	<4,100	<7,100	<10,900	<16,200
Non-Circulation Roads						
Residential Collector	40/60	NA	NA	<4,500	NA	NA
Residential Road	36/56	NA	NA	<1,500	NA	NA

Source: County Guidelines for Determining Significance – Transportation and Traffic (December 5, 2007)

Table 2.2-1b LEVEL OF SERVICE THRESHOLDS FOR STATE ROUTES				
Measure of Effectiveness	LOS A - C	LOS D	LOS E	LOS F
Volume/Capacity Ratio	0.00 - 0.70	0.71 – 0.85	0.86 – 0.99	> 1.00

Source: SANDAG

Table 2.2-1c LEVEL OF SERVICE THRESHOLDS FOR FREEWAYS				
Measure of Effectiveness	LOS A - C	LOS D	LOS E	LOS F
Volume/Capacity Ratio	0.00 - 0.79	0.80 - 0.92	0.93 - 1.00	> 1.00

Source: 2006 SANDAG Congestion Management Program

Table 2.2-1d LEVEL OF SERVICE THRESHOLDS FOR INTERSECTIONS		
Signalized Vehicles Total Control Delay Per Vehicle*	Unsignalized Intersections Average Control Delay per Vehicle*	Level of Service
0 – 10	0 – 10	A
10 – 20	10 – 15	B
20 – 35	15– 25	C
35– 55	25– 35	D
55 – 80	35– 50	E
more than 80	more than 50	F

Source: Highway Capacity Manual 2000

*Delay measured in seconds per vehicle

**Table 2.2-2
ROAD SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS**

Segment	Classification	Capacity	Existing			Existing + Project			Δ ADT	Δ V/C	County Significant Impact?	CMP Significant Impact?
			ADT	V/C	LOS	ADT	V/C	LOS				
OLD HIGHWAY 395												
East Mission Road to Reche Road	Collector	16,200	5,155	0.318	C	2,580	0.477	D	7,735	0.159	No	No
Reche Road to Stewart Canyon Road			5,646	0.349	C	9,023	0.557	D	3,377	0.208	No	No
Stewart Canyon Road to Tecalote Lane			6,405	0.395	C	7,119	0.439	D	714	0.044	No	No
Tecalote Lane to Pala Mesa Drive			6,603	0.408	C	7,420	0.458	D	817	0.050	No	No
Pala Mesa Drive to SR 76			8,302	0.512	D	9,492	0.586	D	1,190	0.073	No	No
STEWART CANYON ROAD												
Old Highway 395 to Horse Ranch Creek Road	Light Collector	16,200	590	0.036	A	3,549	0.219	B	2,959	0.183	No	No
PANKEY ROAD												
Pankey Place (Street R) to SR 76	Collector	NA	NA	NA	NA	483	0.03	A	483	0.03	No	No
SR 76 to Shearer Crossing	Light Collector	16,200	936	0.058	A	1,644	0.10	A	708	0.044	No	No
HORSE RANCH CREEK ROAD												
Stewart Canyon Road to Baltimore Oriole Road	Light Collector	16,200	40	0.002	A	3,102	0.19	B	3,062	0.154	No	No
Baltimore Oriole Road to Longspur Road	Boulevard 4.2A	27,000	NA	NA	NA	5,764	0.21	Un	5,764	0.213	No	No
Longspur Road to Harvest Glen Lane			NA	NA	NA	8,806	0.33	Un	8,806	0.326	No	No
Harvest Glen Lane to Intersection #26			NA	NA	NA	11,141	0.41	Un	11,141	0.413	No	No
Intersection #26 to Park/School			NA	NA	NA	10,421	0.39	Un	10,421	0.386	No	No
Park/School to Pankey Place (Street R)			NA	NA	NA	10,421	0.39	Un	10,421	0.386	No	No
Pankey Place (Street R) to SR 76			NA	NA	NA	7,397	0.27	Un	7,397	0.274	No	No

Table 2.2-2 (cont.) ROAD SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS												
Segment	Classification	Capacity	Existing			Existing + Project			Δ ADT	Δ V/C	County Significant Impact?	CMP Significant Impact?
			ADT	V/C	LOS	ADT	V/C	LOS				
PALA MESA DRIVE												
Old Highway 395 to Pankey Place (Street R)	Light Collector	16,200	0	0.000	A	3,017	0.19	B	3,017	0.186	No	No
PANKEY PLACE (STREET R)												
Pala Mesa/Pankey Place to SR 76	Light Collector	16,200	0	0.000	A	3,988	0.25	B	3,988	0.246	No	No

Source: LOS Engineering, Inc. 2009, as amended

¹ Note: The study area is based on the County criteria of where the Project would add 25 or more peak-hour trips in either direction to the existing roadway traffic.

Bold = Road segments currently operates or would operate at an unacceptable LOS.

NA= not applicable; Un=under capacity; Δ = change in

**Table 2.2-3
SR 76 OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS**

Segment of SR 76	Classification	Direction	Capacity	Existing			Existing + Project			Δ ADT	Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS			
AM Peak Hour												
South Mission Road to Via Monserate	Prime Arterial	EB	950	745	0.78	D	792	0.83	D	47	0.05	No
		WB		901	0.95	E	947	1.00	E	46	0.05	Yes
Via Monserate to Gird Road	Prime Arterial	EB	950	808	0.85	D	857	0.90	E	49	0.05	Yes
		WB		895	0.94	E	946	1.00	E	51	0.05	Yes
Gird Road to Sage Road	Prime Arterial	EB	950	740	0.78	D	789	0.83	D	49	0.05	No
		WB		542	0.57	C	593	0.62	C	51	0.05	No
Sage Road to Old Highway 395	Prime Arterial	EB	950	760	0.80	D	809	0.85	D	49	0.05	No
		WB		534	0.56	C	585	0.62	C	51	0.05	No
Old Highway 395 to I-15 SB ramps	Prime Arterial	EB	2,050	1,507	0.74	D	1,531	0.75	D	24	0.01	No
		WB	2,028	665	0.33	B	683	0.34	B	18	0.01	No
I-15 SB ramps to I-15 NB ramps	Prime Arterial	EB	950	844	0.89	E	927	0.98	E	83	0.09	Yes
		WB		539	0.57	C	696	0.73	D	157	0.17	No
I-15 NB ramps to Pankey Road (with Granite improvements)	Major Road	EB	3,100	559	0.18	A	760	0.25	A	201	0.06	No
		WB	3,030	606	0.20	A	834	0.28	A	228	0.08	No
Pankey Road to Horse Ranch Creek Road (with Granite improvements)	Major Road	EB	1,806	589	0.33	B	809	0.45	B	220	0.12	No
		WB	2,028	540	0.27	A	759	0.37	B	219	0.11	No
Horse Ranch Creek Road to Rice Canyon Road	Major Road	EB	950	588	0.62	C	628	0.66	C	40	0.04	No
		WB		539	0.57	C	584	0.61	C	45	0.05	No
Rice Canyon Road to Couser Canyon Road	Major Road	EB	950	589	0.62	C	627	0.66	C	38	0.04	No
		WB		540	0.57	C	580	0.61	C	40	0.04	No
PM Peak Hour												
South Mission Road to Via Monserate	Prime Arterial	EB	950	1,064	1.12	F	1,137	1.20	F	73	0.08	Yes
		WB		618	0.65	C	682	0.72	D	64	0.07	No
Via Monserate to Gird Road	Prime Arterial	EB	950	1,077	1.13	F	1,156	1.22	F	79	0.08	Yes
		WB		786	0.83	D	853	0.90	E	67	0.07	Yes
Gird Road to Sage Road	Prime Arterial	EB	950	645	0.68	C	724	0.76	D	79	0.08	No
		WB		742	0.78	D	809	0.85	D	67	0.07	No
Sage Road to Old Highway 395	Prime Arterial	EB	950	638	0.67	C	717	0.75	D	79	0.08	No
		WB		768	0.81	D	835	0.88	E	67	0.07	Yes
Old Highway 395 to I-15 SB ramps	Prime Arterial	EB	2,050	816	0.40	B	848	0.41	B	32	0.02	No
		WB	2,028	1,258	0.62	C	1,291	0.64	C	33	0.02	No

**Table 2.2-3 (cont.)
SR 76 OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS**

Segment of SR 76	Classification	Direction	Capacity	Existing			Existing + Project			Δ ADT	Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS			
PM Peak Hour (cont.)												
I-15 SB ramps to I-15 NB ramps	Prime Arterial	EB	950	718	0.76	D	853	0.90	E	135	0.14	Yes
		WB		1,153	1.21	F	1,352	1.42	F	199	0.21	Yes
I-15 NB ramps to Pankey Road (with Granite improvements)	Major Road	EB	3,100	696	0.22	A	1,039	0.34	B	343	0.11	No
		WB	3,030	820	0.27	A	1,102	0.36	B	282	0.09	No
Pankey Road to Horse Ranch Creek Road (with Granite improvements)	Major Road	EB	1,806	631	0.35	B	977	0.54	C	346	0.19	No
		WB	2,028	897	0.44	B	1,204	0.59	C	307	0.15	No
Horse Ranch Creek Road to Rice Canyon Road	Major Road	EB	950	631	0.66	C	692	0.73	D	61	0.06	No
		WB		897	0.94	E	963	1.01	F	66	0.07	Yes
Rice Canyon Road to Couser Canyon Road	Major Road	EB	950	526	0.55	C	581	0.61	C	55	0.06	No
		WB		930	0.98	E	991	1.04	F	61	0.06	Yes

Source: LOS Engineering, Inc. 2009, as amended

Bold = State route segment currently operates or would operate at an unacceptable LOS.

Δ = change in

**Table 2.2-4
 I-15 OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS**

Segment ¹	ADT	Direction	Peak Hour	Existing			Existing + Project			Δ ADT	Δ V/C	Direct Significant Impact?	CMP Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS				
Rainbow Valley Boulevard to Mission Road	136,000	NB	AM	1,515	0.161	A	1,671	0.178	A	156	0.017	No	No
			PM	6,991	0.744	C	7,158	0.761	C	167	0.018	No	No
		SB	AM	7,650	0.814	D	7,768	0.826	D	118	0.013	No	No
			PM	3,936	0.419	A	4,157	0.442	B	221	0.024	No	No
Mission Road to SR 76	127,000	NB	AM	1,415	0.150	A	1,486	0.158	A	71	0.008	No	No
			PM	6,528	0.694	C	6,611	0.703	C	83	0.009	No	No
		SB	AM	7,143	0.760	C	7,202	0.766	C	59	0.006	No	No
			PM	3,675	0.391	A	3,778	0.402	A	103	0.011	No	No
SR 76 to Old Highway 395	120,000	NB	AM	1,569	0.167	A	1,687	0.179	A	118	0.013	No	No
			PM	6,722	0.715	C	6,930	0.737	C	208	0.022	No	No
		SB	AM	6,318	0.672	C	6,457	0.687	C	139	0.015	No	No
			PM	2,943	0.313	A	3,109	0.331	A	166	0.018	No	No

Source: LOS Engineering, Inc. 2009, as amended

¹ All freeway segments are four lanes with a capacity of 9,400 in each direction.

Δ = change in

**Table 2.2-5
INTERSECTION OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS**

Intersection	S/U	Movement	Peak Hour	Existing		Existing + Project ²		Δ Delay ²	CM Volume ³	County Significant Impact?	CMP Significant Impact?
				Delay ²	LOS	Delay ²	LOS				
1) SR 76/Via Monserate	U	SB LR	AM	86.1	F	118.7	F	NA	0	No	NA
		SB LR	PM	91.4	F	138.0	F	NA	0	No	NA
		All	AM	5.0	A	6.5	A	1.5	NA	NA	No
		All	PM	2.9	A	4.0	A	1.1	NA	NA	No
2) SR 76/Gird Road	S	All	AM	12.9	B	13.6	B	0.7	NA	No	No
		All	PM	12.6	B	13.6	B	1.0	NA	No	No
3) SR 76/Sage Road	U	SB LR	AM	22.6	C	24.9	C	NA	0	No	NA
		SB LR	PM	33.0	D	39.8	E	NA	0	No	NA
		All	AM	0.2	A	0.3	A	0.1	NA	NA	No
		All	PM	0.4	A	0.5	A	0.1	NA	NA	No
4) SR 76/Old Highway 395	S	All	AM	29.7	C	33.9	C	4.2	NA	No	No
		All	PM	30.2	C	36.3	C	6.1	NA	No	No
6) SR 76/I-15 SB ramps	S	All	AM	27.5	C	29.1	C	1.6	NA	No	No
		All	PM	28.4	C	28.9	C	0.5	NA	No	No
7) SR 76/I-15 at NB ramps	S	All	AM	22.4	C	28.6	C	6.2	NA	No	No
		All	PM	46.7	D	63.7	E	17.0	NA	Yes	Yes
8) SR 76/Pankey Road	U	NB LTR	AM	12.2	B	15.0	B	NA	29	No	No
		NB LTR	PM	14.6	B	26.2	D	NA	36	No	No
		SB LTR	AM	0.0	A	13.1	B	NA	29	No	No
		SB LTR	PM	0.0	A	17.8	C	NA	15	No	No
9) SR 76/Horse Ranch Creek Road	S	All	AM	DNE	NA	16.1	B	NA	NA	No	No
		All	PM	DNE	NA	20.3	C	NA	NA	No	No
10) SR 76/Rice Canyon Road	U	SB LR	AM	10.5	B	10.8	B	0.3	5	No	No
		SB LR	PM	12.4	B	13.1	B	0.7	5	No	No
11) SR 76/Couser Canyon Road	U	NB LR	AM	11.4	B	12.6	B	1.2	15	No	No
		NB LR	PM	13.5	B	15.5	C	2.0	13	No	No

**Table 2.2-5 (cont.)
INTERSECTION OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS**

Intersection	S/U ¹	Movement	Peak Hour	Existing		Existing + Project ²		Δ Delay ²	CM Volume ³	County Significant Impact?	CMP Significant Impact?
				Delay ²	LOS	Delay ²	LOS				
12) Old Highway 395/Pala Mesa Drive (east leg completed with Project)	U	EB LTR	AM	11.0	B	14.2	B	NA	34	No	No
		EB LTR	PM	11.1	B	18.2	C	NA	40	No	No
		WB LTR	AM	DNE	NA	17.5	C	NA	94	No	No
		WB LTR	PM	DNE	NA	24.3	C	NA	160	No	No
14) Old Highway 395/Stewart Canyon Road	U	WB LTR	AM	10.8	B	11.3	B	NA	131	No	No
		WB LTR	PM	11.9	B	16.7	C	NA	126	No	No
15) Old Highway 395/Reche Road	U	EB LR	AM	18.4	C	39.5	E	NA	20	Yes	NA
		EB LR	PM	35.9	E	219.2	F	NA	45	Yes	NA
		All	AM	10.6	B	17.6	B	7.0	NA	NA	No
		All	PM	17.6	B	77.9	F	60.3	NA	NA	Yes
19) Mission Road/Old Highway 395	S	SB L	AM	12.2	B	12.8	B	0.6	NA	No	No
		SB L	PM	27.3	C	40.7	D	13.4	NA	No	No
20) Mission Road/I-15 SB ramps	S	SB LTR	AM	20.6	C	34.8	D	14.2	NA	No	No
		SB LTR	PM	19.3	B	36.6	D	17.3	NA	No	No
21) Mission Road/I-15 NB ramps	S	All	AM	17.2	B	19.0	B	1.8	NA	No	No
		All	PM	37.5	D	49.1	D	11.6	NA	No	No
22) Stewart Canyon Road/Horse Ranch Creek Road/Pankey Road	U	EB LR	AM	8.7	A	9.3	A	NA	88	No	No
		EB LR	PM	8.7	A	9.6	A	NA	180	No	No
23) Horse Ranch Creek Road/Baltimore Oriole	S	All	AM	DNE	NA	10.9	B	NA	NA	No	No
		All	PM	DNE	NA	13.3	B	NA	NA	No	No
24) Horse Ranch Creek Road/Longspur Road	S	All	AM	DNE	NA	8.7	A	NA	NA	No	No
		All	PM	DNE	NA	11.9	B	NA	NA	No	No
25) Horse Ranch Creek Road/Harvest Glen Lane	S	All	AM	DNE	NA	10.1	B	NA	NA	No	No
		All	PM	DNE	NA	20.8	C	NA	NA	No	No
26) Horse Ranch Creek Road/Pardee South Loop	S	All	AM	DNE	NA	10.7	B	NA	NA	No	No
		All	PM	DNE	NA	11.9	B	NA	NA	No	No
27) Horse Ranch Creek Road/School/Park Access	U	WB R	AM	DNE	NA	0.0	A	NA	NA	No	No
		WB R	PM	DNE	NA	0.0	A	NA	NA	No	No

**Table 2.2-5 (cont.)
 INTERSECTION OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS**

Intersection	S/U ¹	Movement	Peak Hour	Existing		Existing + Project ²		Δ Delay ²	CM Volume ³	County Significant Impact?	CMP Significant Impact?
				Delay ²	LOS	Delay ²	LOS				
28) Horse Ranch Creek Road/Pankey Place (Street R)	S	All	AM	DNE	NA	10.1	B	NA	NA	No	No
		All	PM	DNE	NA	16.1	C	NA	NA	No	No
29) Pankey/Pala Mesa Drive/Pankey Place (Street R)	U	WB LR	AM	DNE	NA	9.4	A	NA	NA	No	No
		WB LR	PM	DNE	NA	9.5	A	NA	NA	No	No
34) SR 76/South Mission Road	S	All	AM	18.9	B	19.4	B	0.5	NA	No	No
		All	PM	21.5	C	22.1	C	0.6	NA	No	No

Source: LOS Engineering, Inc. 2009, as amended

¹ S= Signalized; U=Unsignalized

² Delay measured in seconds

³ CM Volume = Critical Movement Volume; used to show Project volumes on the critical movement

DNE = does not exist; NA = not applicable

Bold = Intersections currently operates or would operate at an unacceptable LOS in the AM and/or PM peak hour period(s).

Note: The study area is based on the County criteria of where the Project will add 50 or more peak-hour trips in either direction to the existing roadway traffic. This means that several intersections are not analyzed under existing plus project conditions because the Project would add less than 50 peak-hour trips in either direction to these intersections.

NA= not applicable; Δ = change in

**Table 2.2-6
 PROPOSED PROJECT TRIP GENERATION**

Use	Daily Trip Rate ¹	Density or Intensity	ADT	AM Peak Hour					PM Peak Hour				
				% of Total ADT	% In	% Out	Volume		% of Total ADT	% In	% Out	Volume	
							In	Out				In	Out
Single-family Residential	10/DU	521 DU	5,210	8	30	70	125	292	10	70	30	365	156
Multi-family Residential	8/DU	555 DU	4,440	8	20	80	71	284	10	70	30	311	133
Town Center	120/ksf	61,200 sf	7,344	4	60	40	178	118	10	50	50	368	367
Office	17/ksf	157 ksf	2,669	13	90	10	312	35	14	20	80	75	298
Neighborhood Park	5/acre	3.6 acres	18	4	50	50	0	0	8	50	50	1	1
Neighborhood Park- Sports Complex	50/acre	5.2 acres	260	4	50	50	5	5	8	50	50	10	10
TOTAL²			19,941	--	--	--	689	734	--	--	--	1,130	965

Source: LOS Engineering, Inc. 2009, as amended

¹ Rates based on “Brief Guide to Vehicular Traffic Generation Rates for the San Diego Region” (SANDAG, April 2002).

² Number totals may not add up due to rounding.

DU= dwelling unit; ksf = thousand square feet; sf = square feet

Table 2.2-7 ROADWAY SEGMENT OPERATIONS UNDER EXISTING PLUS CUMULATIVE CONDITIONS						
Segment	Classification	Capacity	No. of Lanes	ADT	V/C¹	LOS
DULIN ROAD						
Old Highway 395 to Pankey Road	Light Collector	16,200	2	6,992	0.43	C
OLD HIGHWAY 395						
East Mission Road to Reche Road	Collector	16,200	2	17,320	1.07	F
Reche Road to Stewart Canyon Road				19,923	1.23	F
Stewart Canyon Road to Tecalote Lane				16,886	1.04	F
Tecalote Lane to Pala Mesa Drive				18,583	1.15	F
Pala Mesa Drive to SR 76 (Pala Road)				19,710	1.22	F
SR 76 to Dulin Road				4,401	0.89	E
Dulin Road to West Lilac Road	Rural Collector	16,200	2	16,705	1.03	F
RECHE ROAD						
Green Canyon Norte to Live Oak Park Road	Rural Collector	16,200	2	13,202	0.81	E
Live Oak Park Road to Gird Road				11,399	0.70	E
Gird Road to Wilt Road				8,899	0.55	D
Wilt Road to Tecalote Road				8,199	0.51	D
Tecalote Road to Old Highway 395				9,802	0.61	D
STEWART CANYON ROAD						
Old Highway 395 to Horse Ranch Creek Road	Light Collector	16,200	2	5,731	0.35	C
PANKEY ROAD						
Pankey Place (Street R) to SR 76 (Pala Road)	Collector	34,200	4 (by Campus Park West)	8,326	0.24	A
SR 76 to Shearer Crossing	Light Collector	16,200	2	7,175	0.44	D
HORSE RANCH CREEK ROAD						
Stewart Canyon Road to Baltimore Oriole Road	Light Collector	16,200	2	4,831	0.30	C
Baltimore Oriole Road to Longspur Road	Boulevard 4.2A	27,000	4 (by Proposed Project, Meadowood, and Palomar College)	5,436	0.20	Un
Longspur Road to Harvest Glen Lane				6,705	0.25	Un
Harvest Glen Lane to Intersection #26				9,092	0.34	Un
Intersection #26 to Park/School				10,925	0.40	Un
Park/School to Pankey Place (Street R)				11,186	0.41	Un
Pankey Place (Street R) to SR 76 (Pala Road)				6,188	0.23	Un

Table 2.2-7 (cont.) ROADWAY SEGMENT OPERATIONS UNDER EXISTING PLUS CUMULATIVE CONDITIONS						
Segment	Classification	Capacity	No. of Lanes	ADT	V/C ¹	LOS
PALA MESA DRIVE						
Wilt Road/Sage Road to Old Highway 395	Light Collector	16,200	2	10,690	0.66	D
Old Highway 395 to Pankey Place (Street R)				4,405	0.27	C
PANKEY PLACE (STREET R)						
Pala Mesa/Pankey Place to Horse Ranch Creek Road	Light Collector	16,200	2	6,219	0.38	C

Source: LOS Engineering, Inc. 2009, as amended

¹The V/C analysis is provided for informational purposes only

Bold = Road segments currently operating or would operate at an unacceptable LOS

Un=Under capacity per the GP Update Standards; Δ = change in

Table 2.2-8 ROADWAY SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS											
Segment	Classification	Capacity	Existing			Cumulative ADT	Project ADT	Existing + Cumulative + Project			Significant Cumulative Impact?
			ADT	V/C ¹	LOS			ADT	V/C ¹	LOS	
DULIN ROAD											
Old Highway 395 to Pankey Road	Light Collector	16,200	5,770	0.36	C	1,222	708	7,700	0.48	D	No
OLD HIGHWAY 395											
East Mission Road to Reche Road	Collector	16,200	5,155	0.32	C	12,165	2,580	19,900	1.23	F	Yes
Reche Road to Stewart Canyon Road			5,646	0.35	C	14,277	3,377	23,300	1.44	F	Yes
Stewart Canyon Road to Tecalote Lane			6,405	0.40	C	10,481	714	17,600	1.09	F	Yes
Tecalote Lane to Pala Mesa Drive			6,603	0.41	C	11,980	817	19,400	1.20	F	Yes
Pala Mesa Drive to SR 76 (Pala Road)			8,302	0.51	D	11,408	1,190	20,900	1.29	F	Yes
SR 76 to Dulin Road			6,668	0.41	C	7,733	399	14,800	0.91	E	Yes
Dulin Road to West Lilac Road	Rural Collector	16,200	4,163	0.26	C	12,542	495	17,200	1.06	F	Yes
RECHE ROAD											
Green Canyon Norte to Live Oak Park Road	Rural Collector	16,200	10,162	0.63	D	3,040	598	13,800	0.85	E	Yes
Live Oak Park Road to Gird Road			10,380	0.64	D	1,019	701	12,100	0.75	E	Yes
Gird Road to Wilt Road			8,301	0.51	D	598	701	9,600	0.59	D	No
Wilt Road to Tecalote Road			7,814	0.48	D	385	701	8,900	0.55	D	No
Tecalote Road to Old Highway 395			7,420	0.46	D	2,382	798	10,600	0.65	D	No
STEWART CANYON ROAD											
Old Highway 395 to Horse Ranch Creek Road	Light Collector	16,200	590	0.04	A	4,445	2,959	7,994	0.49	D	No
PANKEY ROAD											
Pankey Place (Street R) to SR 76 (Pala Road)	Collector	34,200	0	0.00	A	8,140	483	8,622	0.25	A	No
SR 76 to Shearer Crossing	Light Collector	16,200	936	0.06	A	7,376	3,589	11,902	0.73	E	Yes

Table 2.2-8 (cont.) ROADWAY SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS											
Segment	Classification	Capacity	Existing			Cumulative ADT	Project ADT	Existing + Cumulative + Project			Significant Cumulative Impact?
			ADT	V/C ¹	LOS			ADT	V/C ¹	LOS	
HORSE RANCH CREEK ROAD											
Stewart Canyon Road to Baltimore Oriole Road	Light Collector	16,200	40	0.00	A	4,158	3,062	7,260	0.45	D	No
Baltimore Oriole Road to Longspur Road	Boulevard 4.2A	27,000	0	0.00	Un	5,182	5,764	10,945	0.41	Un	No
Longspur Road to Harvest Glen Lane			0	0.00	Un	6,905	8,806	15,711	0.58	Un	No
Harvest Glen Lane to Intersection #26			0	0.00	Un	9,298	11,141	20,439	0.76	Un	No
Intersection #26 to Park/School			0	0.00	Un	10,190	10,421	20,611	0.77	Un	No
Park/School to Pankey Place (Street R)			0	0.00	Un	10,338	10,421	20,759	0.77	Un	No
Pankey Place (Street R) to SR 76 (Pala Road)			0	0.00	Un	5,146	7,397	12,544	0.46	Un	No
PALA MESA DRIVE											
Wilt Road/Sage Road to Old Highway 395	Light Collector	16,200	604	0.04	A	10,086	810	11,500	0.71	E	Yes
Old Highway 395 to Pankey Place (Street R)			0	0.00	A	3,994	3,017	7,011	0.43	C	No
PANKEY PLACE (STREET R)											
Pala Mesa/Pankey Place to Horse Ranch Creek Road	Light Collector	16,200	0	0.00	A	6,379	3,988	10,367	0.64	D	No

Source: LOS Engineering, Inc. 2009, as amended

¹The V/C analysis is provided for informational purposes only

Bold = Road segments currently operating or would operate at an unacceptable LOS

Un=Under capacity per the GP Update Standards; Δ = change in

**Table 2.2-9
SR 76 OPERATIONS UNDER EXISTING PLUS CUMULATIVE CONDITIONS**

Segment of SR 76	Classification	Direction	Capacity	ADT	V/C	LOS
AM Peak Hour						
Melrose Drive to East Vista Way	Expressway	EB	1,300	1,357	1.04	F
		WB		2,397	1.84	F
East Vista Way to North River Road	Expressway	EB	950	1,172	1.23	F
		WB		1,953	2.06	F
North River Road to Olive Hill Road	Expressway	EB	950	1,371	1.44	F
		WB		2,389	2.51	F
Olive Hill Road to South Mission Road	Expressway	EB	950	1,471	1.55	F
		WB		2,527	2.66	F
South Mission Road to Via Monserate	Prime Arterial	EB	950	1,045	1.10	F
		WB		1,687	1.78	F
Via Monserate to Gird Road	Prime Arterial	EB	950	1,091	1.15	F
		WB		1,745	1.84	F
Gird Road to Sage Road	Prime Arterial	EB	950	1,082	1.14	F
		WB		1,288	1.36	F
Sage Road to Old Highway 395	Prime Arterial	EB	950	1,169	1.23	F
		WB		1,310	1.38	F
Old Highway 395 to I-15 SB ramps	Prime Arterial	EB	2,050	1,319	0.64	C
		WB	2,028	1,247	0.61	C
I-15 SB ramps to I-15 NB ramps	Prime Arterial	EB	950	939	0.99	E
		WB		837	0.88	E
I-15 NB ramps to Pankey Road	Major Road	EB	3,100	641	0.21	A
		WB	3,030	817	0.27	A
Pankey Road to Horse Ranch Creek Road	Major Road	EB	1,806	384	0.21	A
		WB	2,028	965	0.48	B
Horse Ranch Creek Road to Rice Canyon Road	Major Road	EB	950	564	0.59	C
		WB		1,139	1.20	F
Rice Canyon Road to Couser Canyon Road	Major Road	EB	950	1,686	1.77	F
		WB		800	0.84	D
Couser Canyon Road to Pala Mission Road	Major Road	EB	950	823	0.87	E
		WB		653	0.69	C
PM Peak Hour						
Melrose Drive to East Vista Way	Expressway	EB	1,300	2,625	2.02	F
		WB		1,711	1.32	F
East Vista Way to North River Road	Expressway	EB	950	2,020	2.13	F
		WB		1,398	1.47	F
North River Road to Olive Hill Road	Expressway	EB	950	2,550	2.68	F
		WB		1,583	1.67	F
Olive Hill Road to South Mission Road	Expressway	EB	950	2,521	2.65	F
		WB		1,814	1.91	F
South Mission Road to Via Monserate	Prime Arterial	EB	950	2,200	2.32	F
		WB		1,437	1.51	F
Via Monserate to Gird Road	Prime Arterial	EB	950	1,998	2.10	F
		WB		1,294	1.36	F
Gird Road to Sage Road	Prime Arterial	EB	950	1,321	1.39	F
		WB		1,169	1.23	F
Sage Road to Old Highway 395	Prime Arterial	EB	950	1,444	1.52	F
		WB		1,381	1.45	F
Old Highway 395 to I-15 SB ramps	Prime Arterial	EB	2,050	1,454	0.71	C
		WB	2,028	1,498	0.74	D

**Table 2.2-9 (cont.)
 SR 76 OPERATIONS UNDER EXISTING PLUS CUMULATIVE CONDITIONS**

Segment of SR 76	Classification	Direction	Capacity	ADT	V/C	LOS
PM Peak Hour (cont.)						
I-15 SB ramps to I-15 NB ramps	Prime Arterial	EB	950	1,222	1.29	F
		WB		1,086	1.14	F
I-15 NB ramps to Pankey Road	Major Road	EB	3,100	1,106	0.36	B
		WB	3,030	780	0.26	A
Pankey Road to Horse Ranch Creek Road	Major Road	EB	1,806	934	0.52	C
		WB	2,028	1,050	0.52	C
Horse Ranch Creek Road to Rice Canyon Road	Major Road	EB	950	1,219	1.28	F
		WB		1,291	1.36	F
Rice Canyon Road to Couser Canyon Road	Major Road	EB	950	977	1.03	F
		WB		1,282	1.35	F
Couser Canyon Road to Pala Mission Road	Major Road	EB	950	813	0.86	D
		WB		1,203	1.27	F

Source: LOS Engineering, Inc. 2009, as amended

Bold = State route segment currently operating or would operate at an unacceptable LOS

Δ = change in

Table 2.2-10 SR 76 OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS												
Segment of SR 76	Classification	Direction	Capacity	Existing			Existing + Cumulative + Project			Δ ADT	Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS			
AM Peak Hour												
Melrose Drive to East Vista Way	Expressway	EB	1,300	999	0.77	D	1,368	1.05	F	369	0.28	Yes
		WB		1,469	1.13	F	2,416	1.86	F	947	0.73	Yes
East Vista Way to North River Road	Expressway	EB	950	718	0.76	D	1,187	1.25	F	469	0.49	Yes
		WB		1,040	1.09	F	1,984	2.09	F	944	0.99	Yes
North River Road to Olive Hill Road	Expressway	EB	950	852	0.90	E	1,391	1.46	F	539	0.57	Yes
		WB		1,200	1.26	F	2,421	2.55	F	1,221	1.29	Yes
Olive Hill Road to South Mission Road	Expressway	EB	950	1,031	1.09	F	1,498	1.58	F	467	0.49	Yes
		WB		1,245	1.31	F	2,567	2.70	F	1,322	1.39	Yes
South Mission Road to Via Monserate	Prime Arterial	EB	950	745	0.78	D	1,092	1.15	F	347	0.37	Yes
		WB		901	0.95	E	1,733	1.82	F	832	0.88	Yes
Via Monserate to Gird Road	Prime Arterial	EB	950	808	0.85	D	1,140	1.20	F	332	0.35	Yes
		WB		895	0.94	E	1,796	1.89	F	901	0.95	Yes
Gird Road to Sage Road	Prime Arterial	EB	950	740	0.78	D	1,131	1.19	F	391	0.41	Yes
		WB		542	0.57	C	1,339	1.41	F	797	0.84	Yes
Sage Road to Old Highway 395	Prime Arterial	EB	950	760	0.80	D	1,218	1.28	F	458	0.48	Yes
		WB		534	0.56	C	1,361	1.43	F	827	0.87	Yes
Old Highway 395 to I-15 SB ramps	Prime Arterial	EB	2,050	1,507	0.74	D	1,600	0.78	D	93	0.05	No
		WB	2,028	665	0.33	B	1,265	0.62	C	600	0.30	No
I-15 SB ramps to I-15 NB ramps	Prime Arterial	EB	950	844	0.89	E	1,022	1.08	F	178	0.19	Yes
		WB		539	0.57	C	994	1.05	F	455	0.48	Yes
I-15 NB ramps to Pankey Road	Major Road	EB	3,100	559	0.18	A	842	0.27	A	283	0.09	No
		WB	3,030	606	0.20	A	1,045	0.34	B	439	0.14	No
Pankey Road to Horse Ranch Creek Road	Major Road	EB	1,806	589	0.33	B	782	0.43	B	193	0.11	No
		WB	2,028	540	0.27	A	1,184	0.58	C	644	0.32	No
Horse Ranch Creek Road to Rice Canyon Road	Major Road	EB	950	588	0.62	C	782	0.82	D	194	0.20	No
		WB		539	0.57	C	1,184	1.25	F	645	0.68	Yes
Rice Canyon Road to Couser Canyon Road	Major Road	EB	950	589	0.62	C	1,724	1.81	F	1,135	1.19	Yes
		WB		540	0.57	C	840	0.88	E	300	0.32	Yes
Couser Canyon Road to Pala Mission Road	Major Road	EB	950	634	0.67	C	857	0.90	E	223	0.23	Yes
		WB		357	0.38	B	678	0.71	D	321	0.34	No

Table 2.2-10 (cont.)												
SR 76 OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS												
Segment of SR 76	Classification	Direction	Capacity	Existing			Existing + Cumulative + Project			Δ ADT	Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS			
PM Peak Hour												
Melrose Drive to East Vista Way	Expressway	EB	1,300	1,456	1.12	F	2,651	2.04	F	1,195	0.92	Yes
		WB		1,001	0.77	D	1,727	1.33	F	726	0.56	Yes
East Vista Way to North River Road	Expressway	EB	950	1,107	1.17	F	2,059	2.17	F	952	1.00	Yes
		WB		652	0.69	C	1,419	1.49	F	767	0.81	Yes
North River Road to Olive Hill Road	Expressway	EB	950	1,176	1.24	F	2,593	2.73	F	1,417	1.49	Yes
		WB		781	0.82	D	1,611	1.70	F	830	0.87	Yes
Olive Hill Road to South Mission Road	Expressway	EB	950	1,457	1.53	F	2,576	2.71	F	1,119	1.18	Yes
		WB		1,069	1.13	F	1,851	1.95	F	782	0.82	Yes
South Mission Road to Via Monserate	Prime Arterial	EB	950	1,064	1.12	F	2,273	2.39	F	1,209	1.27	Yes
		WB		618	0.65	C	1,501	1.58	F	883	0.93	Yes
Via Monserate to Gird Road	Prime Arterial	EB	950	1,077	1.13	F	2,077	2.19	F	1,000	1.05	Yes
		WB		786	0.83	D	1,361	1.43	F	575	0.61	Yes
Gird Road to Sage Road	Prime Arterial	EB	950	645	0.68	C	1,400	1.47	F	755	0.79	Yes
		WB		742	0.78	D	1,236	1.30	F	494	0.52	Yes
Sage Road to Old Highway 395	Prime Arterial	EB	950	638	0.67	C	1,523	1.60	F	885	0.93	Yes
		WB		768	0.81	D	1,448	1.52	F	680	0.72	Yes
Old Highway 395 to I-15 SB ramps	Prime Arterial	EB	2,050	816	0.40	B	1,486	0.72	D	670	0.33	No
		WB	2,028	1,258	0.62	C	1,531	0.75	D	273	0.13	No
I-15 SB ramps to I-15 NB ramps	Prime Arterial	EB	950	718	0.76	D	1,357	1.43	F	639	0.67	Yes
		WB		1,153	1.21	F	1,285	1.35	F	132	0.14	Yes
I-15 NB ramps to Pankey Road	Major Road	EB	3,100	696	0.22	A	1,449	0.47	B	753	0.24	No
		WB	3,030	820	0.27	A	1,062	0.35	B	242	0.08	No
Pankey Road to Horse Ranch Creek Road	Major Road	EB	1,806	631	0.35	B	1,280	0.71	C	649	0.36	No
		WB	2,028	897	0.44	B	1,357	0.67	C	460	0.23	No
Horse Ranch Creek Road to Rice Canyon Road	Major Road	EB	950	631	0.66	C	1,280	1.35	F	649	0.68	Yes
		WB		897	0.94	E	1,357	1.43	F	460	0.48	Yes
Rice Canyon Road to Couser Canyon Road	Major Road	EB	950	526	0.55	C	1,032	1.09	F	506	0.53	Yes
		WB		930	0.98	E	1,343	1.41	F	413	0.43	Yes

Table 2.2-10 (cont.) SR 76 OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS												
Segment of SR 76	Classification	Direction	Capacity	Existing			Existing + Cumulative + Project			Δ ADT	Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS			
PM Peak Hour (cont.)												
Couser Canyon Road to Pala Mission Road	Major Road	EB	950	434	0.46	B	848	0.89	E	414	0.44	Yes
		WB		950	1.00	F	1,251	1.32	F	301	0.32	Yes

Source: LOS Engineering, Inc. 2009, as amended

Bold = State route segment currently operating or would operate at an unacceptable LOS

Δ = change in

**Table 2.2-11
 I-15 OPERATIONS UNDER EXISTING PLUS CUMULATIVE CONDITIONS**

Segment ¹	Direction	Peak Hour	ADT	V/C	LOS
Rainbow Valley Boulevard to Mission Road	NB	AM	1,825.87	0.19424	A
		PM	7,409.58	0.78825	C
	SB	AM	7,954.51	0.84622	D
		PM	4,399.61	0.46804	B
Mission Road to SR 76	NB	AM	1,612.62	0.17156	A
		PM	6,870.97	0.73095	C
	SB	AM	7,395.29	0.78673	C
		PM	3,958.17	0.42108	B
SR 76 to Old Highway 395	NB	AM	2,278.69	0.24241	A
		PM	8,061.8	0.85764	D
	SB	AM	7,274.13	0.77384	C
		PM	3,758.9	0.39988	A

Source: LOS Engineering, Inc. 2009, as amended

¹ All freeway segments are four lanes with a capacity of 9,400 in each direction.

**Table 2.2-12
 I-15 OPERATIONS UNDER EXISTING, CUMULATIVE PLUS PROJECT, AND EXISTING PLUS CUMULATIVE PLUS PROJECT
 CONDITIONS**

Segment ¹	Direction	Peak Hour	Existing			Existing + Cumulative			Existing + Cumulative + Project			Δ V/C	Significant Cumulative Impact?
			ADT	V/C	LOS	ADT	V/C	LOS	ADT	V/C	LOS		
Rainbow Valley Boulevard to Mission Road	NB	AM	1,515	0.161	A	1,826	0.194	A	1,925	0.205	A	0.011	No
		PM	6,991	0.744	C	7,410	0.788	C	7,507	0.799	C	0.010	No
	SB	AM	7,650	0.814	D	7,955	0.846	D	8,023	0.853	D	0.007	No
		PM	3,936	0.419	A	4,400	0.468	B	4,536	0.483	B	0.014	No
Mission Road to SR 76	NB	AM	1,415	0.150	A	1,613	0.172	A	1,627	0.173	A	0.001	No
		PM	6,528	0.694	C	6,871	0.731	C	6,884	0.732	C	0.001	No
	SB	AM	7,143	0.760	C	7,395	0.787	C	7,404	0.788	C	0.001	No
		PM	3,675	0.391	A	3,958	0.421	B	3,977	0.423	B	0.002	No
SR 76 to Old Highway 395	NB	AM	1,569	0.167	A	2,279	0.242	A	2,352	0.250	A	0.008	No
		PM	6,722	0.715	C	8,062	0.858	D	8,190	0.871	D	0.014	No
	SB	AM	6,318	0.672	C	7,274	0.774	C	7,360	0.783	C	0.009	No
		PM	2,943	0.313	A	3,759	0.400	A	3,861	0.411	A	0.011	No

Source: LOS Engineering, Inc. 2009, as amended

¹ All freeway segments are four lanes with a capacity of 9,400 in each direction.

Table 2.2-13 INTERSECTION OPERATIONS UNDER EXISTING PLUS CUMULATIVE CONDITIONS					
Intersection	S/U¹	Movement	Peak Hour	Delay²	LOS
1) SR 76/Via Monserate	U	SB LR	AM	>500	F
		SB LR	PM	>500	F
		All	AM	>500	F
		All	PM	>500	F
2) SR 76/Gird Road	S	All	AM	43.4	D
		All	PM	97.7	F
3) SR 76/Sage Road	U	SB LR	AM	125.8	F
		SB LR	PM	>500	F
		All	AM	1.2	A
		All	PM	3.5	A
4) SR 76/Old Highway 395	S	All	AM	246.9	F
		All	PM	232.4	F
5) Old Highway 395/Dulin Road	U	WB LR	AM	25.6	D
		WB LR	PM	40.6	E
6) SR 76/I-15 SB ramps	S	All	AM	88.9	F
		All	PM	120.2	F
7) SR 76/I-15 NB ramps	S	All	AM	73.3	E
		All	PM	107.9	F
8) SR 76/Pankey Road	U	NB LTR	AM	>500	F
		NB LTR	PM	>500	F
		SB LTR	AM	29.7	C
		SB LTR	PM	165.9	F
9) SR 76/Horse Ranch Creek Road	U	All	AM	16.3	B
		All	PM	15.3	B
10) SR 76/Rice Canyon Road	U	SB LR	AM	154.3	F
		SB LR	PM	472.0	F
11) SR 76/Couser Canyon Road	U	NB LR	AM	55.0	F
		NB LR	PM	233.2	F
12) Old Highway 395/Pala Mesa Drive	U	EB LTR	AM	>500	F
		EB LTR	PM	>500	F
		WB LTR	AM	>500	F
		WB LTR	PM	>500	F
13) Pala Mesa Drive/Sage Road	U	NB LTR	AM	9.9	A
		SB LTR	AM	11.3	B
		NB LTR	PM	10.0	B
		SB LTR	PM	11.3	B
14) Old Highway 395/Stewart Canyon Road	U	WB LTR	AM	118.1	F
		WB LTR	PM	>500	F
15) Old Highway 395/Reche Road	U	EB LR	AM	>500	F
		EB LR	PM	>500	F
		All	AM	>500	F
		All	PM	>500	F
16) Reche Road/Tecalote Drive	U	NB LR	AM	14.6	B
		NB LR	PM	16.2	C
17) Reche Road/Wilt Road	U	NB LR	AM	14.8	B
		NB LR	PM	18.2	C
18) Reche Road/Gird Road	S	All	AM	15.7	B
		All	PM	15.0	B

Table 2.2-13 (cont.) INTERSECTION OPERATIONS UNDER EXISTING PLUS CUMULATIVE CONDITIONS					
Intersection	S/U¹	Movement	Peak Hour	Delay²	LOS
19) Mission Road/Old Highway 395	S	SB L	AM	45.1	D
		SB L	PM	105.2	F
20) Mission Road/I-15 SB ramps	S	SB LTR	AM	56.2	E
		SB LTR	PM	41.6	D
21) Mission Road/I-15 NB ramps	S	All	AM	26.5	C
		All	PM	84.8	F
22) Stewart Canyon Road/Horse Ranch Creek Road/Pankey Road	U	EB LR	AM	9.9	A
		EB LR	PM	10.7	B
23) Horse Ranch Creek Road/Baltimore Oriole	U	WB LR	AM	13.7	B
		WB LR	PM	13.6	B
24) Horse Ranch Creek Road/Longspur Road	U	All	AM	17.4	B
		All	PM	15.7	B
25) Horse Ranch Creek Road/Harvest Glen Road	U	All	AM	15.5	B
		All	PM	15.9	B
26) Horse Ranch Creek Road/Pardee South Loop	U	WB LR	AM	15.9	B
		WB LR	PM	14.7	B
27) Horse Ranch Creek Road/School/Park Access	U	WB LR	AM	11.8	B
		WB LR	PM	12.7	B
28) Horse Ranch Creek Road/Pankey Place (Street R)	U	All	AM	6.8	A
		All	PM	8.5	A
29) Pankey/Pala Mesa Drive/Pankey Place (Street R)	S	WB LR	AM	23.2	C
		WB LR	PM	34.8	C
30) SR 76/Melrose Drive	S	All	AM	128.2	F
		All	PM	78.0	E
31) SR 76/East Vista Way	S	All	AM	276.0	F
		All	PM	254.9	F
32) SR 76/North River Road	S	All	AM	308.6	F
		All	PM	256.5	F
33) SR 76/Olive Hill Road	S	All	AM	232.6	F
		All	PM	176.8	F
34) SR 76/South Mission Road	S	All	AM	39.6	D
		All	PM	80.3	F
35) Reche Road/Live Oak Park Road	U	SB LR	AM	36.8	E
		SB LR	PM	22.8	C
36) Reche Road/Green Canyon Norte	S	All	AM	26.5	C
		All	PM	24.3	C
37) SR 76/Pala Mission Road	S	All	AM	35.2	D
		All	PM	40.4	D

Source: LOS Engineering, Inc. 2009, as amended

¹ U=Unsignalized, S= Signalized

² Delay is measured in seconds; > = greater than

Bold = Intersections currently operating or would operate at an unacceptable LOS.

DNE = does not exist; NA = not applicable; Δ = change in

Intersection	S/U ¹	Movement	Peak Hour	Existing		Existing + Cumulative + Project		Δ Delay ²	Significant Cumulative Impact?
				Delay ²	LOS	Delay ²	LOS		
1) SR 76/Via Monserate	U	SB LR	AM	86.1	F	>500	F	>2.0	Yes
		SB LR	PM	91.4	F	>500	F	>2.0	Yes
		All	AM	5.0	A	>500	F	>2.0	Yes
		All	PM	2.9	A	>500	F	>2.0	Yes
2) SR 76/Gird Road	S	All	AM	12.9	B	51.5	D	38.6	No
		All	PM	12.6	B	118.0	F	105.4	Yes
3) SR 76/Sage Road	U	SB LR	AM	22.6	C	154.9	F	132.3	Yes
		SB LR	PM	33.0	D	>500	F	>2.0	Yes
		All	AM	0.2	A	1.4	A	1.2	No
		All	PM	0.4	A	4.6	A	4.2	No
4) SR 76/Old Highway 395	S	All	AM	29.7	C	268.7	F	239.0	Yes
		All	PM	30.2	C	266.1	F	235.9	Yes
5) Old Highway 395/Dulin Road	U	WB LR	AM	11.2	B	32.9	D	21.7	No
		WB LR	PM	12.9	B	56.4	F	43.5	Yes
6) SR 76/I-15 SB ramps	S	All	AM	27.5	C	107.0	F	79.5	Yes
		All	PM	28.4	C	140.1	F	111.7	Yes
7) SR 76/I-15 NB ramps	S	All	AM	22.4	C	86.6	F	64.2	Yes
		All	PM	46.7	D	121.1	F	74.4	Yes
8) SR 76/Pankey Road	U	NB LTR	AM	12.2	B	>500	F	>2.0	Yes
		NB LTR	PM	14.6	B	>500	F	>2.0	Yes
		SB LTR	AM	0.0	A	>500	F	>2.0	Yes
		SB LTR	PM	0.0	A	>500	F	>2.0	Yes
9) SR 76/Horse Ranch Creek Road	U	All	AM	DNE	NA	20.9	C	NA	No
		All	PM	DNE	NA	22.6	C	NA	No
10) SR 76/Rice Canyon Road	U	SB LR	AM	10.5	B	211.4	F	>2.0	Yes
		SB LR	PM	12.4	B	>500	F	>2.0	Yes
11) SR 76/Couser Canyon Road	U	NB LR	AM	11.4	B	86.2	F	74.8	Yes
		NB LR	PM	13.5	B	427.4	F	>2.0	Yes

Table 2.2-14 (cont.)									
INTERSECTION OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS									
Intersection	S/U ¹	Movement	Peak Hour	Existing		Existing + Cumulative + Project		Δ Delay ²	Significant Cumulative Impact?
				Delay ²	LOS	Delay ²	LOS		
12) Old Highway 395/Pala Mesa Drive	U	EB LTR	AM	11.0	B	>500	F	>2.0	Yes
		EB LTR	PM	11.1	B	>500	F	>2.0	Yes
		WB LTR	AM	DNE	NA	>500	F	>2.0	Yes
		WB LTR	PM	DNE	NA	>500	F	>2.0	Yes
13) Pala Mesa Drive/Sage Road	U	NB LTR	AM	8.6	A	9.9	A	1.3	No
		NB LTR	PM	8.7	A	10.0	B	1.3	No
		SB LTR	AM	9.0	A	11.4	B	2.4	No
		SB LTR	PM	9.1	A	11.4	B	2.3	No
14) Old Highway 395/Stewart Canyon Road	U	WB LTR	AM	10.8	B	>500	F	>2.0	Yes
		WB LTR	PM	11.9	B	>500	F	>2.0	Yes
15) Old Highway 395/Reche Road	U	EB LR	AM	18.4	C	>500	F	>2.0	Yes
		EB LR	PM	35.9	E	>500	F	>2.0	Yes
		All	AM	10.6	B	>500	F	>2.0	Yes
		All	PM	17.6	B	>500	F	>2.0	Yes
16) Reche Road/Tecalote Drive	U	NB LR	AM	13.1	B	15.2	C	2.1	No
		NB LR	PM	15.0	C	17.5	C	2.5	No
17) Reche Road/Wilt Road	U	NB LR	AM	14.8	B	15.6	C	0.8	No
		NB LR	PM	17.2	C	19.8	C	2.6	No
18) Reche Road/Gird Road	S	All	AM	14.4	B	15.9	B	1.5	No
		All	PM	13.9	B	15.3	B	1.4	No
19) Mission Road/Old Highway 395	S	SB L	AM	12.2	B	54.8	D	42.6	No
		SB L	PM	27.3	C	111.8	F	84.5	Yes
20) Mission Road/I-15 SB ramps	S	SB LTR	AM	20.6	C	75.6	E	55.0	Yes
		SB LTR	PM	19.3	B	88.2	F	68.9	Yes
21) Mission Road/I-15 NB ramps	S	All	AM	17.2	B	31.8	C	14.6	No
		All	PM	37.5	D	109.6	F	72.1	Yes
22) Stewart Canyon Road/Horse Ranch Creek Road/Pankey Road	U	EB LR	AM	8.7	A	11.1	B	2.4	No
		EB LR	PM	8.7	A	13.7	B	5.0	No

Intersection	S/U ¹	Movement	Peak Hour	Existing		Existing + Cumulative + Project		Δ Delay ²	Significant Cumulative Impact?
				Delay ²	LOS	Delay ²	LOS		
23) Horse Ranch Creek Road/Baltimore Oriole	U	WB LR	AM	DNE	NA	17.8	B	NA	No
		WB LR	PM	DNE	NA	17.7	B	NA	No
24) Horse Ranch Creek Road/Longspur Road	U	All	AM	DNE	NA	21.4	C	NA	No
		All	PM	DNE	NA	24.2	C	NA	No
25) Horse Ranch Creek Road/Harvest Glen Road	U	All	AM	DNE	NA	17.7	B	NA	No
		All	PM	DNE	NA	26.0	C	NA	No
26) Horse Ranch Creek Road/Pardee South Loop	U	WB LR	AM	DNE	NA	18.3	B	NA	No
		WB LR	PM	DNE	NA	24.6	C	NA	No
27) Horse Ranch Creek Road/School/Park Access	U	WB LR	AM	DNE	NA	15.2	C	NA	No
		WB LR	PM	DNE	NA	18.1	C	NA	No
28) Horse Ranch Creek Road/Pankey Place (Street R)	U	All	AM	DNE	NA	11.3	B	NA	No
		All	PM	DNE	NA	15.1	B	NA	No
29) Pankey/Pala Mesa Drive/Pankey Place (Street R)	S	WB LR	AM	DNE	NA	24.8	C	NA	No
		WB LR	PM	DNE	NA	43.3	D	NA	No
30) SR 76/Melrose Drive	S	All	AM	30.3	C	129.5	F	99.2	Yes
		All	PM	26.3	C	80.7	F	54.4	Yes
31) SR 76/East Vista Way	S	All	AM	60.9	E	281.7	F	220.8	Yes
		All	PM	48.4	D	261.1	F	212.7	Yes
32) SR 76/North River Road	S	All	AM	61.7	E	317.1	F	255.4	Yes
		All	PM	29.7	C	267.3	F	237.6	Yes
33) SR 76/Olive Hill Road	S	All	AM	53.8	D	239.7	F	185.9	Yes
		All	PM	52.9	D	184.1	F	131.2	Yes
34) SR 76/South Mission Road	S	All	AM	18.9	B	42.1	D	23.2	No
		All	PM	21.5	C	88.0	F	66.5	Yes
35) Reche Road/Live Oak Park Road	U	SB LR	AM	23.0	C	45.3	E	22.3	Yes
		SB LR	PM	18.0	C	26.3	D	8.3	No
36) Reche Road/Green Canyon Norte	S	All	AM	21.1	C	27.3	C	6.2	No
		All	PM	21.0	C	26.0	C	5.0	No

Table 2.2-14 (cont.)

INTERSECTION OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	S/U ¹	Movement	Peak Hour	Existing		Existing + Cumulative + Project		Δ Delay ²	Significant Cumulative Impact?
				Delay ²	LOS	Delay ²	LOS		
37) SR 76/Pala Mission Road	S	All	AM	29.3	C	35.8	D	6.5	No
		All	PM	32.4	C	42.6	D	10.2	No

Source: LOS Engineering, Inc. 2009, as amended

¹ U=Unsignalized, S= Signalized

² Delay is measured in seconds.

Bold = Intersections currently operating or would operate at an unacceptable LOS.

DNE = does not exist; NA = not applicable; Δ = change in

Table 2.2-15 ROADWAY SEGMENT OPERATIONS UNDER BUILDOUT (YEAR 2030) AND BUILDOUT (YEAR 2030) PLUS PROJECT CONDITIONS											
Segment	Classification	Capacity	Buildout (Year 2030)			Buildout (Year 2030) + Project			Δ V/C	County Significant Impact?	CMP Significant Impact?
			ADT	V/C ₁	LOS	ADT	V/C ¹	LOS			
OLD HIGHWAY 395											
East Mission Road to Reche Road	Collector (four-lane undivided)	34,200	19,320	0.56	B	21,900	0.64	B	0.08	No	No
Reche Road to Stewart Canyon Road			21,823	0.64	B	25,200	0.74	C	0.10	No	No
Stewart Canyon Road to Tecalote Lane			20,586	0.60	B	21,300	0.62	B	0.02	No	No
Tecalote Lane to Pala Mesa Drive			22,383	0.65	B	23,200	0.68	C	0.02	No	No
Pala Mesa Drive to SR 76 (Pala Road)			22,210	0.65	B	23,400	0.68	C	0.03	No	No
STEWART CANYON ROAD											
Old Highway 395 to Horse Ranch Creek Road	Collector (two-lane undivided)	34,200	5,841	0.17	A	8,800	0.26	A	0.09	No	No
PANKEY ROAD											
Pankey Place (Street R) to SR 76	Collector (four-lane divided)	34,200	8,418	0.25	A	8,900	0.26	A	0.01	No	No
SR 76 to Shearer Crossing/Dulin Road	Light Collector (two-lane undivided)	16,200	16,411	1.01	F	20,000	1.23	F	0.22	Yes	Yes
HORSE RANCH CREEK ROAD											
Stewart Canyon Road to Baltimore Oriole Road	Light Collector (two-lane undivided)	16,200	4,838	0.30	C	7,900	0.49	D	0.19	No	No
Baltimore Oriole Road to Longspur Road	Boulevard 4.2A (four-lane divided)	27,000	5,636	0.21	Un	11,400	0.42	Un	0.21	No	No
Longspur Road to Harvest Glen Lane			7,194	0.27	Un	16,000	0.59	Un	0.33	No	No
Harvest Glen Lane to Intersection #26			9,659	0.36	Un	20,800	0.77	Un	0.41	No	No
Intersection #26 to Park/School			12,179	0.45	Un	22,600	0.84	Un	0.39	No	No
Park School to Pankey Place (Street R)			12,379	0.46	Un	22,800	0.84	Un	0.39	No	No
Pankey Place (Street R) to SR 76			6,203	0.23	Un	13,600	0.50	Un	0.27	No	No

Table 2.2-15 (cont.) ROAD SEGMENT OPERATIONS UNDER BUILDOUT (YEAR 2030) AND BUILDOUT (YEAR 2030) PLUS PROJECT CONDITIONS												
Segment	Classification	Capacity	Buildout (Year 2030)			Buildout (Year 2030) + Project			Δ V/C	County Significant Impact?	CMP Significant Impact?	
			ADT	V/C ¹	LOS	ADT	V/C ¹	LOS				
PALA MESA DRIVE												
Old Highway 395 to Pankey Place (Street R)	Light Collector (two-lane undivided)	16,200	4,483	0.28	C	7,500	0.46	D	0.19	No	No	
PANKEY PLACE/STREET R												
Pala Mesa/Pankey Place to Horse Ranch Creek Road	Light Collector (two-lane undivided)	16,200	6,312	0.39	C	10,300	0.64	D	0.25	No	No	

Source: LOS Engineering, Inc. 2009, as amended

¹The V/C analysis is provided for informational purposes only.

Bold = Road segments would operate at an unacceptable LOS.

Un= Under capacity per the GP Update Standards; Δ = change in

Table 2.2-16 SR 76 OPERATIONS UNDER BUILDOUT (YEAR 2030) AND BUILDOUT (YEAR 2030) PLUS PROJECT CONDITIONS											
Segment of SR 76 ¹	Classification	Direction	Buildout (Year 2030)			Buildout (Year 2030)+ Project			Δ ADT	Δ V/C	Significant Impact?
			ADT	V/C	LOS	ADT	V/C	LOS			
AM Peak Hour											
South Mission Road to Via Monserate	Prime Arterial	EB	1,045	0.33	B	1,092	0.35	B	47	0.01	No
		WB	1,794	0.54	C	1,840	0.56	C	46	0.01	No
Via Monserate to Gird Road	Prime Arterial	EB	1,091	0.33	B	1,140	0.35	B	49	0.01	No
		WB	1,765	0.56	C	1,816	0.57	C	51	0.02	No
Gird Road to Sage Road	Prime Arterial	EB	1,082	0.33	B	1,131	0.34	B	49	0.01	No
		WB	1,610	0.49	B	1,661	0.50	B	51	0.02	No
Sage Road to Old Highway 395	Prime Arterial	EB	1,169	0.61	C	1,218	0.64	C	49	0.03	No
		WB	1,600	0.48	B	1,651	0.50	B	51	0.02	No
Old Highway 395 to I-15 SB ramps	Prime Arterial	EB	1,319	0.44	B	1,343	0.44	B	24	0.01	No
		WB	1,247	0.61	C	1,265	0.62	C	18	0.01	No
I-15 SB ramps to I-15 NB ramps	Prime Arterial	EB	939	0.31	A	1,022	0.34	B	83	0.03	No
		WB	837	0.28	A	994	0.33	B	157	0.05	No
I-15 NB ramps to Pankey Road	Major Road	EB	641	0.21	A	842	0.27	A	201	0.06	No
		WB	817	0.27	A	1,045	0.34	B	228	0.08	No
Pankey Road to Horse Ranch Creek Road	Major Road	EB	542	0.30	A	762	0.42	B	220	0.12	No
		WB	965	0.49	C	1,184	0.61	C	219	0.11	No
Horse Ranch Creek Road to Rice Canyon Road	Major Road	EB	722	0.40	B	762	0.42	B	40	0.02	No
		WB	1,139	0.58	C	1,184	0.61	C	45	0.02	No
Rice Canyon Road to Couser Canyon Road	Major Road	EB	802	0.34	B	840	0.35	B	38	0.02	No
		WB	1,684	0.54	C	1,724	0.56	C	40	0.01	No
PM Peak Hour											
South Mission Road to Via Monserate	Prime Arterial	EB	2,200	0.67	C	2,273	0.69	C	73	0.02	No
		WB	1,437	0.68	C	1,501	0.71	C	64	0.03	No
Via Monserate to Gird Road	Prime Arterial	EB	1,998	0.69	C	2,077	0.71	D	79	0.03	No
		WB	1,294	0.39	B	1,361	0.41	B	67	0.02	No
Gird Road to Sage Road	Prime Arterial	EB	1,599	0.48	B	1,678	0.51	B	79	0.02	No
		WB	1,169	0.40	B	1,236	0.42	B	67	0.02	No
Sage Road to Old Highway 395	Prime Arterial	EB	1,596	0.69	C	1,675	0.73	D	79	0.03	No
		WB	1,381	0.42	B	1,448	0.44	B	67	0.02	No
Old Highway 395 to I-15 SB ramps	Prime Arterial	EB	1,454	0.48	B	1,486	0.49	B	32	0.01	No
		WB	1,498	0.74	D	1,531	0.75	D	33	0.02	No

Table 2.2-16 (cont.) SR 76 OPERATIONS UNDER BUILDOUT (YEAR 2030) AND BUILDOUT (YEAR 2030) PLUS PROJECT CONDITIONS											
Segment of SR 76¹	Classification	Direction	Buildout (Year 2030)			Buildout (Year 2030)+ Project			Δ ADT	Δ V/C	Significant Impact?
			ADT	V/C	LOS	ADT	V/C	LOS			
PM Peak Hour (cont.)											
I-15 SB ramps to I-15 NB ramps	Prime Arterial	EB	1,222	0.40	B	1,357	0.45	B	135	0.04	No
		WB	1,086	0.36	B	1,285	0.42	B	199	0.07	No
I-15 NB ramps to Pankey Road	Major Road	EB	1,106	0.36	B	1,449	0.47	B	343	0.11	No
		WB	780	0.26	A	1,062	0.35	B	282	0.09	No
Pankey Road to Horse Ranch Creek Road	Major Road	EB	934	0.52	C	1,280	0.71	C	346	0.19	No
		WB	1,050	0.52	C	1,357	0.67	C	307	0.15	No
Horse Ranch Creek Road to Rice Canyon Road	Major Road	EB	1,219	0.67	C	1,280	0.71	C	61	0.03	No
		WB	1,291	0.64	C	1,357	0.67	C	66	0.03	No
Rice Canyon Road to Couser Canyon Road	Major Road	EB	977	0.32	B	1,032	0.33	B	55	0.02	No
		WB	1,282	0.54	C	1,343	0.56	C	61	0.03	No

Source: LOS Engineering, Inc. 2009, as amended

¹ All segments are four lanes.

Bold = State route segment currently operating or would operate at an unacceptable LOS

Δ = change in

Table 2.2-17
I-15 OPERATIONS UNDER BUILDOUT (YEAR 2030) AND BUILDOUT (YEAR 2030) PLUS PROJECT CONDITIONS

Segment ¹	ADT	Direction	Peak Hour	Buildout (Year 2030)			Buildout (Year 2030) + Project			Δ ADT	Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS			
Rainbow Valley Boulevard to Mission Road	275,000	NB	AM	9,384	1.00	F	9,483	1.01	F	99	0.01	No
			PM	11,188	1.19	F	11,285	1.20	F	97	0.01	No
		SB	AM	9,417	0.97	E	9,215	0.98	E	68	0.01	No
			PM	10,905	1.16	F	11,041	1.17	F	136	0.01	No
Mission Road to SR 76	251,000	NB	AM	8,584	0.91	D	8,598	0.91	D	14	0.00	No
			PM	10,234	1.09	F	10,247	1.09	F	13	0.00	No
		SB	AM	8,330	0.89	D	8,339	0.89	D	9	0.00	No
			PM	9,931	1.06	F	9,950	1.06	F	19	0.00	No
SR 76 to Old Highway 395	231,000	NB	AM	7,465	0.79	C	7,538	0.80	D	73	0.01	No
			AM	9,148	0.97	E	9,276	0.98	E	128	0.01	No
		SB	PM	7,717	0.82	D	7,803	0.83	D	86	0.01	No
			PM	9,457	1.01	F	9,559	1.02	F	102	0.01	No

Source: LOS Engineering, Inc. 2009, as amended

¹ All freeway segments are four lanes with a capacity of 9,400 in each direction.

Bold = Freeway segments would operate at an unacceptable LOS.

Δ = change in

Intersection	S/U ¹	Movement	Peak Hour	Buildout (Year 2030)		Buildout (Year 2030) + Project		Δ Delay ²	CM Volume ³	Significant Impact?
				Delay ²	LOS	Delay ²	LOS			
1) SR 76/Via Monserate	U	SB R	AM	24.3	C	25.3	C	1.0	0	No
		SB R	PM	19.4	C	19.7	C	0.3	0	No
2) SR 76/Gird Road	S	All	AM	12.3	B	12.5	B	0.2	NA	No
		All	PM	12.6	B	13.0	B	0.4	0	No
3) SR 76/Sage Road	U	SB R	AM	17.5	C	17.6	C	0.1	0	No
		SB R	PM	17.1	C	17.9	C	0.8	NA	No
4) SR 76/Old Highway 395	S	All	AM	43.4	D	51.0	D	7.6	NA	No
		All	PM	40.6	D	47.8	D	7.2	NA	No
6) SR 76/I-15 SB ramps	S	All	AM	33.6	C	34.0	C	0.4	NA	No
		All	PM	32.6	C	34.1	C	1.5	NA	No
7) SR 76/I-15 NB ramps	S	All	AM	36.8	D	41.2	D	4.4	NA	No
		All	PM	41.2	D	41.3	D	0.1	NA	No
8) SR 76/Pankey Road	S	All	AM	23.3	C	27.8	C	4.5	NA	No
		All	PM	34.9	C	45.4	D	10.5	NA	No
9) SR 76/Horse Ranch Creek Road	S	All	AM	16.9	B	21.8	C	4.9	NA	No
		All	PM	15.1	B	22.9	C	7.8	NA	No
10) SR 76/Rice Canyon Road	S	All	AM	8.3	A	8.5	A	0.2	NA	No
		All	PM	8.2	A	8.6	A	0.4	NA	No
11) SR 76/Couser Canyon Road	S	All	AM	7.4	A	7.7	A	0.3	NA	No
		All	PM	5.5	A	5.7	A	0.2	NA	No
12) Old Highway 395/Pala Mesa Drive	S	All	AM	28.3	C	34.2	C	5.9	NA	No
		All	PM	36.5	D	52.3	D	15.8	NA	No
14) Old Highway 395/Stewart Canyon Road	S	All	AM	20.5	C	22.6	C	2.1	NA	No
		All	PM	23.0	C	39.9	D	16.9	NA	No
15) Old Highway 395/Reche Road	S	All	AM	22.3	C	23.3	C	1.0	NA	No
		All	PM	45.1	D	50.9	D	5.8	NA	No
19) Mission Road/Old Highway 395	S	All	AM	24.2	C	27.5	C	3.3	NA	No
		All	PM	28.5	C	37.8	D	9.3	NA	No

Table 2.2-18 (cont.)
INTERSECTION OPERATIONS UNDER BUILDOUT (YEAR 2030) AND BUILDOUT (YEAR 2030) PLUS PROJECT CONDITIONS

Intersection	S/U ¹	Movement	Peak Hour	Buildout (Year 2030)		Buildout (Year 2030) + Project		Δ Delay ²	CM Volume ³	Significant Impact?
				Delay ²	LOS	Delay ²	LOS			
20) Mission Road/Old Highway 395	S	All	AM	28.3	C	36.8	D	8.5	NA	No
		All	PM	18.4	B	27.7	C	9.3	NA	No
21) Mission Road/I-15 NB ramps	S	All	AM	20.7	C	22.8	C	2.1	NA	No
		All	PM	26.7	C	29.9	C	3.2	NA	No
22) Stewart Canyon Road/Horse Ranch Creek Road/Pankey Road	U	EB LR	AM	10.5	B	12.2	B	1.7	88	No
		EB LR	PM	11.5	B	15.5	C	4.0	180	No
23) Horse Ranch Creek Road/Baltimore Oriole	S	All	AM	16.0	B	17.5	B	1.5	NA	No
		All	PM	16.8	B	19.6	B	2.8	NA	No
24) Horse Ranch Creek Road/Longspur Road	S	All	AM	22.4	C	23.6	C	1.2	NA	No
		All	PM	18.9	B	24.9	C	6.0	NA	No
25) Horse Ranch Creek Road/Harvest Glen Road	S	All	AM	18.4	B	22.2	C	3.8	NA	No
		All	PM	18.7	B	30.2	C	11.5	NA	No
26) Horse Ranch Creek Road/Pardee South Loop	S	All	AM	15.5	B	18.9	B	3.4	NA	No
		All	PM	16.8	B	27.3	C	10.5	NA	No
27) Horse Ranch Creek Road/School/Park Access	U	WB RT	AM	12.0	B	15.6	C	3.6	0	No
		WB RT	PM	12.9	B	18.7	C	5.8	0	No
28) Horse Ranch Creek Road/Pankey Place (Street R)	S	All	AM	11.0	B	11.8	B	0.8	NA	No
		All	PM	10.9	B	15.7	B	4.8	NA	No
29) Pankey/Pala Mesa Drive/Pankey Place (Street R)	S	All	AM	22.4	C	27.0	C	4.6	NA	No
		All	PM	38.6	D	48.0	D	9.4	NA	No
34) SR 76/South Mission Road	S	All	AM	38.8	D	41.2	D	2.4	NA	No
		All	PM	34.5	C	36.2	D	1.7	NA	No

Source: LOS Engineering, Inc. 2009, as amended

¹ S= Signalized, U=Unsignalized

² Delay measured in seconds

³ CM Volume = Critical Movement Volume; used to show Project volumes on the critical movement

NA= not applicable; Δ = change in

Table 2.2-19 SUMMARY OF TRAFFIC IMPACTS AND MITIGATION			
Impact	Mitigation	Responsible Party	Significance After Mitigation
SIGNIFICANT DIRECT IMPACTS TO SR 76			
Impact TR-1: SR 76 (I-15 SB ramps to I-15 NB ramps)	Construct loop a on-ramp at the intersection of SR 76/ I-15 SB ramps and restripe bridge to four lanes	Project Applicant	Direct impact mitigated to below a level of significance
Impact TR-1: SR 76 (from South Mission Road to Gird Road)	Widen SR 76 from two to four lanes	TransNet SR 76 Widening	Direct impact mitigated to below a level of significance with TransNet improvements. Due to timing considerations, Project Applicant will require a Statement of Overriding Considerations if Proposed Project proceeds before TransNet improvements
Impact TR-1: SR 76 (Sage Road to Old Highway 395)	Widen SR 76 from two to four lanes	TransNet SR 76 Widening	Direct impact mitigated to below a level of significance with TransNet improvements. Due to timing considerations, Project Applicant will require a Statement of Overriding Considerations if Proposed Project proceeds before TransNet improvements
Impact TR-1: SR 76 (Horse Ranch Creek Road to Couser Canyon Road)	Widen SR 76 from two to four lanes	Caltrans	Direct impact mitigated to below a level of significance with TransNet improvements. Due to timing considerations, Project Applicant will require a Statement of Overriding Considerations if Proposed Project proceeds before TransNet improvements
SIGNIFICANT DIRECT INTERSECTION IMPACTS			
Impact TR-2: SR 76/I-15 NB ramps	Construct loop on-ramp for EB SR 76 to NB I-15	Project Applicant	Direct impact mitigated to below a level of significance
Impact TR-3: Old Highway 395/Reche Road	Install traffic signal	Project Applicant	Direct impact mitigated to below a level of significance
SIGNIFICANT CUMULATIVE SEGMENT AND SR 76 IMPACTS			
Impact TR-4: Old Highway 395 (East Mission Road to West Lilac Road)	Widen roadway to four-lane collector	TIF ¹	Cumulative impact mitigated to below a level of significance
Impact TR-4: Reche Road (Green Canyon Norte to Live Oak Park Road)	Widen roadway to four-lane collector	TIF ¹	Cumulative impact mitigated to below a level of significance
Impact TR-4: Reche Road (Live Oak Park Road to Gird Road)	Widen roadway to town collector	TIF ¹	Cumulative impact mitigated to below a level of significance
Impact TR-4 and 8: Pankey Road (SR 76 to Shearer Crossing)	Widen roadway to four-lane collector	TIF ¹	Cumulative impact mitigated to below a level of significance

Table 2.2-19 (cont.) SUMMARY OF TRAFFIC IMPACTS AND MITIGATION			
Impact	Mitigation	Responsible Party	Significance After Mitigation
SIGNIFICANT CUMULATIVE SEGMENT AND SR 76 IMPACTS (cont.)			
Impact TR-4: Pala Mesa Dr. (Wilt Road/Sage Road to Old Highway 395)	Widen roadway to town collector	TIF ¹	Cumulative impact mitigated to below a level of significance
Impact TR-5: SR 76 (Melrose Drive to South Mission Road)	Widen SR 76 from two to six lanes	TransNet SR 76 Widening; TIF ¹	Cumulative impact mitigated to below a level of significance
Impact TR-5: SR 76 (South Mission Road to Old Highway 395)	Widen SR 76 from two to four lanes	TransNet SR 76 Widening; TIF ¹	Cumulative impact mitigated to below a level of significance
Impact TR-5: SR 76 (I-15 SB ramps to I-15 NB ramps)	Restripe SR 76 from two to four lanes	TransNet SR 76 Widening; TIF ¹	Cumulative impact mitigated to below a level of significance
Impact TR-5: SR 76 (Horse Ranch Creek Road to Pala Mission Road)	Widen SR 76 from two to four lanes	TIF ²	Cumulative impact mitigated to below a level of significance
SIGNIFICANT CUMULATIVE INTERSECTION IMPACTS			
Impact TR-6: SR 76/Melrose Drive	Additional EB and WB left-turn lane and through lane	TIF; TransNet SR 76 Widening	Cumulative impact mitigated to below a level of significance
Impact TR-6: SR 76/East Vista Way	Additional EB through and right-turn lane, additional two WB through lanes, and additional NB and SB lanes	TIF; TransNet SR 76 Widening	Cumulative impact mitigated to below a level of significance
Impact TR-6: SR 76/North River Road	Additional EB and WB through lanes and separate WB right-turn lane	TIF; TransNet SR 76 Widening	Cumulative impact mitigated to below a level of significance
Impact TR-6: SR 76/Olive Hill Road	Additional EB through and separate right-turn lane, additional WB left-lane and through lane, additional NB through lane, additional SB left turn lane and right turn lane	TIF; TransNet SR 76 Widening	Cumulative impact mitigated to below a level of significance
Impact TR-6: SR 76/South Mission Road	Two additional EB through lanes	TIF; TransNet SR 76 Widening	Cumulative impact mitigated to below a level of significance
Impact TR-7: SR 76/Via Monserate	Additional EB and WB lanes with either a traffic signal or restriction to SB left turns	TIF; TransNet SR 76 Widening	Cumulative impact mitigated to below a level of significance
Impact TR-6: SR 76/Gird Road	Additional EB and WB lanes	TIF; TransNet SR 76 Widening	Cumulative impact mitigated to below a level of significance
Impact TR-7: SR 76/Sage Road	Additional EB and WB lanes with either a traffic signal or restriction to SB left-turn lanes	TIF; TransNet SR 76 Widening	Cumulative impact mitigated to below a level of significance

Table 2.2-19 (cont.) SUMMARY OF TRAFFIC IMPACTS AND MITIGATION			
Impact	Mitigation	Responsible Party	Significance After Mitigation
SIGNIFICANT CUMULATIVE INTERSECTION IMPACTS (cont.)			
Impact TR-6: SR 76/Old Highway 395	Additional EB right-turn lane, additional NB left-turn lane and through lane, additional dual SB left-turn lanes	TIF; TransNet SR 76 Widening	Cumulative impact mitigated to below a level of significance
Impact TR-6: SR 76/I-15 SB ramps	Additional EB and WB through lanes and interchange modifications of either loop ramps or additional turn lanes	TIF; TransNet SR 76 Widening	Cumulative impact mitigated to below a level of significance
Impact TR-6: SR 76/I-15 NB ramps	Additional EB and WB through lanes and interchange modifications of either loop ramps or additional turn lanes	TIF; TransNet SR 76 Widening	Cumulative impact mitigated to below a level of significance
Impact TR-6: SR 76/Pankey Road	Install traffic signal and add EB and WB left-turn lanes, additional NB dual left-turn lanes and through lane, additional SB left-turn lane and through lane	TIF	Cumulative impact mitigated to below a level of significance
Impact TR-7: SR 76/Rice Canyon Road	Install traffic signal and add EB left-turn lane and WB right-turn lane	TIF	Cumulative impact mitigated to below a level of significance
Impact TR-7: SR 76/Couser Canyon Road	Install traffic signal and add EB right-turn lane and WB left-turn lane	TIF	Cumulative impact mitigated to below a level of significance
Impact TR-6: Old Highway 395/East Mission Road	Additional SB left-turn lane	TIF	Cumulative impact mitigated to below a level of significance
Impact TR-6: Mission Road/I-15 SB ramps	Additional EB through and EB right-turn lane	TIF	Cumulative impact mitigated to below a level of significance
Impact TR-6: Mission Road/I-15 NB ramps	Additional EB left-turn lane	TIF	Cumulative impact mitigated to below a level of significance
Impact TR-7: Old Highway 395/Reche Road	Install traffic signal and separate EB left-turn lane, additional NB and SB through lanes, separate SB right-turn lane	TIF	Cumulative impact mitigated to below a level of significance
Impact TR-7: Old Highway 395/Stewart Canyon Road	Install traffic signal and add additional NB and SB through lanes, additional EB and WB left-turn lane	TIF	Cumulative impact mitigated to below a level of significance
Impact TR-7: Old Highway 395/Pala Mesa Drive	Install traffic signal and add additional NB and SB through lanes, additional EB and WB left-turn lanes	TIF	Cumulative impact mitigated to below a level of significance

Table 2.2-19 (cont.) SUMMARY OF TRAFFIC IMPACTS AND MITIGATION			
Impact	Mitigation	Responsible Party	Significance After Mitigation
SIGNIFICANT CUMULATIVE INTERSECTION IMPACTS (cont.)			
Impact TR-7: Old Highway 395/Dulin Road	Install traffic signal	TIF	Cumulative impact mitigated to below a level of significance
Impact TR-7: Reche Road/Live Oak Park Road	Install traffic signal	TIF	Cumulative impact mitigated to below a level of significance

Source: LOS Engineering, Inc. 2009, as amended

- 1 The TIF Program provides a comprehensive facility financing fee program that addresses forecasted deficiencies to SR 76 and other public street facilities. Applicant's contribution to the TIF will fully mitigate the Proposed Project cumulative impacts to SR 76 and other public street facilities.
- 2 For cumulative segment impacts to SR 76 east of Couser Canyon Road, the TIF Program mitigates for cumulative impacts on SR 76 west of Couser Canyon Road. Improvements to that segment, paid for by the TIF Program, will increase the operational efficiency of SR 76 west of Couser Canyon Road, and these improvements will provide improved operational characteristics on SR 76 east of Couser Canyon Road.

**Table 2.2-20
 MITIGATION FOR DIRECT IMPACTS TO INTERSECTIONS**

Intersection	Movement	Peak Hour	Existing		Existing + Project		Mitigation	Existing + Project with Mitigation		Impact Reduced to Below Significant?	
			Delay ¹	LOS	Delay ¹	LOS		Delay ¹	LOS	Direct	CMP
7) SR 76/I-15 NB ramps	All	PM	46.7	C	63.7	E	Construct a cloverleaf to the interchange	21.4	C	Yes	Yes
15) Old Highway 395/ Reche Road	EB LR	AM	18.4	C	39.5	E	Install a traffic signal	-	-	-	-
		PM	35.9	E	219.2	F		-	-	-	-
	All	AM	10.6	B	17.6	B		18.4	B	Yes	Yes
		PM	17.6	B	77.9	F		26.5	C	Yes	Yes

Source: LOS Engineering, Inc. 2009, as amended

¹ Delay measured in seconds

Bold = Intersections operating at an unacceptable LOS.

NA= not applicable

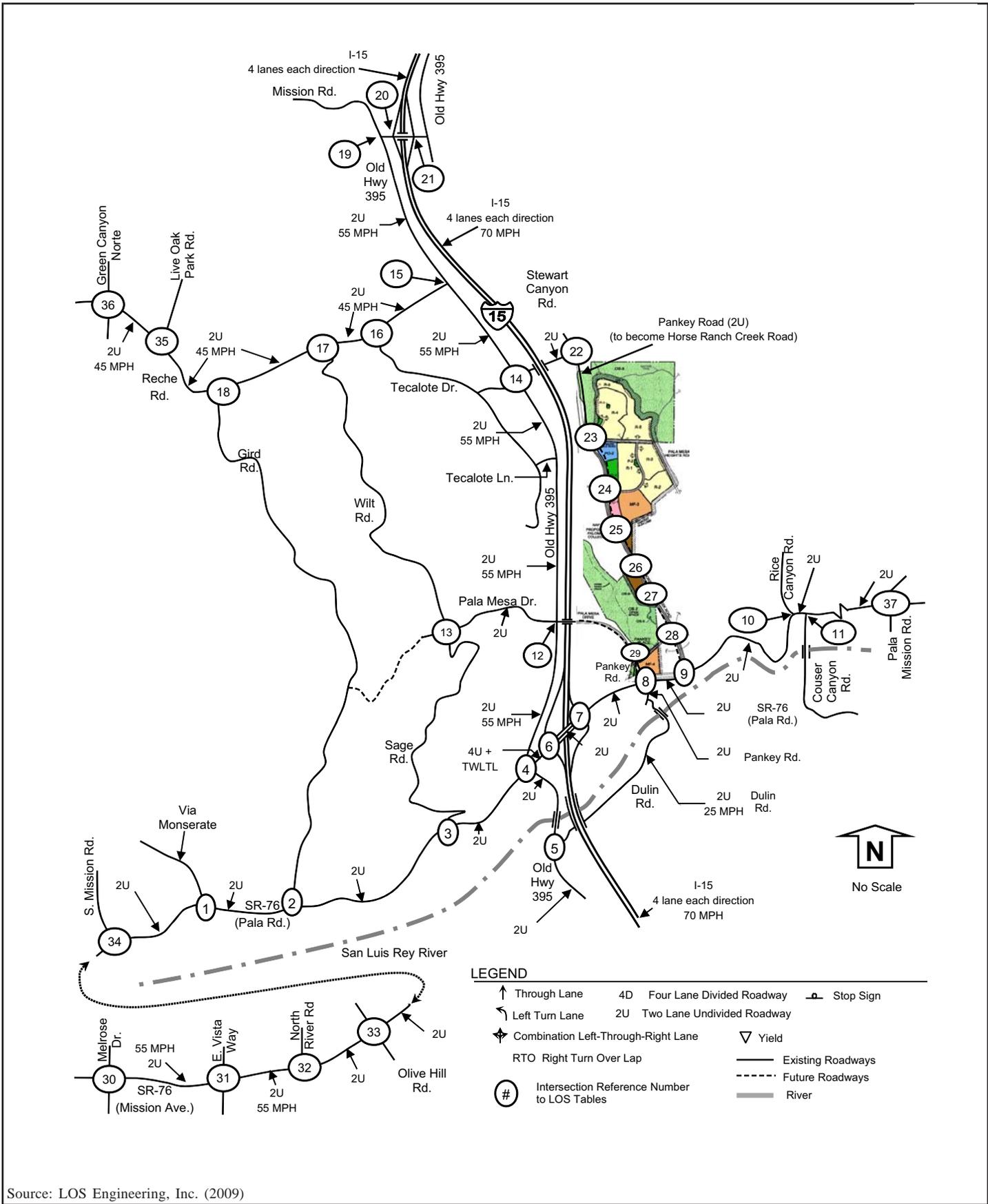
**Table 2.2-21
MITIGATION FOR DIRECT IMPACTS TO SR 76 TO BE COMPLETED BY OTHER RESPONSIBLE PARTIES**

Intersection	Classifi- cation	Move- ment	Capacity	Existing + Project			Mitigation	Existing + Project with Mitigation				Mitigation to Reduce Below Significant?	Impact Significance	
				ADT	V/C	LOS		Capacity	ADT	V/C	LOS			
AM Peak Hour														
South Mission Road to Via Monserate	Prime Arterial	EB	950	792	0.83	D	4-lane Major (Caltrans)	3,164	792	0.25	A	Yes	Significant and unmitigated; beyond jurisdiction of the Lead Agency – under jurisdiction of Caltrans	
		WB	950	947	1.00	E		3,300	947	0.29	A	Yes		
Via Monserate to Gird Road	Prime Arterial	EB	950	857	0.90	E		3,300	857	0.26	A	Yes		
		WB	950	946	1.00	E		3,162	946	0.30	A	Yes		
I-15 NB ramps to I-15 SB ramps	Prime Arterial	EB	950	927	0.98	E		3,030	927	0.31	A	Yes		
		WB	950	696	0.73	D		3,030	696	0.23	A	Yes		
PM Peak Hour														
South Mission Road to Via Monserate	Prime Arterial	EB	950	1,137	1.20	F	4-lane Major (Caltrans)	3,300	1,137	0.34	B	Yes	Significant and unmitigated; beyond jurisdiction of the Lead Agency – under jurisdiction of Caltrans	
		WB	950	682	0.72	D		2,122	682	0.32	B	Yes		
Via Monserate to Gird Road	Prime Arterial	EB	950	1,156	1.22	F		2,912	1,156	0.40	B	Yes		
		WB	950	853	0.90	E		3,300	853	0.26	A	Yes		
Sage Road to Old Highway 395	Prime Arterial	EB	950	717	0.75	D		2,300	717	0.31	B	Yes		
		WB	950	835	0.88	E		3,300	835	0.25	A	Yes		
I-15 NB ramps to I-15 SB ramps	Prime Arterial	EB	950	853	0.90	E		3,030	853	0.28	A	Yes		
		WB	950	1,352	1.42	F		3,030	1,352	0.45	B	Yes		
Horse Ranch Creek Road to Rice Canyon Road	Major Road	EB	950	692	0.73	D		3-lane Town Collector (Granite/ Warner Ranch) ¹	1,806	692	0.38	B		Yes
		WB	950	963	1.01	F		2,028	963	0.47	B	Yes		
Rice Canyon Road to Couser Canyon Road	Major Road	EB	950	518	0.61	C	3-lane Town Collector (Warner Ranch)	3,100	581	0.19	A	Yes		
		WB	950	991	1.04	F	2,382	991	0.42	B	Yes			

Source: LOS Engineering, Inc. 2009, as amended

¹ Granite Construction is planning to complete this improvement up to the Granite driveway. Warner Ranch is completing the improvements from Granite Construction Driveway to Rice Canyon Road.

Bold = Intersections operating at an unacceptable LOS.

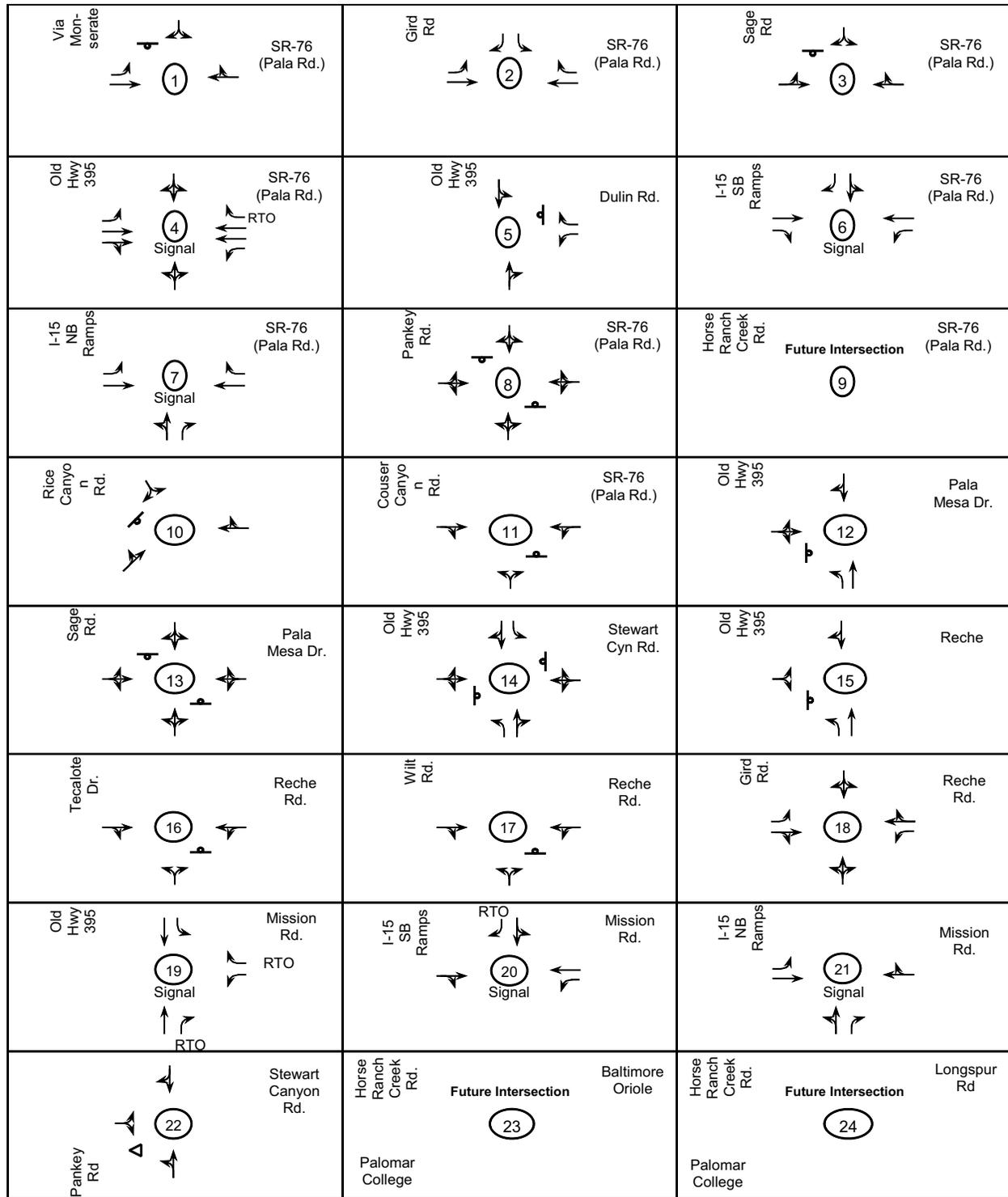


Existing Roadway Segment Conditions

CAMPUS PARK PROJECT

Figure 2.2-1a





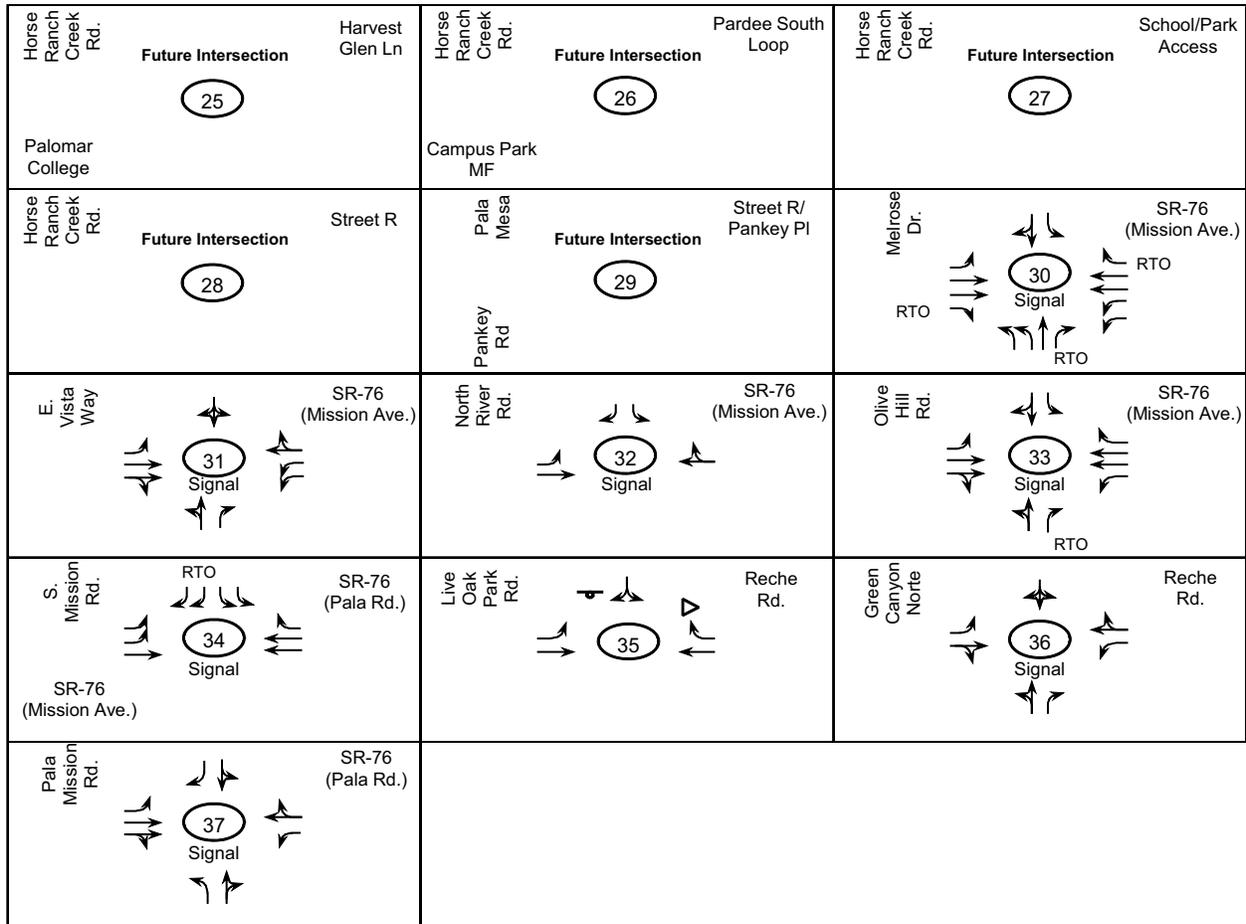
Source: LOS Engineering, Inc. (2009)

I:\ArcGIS\PPAS-01 Passarelle\Map\ENV\EIR\Fig2.2-1b_Existing_Intersection_Conditions.pmd -KF

Existing Intersection Conditions

CAMPUS PARK PROJECT

Figure 2.2-1b



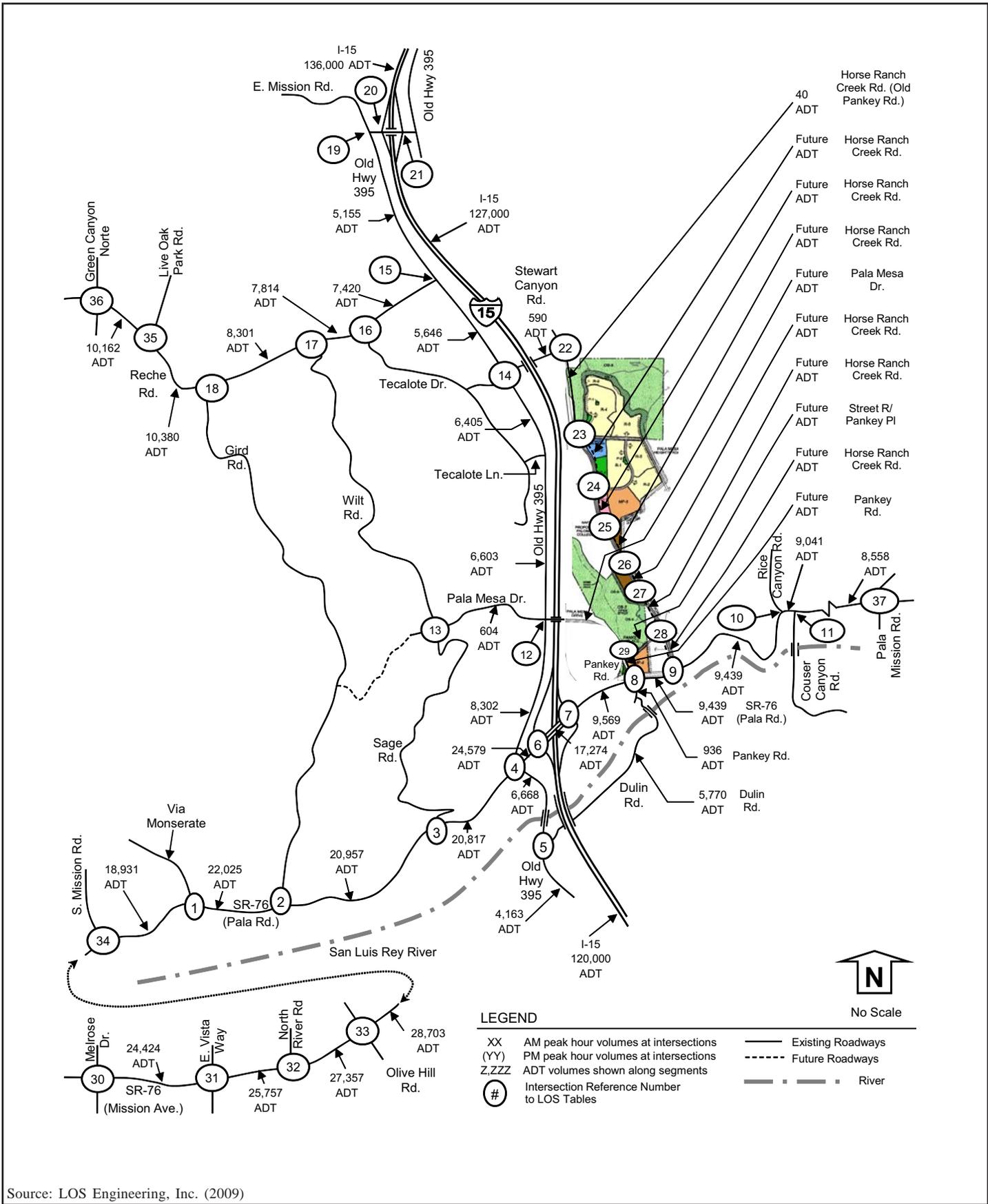
Source: LOS Engineering, Inc. (2009)

I:\ArcGIS\PPAS-01 Passarelle\Map\ENV\EIR\Fig2.2-1c_Existing_Intersection_Conditions.pmd -NM

Existing Intersection Conditions

CAMPUS PARK PROJECT

Figure 2.2-1c

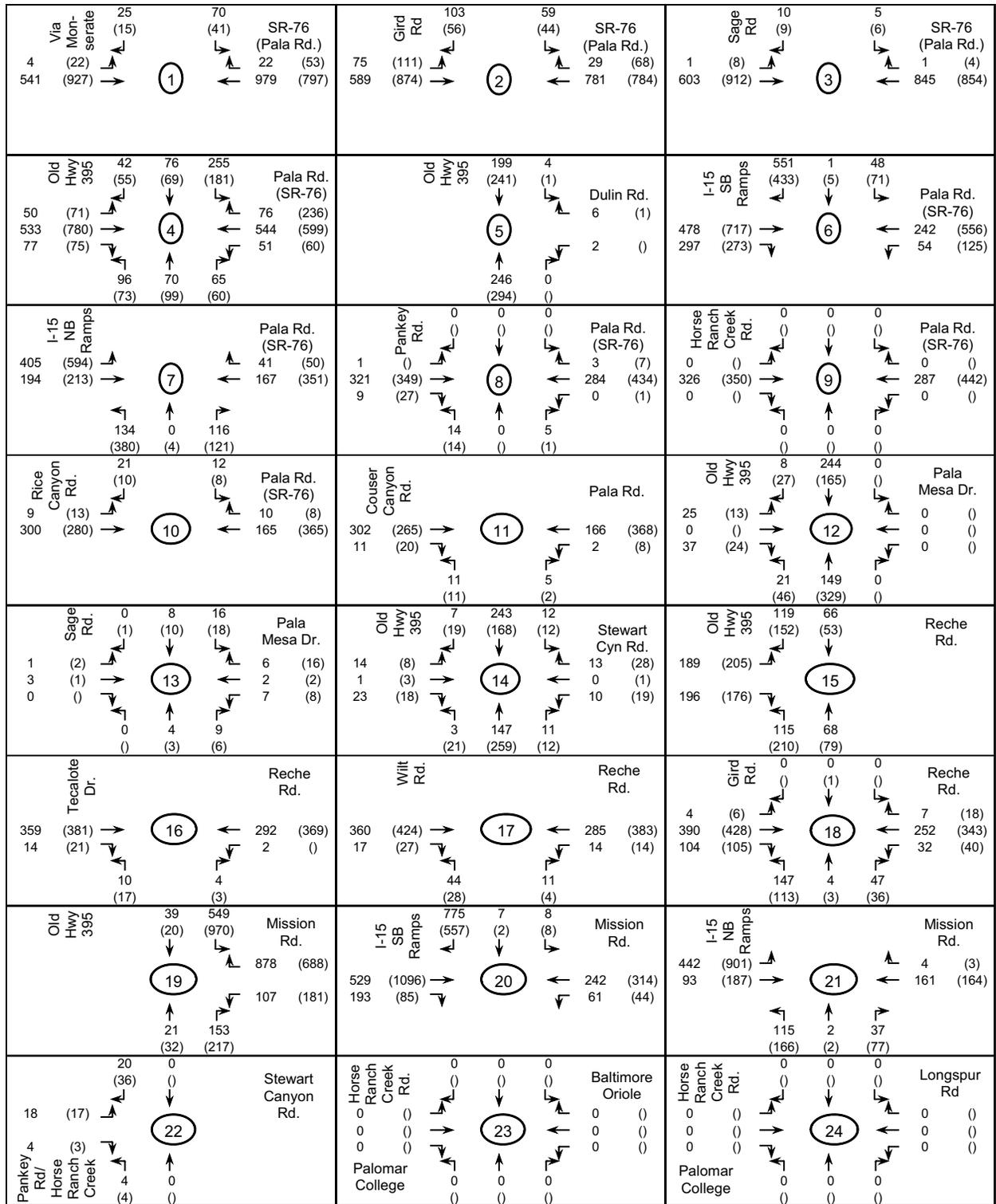


Existing Average Daily Traffic - Roadway Segments

CAMPUS PARK PROJECT

Figure 2.2-2a





Source: LOS Engineering, Inc. (2009)

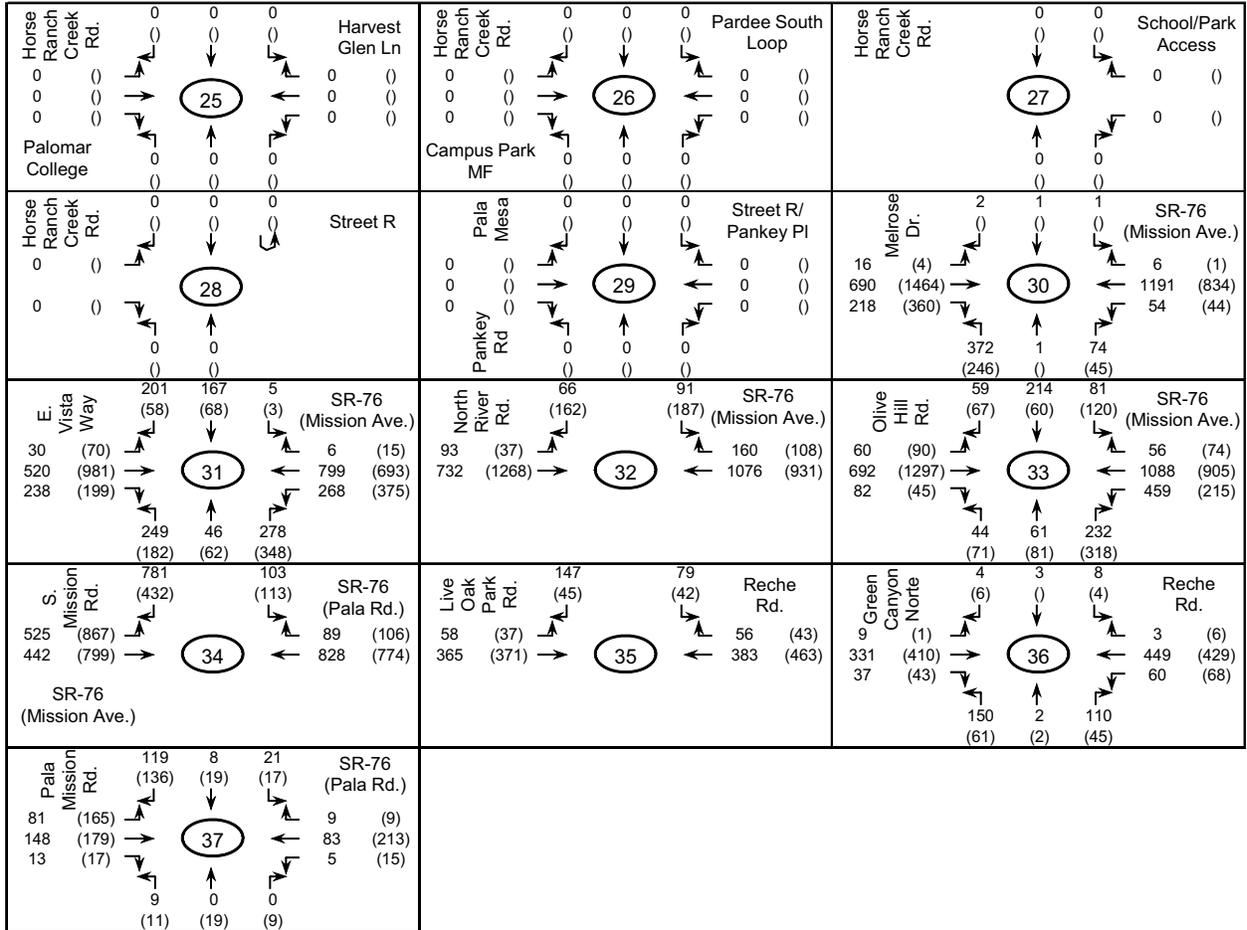
I:\ArcGIS\PA\SAS-01 Passarelle\Map\ENV\DIR\Fig2.2-2b_Existing_Avg_Daily_Traffic.pmd -KF

Existing Average Daily Traffic - Intersections

CAMPUS PARK PROJECT



Figure 2.2-2b



Source: LOS Engineering, Inc. (2009)

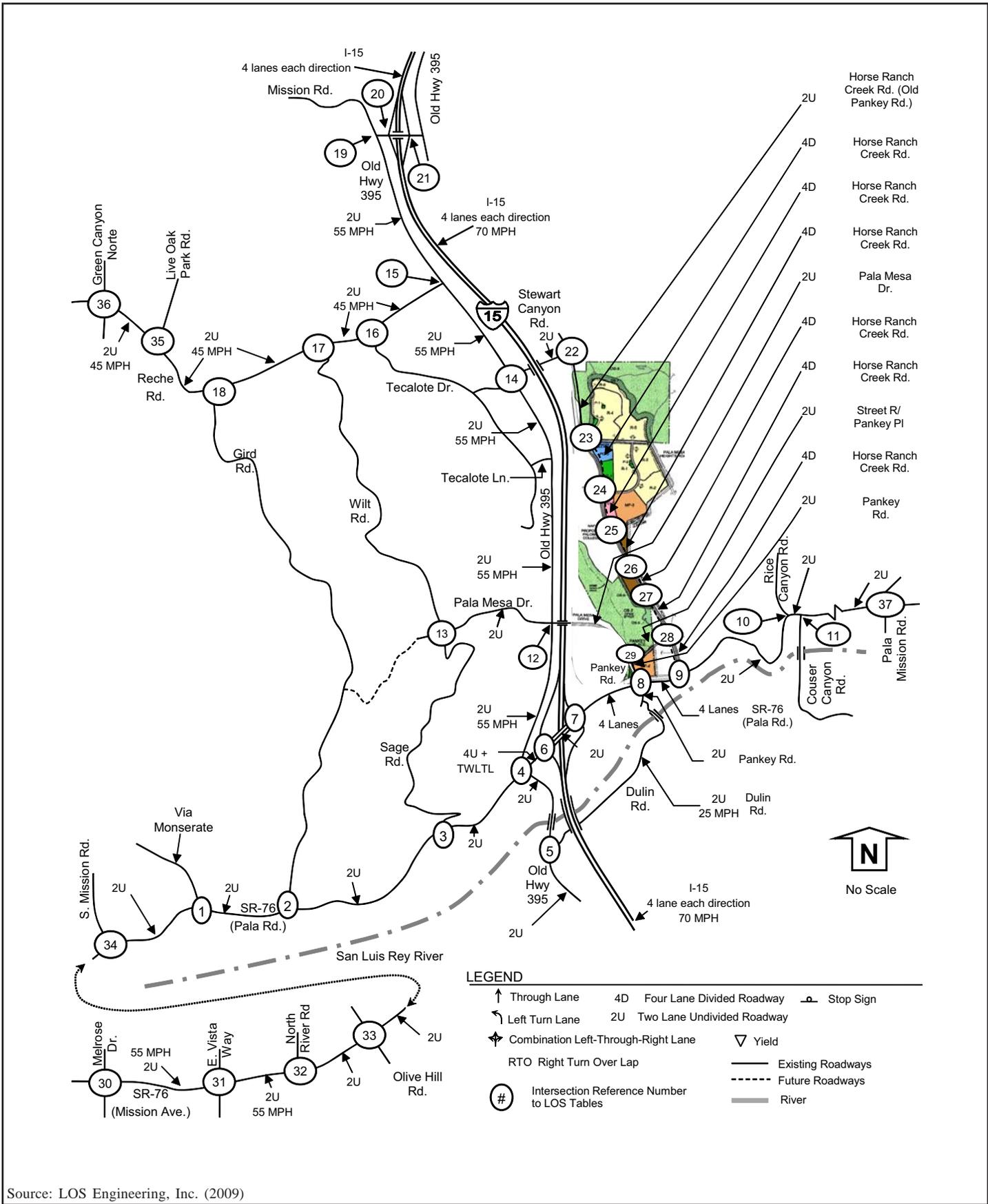
I:\ArcGIS\PA\SAS-01 Passarelle\Map\ENV\EIR\Fig2.2-2c_Existing_Avg_Daily_Traffic.pmd -NM

Existing Average Daily Traffic - Intersections

CAMPUS PARK PROJECT

Figure 2.2-2c





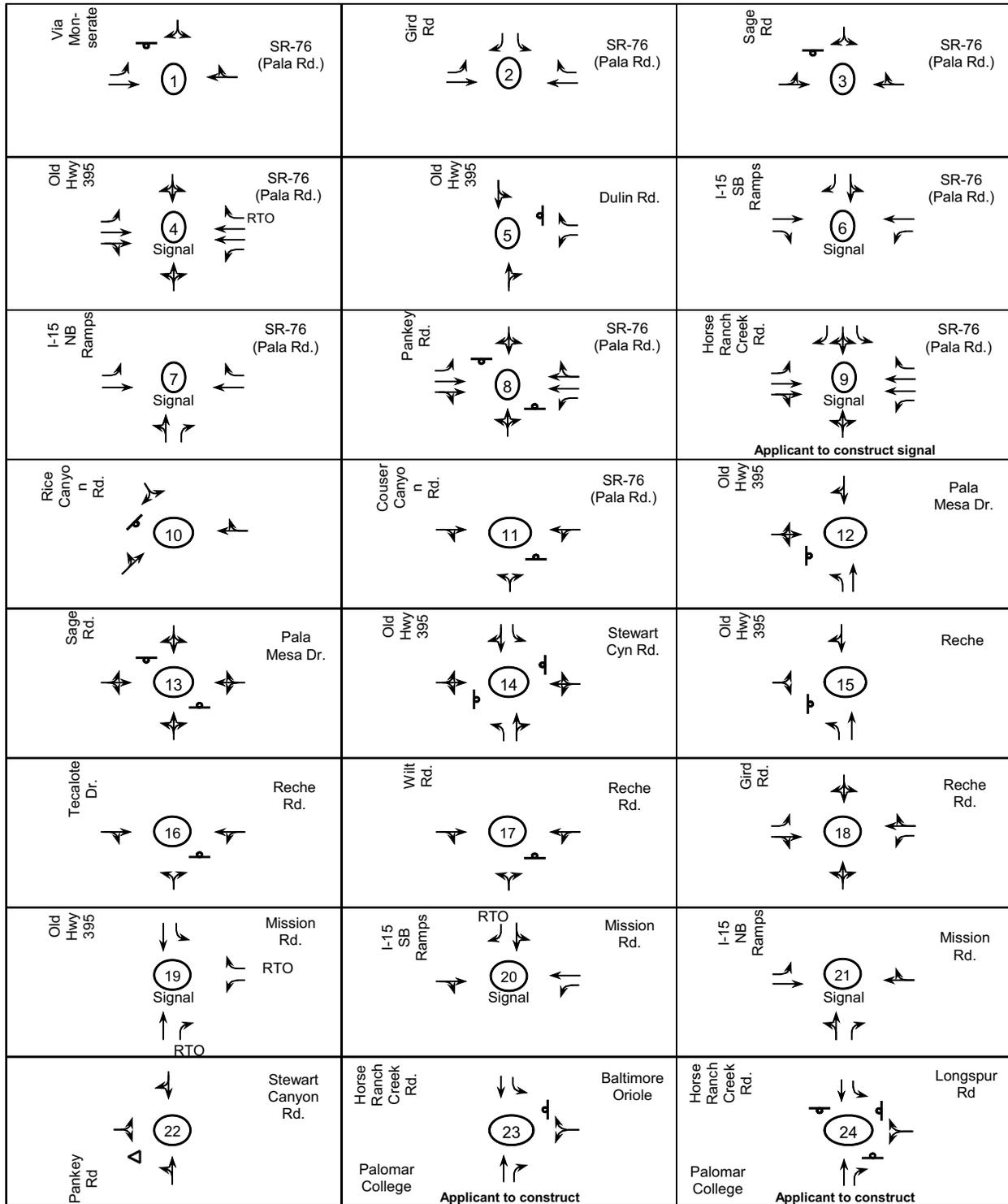
Source: LOS Engineering, Inc. (2009)

I:\ArcGIS\Map\Passarelle\Map\ENV\EIR\Fig2.2-3a_Project_Roadway_Conditions.pmd -KF

Existing Plus Project Roadway Segment Conditions

CAMPUS PARK PROJECT

Figure 2.2-3a



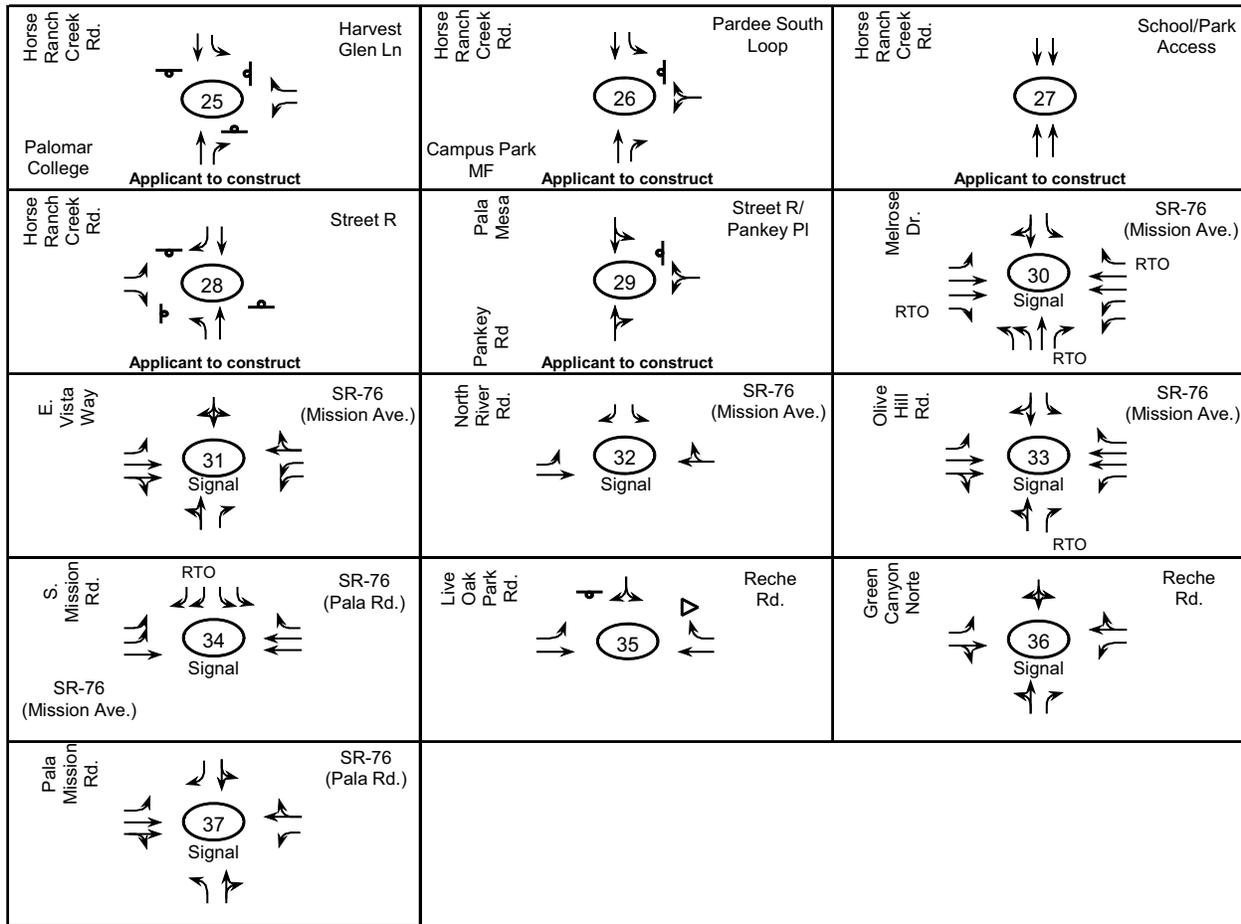
Source: LOS Engineering, Inc. (2009)

I:\ArcGIS\Map\Map\Passarelle\Map\ENV\EIR\Fig2.2-3b_Project_Intersection_Conditions.pmd_NM

Existing Plus Project Intersection Conditions

CAMPUS PARK PROJECT

Figure 2.2-3b



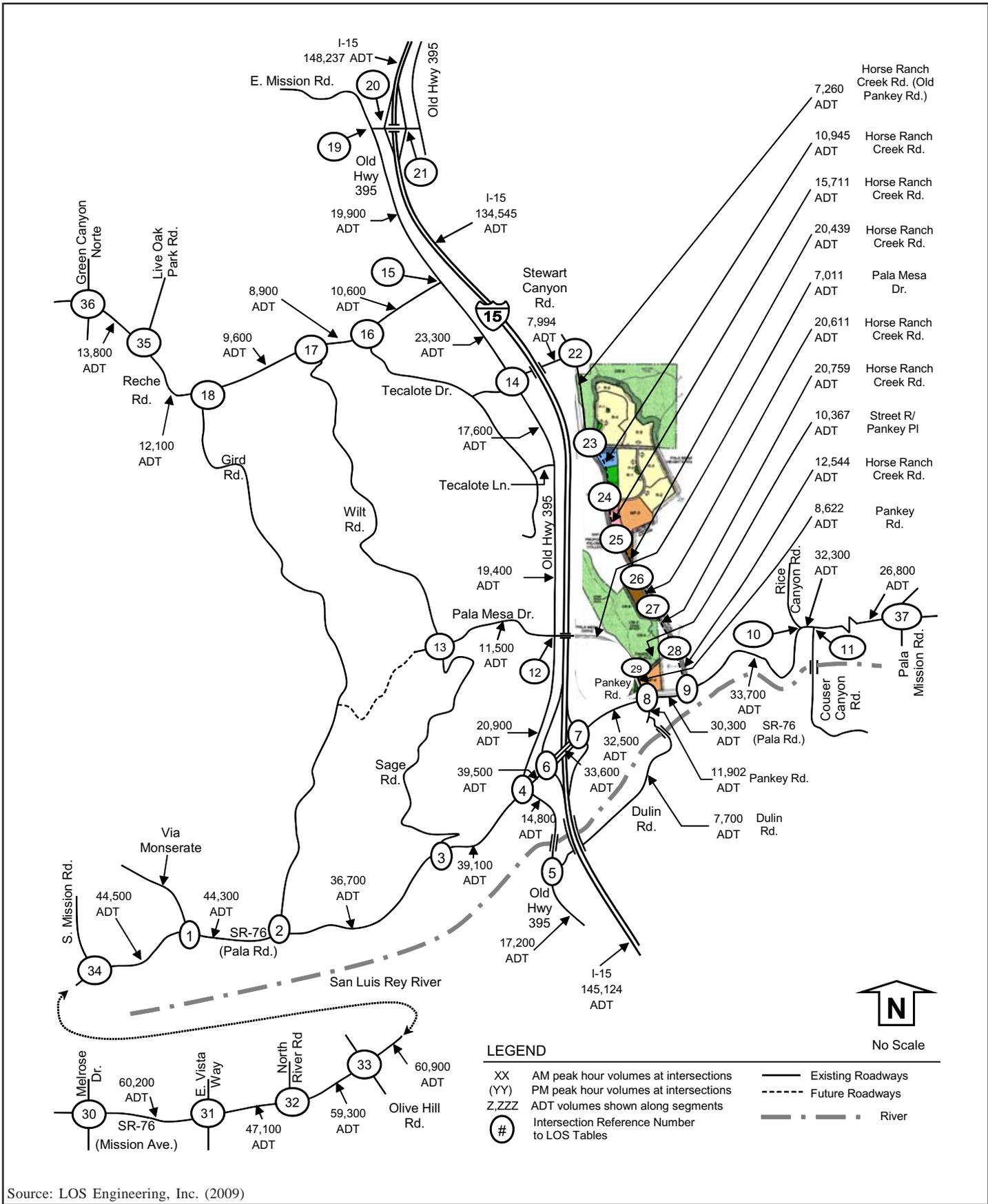
Source: LOS Engineering, Inc. (2009)

I:\ArcGIS\Map\Map\ENV\EIR\Fig2.2-3c_Project_Intersection_Conditions.pmd -NM

Existing Plus Project Intersection Conditions

CAMPUS PARK PROJECT

Figure 2.2-3c

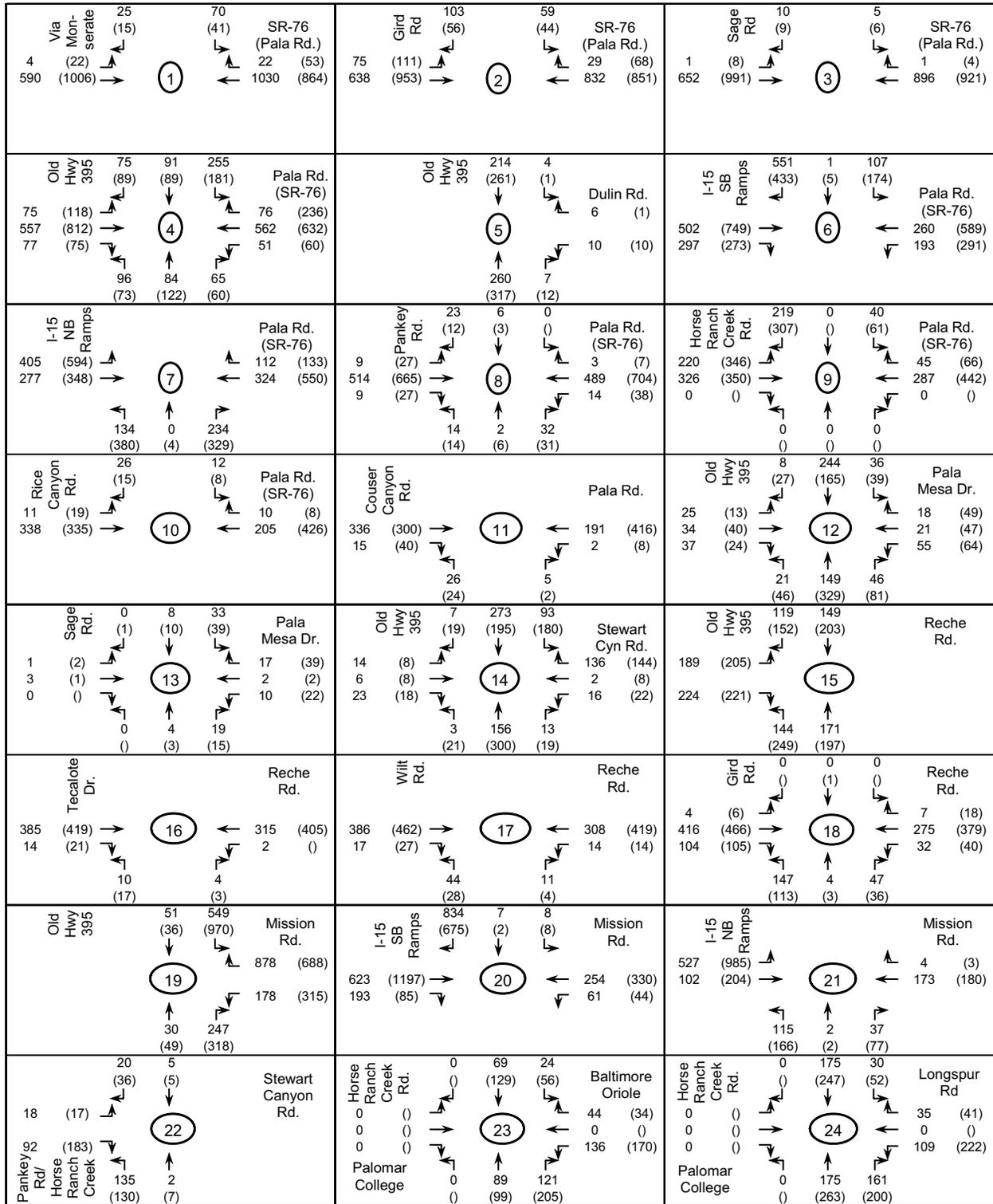


Existing Plus Project Average Daily Traffic - Roadway Segments

CAMPUS PARK PROJECT

Figure 2.2-4a





Source: LOS Engineering, Inc. (2009)

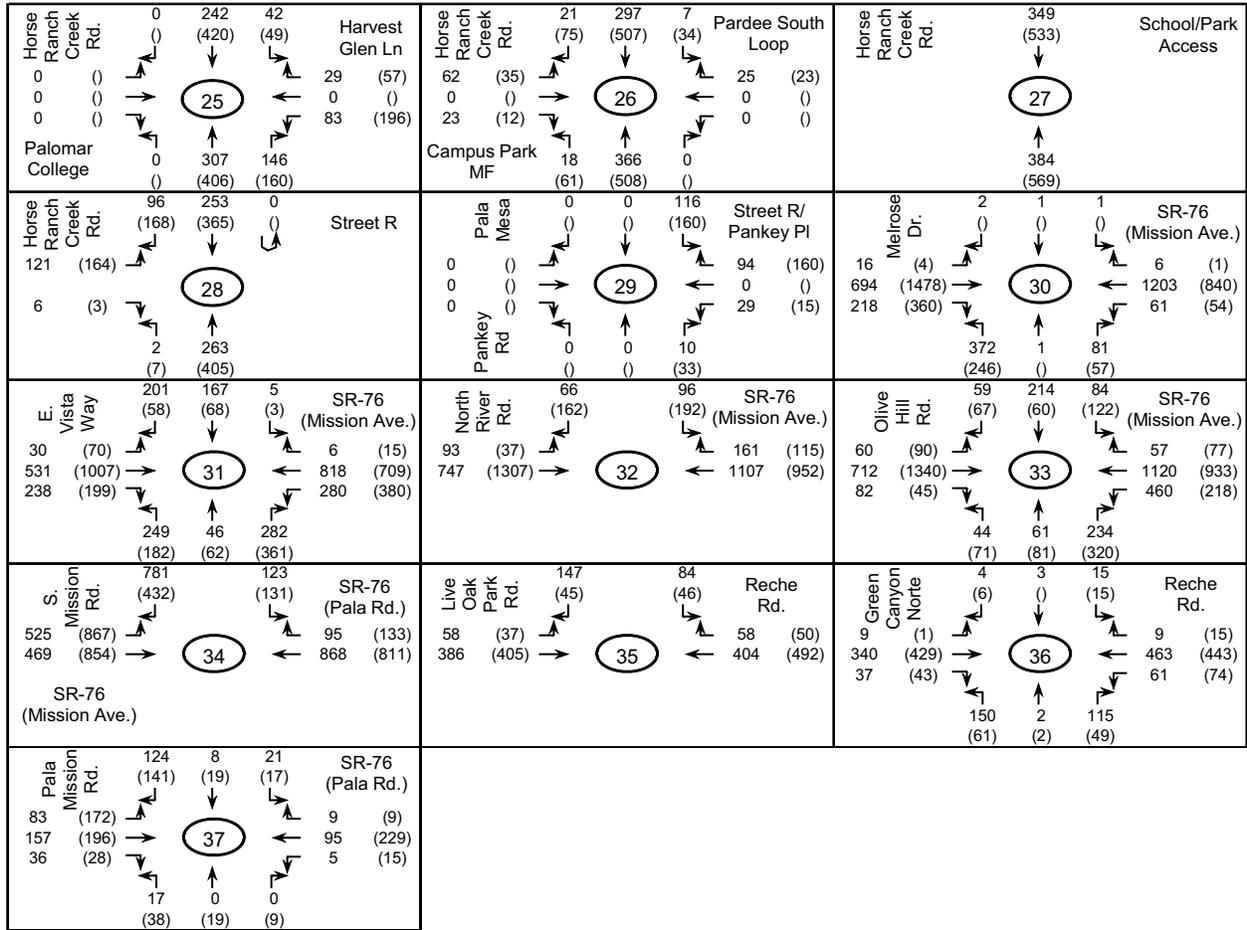
I:\ArcGIS\PAS-01 Passarelle\Map\ENV\EIR\Fig2.2-4b_Project_Avg_Daily_Traffic.pmd -NM

Existing Plus Project Average Daily Traffic - Intersections

CAMPUS PARK PROJECT

HELIX

Figure 2.2-4b



Source: LOS Engineering, Inc. (2009)

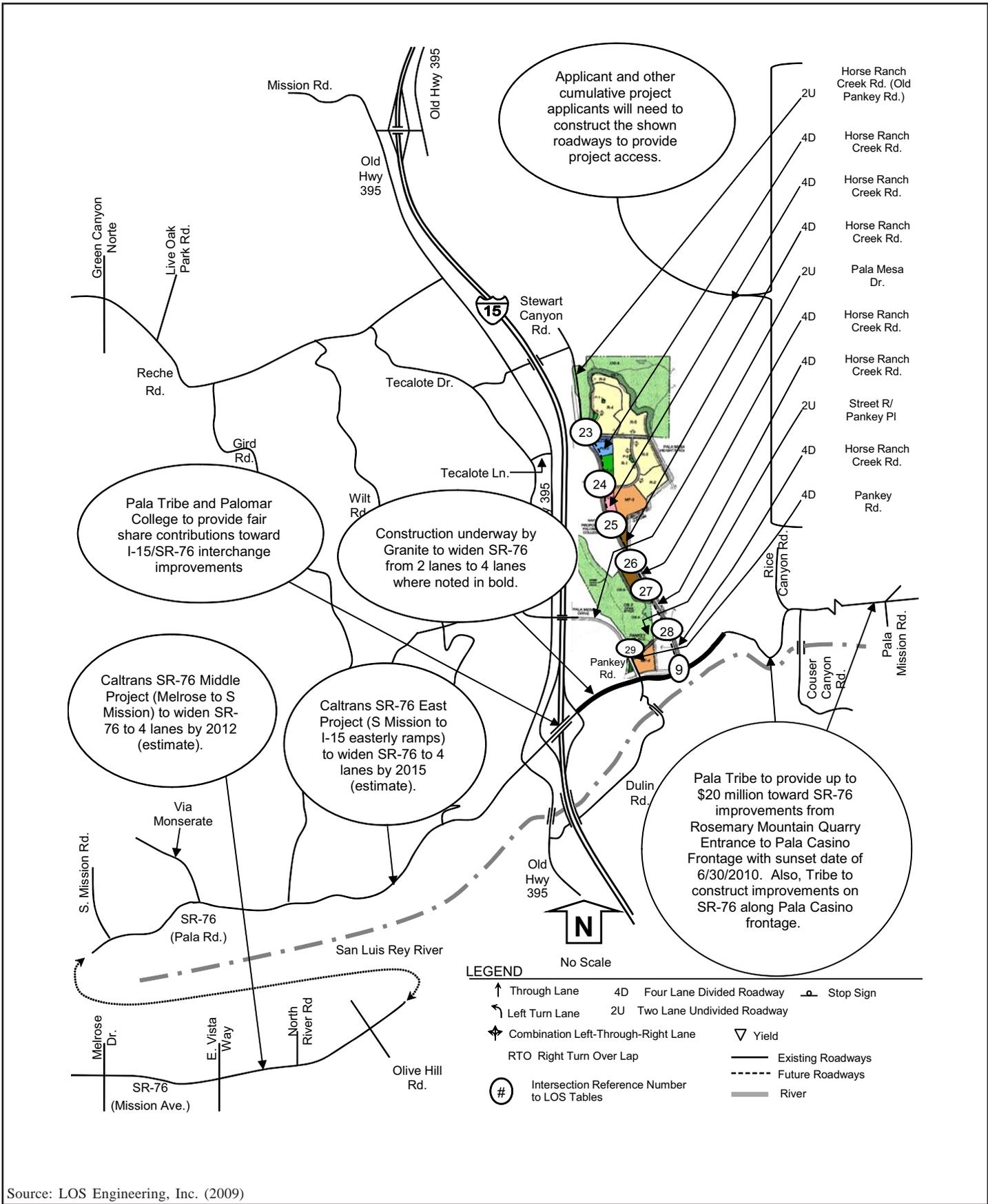
E:\ArcGIS\PA\01 Passarelle\Map\ENV\EIR\Fig2.2-4c_Project_Avg_Daily_Traffic.pmd -NM

Existing Plus Project Average Daily Traffic - Intersections

CAMPUS PARK PROJECT



Figure 2.2-4c



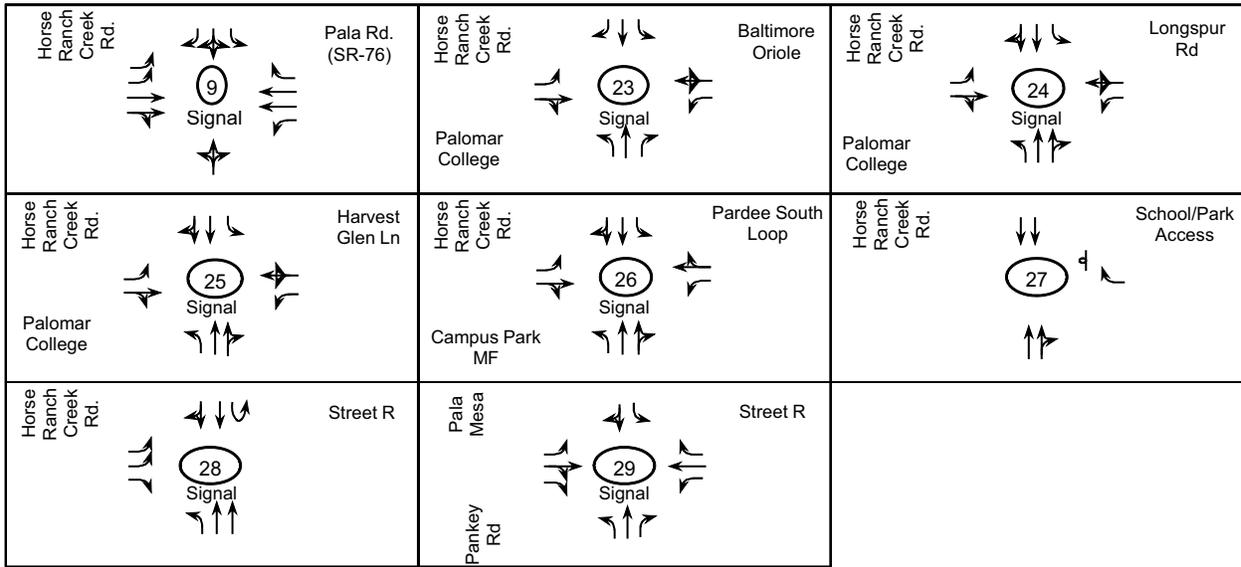
Source: LOS Engineering, Inc. (2009)

I:\ArcGIS\Map\Passarelle\Map\ENV\EIR\Fig2.2-5a_Cumulative_Roadway_Conditions.pmd -NM

Existing Plus Cumulative Roadway Segment Conditions

CAMPUS PARK PROJECT

Figure 2.2-5a

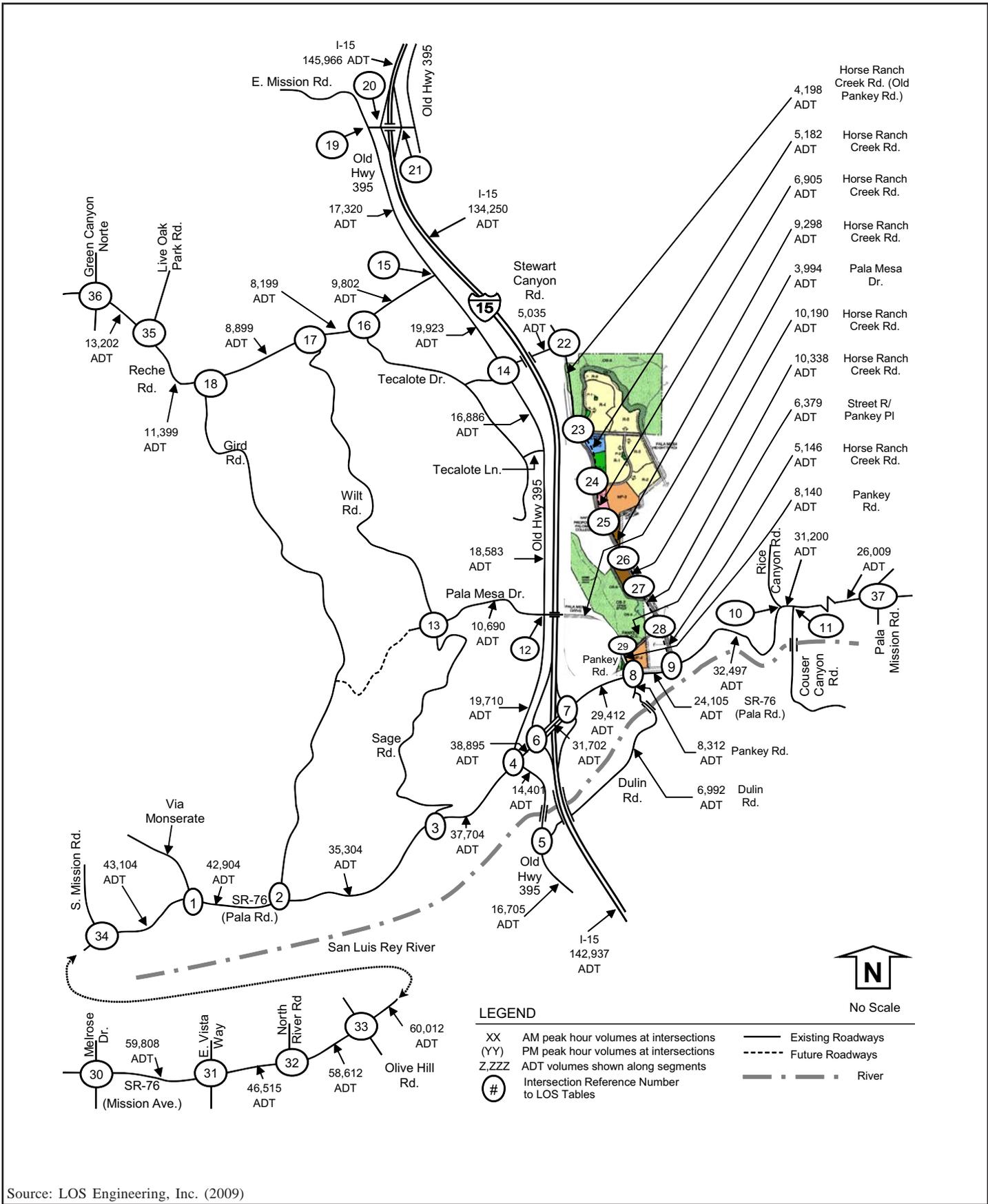


Source: LOS Engineering, Inc. (2009)

I:\ArcGIS\Project\Map\ENVI\Map\ENVI\Fig2.2-5b_Cumulative_Intersection_Conditions.pmd -NM

Existing Plus Cumulative Intersection Conditions

CAMPUS PARK PROJECT



Existing Plus Cumulative Average Daily Traffic - Roadway Segments

CAMPUS PARK PROJECT

Figure 2.2-6a



Source: LOS Engineering, Inc. (2009)

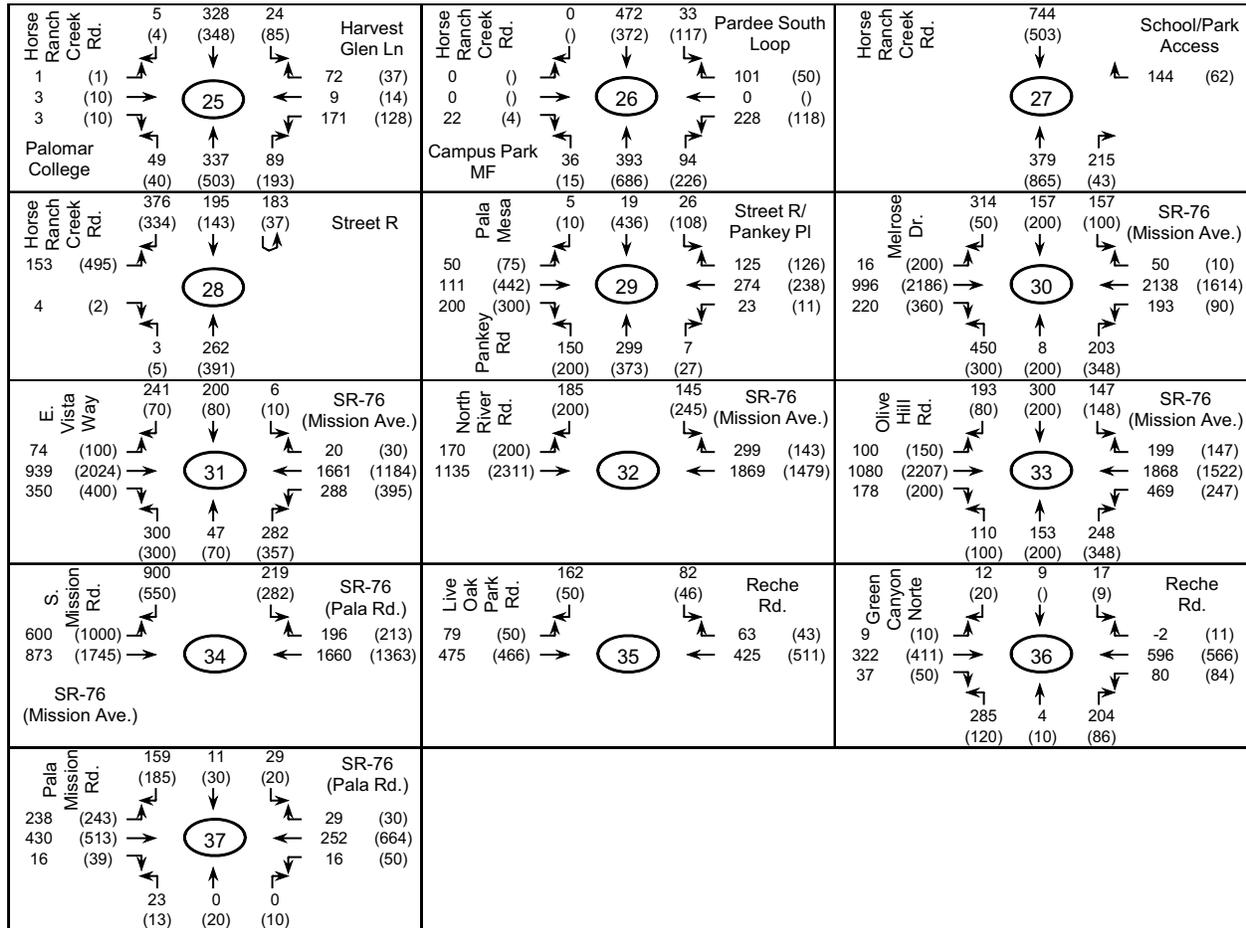
I:\ArcGIS\PAS-01 Passarelle\Map\ENV\EIR\Fig2.2-6b_Near-term_Avg_Daily_Traffic.pmd -KF

Existing Plus Cumulative Average Daily Traffic - Intersections

CAMPUS PARK PROJECT



Figure 2.2-6b



Source: LOS Engineering, Inc. (2009)

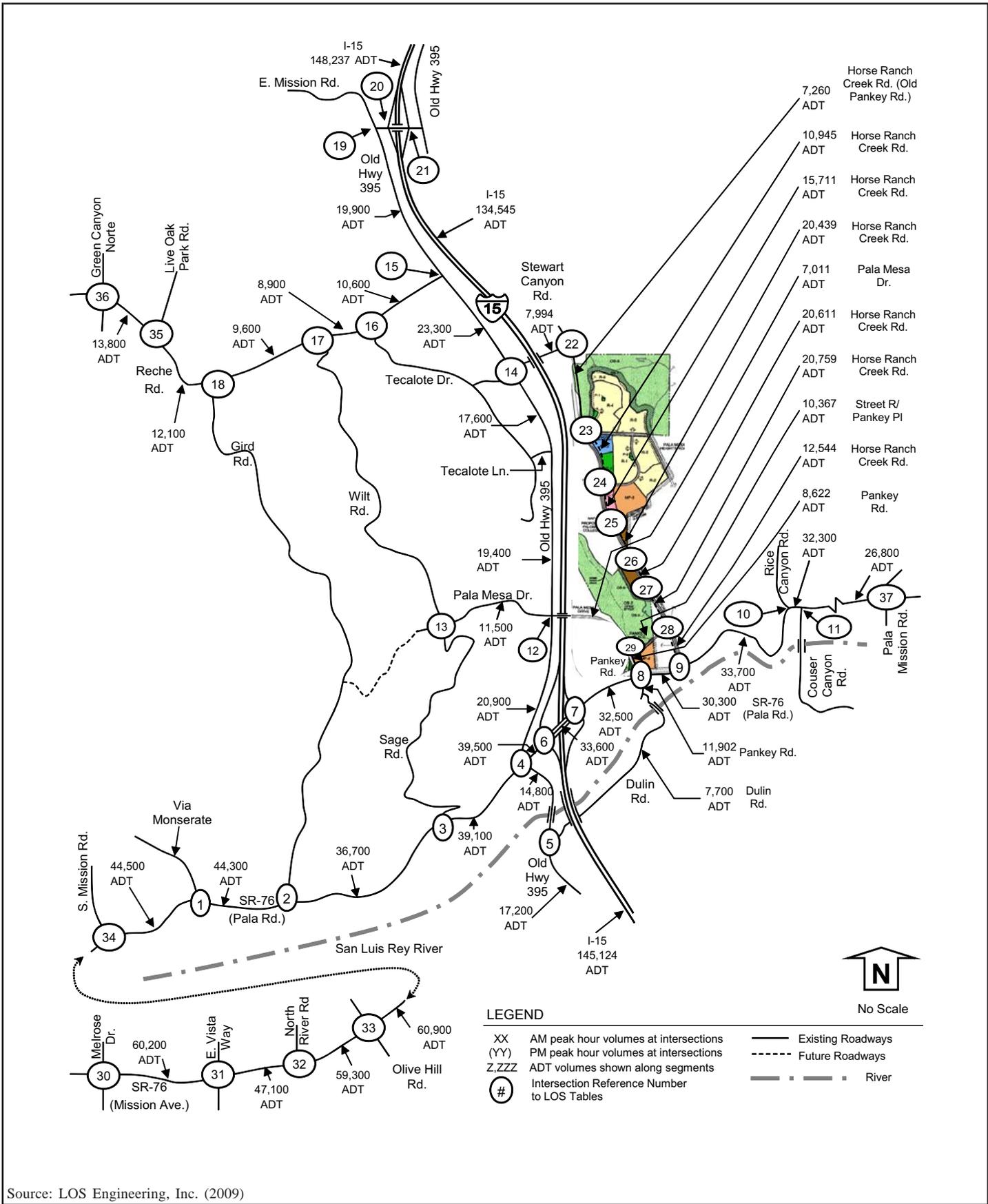
E:\ArcGIS\PPAS-01 Passarelle\Map\ENV\EIR\Fig2.2-6c_Near-term_Avg_Daily_Traffic.pmd -KF

Existing Plus Cumulative Average Daily Traffic - Intersections

CAMPUS PARK PROJECT



Figure 2.2-6c



Existing Plus Cumulative Plus Project Average Daily Traffic - Roadway Segments

CAMPUS PARK PROJECT

Figure 2.2-7a





Source: LOS Engineering, Inc. (2009)

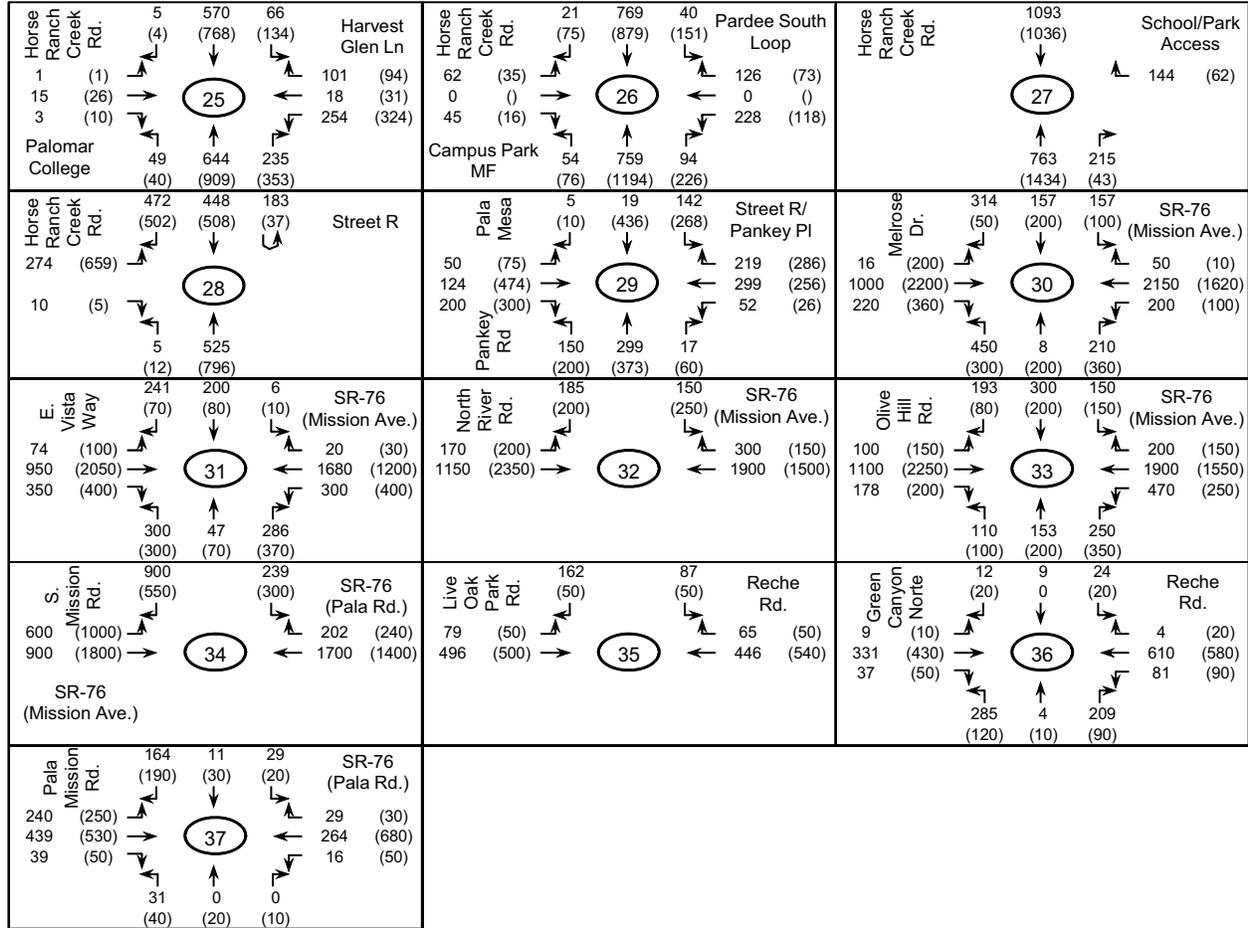
I:\ArcGIS\PI\PAS-01 Passarelle\Map\ENV\EIR\Fig2.2-7b_Cumulative_Proj_Avg_Daily_Traffic.pmd -NM

Existing Plus Cumulative Plus Project Average Daily Traffic - Intersections

CAMPUS PARK PROJECT



Figure 2.2-7b



Source: LOS Engineering, Inc. (2009)

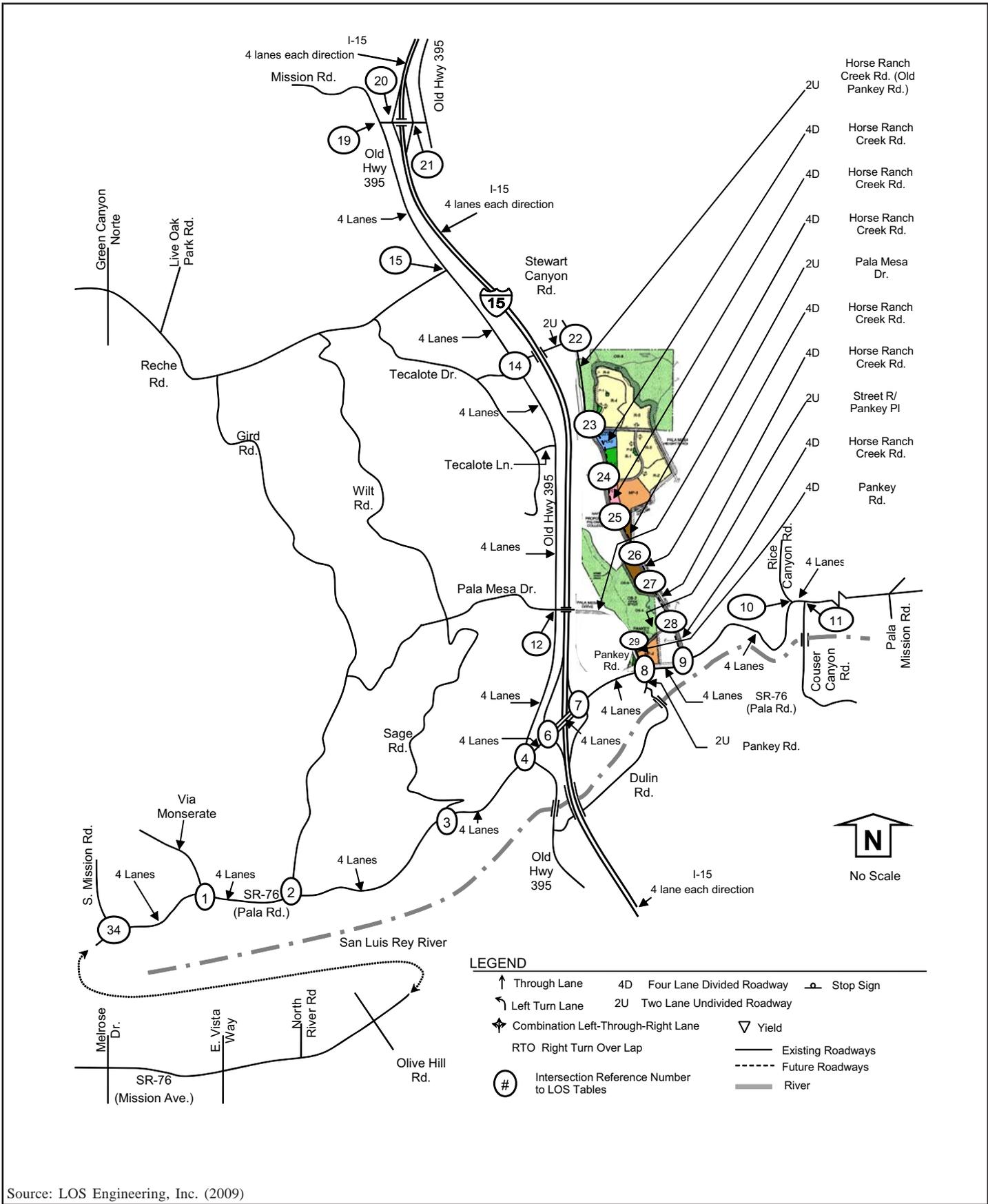
I:\ArcGIS\PAS-01 Passarelle\Map\ENV\EIR\Fig2.2-7c_Cumulative_Proj_Avg_Daily_Traffic.pmd -NM

Existing Plus Cumulative Plus Project Average Daily Traffic - Intersections

CAMPUS PARK PROJECT



Figure 2.2-7c



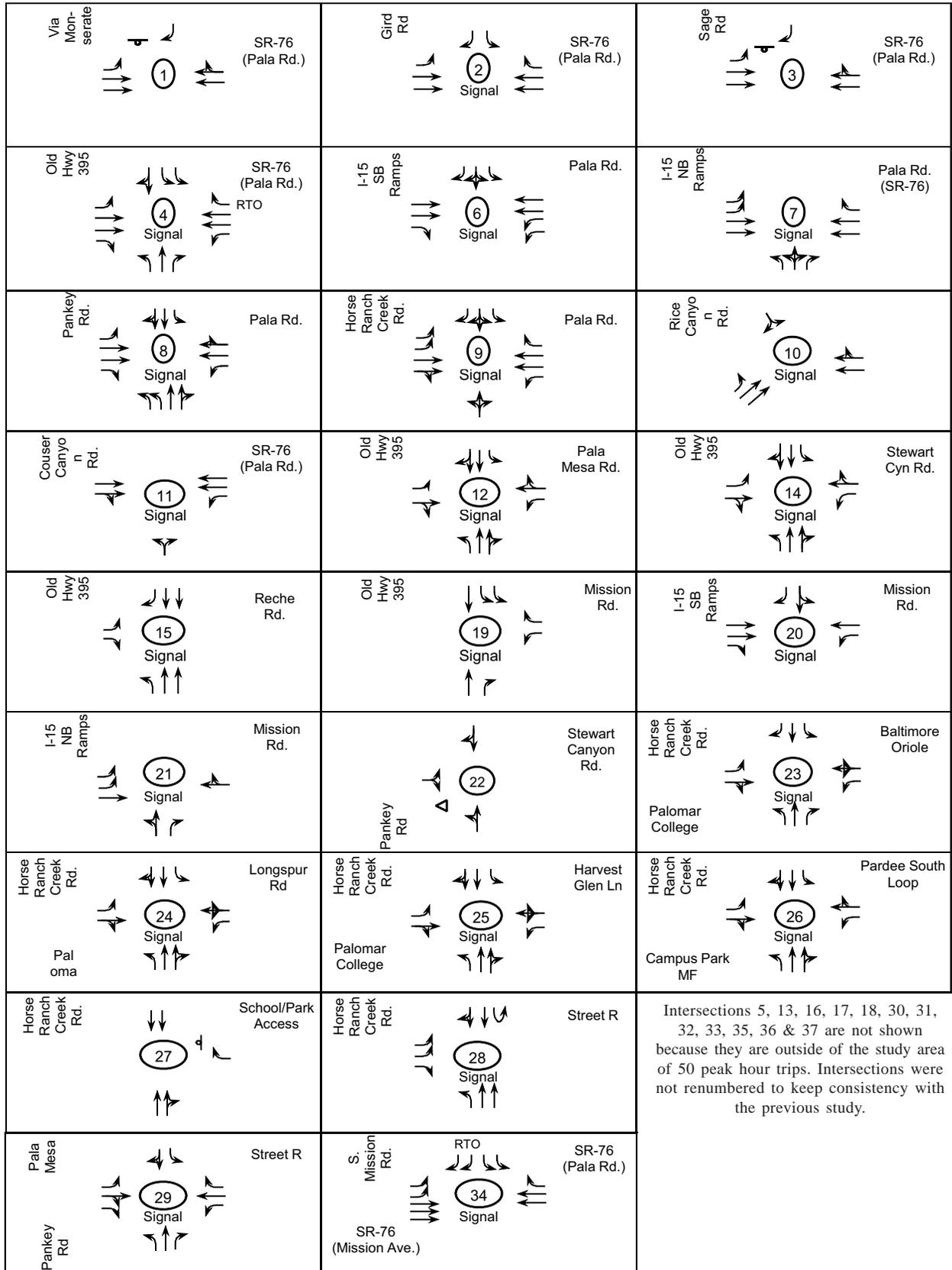
Source: LOS Engineering, Inc. (2009)

I:\ArcGIS\Map\ENV\Fig2.2-8a_Year2030_Roadway_Conditions.pmd -NM

Buildout (Year 2030) Roadway Segment Conditions

CAMPUS PARK PROJECT

Figure 2.2-8a



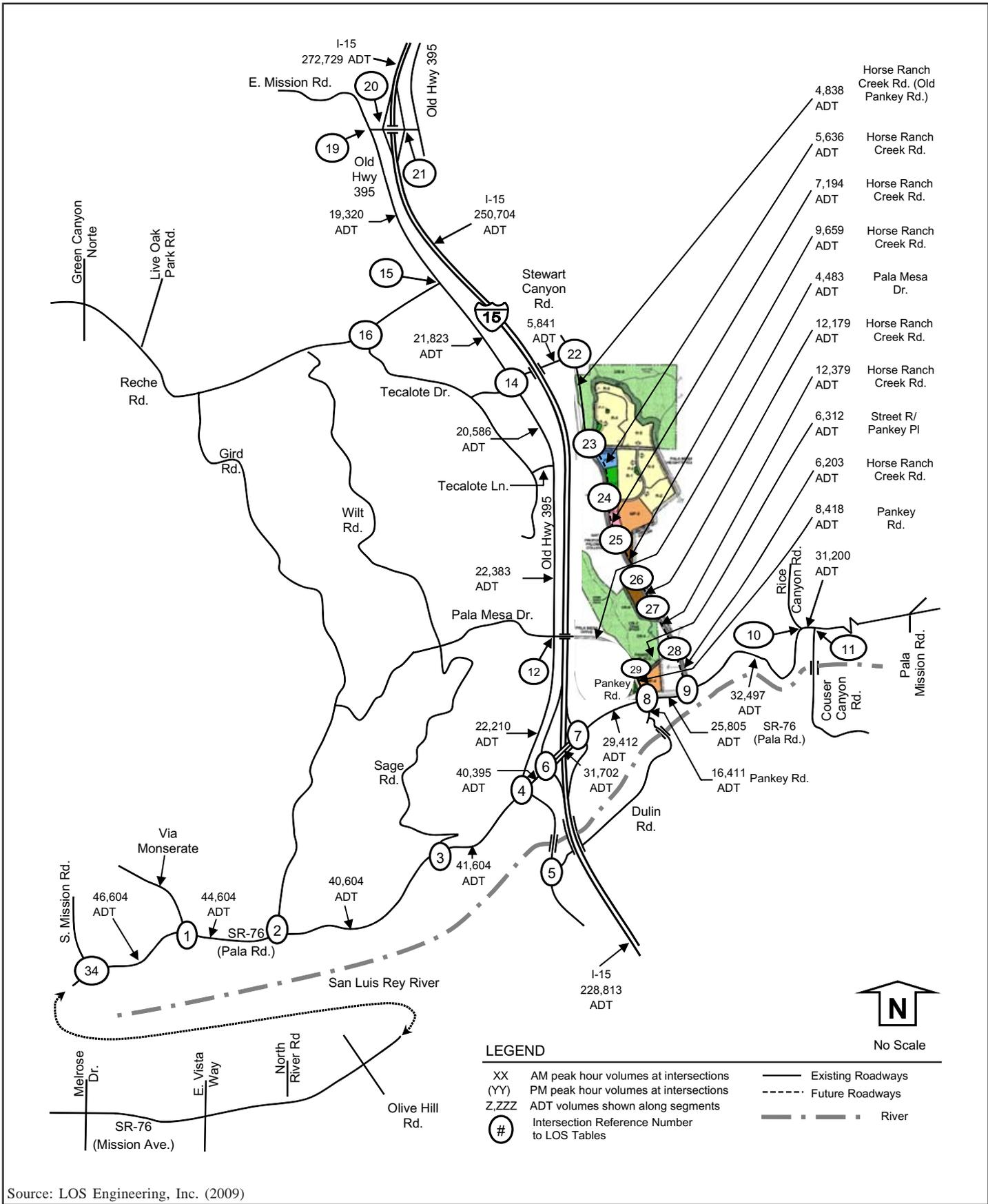
Source: LOS Engineering, Inc. (2009)

I:\ArcGIS\P\AS-01 Passarelle\Map\ENV\EIR\Fig2.2-8b_Year2030_Intersection_Conditions.pmd -NM

Buildout (Year 2030) Intersection Conditions

CAMPUS PARK PROJECT

Figure 2.2-8b

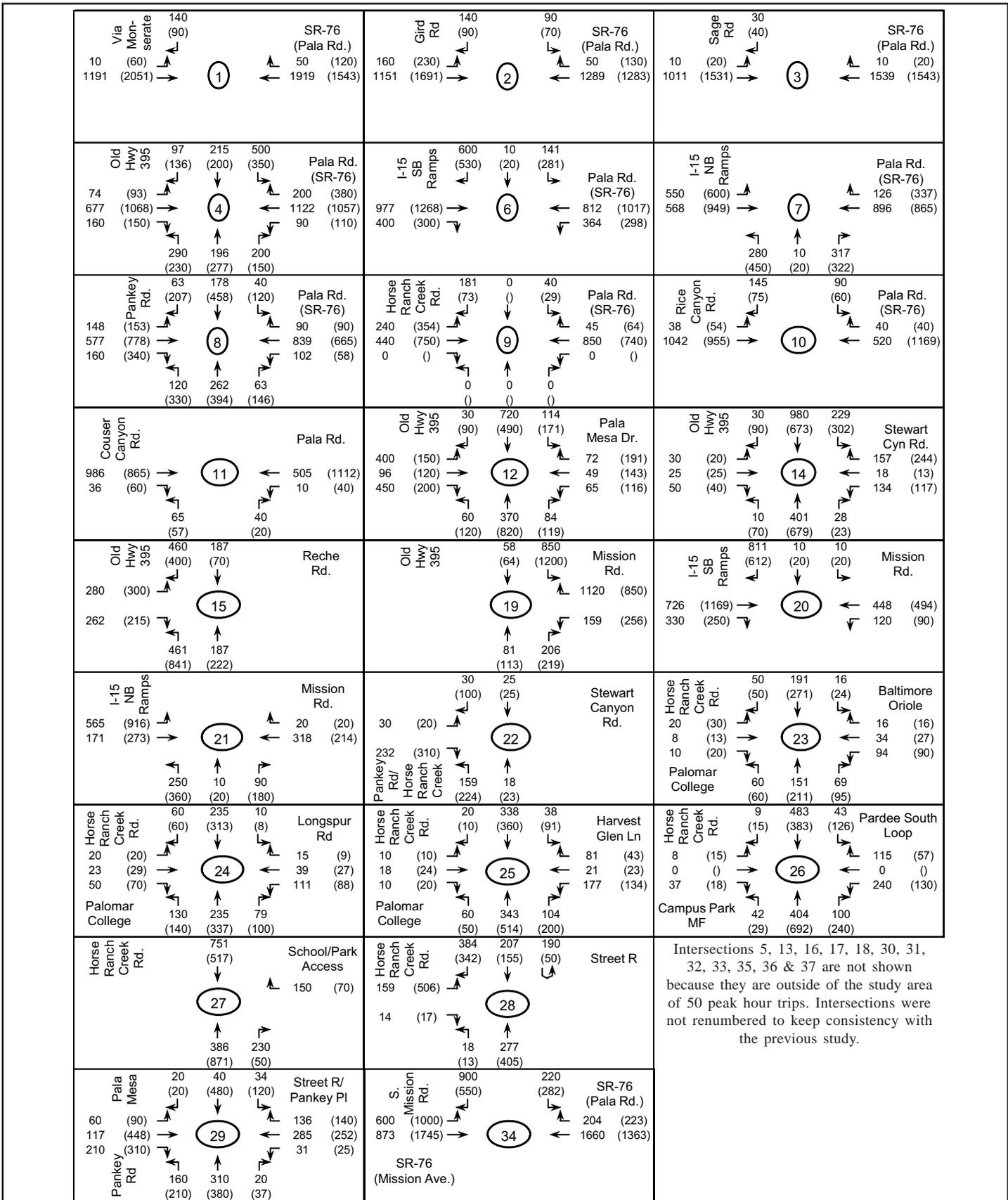


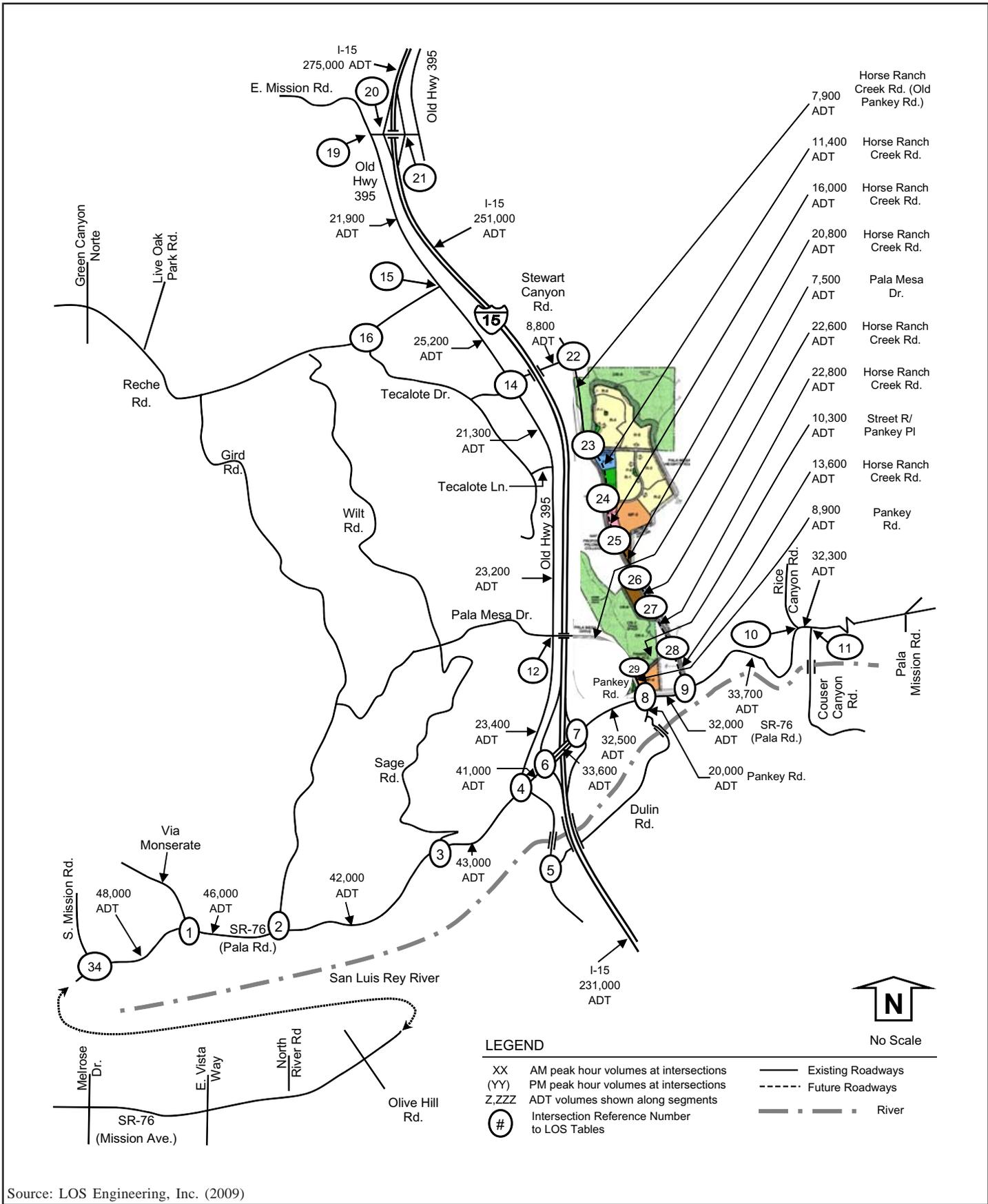
Buildout (Year 2030) Without Project Average Daily Traffic - Roadway Segments

CAMPUS PARK PROJECT

Figure 2.2-9a





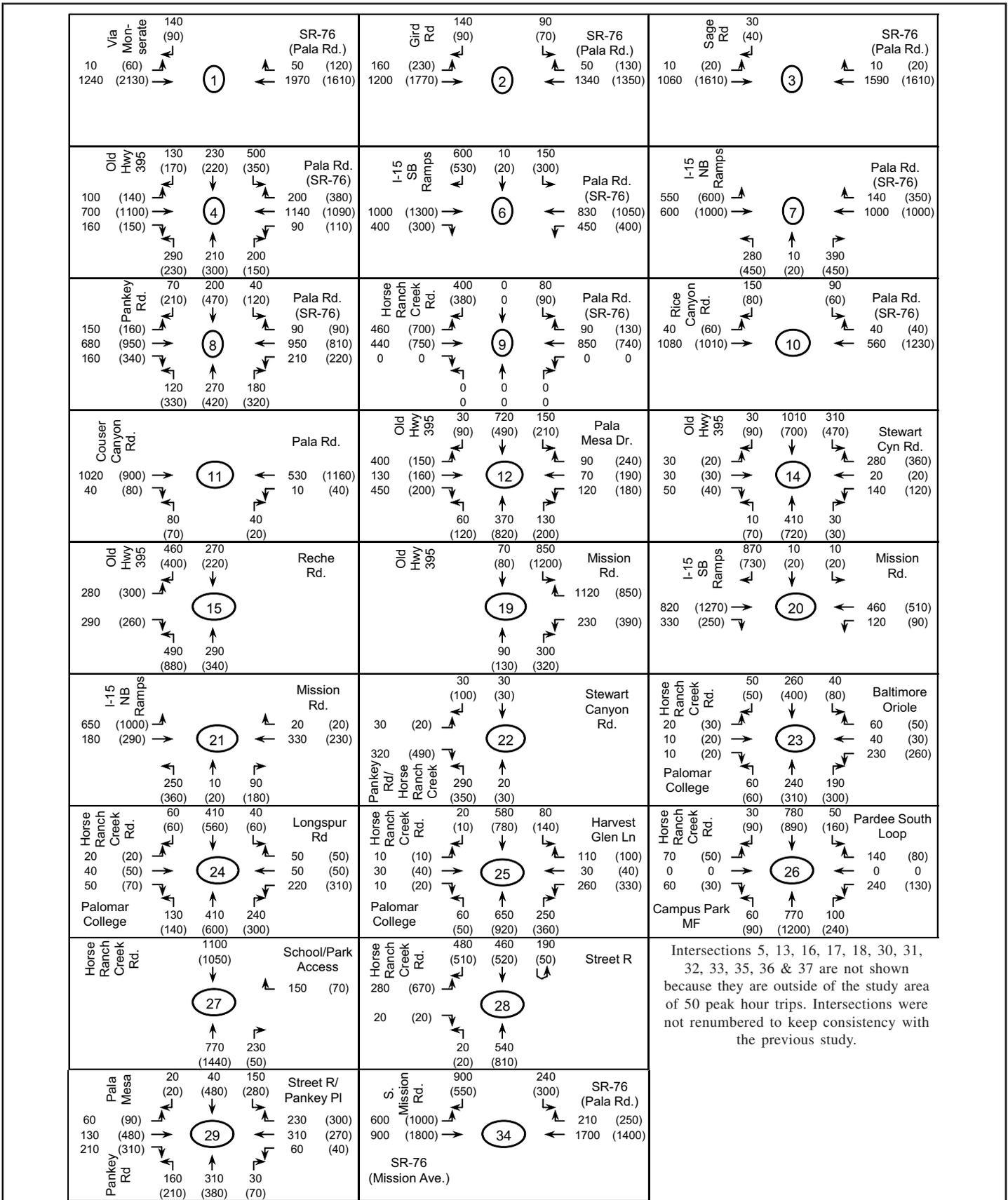


Buildout (Year 2030) Plus Project Average Daily Traffic - Roadway Segments

CAMPUS PARK PROJECT

Figure 2.2-10a





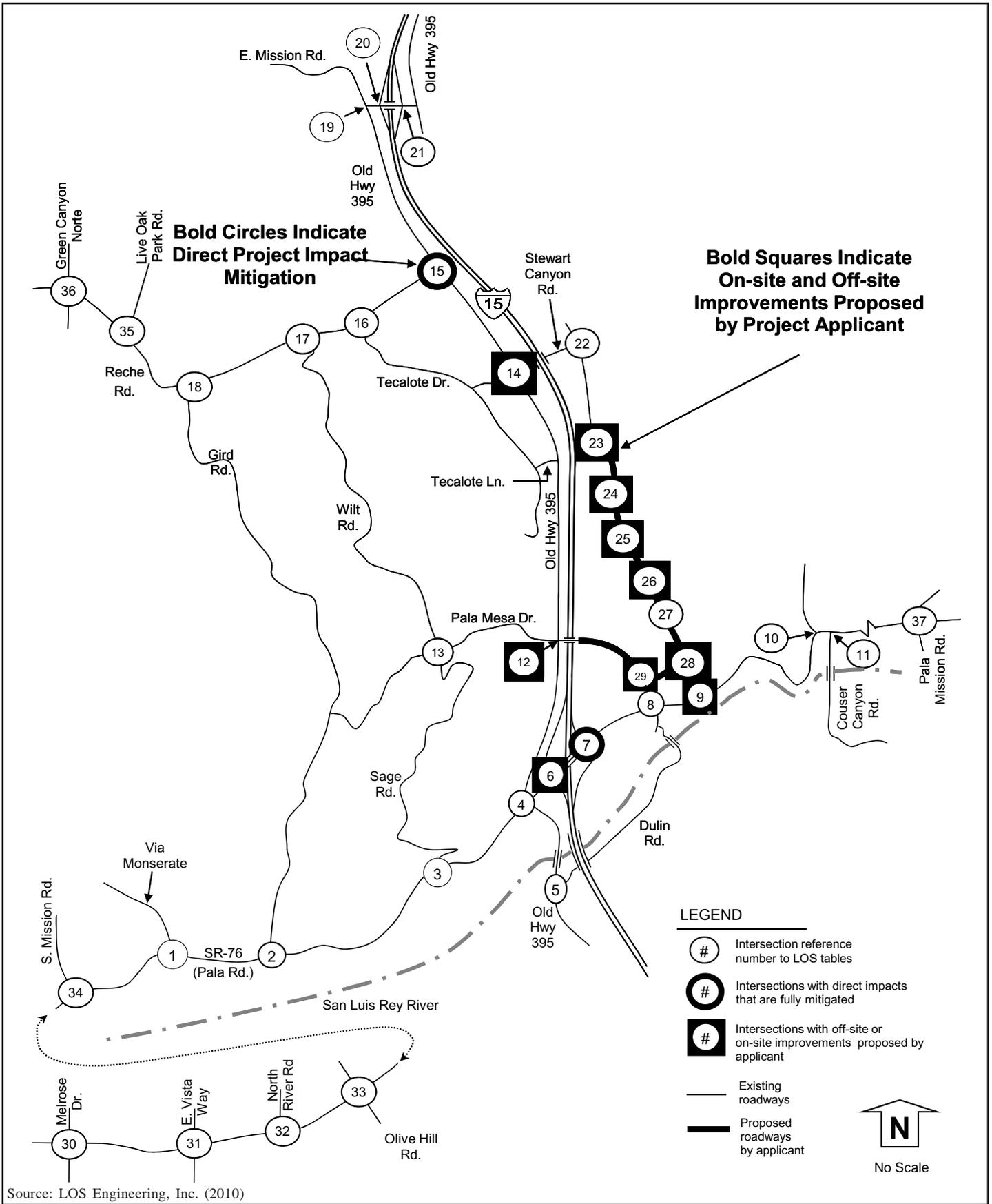
Intersections 5, 13, 16, 17, 18, 30, 31, 32, 33, 35, 36 & 37 are not shown because they are outside of the study area of 50 peak hour trips. Intersections were not renumbered to keep consistency with the previous study.

Buildout (Year 2030) Plus Project Average Daily Traffic - Intersections

CAMPUS PARK PROJECT

Figure 2.2-10b

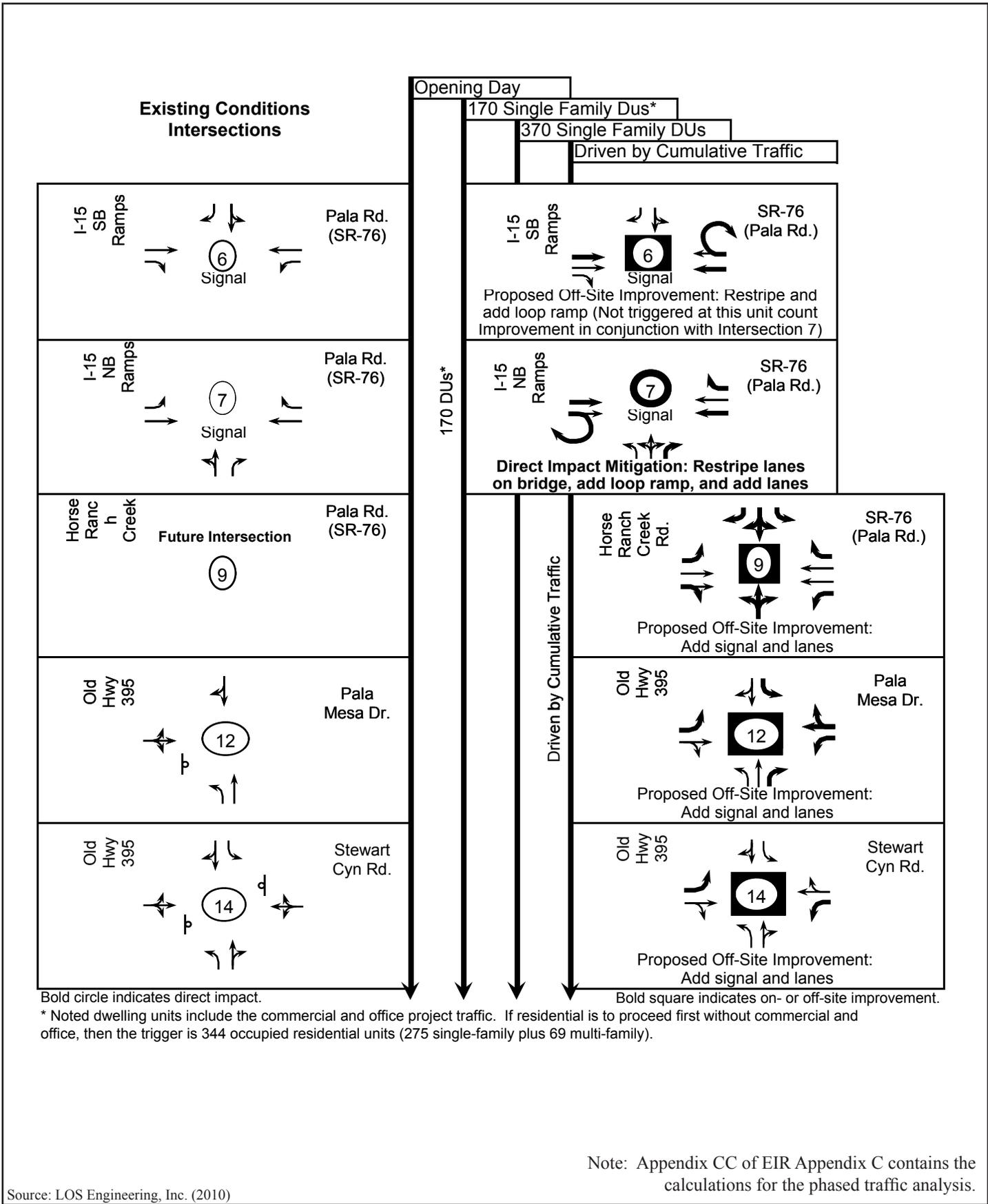




Key Map - Project Features and Mitigation Measures

CAMPUS PARK PROJECT

Figure 2.2-11a



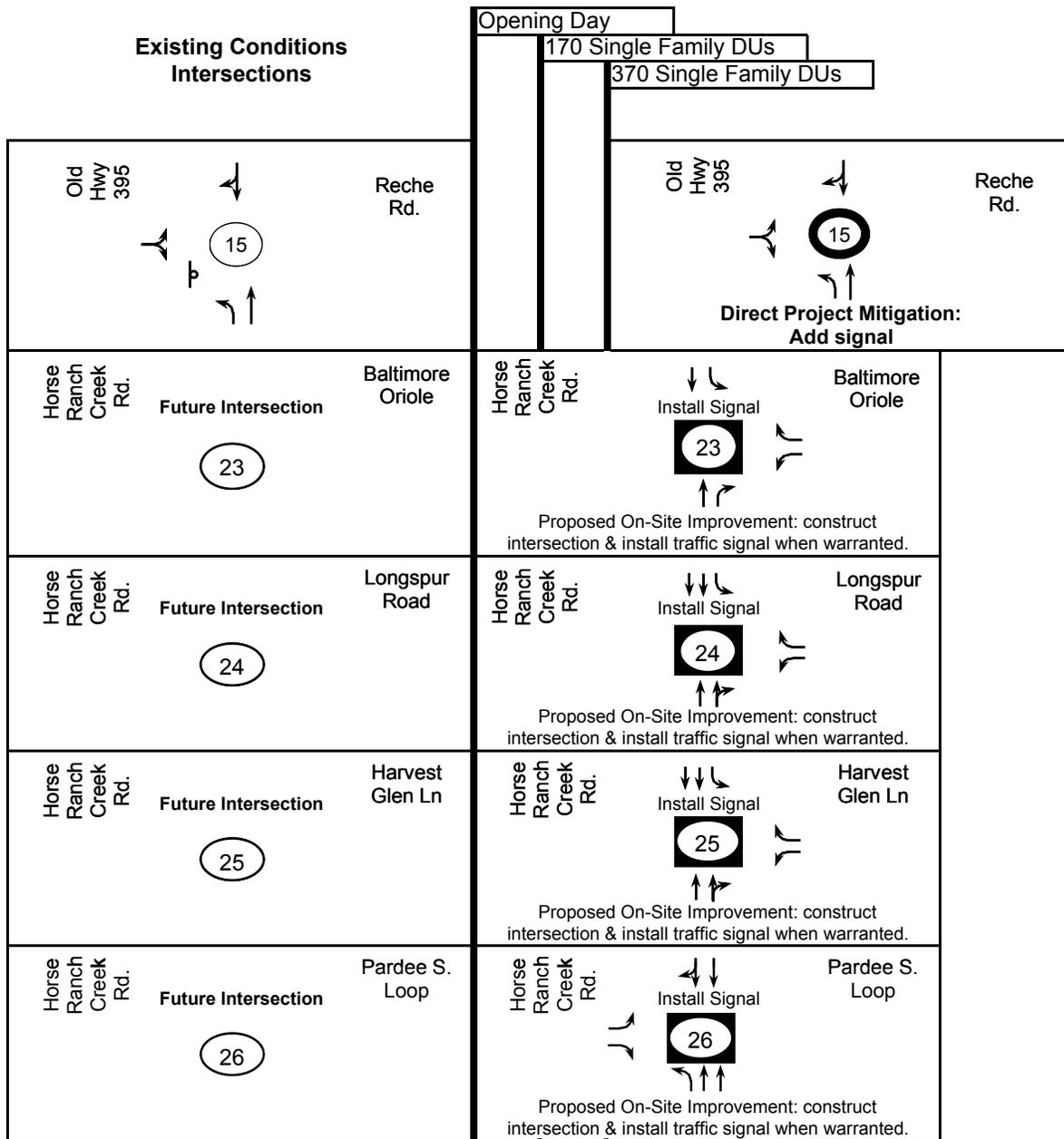
Source: LOS Engineering, Inc. (2010)

I:\ArcGIS\IPAS-01 Passarelle\Map\ENV\EIR\Fig2.2-11b_MitMeasures_Impacts_Intersections.indd -KF

Project Features and Mitigation Measures

CAMPUS PARK PROJECT

Figure 2.2-11b



Bold circle indicates direct impact.
 Bold square indicates on- or off-site improvement.

Note: Appendix CC of EIR Appendix C contains the calculations for the phased traffic analysis.

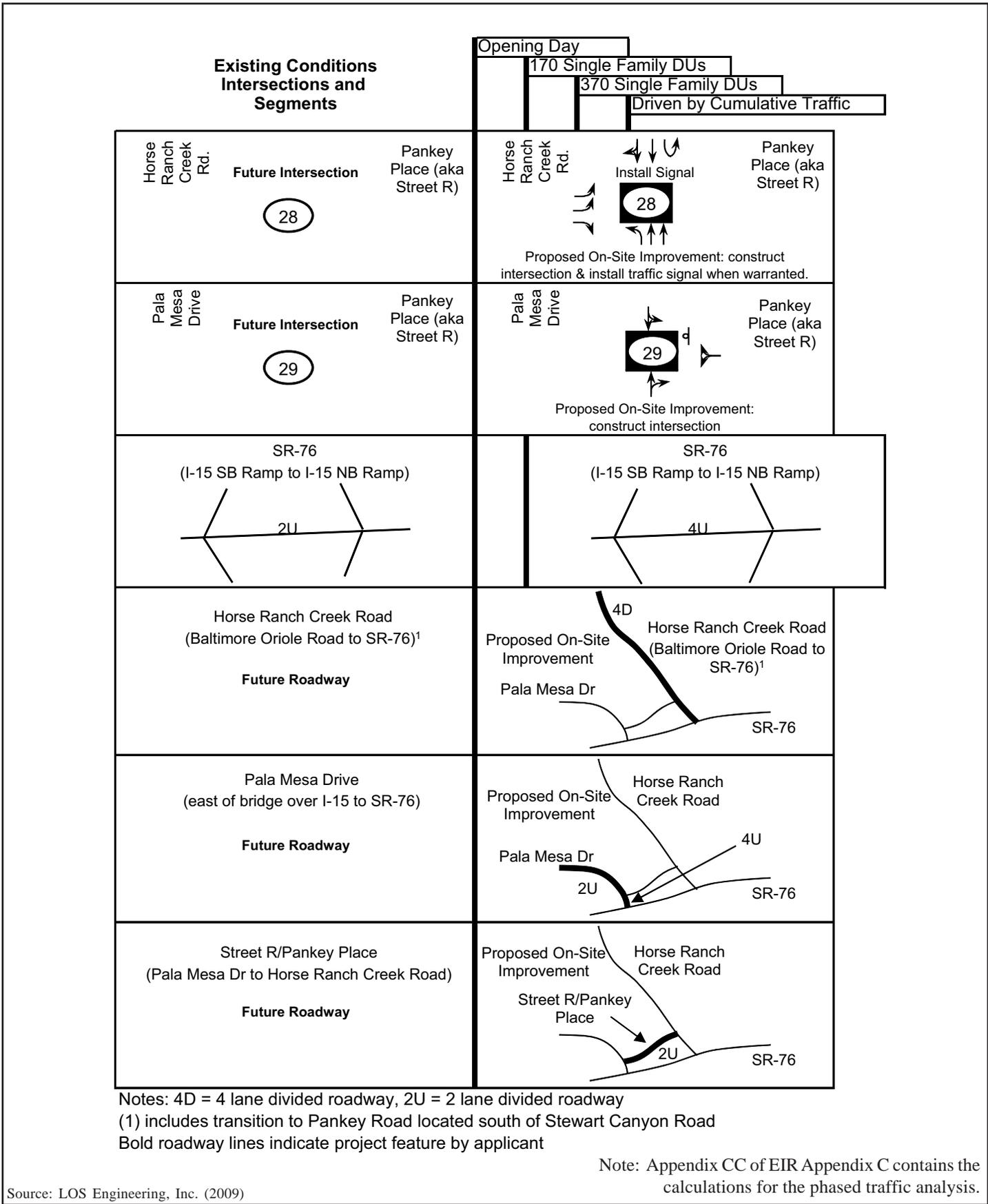
Source: LOS Engineering, Inc. (2009)

E:\ArcGIS\PPAS-01 Passarelle\Map\ENV\EIR\Fig2.2-11c_MitMeasures_Impacts_Intersections.indd -NM

Project Features and Mitigation Measures

CAMPUS PARK PROJECT

Figure 2.2-11c



E:\ArcGIS\P\PAS-01 Passarelle\Map\ENV\EIR\Fig2.2-11d_MitMeasures_Impacts_Intersections.pmd -KF

Project Features and Mitigation Measures

CAMPUS PARK PROJECT

Figure 2.2-11d