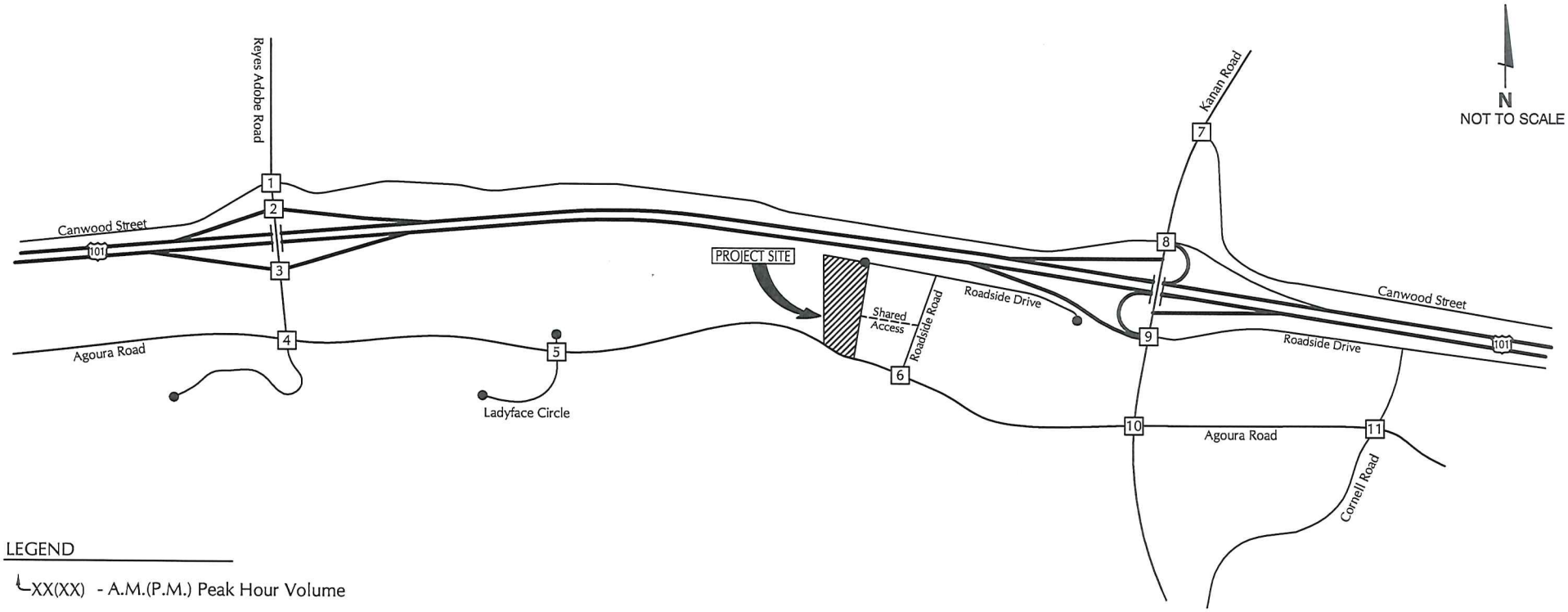
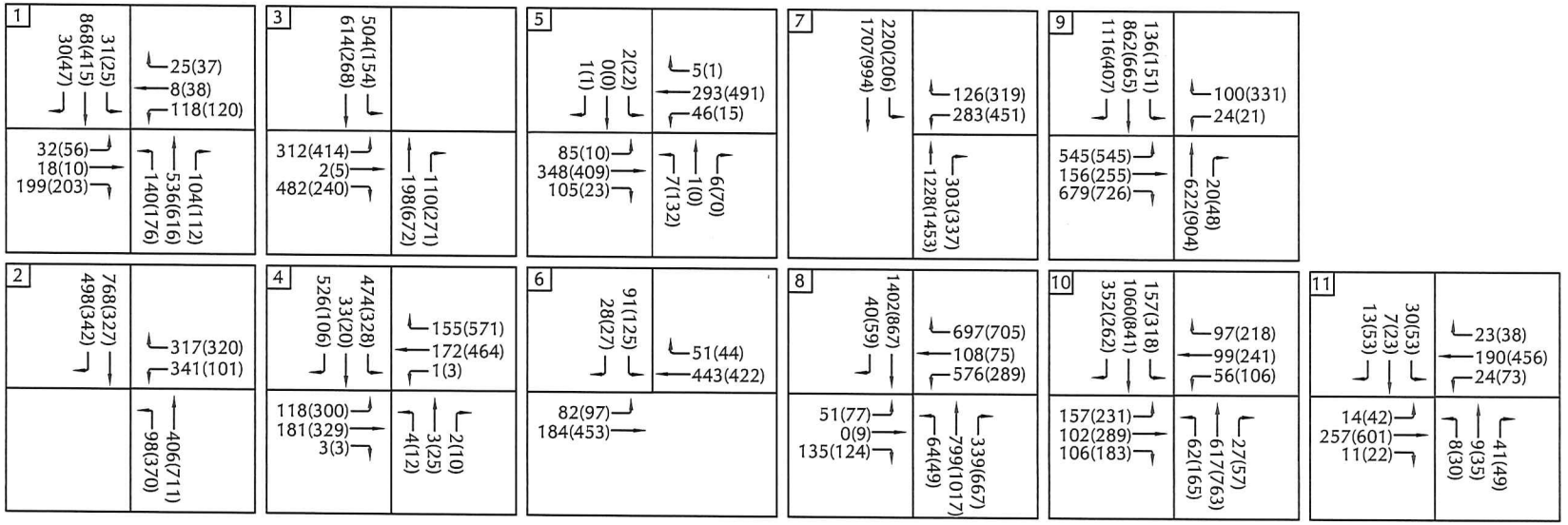


LEGEND

└XX(XX) - A.M.(P.M.) Peak Hour Volume



ASSOCIATED TRANSPORTATION ENGINEERS

NEAR-TERM + PROJECT TRAFFIC VOLUMES

FIGURE 9

MMF - #15068

Table 10
Near-Term and Near-Term + Project A.M. Peak Hour Levels of Service

Intersection	Near-Term		Near-Term + Project		Project Added	
	ICU/Delay[a]	LOS	ICU/Delay[a]	LOS	Increase	Impact?
Reyes Adobe Rd./Canwood St.	0.73	C	0.73	C	0.00	NO
U.S. 101 NB Ramp/Reyes Adobe Rd.	0.69	B	0.69	B	0.00	NO
U.S. 101 SB Ramp/Reyes Adobe Rd.	0.63	B	0.63	B	0.00	NO
Agoura Rd./Reyes Adobe Rd.	0.55	A	0.56	A	0.01	NO
Agoura Rd./Ladyface Circle	0.22	A	0.23	A	0.01	NO
Agoura Rd./Roadside Rd.	11.1 sec.	B	12.2 sec.	B	1.0 sec.	NO
Kanan Rd./Canwood St.	0.61	B	0.61	B	0.00	NO
U.S. 101 NB Ramp/Canwood St./Kanan Rd.	0.69	B	0.69	B	0.00	NO
U.S. 101 SB Ramp/Roadside Dr./Kanan Rd.	0.63	B	0.64	B	0.01	NO
Agoura Rd./Kanan Rd.[b]	0.77	C	0.77	C	0.00	NO
Agoura Rd./Cornell Rd.	9.4 sec.	A	9.4 sec.	A	0.0 sec.	NO

(a) ICU reported for signalized intersections and delay reported for unsignalized intersections.
(b) LOS based assumes planned Near-Term improvements in place.

Table 11
Near-Term and Near-Term + Project P.M. Peak Hour Levels of Service

Intersection	Near-Term		Near-Term + Project		Project Added	
	ICU/Delay[a]	LOS	ICU/Delay[a]	LOS	Increase	Impact?
Reyes Adobe Rd./Canwood St.	0.62	B	0.62	B	0.00	NO
U.S. 101 NB Ramp/Reyes Adobe Rd.	0.58	A	0.59	A	0.01	NO
U.S. 101 SB Ramp/Reyes Adobe Rd.	0.61	B	0.62	B	0.01	NO
Agoura Rd./Reyes Adobe Rd.	0.68	B	0.69	B	0.01	NO
Agoura Rd./Ladyface Circle	0.30	A	0.31	A	0.01	NO
Agoura Rd./Roadside Rd.	12.2 sec.	B	14.3 sec.	B	2.1 sec.	NO
Kanan Rd./Canwood St.	0.71	C	0.71	C	0.00	NO
U.S. 101 NB Ramp/Canwood St./Kanan Rd.	0.64	B	0.64	B	0.00	NO
U.S. 101 SB Ramp/Roadside Dr./Kanan Rd.	0.76	C	0.76	C	0.00	NO
Agoura Rd./Kanan Rd.[b]	0.77	C	0.78	C	0.01	NO
Agoura Rd./Cornell Rd.	**59.0 sec.**	**F**	**60.4 sec.**	**F**	**1.4 sec.**	**NO**

(a) ICU reported for signalized intersections and delay reported for unsignalized intersections.
(b) LOS based assumes planned Near-Term improvements in place.
Bold Values exceed City's LOS C standard.

The data presented in Tables 10 and 11 indicate that the unsignalized Agoura Road/Cornell Road intersection will operate at LOS F during the P.M. peak hour period. The project would not generate project-specific impacts based on City of Agoura Hills impact thresholds since the vehicle delay increase attributable to the project is less than 5 seconds.

CUMULATIVE (YEAR 2035) ANALYSIS

The City of Agoura Hills requires that intersections be analyzed with the addition of traffic generated by approved/pending developments and with an ambient growth to account for future cumulative traffic over a 20 year period. The Year 2035 analysis assumes the implementation of the City's cumulative improvements at the Agoura Road/Kanan Road intersection.

Traffic Forecasts

Cumulative traffic volumes were forecast for the study-area intersection assuming an annual ambient growth factor of 0.75 percent over a 20 year period (1.1612). The cumulative traffic volumes also include the traffic generated by Near-Term developments proposed within the City of Agoura Hills.

Cumulative Impacts

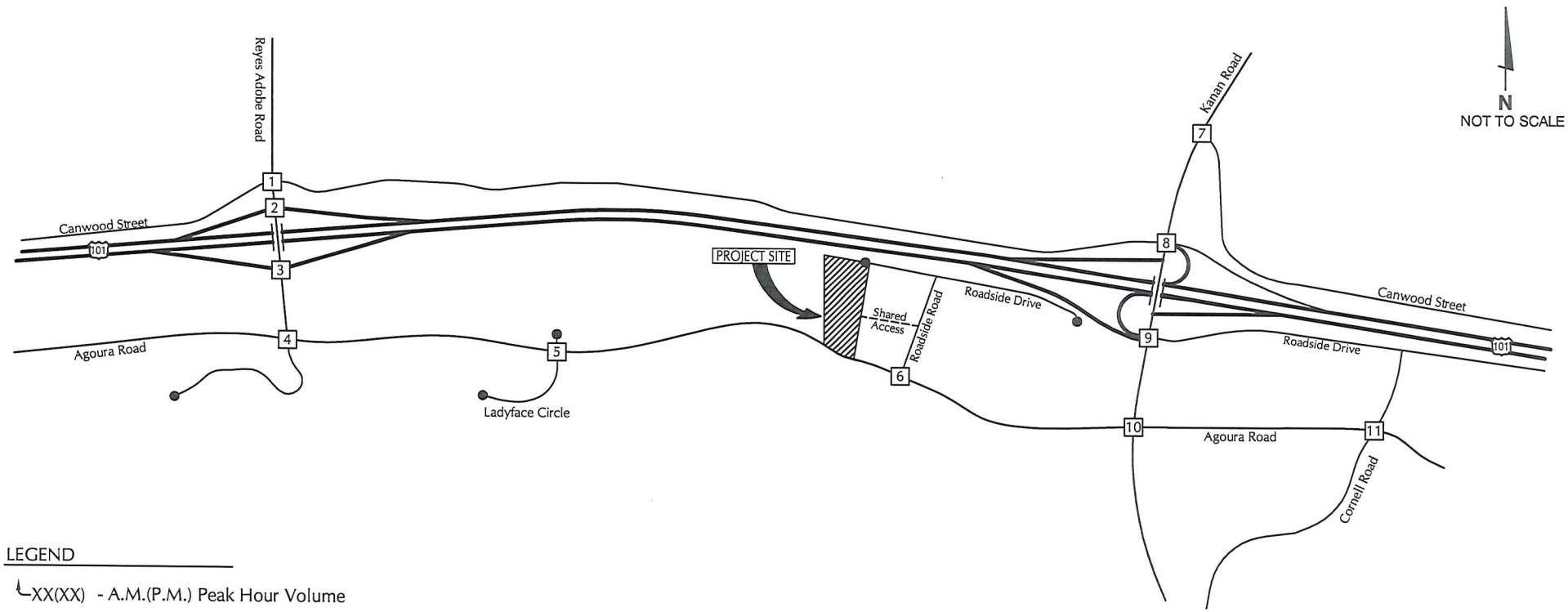
Roadways. Levels of service were calculated for Agoura Road assuming the Cumulative + Project volumes. LOS Worksheets are contained in the Technical Appendix. Roadway level of service for the Cumulative and Cumulative + Project conditions are listed in Table 12.

Table 12
Cumulative + Project Roadway Operations

Roadway	Segment	Roadway Type	Peak Hour LOS		Impact
			Cumulative	Cumulative + Project	
Agoura Road					
- eastbound	Ladyface Cir./Roadside Rd.	4-Lane Roadway	LOS A	LOS A	No
- westbound	Ladyface Cir./Roadside Rd.	4-Lane Roadway	LOS A	LOS A	No
Agoura Road					
- eastbound	Roadside Rd./Kanan Rd.	4-Lane Roadway	LOS A	LOS A	No
- westbound	Roadside Rd./Kanan Rd.	4-Lane Roadway	LOS A	LOS A	No

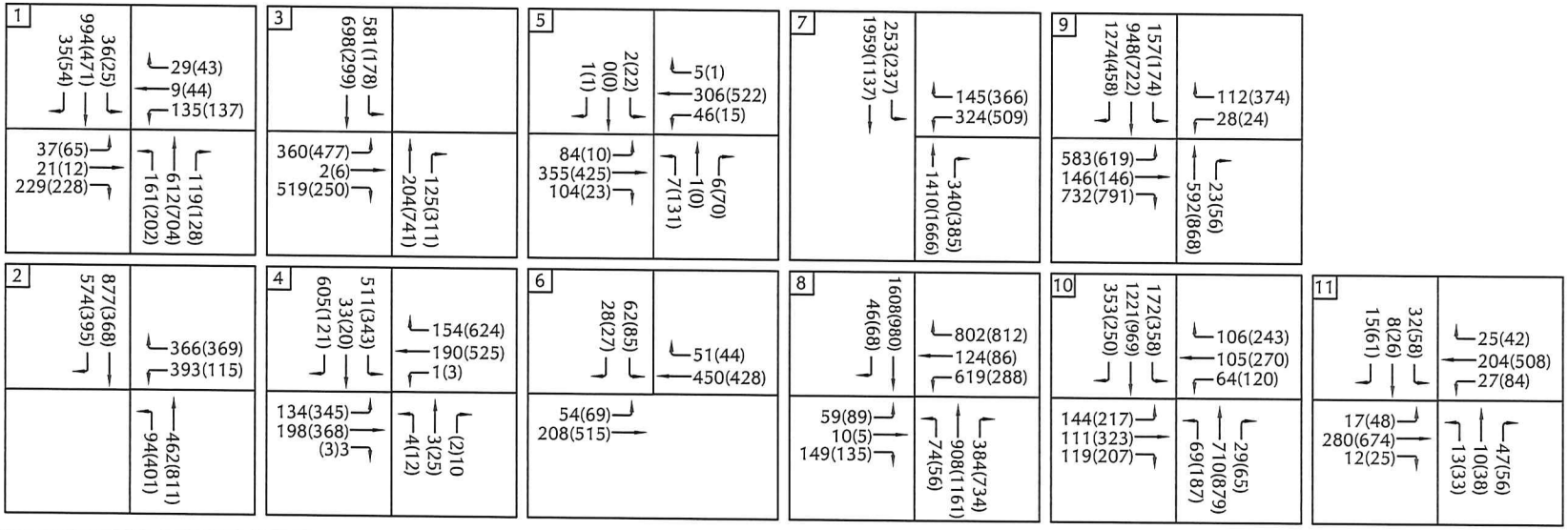
The data presented in Table 12 show that the addition of project traffic to the Agoura Road would not significantly impact the roadway segments adjacent to the site based on City of Agoura Hills impact thresholds.

Intersections. Levels of service were calculated for the study-area intersections assuming the Cumulative and Cumulative + Project traffic volumes presented on Figures 10 and 11. Tables 13 and 14 compare the Cumulative and Cumulative + Project levels of service for the study-area intersections and identify cumulative impacts based on City thresholds.



LEGEND

└XX(XX) - A.M.(P.M.) Peak Hour Volume

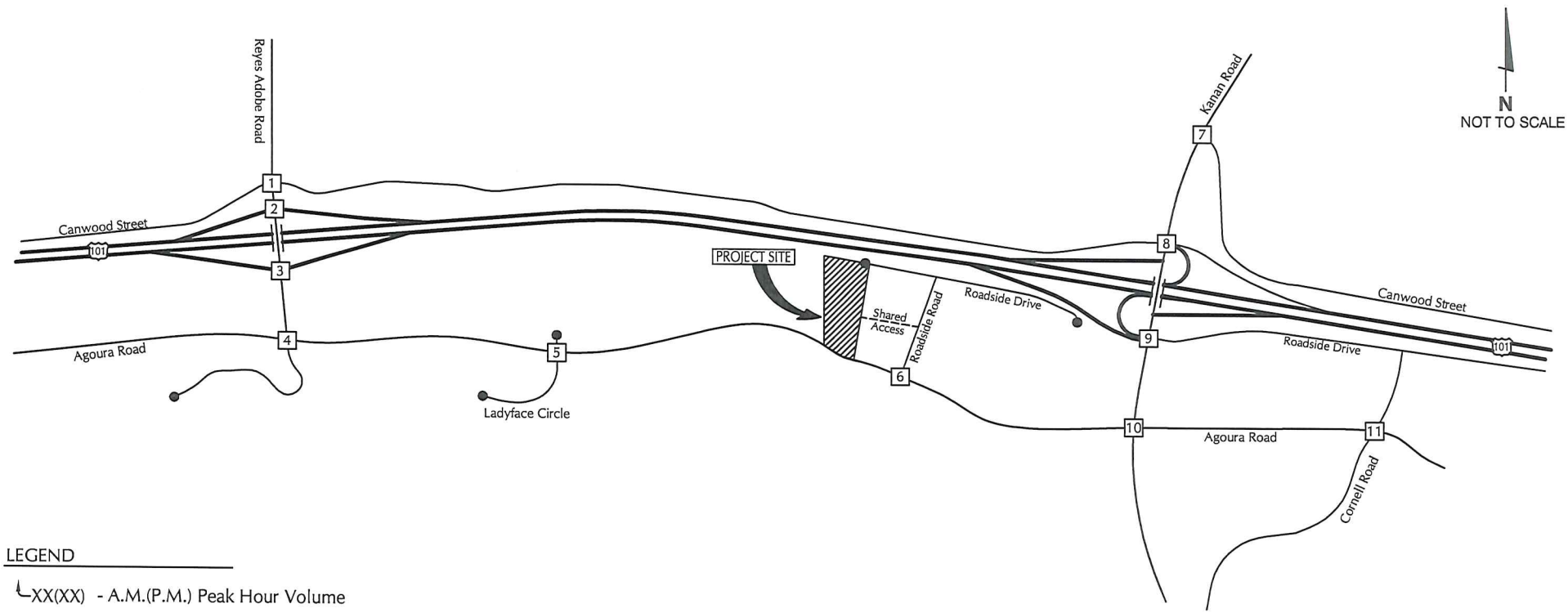


Associated Transportation Engineers

CUMULATIVE TRAFFIC VOLUMES

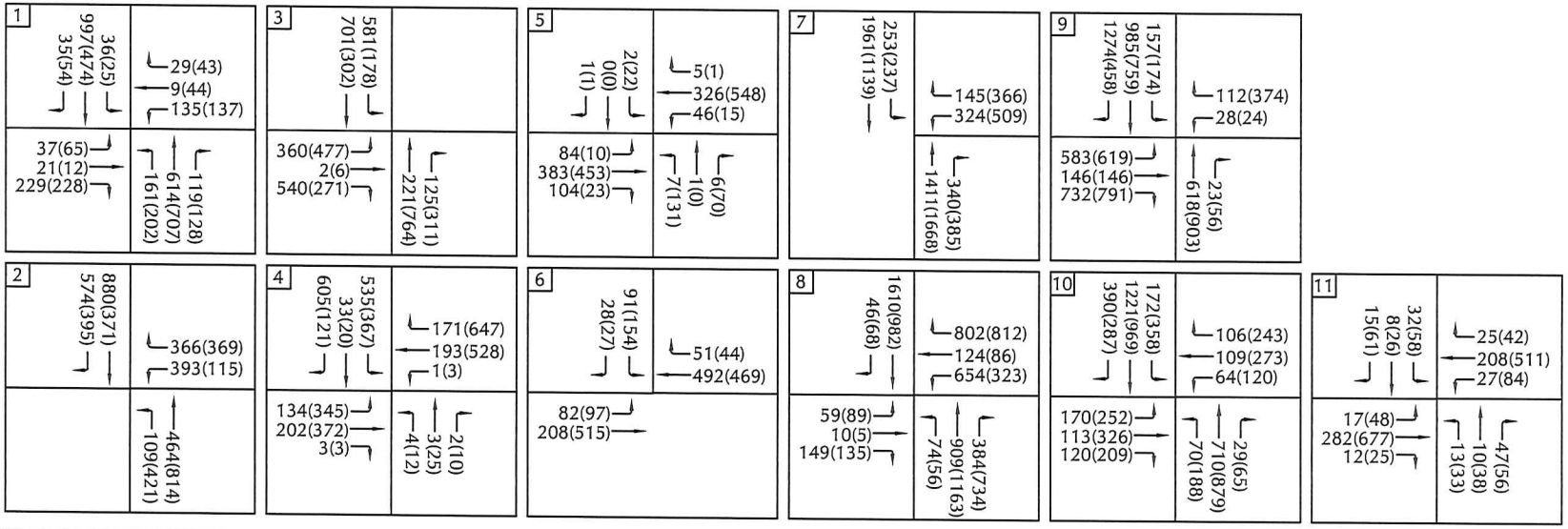
FIGURE 10

MMF - #15068



LEGEND

└XX(XX) - A.M.(P.M.) Peak Hour Volume



ASSOCIATED TRANSPORTATION ENGINEERS

CUMULATIVE + PROJECT TRAFFIC VOLUMES

FIGURE 11

MMF - #15068

Table 13
Cumulative and Cumulative + Project A.M. Peak Hour Levels of Service

Intersection	Cumulative		Cumulative + Project		Project Added	
	ICU/Delay[a]	LOS	ICU/Delay[a]	LOS	Increase	Impact?
Reyes Adobe Rd./Canwood St.	**0.83**	**D**	**0.83**	**D**	**0.00**	**NO**
U.S. 101 NB Ramp/Reyes Adobe Rd.	0.77	C	0.77	C	0.00	NO
U.S. 101 SB Ramp/Reyes Adobe Rd.	0.80	C	**0.82**	**D**	**0.02**	**NO**
Agoura Rd./Reyes Adobe Rd.	0.62	B	0.63	B	0.01	NO
Agoura Rd./Ladyface Circle	0.23	A	0.24	A	0.01	NO
Agoura Rd./Roadside Rd.	11.5 sec.	B	12.6 sec.	B	1.1 sec.	NO
Kanan Rd./Canwood St.	0.69	B	0.69	B	0.00	NO
U.S. 101 NB Ramp/Canwood St./Kanan Rd.	0.78	C	0.79	C	0.01	NO
U.S. 101 SB Ramp/Roadside Dr./Kanan Rd.	0.69	B	0.70	B	0.01	NO
Agoura Rd./Kanan Rd.	0.58	A	0.62	B	0.04	NO
Agoura Rd./Cornell Rd.	9.9 sec	A	9.9 sec.	A	0.0 sec.	NO

(a) ICU reported for signalized intersections and delay reported for unsignalized intersections.
Bold Values exceed City's LOS C standard.

Table 14
Cumulative and Cumulative + Project P.M. Peak Hour Levels of Service

Intersection	Cumulative		Cumulative + Project		Project Added	
	ICU/Delay[a]	LOS	ICU/Delay[a]	LOS	Increase	Impact?
Reyes Adobe Rd./Canwood St.	0.70	B	0.71	C	0.01	NO
U.S. 101 NB Ramp/Reyes Adobe Rd.	0.66	B	0.67	B	0.01	NO
U.S. 101 SB Ramp/Reyes Adobe Rd.	0.69	B	0.70	B	0.01	NO
Agoura Rd./Reyes Adobe Rd.	0.76	C	0.78	C	0.02	NO
Agoura Rd./Ladyface Circle	0.32	A	0.32	A	0.00	NO
Agoura Rd./Roadside Rd.	12.7 sec.	B	16.9 sec.	C	4.2 sec.	NO
Kanan Rd./Canwood St.	**0.83**	**D**	**0.83**	**D**	**0.00**	**NO**
U.S. 101 NB Ramp/Canwood St./Kanan Rd.	0.73	C	0.74	C	0.01	NO
U.S. 101 SB Ramp/Roadside Dr./Kanan Rd.	0.79	C	0.80	C	0.01	NO
Agoura Rd./Kanan Rd.	0.75	C	0.75	C	0.00	NO
Agoura Rd./Cornell Rd.	**107.8 sec**	**F**	**109.5 sec.**	**F**	**1.7 sec.**	**NO**

(a) ICU reported for signalized intersections and delay reported for unsignalized intersections.
Bold Values exceed City's LOS C standard.

The data presented in Tables 13 and 14 indicate that the Reyes Adobe Road/Canwood Street, Kanan Road/Canwood Street, and Agoura Road/Cornell Road intersections are forecast to operate at LOS D or worse under Cumulative and Cumulative + Project traffic conditions. Since the project will not increase the V/C by 0.02 or more at the Reyes Adobe Road/Canwood Street and Kanan Road/Canwood Street intersections, or increase the vehicle delay by 5.0 seconds or more at the Agoura Road/Cornell Road intersection, the project would not generate a cumulative impact based on City of Agoura Hills impact thresholds.

SIGNAL WARRANT ANALYSIS

A signal warrant analysis was completed for the Agoura Road/Roadside Road intersection, as reviewed in the following section. The Agoura Road/Roadside Road intersection is a T-intersection controlled by a STOP-Sign on the Roadside Road minor street approach. ATE collected 24-hour traffic counts for each approach leg of the intersection in August of 2015 (count data attached). The traffic signal warrant analysis was completed based on the Manual on Uniform Traffic Control Devices (MUTCD), California Supplement warrant criteria (warrant worksheets are attached). The posted speed limit on Agoura Road is 40 mph, therefore the urban warrants apply. The hourly trip distributions for the project and the approved/pending projects are based on trip generation data published by Caltrans in the "Progress Report on Trip Ends Generation Counts" for similar land uses. Table 15 summarizes the results of the

signal warrant analysis.

Table 15
Signal Warrant Results

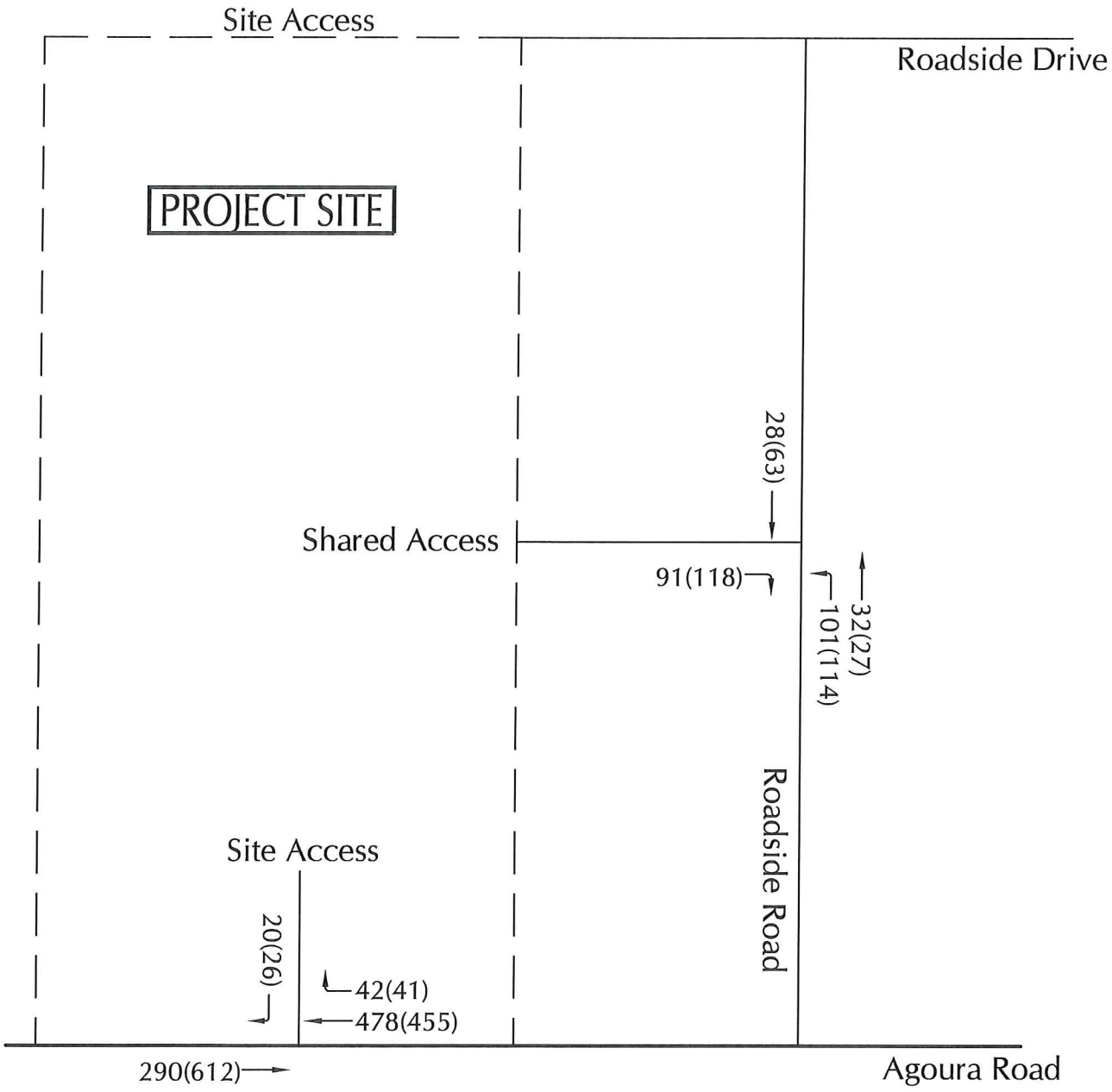
Warrant	Type	Warrant Satisfied ?			
		Existing	Existing + Project	Near-Term	Near-Tern+ Project
1	8 Hour Vehicular Volume	No	No	No	Yes
2	4 Hour Vehicular Volume	No	No	Yes	Yes
3	Peak Hour	No	No	Yes	Yes

The approach volumes at the Agoura Road/Roadside Road intersection satisfy the minimum vehicular volume warrants under Near-Term (4-hour, peak hour) and Near-Term + Project conditions (8-hour, 4-hour, peak hour). It should be noted that satisfaction of warrants is not necessarily justification for the installation of traffic signals. Delay, congestion, confusion or other evidence of the need for right-of-way assignment must be shown. The warrants are aids for determining whether a traffic signal should be considered, they do not establish thresholds above which traffic signals must be installed. Rather, they establish minimum thresholds below which traffic signals should not be installed. Given that the intersection is forecast to operate in the LOS B range, without significant vehicle delays on the southbound approach of Roadside Road, the intersection should be monitored for future signal installation.

SITE ACCESS AND CIRCULATION

Primary access to the project site is provided via a driveway connection on the north side of Agoura Road. Secondary access is provided via a driveway connection to Roadside Drive and a cross-access through the adjacent LA Fitness Property to the east. The project's primary driveway intersects Agoura Road approximately 450 feet west of the Agoura Road/Roadside Road intersection. The Agoura Road cross-section will allow limited access at the project driveway (right-turns inbound and outbound only) due to a raised median. The project driveway extends north from Agoura Road and provides access to the hotel parking area and the main entrance. Due to the proposed raised median on Agoura Road 40% of the project traffic would exit the site via the driveway on Agoura Road and the other 60% would use Roadside Drive until the adjacent property is developed and the cross-access through the LA Fitness property is constructed. Cumulative + Project driveway volumes are illustrated on Figure 12.

Levels of service were calculated to assess operations at the project driveway connection to Agoura Road and the shared cross-access connection to Roadside Road (HCS worksheets are contained in the Technical Appendix). The results show that there would be sufficient gaps for traffic to enter and exit the proposed driveways under Cumulative + Project conditions.



LEGEND

XX(XX) - A.M.(P.M.) Peak Hour Volume

N

NOT TO SCALE

ASSOCIATED TRANSPORTATION ENGINEERS

CUMULATIVE + PROJECT DRIVEWAY VOLUMES

FIGURE 12

MMF - #15068

Agoura Road/Project Driveway: Vehicle delays would be in the LOS A range for right-turns inbound and outbound during the peak hour periods. The 95th percentile queue lengths at the driveway are less than 1 vehicle which indicates that adequate gaps in the traffic flow will exist for exiting and entering vehicles.

Roadside Road/Cross-Access Driveway: Vehicle delays would be in the LOS A range for left-turns inbound and right-turns outbound during the peak hour periods. The 95th percentile queue lengths at the driveway are less than 1 vehicle which indicates that adequate gaps in the traffic flow will exist for exiting and entering vehicles.

Frontage Improvements

The project would be required to dedicate the necessary right-of-way to complete City required frontage improvements to the section of Agoura Road adjacent to the project site. The Agoura Road widening project includes new sidewalk, curb and gutter improvements, in addition to on-street bike lane adjacent to the project.

Pedestrian Facilities

Currently there are limited pedestrian facilities (crosswalks/sidewalks etc.) located along Agoura Road and Roadside Road in the study-area. No sidewalks are provided on Agoura Road adjacent to the project site. The nearest pedestrian crosswalks across Agoura Road are provided at the Ladyface Circle and Kanan Road signalized intersections. Along Roadside Road, a sidewalk is provided on the east side from Agoura Road to Roadside Drive and no sidewalks are provided on the west side of the road.

The planned project improvements to Agoura Road would enhance pedestrian facilities in the study-area. The Agoura Road improvement project includes the construction of pedestrian sidewalks on the section of Agoura Road located adjacent to the site. Agoura Road would be widened to include sidewalk and curb and gutter improvements on both the south and north sides adjacent to the project frontage. As part of the development of the LA Fitness property, new sidewalk would be provided on the west side of Roadside Road.

Bicycle Facilities

The project site is served by the City of Agoura Hills Bikeway System. The existing bicycle facilities located in the study-area consist of Class II bike lanes along Agoura Road adjacent to the project site. These Class II bike lanes connect the project to residential areas east and west of the project. The planned widening improvement to Agoura Road would enhance bicycle facilities in the study-area. The improvement project includes bike lane improvements to the section of Agoura Road located adjacent to the site.

Transit Facilities

The City of Agoura Hills traffic study guidelines require that impacts to fixed-route transit service with a bus stop within a 1/4 mile of the project be evaluated. The City of Agoura Hills is served by the LA Metro Route 161. The nearest bus stop is located at the Kanan Road/Roadside Drive intersection which is more than a 1/4 mile away from the project site.

PARKING ANALYSIS

Parking Supply

As illustrated on the project site plan, a total of 225 on-site parking spaces are provided.

Parking Requirement

The City of Agoura Hills Municipal Code parking requirement ratio for the hotel project is summarized below:

> Hotels and Motels: 1 space/per unit, plus the spaces required for each additional use on the site.

Based on the 1 space/per unit parking ratio, the Municipal Code parking requirements for the 225 room hotel project was calculated as shown in Table 16.

Table 16
City of Agoura Hills Municipal Code Parking Requirement

Land Use	Size	City Parking Ratio	Parking Required	Parking Provided
Hotel	225 Rooms	1 space/per room	225 spaces	225

Based on the Development Code, the parking requirement for the project is 225 spaces. The 225 on-site parking spaces would accommodate the parking requirement.

CONGESTION MANAGEMENT PROGRAM ANALYSIS

Impact Criteria

Los Angeles County has developed traffic impact guidelines with criteria and thresholds to assess the impacts of land use decisions made by local jurisdictions on the regional transportation facilities included as part of the Congestion Management Program (CMP) roadway system. The following guidelines were developed to determine the significance of project-generated traffic impacts. A significant impact occurs when the proposed project increases traffic demand on a facility by 2% of capacity (V/C > 0.02), causing LOS F (V/C >

1.00). If the facility is already at LOS F, a significant impact occurs when the proposed project increases the traffic demand on a facility by 2% of capacity (V/C > 0.02).

Potential Intersection Impacts

The CMP guidelines require that intersection monitoring locations must be examined if the proposed project would add 50 peak hour trips (PHT) or more during the A.M. or P.M. peak hours. None of the intersections included in this traffic study are included in the CMP network. Therefore, no further review of potential impacts to CMP intersections is required.

Potential Freeway Impacts

The CMP guidelines require that freeway monitoring locations must be examined if the proposed project would add 150 PHT or more (in either direction) during the A.M. or P.M. peak hours. The proposed project is forecast to add 50 A.M. and 55 P.M. PHT to U.S. Highway 101 northbound as well as 46 A.M. and 54 P.M. PHT to U.S. Highway 101 southbound, which is less than 150 PHT. Based on CMP criteria the project would not generate a significant impact to the freeway segments located in the study-area.

■ ■ ■

REFERENCES AND PERSONS CONTACTED

Associated Transportation Engineers

Scott A. Schell, AICP, PTP, Principal Transportation Planner
Darryl F. Nelson, PTP, Senior Transportation Planner
Matthew Farrington, Transportation Planner I

References

Highway Capacity Manual , Transportation Research Board, December 2010.

Trip Generation, Institute of Transportation Engineers, 9th Edition, 2012.

Cornerstone Mixed-Use Project, ATE, December 2014.

LA Fitness at Agoura Park, LSA, November 2014.

Agoura Business Center, ATE, August 2012.

Agoura Village Specific Plan EIR, ATE, January 2006.

Agoura Medical Office Traffic and Circulation Study, ATE, August 2008.

2004 Congestion Management Program for Los Angeles County, County of Los Angeles Metropolitan Transportation Authority, 2004.

Persons Contacted

Sri Chakravarthy, P.E., T.E., City of Agoura Hills
Valerie Darbouze, Associate Planner, City of Agoura Hills

CITY OF
AGOURA HILLS

INTEROFFICE MEMORANDUM

DATE: **April 27, 2016**

TO: **Ramiro Adeva, P.E. – Director of Public Works / City Engineer**

CC: **Kelly Fisher – Public Works Project Manager**

FROM: **Carlie Campuzano, P.E. – City Traffic Engineer**

SUBJECT: **Courtyard & TownePlace Suites Hotel Project Fair Share Contribution**

Associated Transportation Engineers (ATE) completed a Traffic and Circulation Study for the proposed Courtyard & TownePlace Suites Hotel Project (Project) that would be located on the north side of Agoura Road west of Roadside Road in the City of Agoura Hills. The project proposes to construct a 225 room hotel.

A signal warrant analysis for the intersection of Agoura Road/Roadside Road was conducted as a part of this study. The traffic signal warrant analysis was completed based on criteria listed in the California Manual on Uniform Traffic Control Devices. Three signal warrants were evaluated: 8 Hour Vehicular Volume, 4 Hour Vehicular Volume, and Peak Hour Volume. The Results of this analysis show that two signal warrants are met in the Near Term (2016) scenario, and three warrants are met in the Near Term (2016) plus Project scenario.

The City's Traffic Impact Analysis Guidelines indicate that a proposed project is considered to result in a significant impact if, prior to mitigation, the proposed project results in satisfying the most recent California Manual on Uniform Traffic Control Devices peak-hour volume warrant or other warrants for traffic signal installation at the intersection. As the warrants have been met, the project is considered to have a significant impact on traffic, and the mitigation shall be to contribute a fair-share cost toward construction of a signal at the intersection of Agoura Road and Roadside Road.

This project and other projects identified in the near term will create the need for a traffic signal in the next few years. Because of this, a fair share fee for this Project has been calculated by the City for the future traffic signal installation.

The Project is estimated to generate 208 trips at the Agoura Road/Roadside Road intersection in the peak hour. The cumulative trips generated by all development projects at this intersection total 1,133. This Project accounts for 18.4% of the cumulative project trips at this intersection.

Assuming that the future signal will cost $350,000, the fair share fee allocated to this Project is $64,254 (18.4% of $350,000).

The City will monitor the operations of the Agoura Road/Roadside Road intersection and will install a signal once the proposed projects are operational.