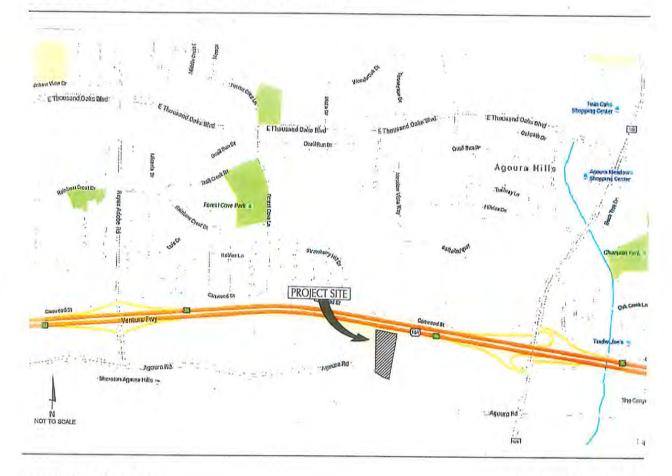
COURTYARD & TOWNEPLACE SUITES HOTEL PROJECT CITY OF AGOURA HILLS, CALIFORNIA

REVISED TRAFFIC AND CIRCULATION STUDY



November 30, 2015

ATE Project #15068

Prepared for:

Kruse Development Services Group Inc. 3247 Sitio Oceano Carlsbad, CA 92009



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November 30, 2015

15068R02.WPD

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REVISED TRAFFIC AND CIRCULATION STUDY FOR THE COURTYARD & TOWNEPLACE SUITES HOTEL PROJECT, CITY OF AGOURA HILLS, CALIFORNIA

Associated Transportation Engineers (ATE) has prepared the following revised traffic and circulation study for the Courtyard & TownePlace Suites Hotel Project, proposed in the City of Agoura Hills. The study addresses the November 4th 2015 comments proved by City staff.

We appreciate the opportunity to assist you with this project.

Associated Transportation Engineers

Scott A. Schell, AICP, PTP

Principal Transportation Planner

CONTENTS

INTRODUCTION		1
PROJECT DESCRIPTION	Į,	1
EXISTING CONDITIONS	1	1
Street Network		1
Roadway Operations		
Intersection Operations		
PLANNED IMPROVEMENTS		9
THRESHOLDS OF SIGNIFICANCE		9
	'n	L
PROJECT-SPECIFIC ANALYSIS		
Project Trip Generation		
Project Trip Distribution		
Project-Specific Impacts	1	1
NEAR-TERM (OPENING YEAR 2016) ANALYSIS	1.	5
Traffic Forecasts		-
Near-Term Impacts		
CUMULATIVE (YEAR 2035) ANALYSIS	2	2
Traffic Forecasts		
Cumulative Impacts	2.	3
SIGNAL WARRANTS	2	7
SITE ACCESS AND CIRCULATION	28	8
Frontage Improvements	30	0
Pedestrian Facilities		O
Bicycle Facilities	30	
Transit Facilities		
CONGESTION MANAGEMENT PROGRAM ANALYSIS	3	1
	100	
Impact Criteria	3	
Potential Intersection Impacts		31.
Potential Freeway Impacts	32	2
REFERENCES AND PERSONS CONTACTED	3.	3
TECHNICAL APPENDIX	34	4
	-	

TABLES

Table 1	Existing Roadway Operations 5
Table 2	Existing Intersection Levels of Service
Table 3	Project Trip Generation
Table 4	Project Trip Distribution
Table 5	Existing + Project Roadway Operations
Table 6	Existing and Existing + Project A.M. Peak Hour Levels of Service 13
Table 7	Existing and Existing + Project P.M. Peak Hour Levels of Service 15
Table 8	Approved/Pending Development Projects Trip Generation 16
Table 9	Near-Term + Project Roadway Operations
Table 10	Near-Term and Near-Term + Project A.M. Peak Hour Levels of Service . 21
Table 11	Near-Term and Near-Term + Project P.M. Peak Hour Levels of Service . 22
Table 12	Cumulative + Project Roadway Operations
Table 13	Cumulative and Cumulative + Project A.M. Peak Hour Levels of Service 26
Table 14	Cumulative and Cumulative + Project P.M. Peak Hour Levels of Service 27
Table 15	Signal Warrant Results
Table 16	City of Agoura Hills Municipal Code Parking Requirement
	FIGURES
Figure 1	Existing Street Network and Project Location
Figure 2	Project Site Plan 3
Figure 3	Existing Traffic Volumes
Figure 4	Existing Lane Geometry and Traffic Control
Figure 5	Project Trip Distribution and Assignment
Figure 6	Existing + Project Traffic Volumes
Figure 7	Near-Term Added Traffic Volumes
Figure 8	Near-Term Traffic Volumes
Figure 9	Near-Term + Project Traffic Volumes
Figure 10	Cumulative Traffic Volumes
Figure 11	Cumulative + Project Traffic Volumes
Figure 12	Cumulative + Project Driveway Traffic Volumes

INTRODUCTION

The following traffic and circulation study contains an analysis of the potential traffic impacts associated with the Courtyard & TownePlace Suites Hotel Project. The study provides information regarding existing and future traffic conditions within the project study-area and recommends improvements where necessary. The study also provides an analysis of the project's consistency with the policies outlined in the Los Angeles County Congestion Management Program (CMP).

PROJECT DESCRIPTION

The Courtyard & TownePlace Hotel Suites Project is located on Agoura Road just west of the Agoura Road/Roadside Road intersection in the City of Agoura Hills. The project is proposing to develop a 225 room hotel. Figure 1 shows the location of the project site within the City of Agoura Hills. Regional access to U.S. Highway 101 is provided via the Reyes Adobe Road and Kanan Road interchanges. Primary access to the site is proposed via a right-turn in/out only driveway on Agoura Road. Secondary access is provided via a driveway connection to Roadside Drive at the northeast corner of the project. Access to Roadside Road will be provided via a cross-access through the adjacent proposed LA Fitness property to the east. Figure 2 illustrates the project site plan.

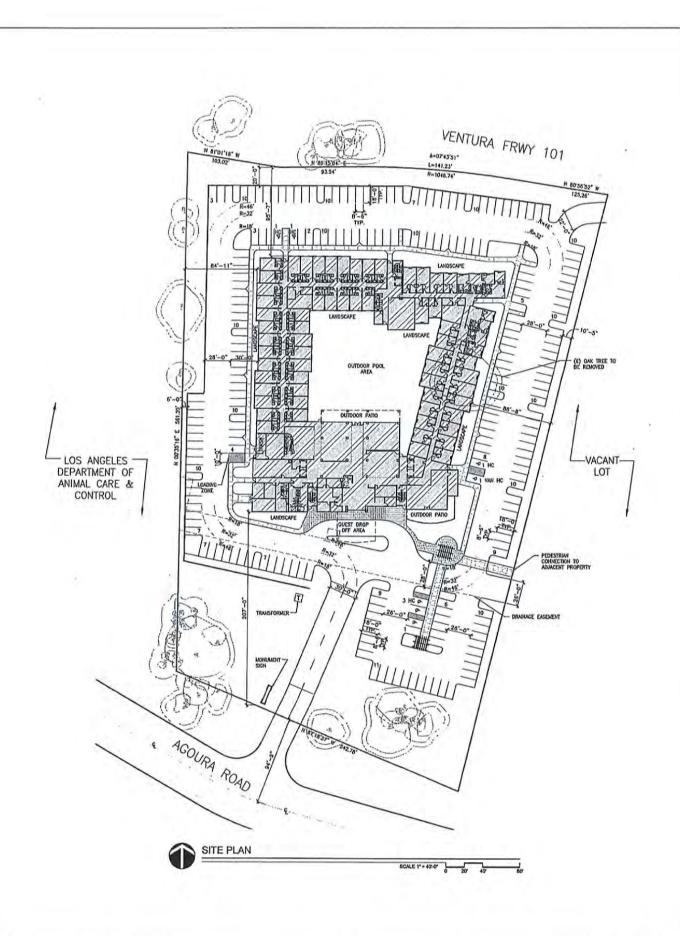
EXISTING CONDITIONS

Street Network

The project site is served by a network of highways, arterial roads and collector streets as illustrated in Figure 1. The following text provides a brief description of the major components of the study-area street network.

U.S. Highway 101, located north of the project site, is a multi-lane interstate highway serving the Pacific coast between the City of Los Angeles and the State of Washington. U.S. Highway 101 is the principal route between the City of Agoura Hills and the adjacent cities of Thousand Oaks and Westlake Village to the north, and the cities of Calabasas, Hidden Hills, and Los Angeles to the south. Access between the site and U.S. Highway 101 is provided via the Reyes Adobe Road and Kanan Road interchanges. The ramp intersections at the Reyes Adobe Road and Kanan Road interchanges are controlled by traffic signals.

Reyes Adobe Road, located west of the project site, is a 2- to 4-lane north-south arterial roadway that extends north from Agoura Road to the YMCA located off of Lake Lindero Drive. The roadway provides a primary north-south surface street route through the City of Agoura Hills. Within the study-area, Reyes Adobe Road is signalized at the U.S. Highway 101 interchange, Canwood Street and at the Agoura Road intersections.





PROJECT SITE PLAN

FIGURE

MMF - #15068

Kanan Road, located east of the project site, is a 4-lane arterial roadway that extends south from Tamarind Street and intersects with U.S. Highway 101 and Agoura Road before entering into Los Angeles County at the southern City limits. The roadway provides a primary north-south surface street route through the City of Agoura Hills. Within the study-area, Kanan Road is signalized at the U.S. Highway 101 interchange, Canwood Street and at the Agoura Road intersections.

Agoura Road, located along the project's southern frontage, is a 2- to 4-lane east-west arterial roadway that extends between Las Virgenes Road on the east and South Westlake Boulevard on the west. Within the study-area, the Agoura Road/Reyes Adobe Road, Ladyface Circle, and Kanan Road intersections are controlled by traffic signals. The Agoura Road/Roadside Road and Agoura Road/Cornell Road intersections are STOP-sign controlled. Access to the project site will be provided via a right-turn in/out only driveway located on Agoura Road. The 2-lane undivided section of Agoura Road adjacent to the project site from Ladyface Circle to Kanan Road is currently being widened to a 4-lane divided section with sidewalk and bike lanes in each direction.

Canwood Street, is an east-west arterial roadway which serves as a frontage road on the north side of U.S. Highway 101. Canwood Street originates at Lake Crest Drive and extends east to Chesebro-Driver-Palo Comado Canyon Road. It serves local businesses east of Kanan Road and residential neighborhoods west of Kanan Road. The Kanan Road/Canwood Street intersection is signalized.

Cornell Road, located east of the project, is a 2-lane north-south collector street that extends south from the intersection of Roadside Drive through the intersection of Agoura Road and beyond the City limits into Los Angeles County. The intersection of Agoura Road/Cornell Road is All-Way STOP-sign controlled.

Ladyface Circle, located west of the project site, is a 2-lane north-south street that extends south from Agoura Road to provide access to City Hall and additional commercial office uses. The Agoura Road/Ladyface Circle intersection is signalized.

Roadside Road, located east of the project site, is a 2-lane north-south street that extends north from Agoura Road to Roadside Drive. The Agoura Road/Roadside Road intersection is STOP-sign controlled on Roadside Road. Roadside Road will provide secondary access to the project site via a cross-access with the adjacent LA Fitness property.

Roadside Drive, located north of the project site, is a 2-lane east-west collector street that extends west from the shopping center located in the southwest quadrant of the U.S. Highway 101 Southbound Off-Ramp/Kanan Road intersection to the project site. Roadside Drive will provide secondary access to the project site.

Roadway Operations

The following section reviews the operation of Agoura Road in the study-area. The operational characteristics of the roadway are analyzed based on the 2010 Highway Capacity Manual (HCM) ¹ methodology for multi-lane highways. In rating a roadway's operating condition, "Levels of Service" (LOS) "A" through "F" are used. LOS "A" and LOS "B" represent primarily free-flow operations, LOS "C" represents stable conditions, LOS "D" nears unstable operations with restrictions on maneuverability within traffic streams, LOS "E" represents unstable operations with maneuverability very limited, and LOS "F" represents breakdown or forced flow conditions (more complete definitions of levels of service are included in the Technical Appendix). The City of Agoura Hills considers LOS "C" as the acceptable standard for Agoura Road.

Existing peak hour volumes for Agoura Road were obtained from traffic count data collected in August of 2015 by ATE. Note that the P.M. peak hour volumes are higher than the A.M. peak hour and therefore represent the worst case scenario. Table 1 lists the study-area roadway segments and summarizes their operations. Figure 3 illustrates the existing volumes.

Table 1 Existing Roadway Operations

Roadway	Segment	Roadway Type	P.M. Peak Hour LOS
Agoura Road - eastbound - westbound	Ladyface Cir./Roadside Rd. Ladyface Cir./Roadside Rd.	2-Lane Roadway 2-Lane Roadway	LOŠ E LOS E
Agoura Road - eastbound - westbound	Roadside Rd./Kanan Rd. Roadside Rd./Kanan Rd.	2-Lane Roadway 2-Lane Roadway	LOS E LOS E

The data presented in Table 1 indicate that the existing study-area 2-lane roadway segments currently operate in the LOS E range. Once the widening is completed, Agoura Road will operate at LOS A.

Intersection Operations

Because traffic flow on urban arterial roadways is most constrained at intersections, detailed traffic flow analyses focus on the operating conditions of critical intersections during peak travel periods. In rating intersection operations, LOS A through F are used (more complete definitions of levels of service are included in the Technical Appendix). The City of Agoura Hills considers LOS C as the minimum acceptable operating standard for intersections.

^{1 2010} Highway Capacity Manual, Transportation Research Board, 2010.

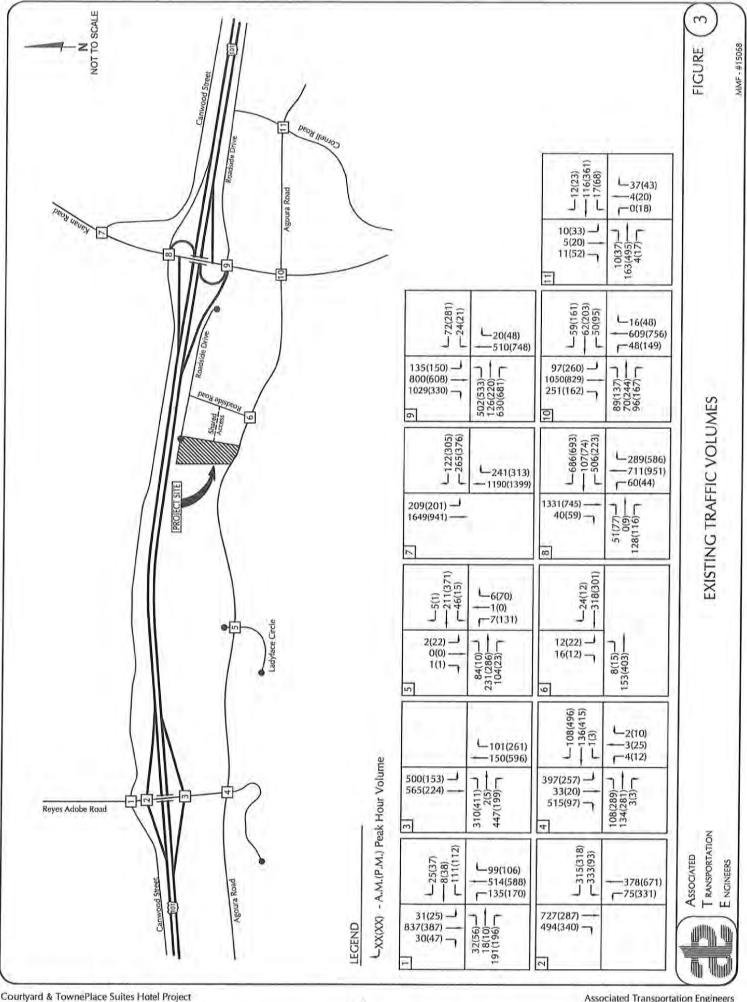


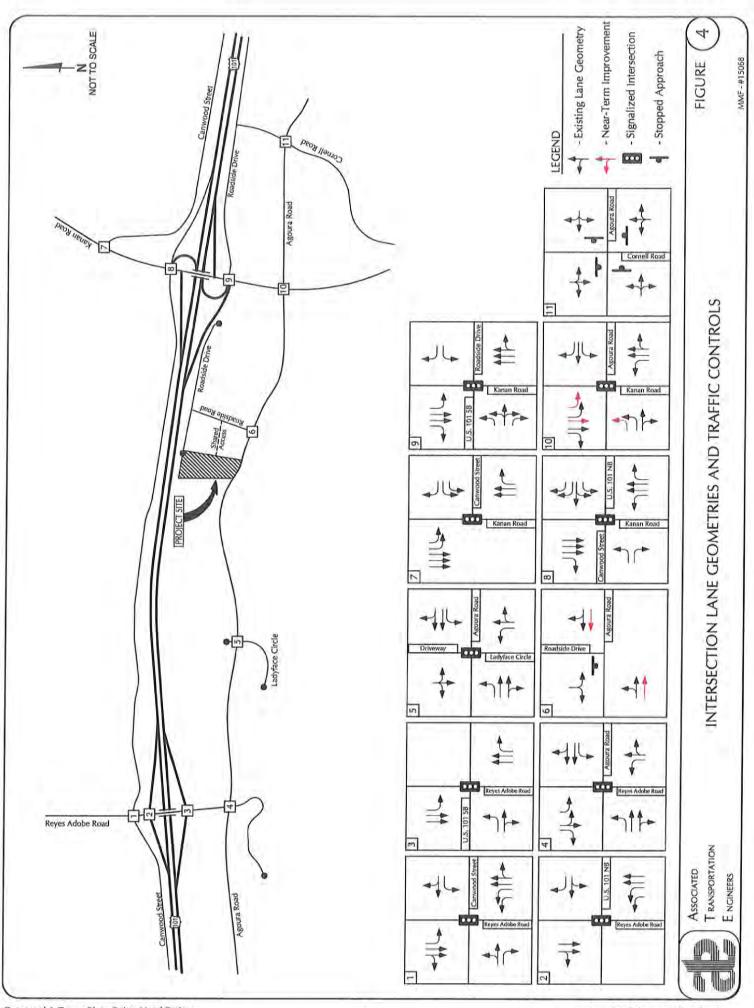
Figure 4 shows the study-area intersections, the existing traffic controls, and the intersection lane geometries. Existing peak hour volumes at study-area intersections were collected in February of 2015 and August of 2015 while school was in session (traffic count data is contained in the Technical Appendix for reference). Existing A.M. and P.M. peak hour traffic volumes for the study-area intersections are shown on Figure 3. Levels of service were calculated for the signalized intersections based on the "Intersection Capacity Utilization" (ICU) methodology. Levels of service for the unsignalized intersections were calculated using the methodology outlined in the 2010 HCM. Table 2 lists the existing levels of service for the study-area intersections (calculation worksheets are contained in the Technical Appendix).

Table 2 Existing Intersection Levels of Service

	A.M. Peak	Hour	P.M. Peak Hour		
Intersection	ICU/Delay ^(a)	LOS	ICU/Delay ^(a)	LOS	
Reyes Adobe Road/Canwood Street	0.70	LOS A	0.60	LOS A	
U.S. 101 NB Ramp/Reyes Adobe Road	0.67	LOS B	0.56	LOS A	
U.S. 101 SB Ramp/Reyes Adobe Road	0.62	LOS B	0.59	LOS A	
Agoura Road/Reyes Adobe Road	0.52	LOS A	0.63	LOS B	
Agoura Road/Ladyface Circle	0.18	LOS A	0.27	LOS A	
Agoura Road/Roadside Road	10.4 sec.	LOS B	11.8 sec.	LOS B	
Kanan Road/Canwood Street	0.59	LOS A	0.69	LOS B	
U.S. 101 NB Ramp/Canwood Street/Kanan Road	0.66	LOS B	0.61	LOS B	
U.S. 101 SB Ramp/Roadside Drive/Kanan Road	0.58	LOS A	0.70	LOS B	
Agoura Road/Kanan Road	0.87	LOS D	0.98	LOS E	
Agoura Road/Cornell Road	8.1 sec.	LOS A	20.7 sec	LOS C	

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

The data presented in Table 2 shows the Agoura Road/Kanan Road intersection currently operates at LOS D during the A.M. peak hour period and LOS E during P.M. peak hour period. A planned improvement for the Agoura Road/Kanan Road intersection discussed in the following section will improve the operation of the intersection.



PLANNED IMPROVEMENTS

The City of Agoura Hills has identified the following near-term and cumulative programmed improvements for the signalized Agoura Road/Kanan Road intersection and the 2-lane section of Agoura Road from Kanan Road to Ladyface Circle.

Near-Term Improvements

Agoura Road from Ladyface Circle to Kanan Road Improvement: The existing undivided 2-lane section of Agoura Road is currently being widened to a 4-lane divided section with a landscaped median. Pedestrian sidewalks and bicycle lanes will be provided in both directions.

Agoura Road/Kanan Road Intersection Improvement:

Southbound Approach: Add a second left-turn lane and a through lane.

Eastbound Approach: Add a second left-turn lane.

Cumulative Improvements

Agoura Road/Kanan Road Intersection Improvement:

Eastbound Approach: Add an exclusive right-turn lane. Northbound Approach: Add an exclusive right-turn lane.

THRESHOLDS OF SIGNIFICANCE

The City of Agoura Hills considers LOS C or better acceptable for signalized intersection operations. A significant impact would occur when a proposed project increases traffic demand by:

4% or greater (V/C increase \geq 0.04) at a facility that would operate at LOS C with project-added traffic volumes.

2% or greater (V/C increase \geq 0.02) at a facility that would operate at LOS D with project-added traffic volumes.

1% or greater (V/C increase > 0.01) at a facility that would operate at LOS E/F with project-added traffic volumes.

The City of Agoura Hills considers LOS C or better acceptable for unsignalized intersection operations. A significant impact would occur if there is a change in the LOS with the addition of project traffic to LOS D or worse. A significant impact at an unsignalized intersection would also occur if there is a increase in delay by 5 or more seconds for intersections operating at an unacceptable LOS. A significant impact at an unsignalized intersection would also occur if the California Manual on Uniform Traffic Control Devices (MUTCD) warrants for traffic signals are satisfied with the addition of project traffic.

PROJECT-SPECIFIC ANALYSIS

Project Trip Generation

Trip generation estimates were calculated for the Courtyard & TownePlace Suites Hotel based on the rates published in the Institute of Transportation Engineers (ITE), <u>Trip Generation</u>, 9th Edition for Hotels (Land-Use Code #310). Table 3 summarizes the average daily, A.M. and P.M. peak hour trip generation estimates for the hotel project.

Table 3 Project Trip Generation

		Al	DT	A.M.	Peak Hour	P.M.	Peak Hour
Land Use	Size	Rate	Trips	Rate	Trips (In/Out)	Rate	Trips (In/Out)
Hotel	225 Rooms	8.17	1,838	0.53	119 (70/49)	0.60	135(69/66)

The proposed hotel project would generate a total of 1,838 average daily trips (ADT), 119 A.M. peak hour trips, and 135 P.M. peak hour trips as shown in Table 3.

² <u>Trip Generation</u>, Institute of Transportation Engineers, 9th Edition, 2013.

Project Trip Distribution

The project-generated traffic volumes were distributed and assigned to the adjacent street network based on percentages shown in Table 4 and illustrated on Figure 5. The trip distribution percentages were developed based on existing traffic patterns observed in the study area, input from City staff, and consideration of the most logical travel routes for drivers accessing the proposed hotel.

Table 4
Project Trip Distribution

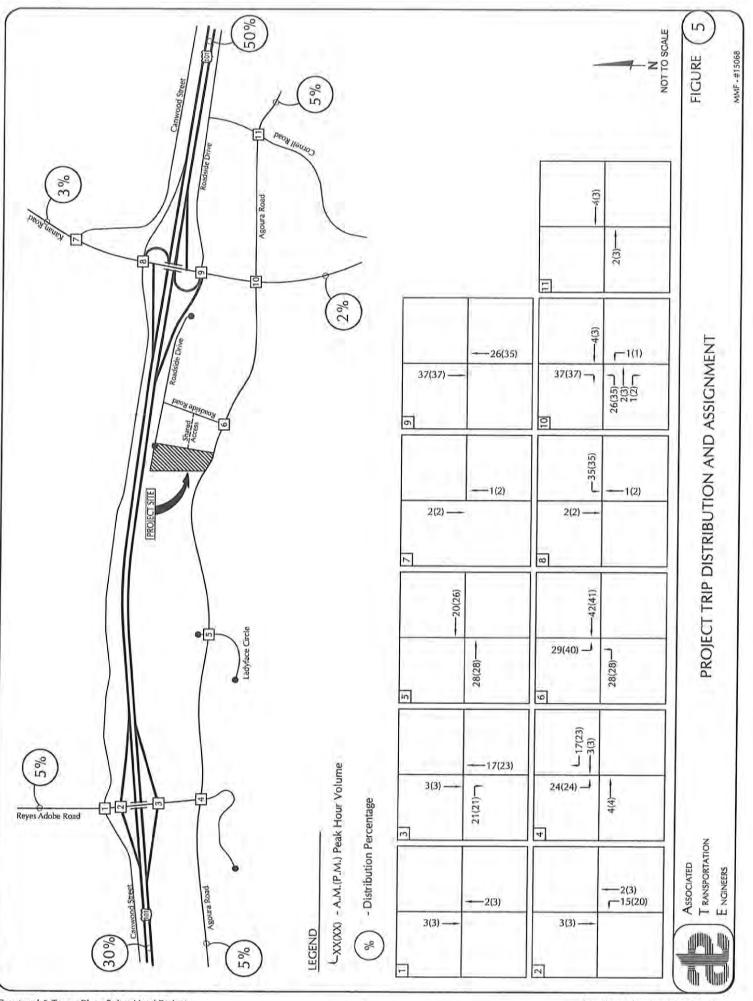
Origin/Destination	Direction	Percent
U.S. Highway 101 East of Kanan Road	East	50%
U.S. Highway 101 West of Reyes Adobe Road	West	30%
Reyes Adobe Road North of U.S. Highway 101	North	5%
Kanan Road North of U.S. Highway 101/Canwood Street	North	3%
Kanan Road South of Agoura Road	South	2%
Agoura Road East of Cornell Road	East	5%
Agoura Road West of Reyes Adobe Road	West	5%
	Total	100%

Project-Specific Impacts

Roadways. Levels of service were calculated for Agoura Road assuming the Existing + Project volumes. LOS Worksheets are contained in the Technical Appendix. Roadway level of service for the existing and existing + project conditions are listed in Table 5. As noted previously the Existing + Project analysis assumes the completion of the Agoura Road widening project that is currently under construction.

Table 5
Existing + Project Roadway Operations

Roadway	Segment	Roadway Type	P.M.		
			Existing	Existing + Project	Impact
Agoura Road - westbound - eastbound	Ladyface Cir./Roadside Rd. Ladyface Cir./Roadside Rd.	4-Lane Roadway 4-Lane Roadway	LOS E LOS E	LOS A LOS A	No No
Agoura Road - westbound - eastbound	Roadside Rd./Kanan Rd. Roadside Rd./Kanan Rd.	4-Lane Roadway 4-Lane Roadway	LOS E LOS E	LOS A LOS A	No No



The data in Table 5 show that with the widening to 4-lanes Agoura Road would operate at LOS A. The addition of project traffic to 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 Existing + Project traffic volumes presented on Figure 6. Tables 6 and 7 compare the Existing and Existing + Project levels of service and identify project-specific impacts based on City thresholds. Analysis assumes the implementation of the City's road widening improvements on Agoura Road adjacent to the project site.

Table 6
Existing and Existing + Project A.M. Peak Hour Levels of Service

	Existing	g	Existing + P	Existing + Project		Added
Intersection	ICU/Delay ^(a)	LOS	ICU/Delay(**)	LOS	Increase	Impact?
Reyes Adobe Rd./Canwood St.	0.70	В	0.70	В	0.00	NO
U.S. 101 NB Ramp/Reyes Adobe Rd.	0,67	В	0.67	В	0.00	NO
U.S. 101 SB Ramp/Reyes Adobe Rd.	0.62	В	0.62	В	0.00	NO
Agoura Rd./Reyes Adobe Rd.	0.52	Α	0.53	Α	0.01	NO
Agoura Rd./Ladyface Cir.	0.18	A	0.20	Α	0.02	NO
Agoura Rd./Roadside Rd.	10.4 sec.	В	10.2 sec.	В	-0.2 sec.	NO
Kanan Rd./Canwood St.	0.59.	Α	0.59	Α	0.00	NO
U.S. 101 NB Ramp/Canwood St./Kanan Rd.	0.66	В	0.66	В	0.00	NO
U.S. 101 SB Ramp/Roadside Dr./Kanan Rd.	0.58	Α	0.59	Α	0.01	NO
Agoura Road/Kanan Road	0.87	D	0.87	D	0.00	NO
Agoura Road/Cornell Road	8.1 sec.	Α	8.1 sec.	Α	0.0 sec.	NO

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

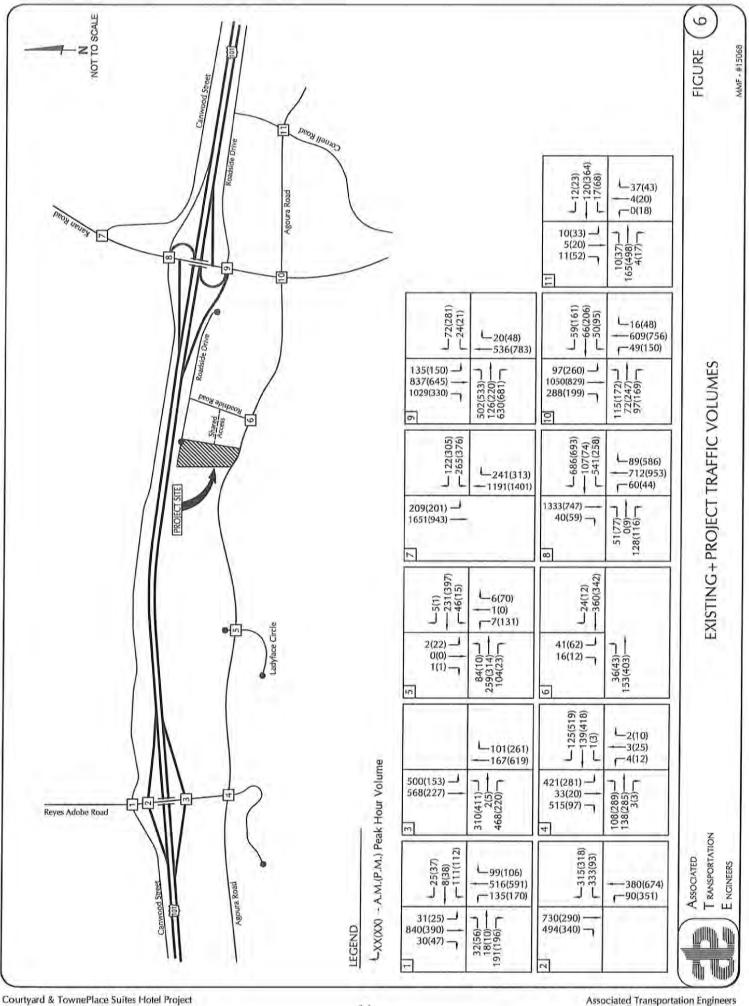


Table 7
Existing and Existing + Project P.M. Peak Hour Levels of Service

	Existing		Existing + P	roject	Projec	t Added
Intersection	ICU/Delay ^(a)	LOS	ICU/Delay ^(a)	LOS	Increase	Impacti
Reyes Adobe Rd./Canwood St.	0.60	٨	0.60	Α	0.00	NO
U.S. 101 NB Ramp/Reyes Adobe Rd.	0.56	Α	0.57	Α	0.01	NO
U.S. 101 SB Ramp/Reyes Adobe Rd.	0.59	۸	0.60	Α	0.01	NO
Agoura Rd./Reyes Adobe Rd.	0.63	В	0.64	В	0.01	NO
Agoura Rd./Ladyface Cir.	0.27	Α	0.28	Α	0.01	NO
Agoura Rd./Roadside Rd.	11.8 sec.	В	11.1 sec.	В	-0.7 sec.	NO
Kanan Rd./Canwood St.	0.69	В	0,69	В	0.00	NO
U.S. 101 NB Ramp/Canwood St./Kanan Rd.	0.61	В	0.61	В	0.00	NO
U.S. 101 SB Ramp/Roadside Dr./Kanan Rd.	0,70	В	0.70	В	0.00	NO
Agoura Road/Kanan Road	0.98	Е	0.98	E	0.00	NO
Agoura Road/Cornell Road	20.7 sec.	С	21.0 sec.	С	0.3 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 6 and 7 indicate that the Agoura Road/Kanan Road intersection would operate in the LOS D - E range. The project's traffic additions would not generate project-specific impacts based on City of Agoura Hills impact thresholds since the V/C increase attributable to the project delay is less than 0.01. The remaining intersections would operate at LOS C or better.

NEAR-TERM (OPENING YEAR 2016) ANALYSIS

The City of Agoura Hills requires that intersections be analyzed with the addition of traffic generated by approved/pending developments that would be operational by the opening year (Year 2016) of the project and an ambient growth factor of 0.75 percent over a 1 year period (1.0075). The Year 2016 analysis assumes implementation of the City's near-term improvements on Agoura Road adjacent to the project site and at the Agoura Road/Kanan Road intersection.

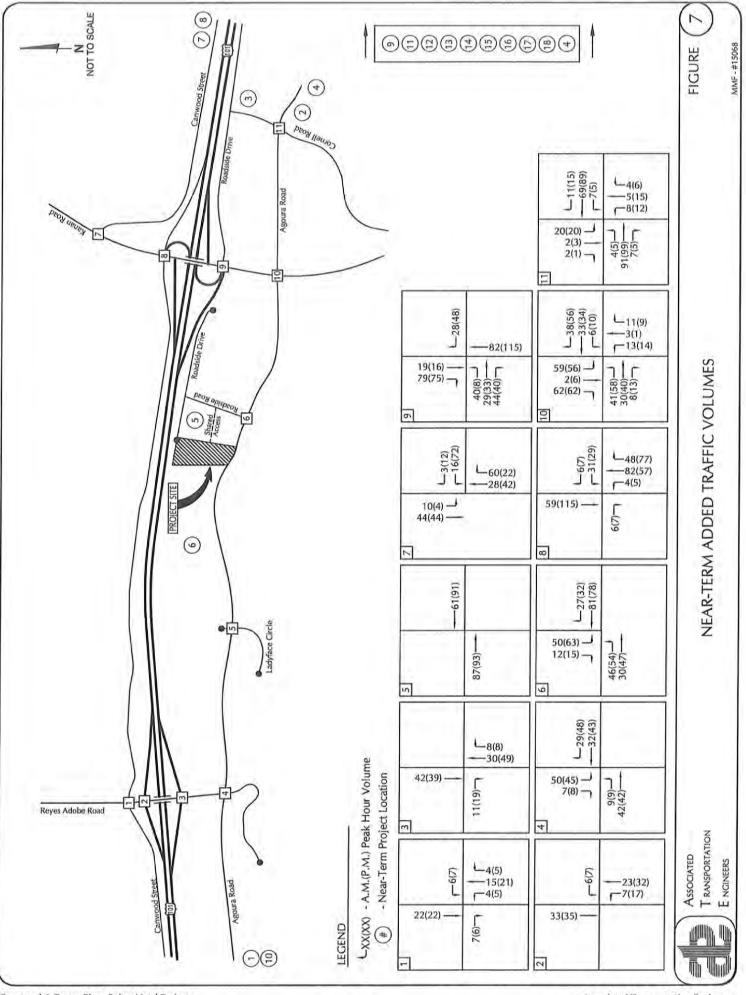
Traffic Forecasts

Near-Term (Opening Year 2016) traffic volumes were forecasted assuming development of the approved/pending projects proposed within the City of Agoura Hills. A copy of the City of Agoura Hills Development Summary June 2015 Quarterly Report is contained in the Technical Appendix for reference. Trip generation estimates were developed for the approved/pending projects using the rates presented in the ITE, <u>Trip Generation</u>, 9th Edition. Table 8 summarizes the average daily, A.M. and P.M. peak hour trip generation estimates for the approved/pending development projects. A spreadsheet containing the ITE Land Use Codes and trip generation rates is contained in the Technical Appendix for reference.

Table 8
Approved/Pending Development Projects Trip Generation

No.	Project	Land Use	Size	ADT	A.M. Peak (In/Out)	P.M. Peak (In/Out)
1.	Heathcote	Medical Office	14,075 s.f.	509	34 (27/7)	50 (14/36)
2.	Cornerstone Mixed-Use	Trip Generation	from ATE T.I.S.	3,035	220 (135/85)	242 (114/128
3.	Whizin Market	Trip Generation	from ATE T.I.S.	4,274	234 (137/97)	319 (170/149
4.	Utopia Hills	Restaurant Townhome Condominium Gym/Yoga	3,381 s.f. 8 Units 9 Units 2,204 s.f	430 46 52 72	36 (20/16) 4 (1/3) 4 (1/3) 3 (2/1)	33 (20/13) 4 (2/2) 5 (3/2) 8 (5/3)
5.	Selleck Development		from LSA T.I.S.	3,630	195(111/84)	237 (131/106
6.	Agoura Landmark	Warehouse Office	48,532 s.f. 21,320 s.f.	173 235	14 (11/3) 33 (29/4)	16 (4/12) 32 (5/27)
7.	Shirvanian	Industrial Park	103,000 s.f.	718	95 (0/0)	100 (12/88)
8.	Agoura Business Center West	Commercial	21,782 s.f.	965	29 (0/0)	59 (26/33)
9.	APB	Office	30,400 s.f.	335	47 (41/6)	45 (8/37)
10.	Khantzis/Rice	Residential	46 units	267	20 (3/17)	24 (16/8)
11.	Jay Rogers	Residential	18 units	171	14 (4/10)	18 (11/7)
12.	Barry Robles	Residential	2 units	19	2 (1/1)	2 (1/1)
13.	Payan	Residential	1 unit	10	1 (1/0)	1 (0/1)
14.	Nabiollah Moallem	Residential	1 unit	10	1 (1/0)	1 (0/1)
15.	Katherine Neff	Residential	1 unit	10	1 (1/0)	1 (0/1)
16.	Abudalu	Residential	1 unit	10	1 (1/0)	1 (0/1)
17,	Texidor	Residential	1 unit	10	1 (1/0)	1 (0/1)
18.	Gold	Residential	1 unit	10	1 (1/0)	1 (0/1)
			Total Trips:	14,991	990 (622/368)	1,200 (549/651

The data presented in Table 8 indicates that the approved/pending projects would generate a total of 14,991 average daily trips, 990 A.M. peak hour trips and 1,200 P.M. peak hour trips. The approved/pending projects' traffic volumes were distributed and assigned to the study-area intersections. The trip assignment for the approved/pending projects was developed based on the location of each project, recent traffic studies, existing traffic patterns observed in the study-area as well as a general knowledge of the population, employment and commercial centers in Agoura Hills. Figure 7 illustrates the Near-Term-Added peak hour traffic volumes for the study-area intersections. The trip distribution for the Near-Term projects is presented in the Technical Appendix.



Near-Term Impacts

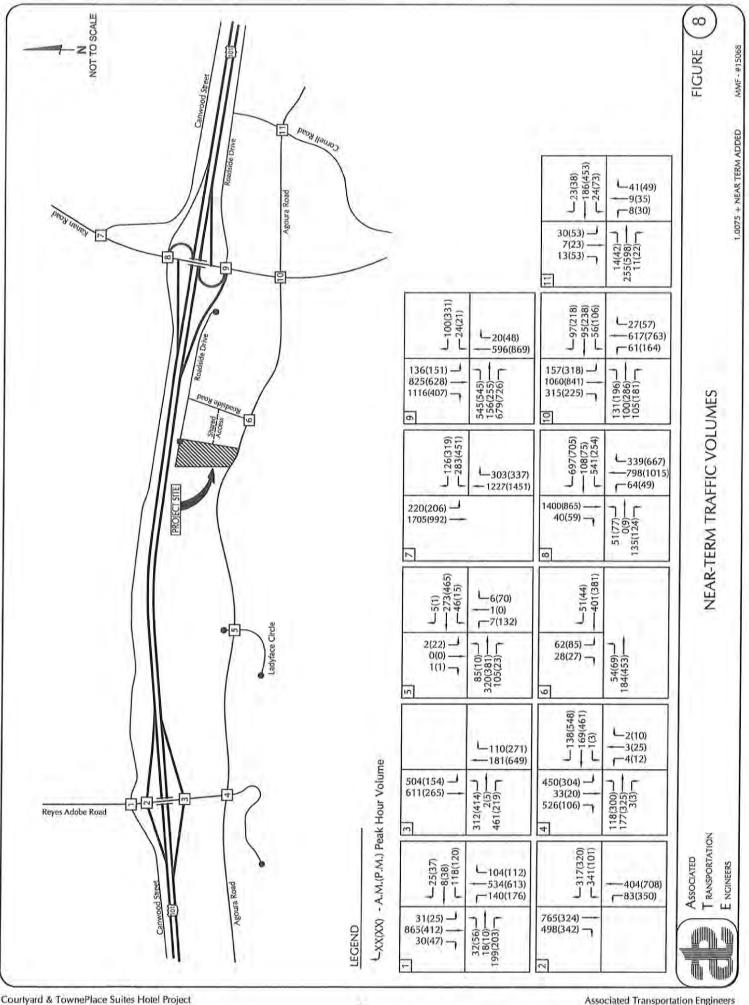
Roadways. Levels of service were calculated for Agoura Road assuming the Near-Term + Project volumes. LOS Worksheets are contained in the Technical Appendix. Roadway level of service for the Near-Term and Near-Term + Project conditions are listed in Table 9.

Table 9 Near-Term + Project Roadway Operations

Roadway	Segment	Roadway Type	Pe	7	
		Marin also also	Near-Term	Near-Term + Project	Impact
Agoura Road - eastbound - westbound	Ladyface Cir./Roadside Rd. Ladyface Cir./Roadside Rd.	4-Lane Roadway 4-Lane Roadway	LOS A LOS A	LOS A LOS A	No No
Agoura Road - eastbound - westbound	Roadside Rd./Kanan Rd. Roadside Rd./Kanan Rd.	4-Lane Roadway 4-Lane Roadway	LOS A LOS A	LOS A LOS A	No No

The data presented in Table 9 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 Near-Term and Near-Term + Project traffic volumes presented on Figures 8 and 9. Tables 10 and 11 compare the Near-Term and Near-Term + Project levels of service for the study-area intersections and identify near-term impacts based on City thresholds.



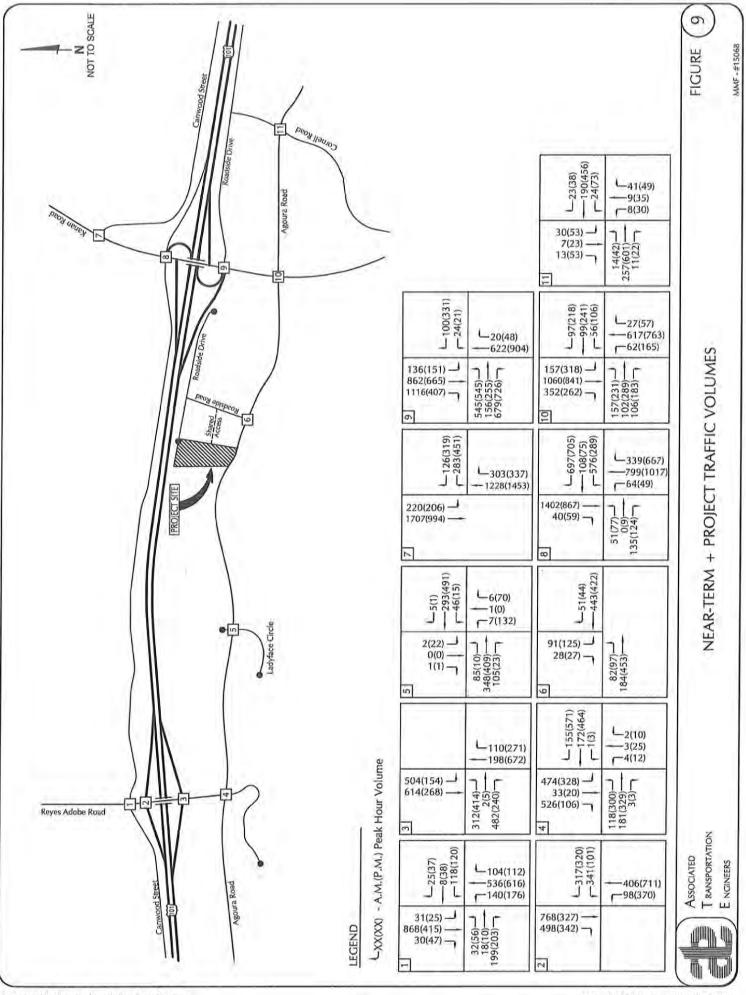


Table 10
Near-Term and Near-Term + Project A.M. Peak Hour Levels of Service

	Near-Ter	m	Near-Term + Project		Project Added	
Intersection	ICU/Delay ^(a)	LOS	ICU/Delay ^(a)	LOS	Increase	Impact?
Reyes Adobe Rd./Canwood St.	0.73	С	0.73	С	0.00	NO
U.S. 101 NB Ramp/Reyes Adobe Rd.	0.69	В	0.69	В	0.00	20
U.S. 101 SB Ramp/Reyes Adobe Rd.	0.63	В	0.63	В	0.00	NO
Agoura Rd./Reyes Adobe Rd.	0.55	Α	0.56	Α	0.01	NO
Agoura Rd./Ladyface Circle	0,22	Α	0.23	Á	0.01	NO
Agoura Rd./Roadside Rd.	11.1 sec.	В	12.2 sec.	В	1.0 sec.	NO
Kanan Rd./Canwood St.	0.61	В	0.61	В	0.00	NO
U.S. 101 NB Ramp/Canwood St./Kanan Rd.	0.69	В	0.69	В	0.00	NO
U.S. 101 SB Ramp/Roadside Dr./Kanan Rd.	0.63	В	0.64	В	0.01	NO
Agoura Rd./Kanan Rd. ⁶⁾	0.77	С	0.77	c	0.00	NO
Agoura Rd./Cornell Rd.	9.4 sec.	Α	9.4 sec.	Α	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

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

⁽a) ICU reported for signalized intersections and delay reported for unsignalized intersections.

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.

⁽b) LOS based assumes planned Near-Term improvements in place.

Bold Values exceed City's LOS C standard.

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

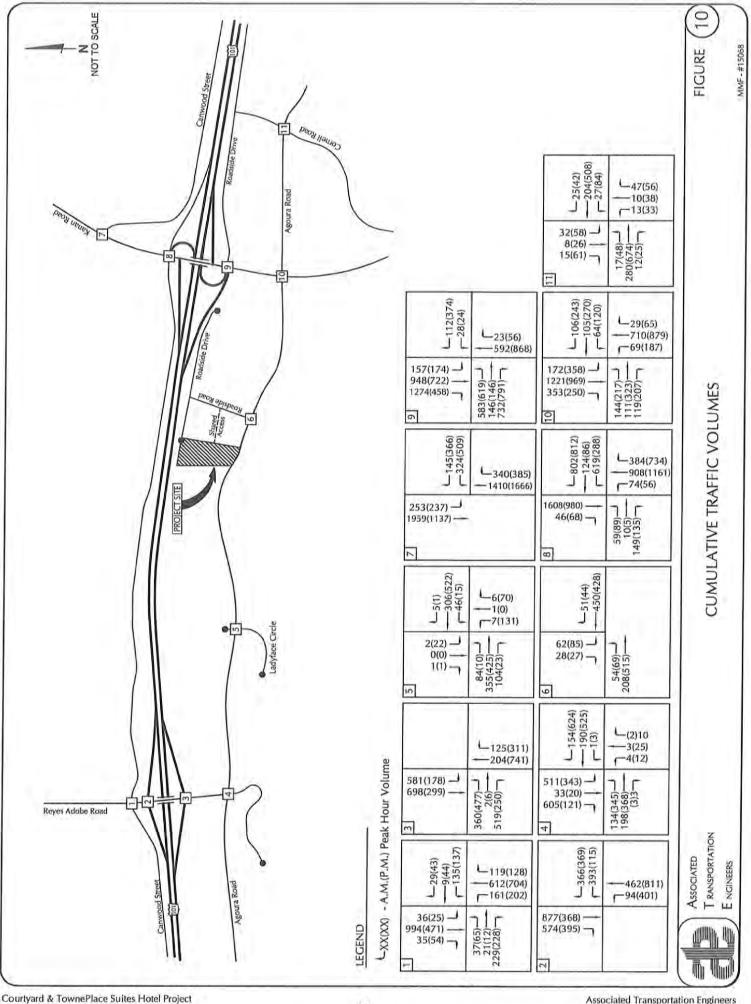
Roadways. Levels of service were calculated for Agoura Road assuming the Cumulative + Project volumes. LOS Worksheets are contained in the Technical Appendix. Roadway level of service for the Cumulative and Cumulative + Project conditions are listed in Table 12.

Table 12 Cumulative + Project Roadway Operations

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



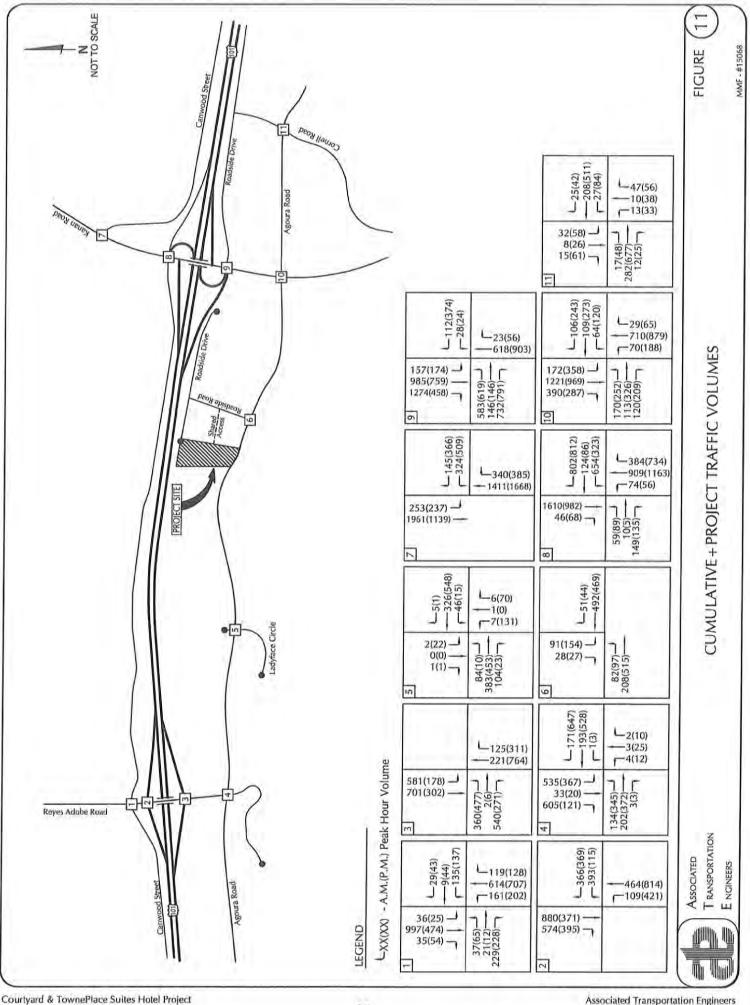


Table 13
Cumulative and Cumulative + Project A.M. Peak Hour Levels of Service

	Cumulati	ive	Cumulative + Project		Project Added	
Intersection	ICU/Delay ^(a)	LOS	ICU/Delay ^(a)	LOS	Increase	Impacti
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	С	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	В	0.63	В	0.01	NO
Agoura Rd./Ladyface Circle	0,23	Α	0.24	A	0.01	NO
Agoura Rd./Roadside Rd.	11.5 sec.	В	12.6 sec.	В	1.1 sec.	NO
Kanan Rd./Canwood St.	0.69	В	0.69	В	0.00	NO
U.S. 101 NB Ramp/Canwood St./Kanan Rd.	0.78	С	0.79	С	0.01	NO
U.S. 101 SB Ramp/Roadside Dr./Kanan Rd.	0.69	В	0.70	В	0.01	NO
Agoura Rd./Kanan Rd.	0.58	Α	0.62	В	0.04	NO
Agoura Rd./Comell Rd.	9.9 sec	Α	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

	Cumulative		Cumulative + Project		Project Added	
Intersection	ICU/Delay ^ω	LOS	ICU/Delay ^(a)	LOS	Increase	Impact
Reyes Adobe Rd./Canwood St.	0.70	В	0.71	С	0.01	NO
U.S. 101 NB Ramp/Reyes Adobe Rd.	0.66	В	0.67	В	0.01	NO
U.S. 101 SB Ramp/Reyes Adobe Rd.	0.69	В	0.70	В	0,01	NO
Agoura Rd./Reyes Adobe Rd.	0.76	C	0.78	С	0.02	NO
Agoura Rd./Ladyface Circle	0.32	Α	0.32	A	0.00	NO
Agoura Rd./Roadside Rd.	12.7 sec.	В	16.9 sec.	С	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	С	0.74	С	0.01	NO
U.S, 101 SB Ramp/Roadside Dr./Kanan Rd.	0.79	С	0.80	С	0.01	NO
Agoura Rd./Kanan Rd.	0.75	C	0.75	С	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

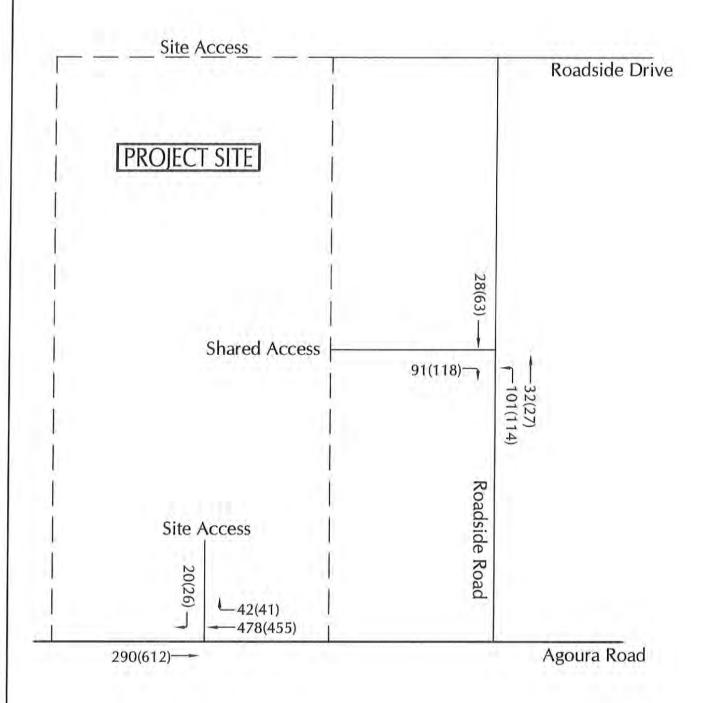
Warrant	Туре	Warrant Satisfied ?						
		Existing	Existing + Project	Near-Term	Near-Tern+ Project			
1	8 Hour Vehicular Volume	No	No	No	Yes			
2	4 Hour Vehicular Volume	No	No	Yes	Yes			
3	Peak Hour	No	No	Yes	Yes			

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.



NOT TO SCALE

LEGEND

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

Associated T ransportation E ngineers

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.

<u>Roadside Road/Cross-Access Driveway</u>: 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.

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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

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Persons Contacted

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