Section 5.4
TRAFFIC

5.4 TRAFFIC

This section evaluates the impacts of the proposed project on the local traffic system in the vicinity of the project site. This analysis summarizes the findings of the *Traffic Impact Analysis* (May 2008) prepared for the proposed project by Austin-Foust Associates, Inc. (AFA) and the *Parking Study Report* (May 2008) prepared by Linscott, Law & Greenspan. Because the traffic report is technical in its subject and language, this section presents a summary intended for the non-technical reader. For a detailed discussion of assumptions, calculations, and conclusions utilized in the traffic analysis, refer to the *Traffic Impact Analysis* included in its entirety in Appendix E of this EIR. For a detailed discussion of assumptions, calculations, and conclusions utilized in the parking analysis, refer to the *Parking Study Report* included in its entirety in Appendix K of this EIR.

5.4.1 METHODOLOGY AND PERFORMANCE CRITERIA

STUDY AREA

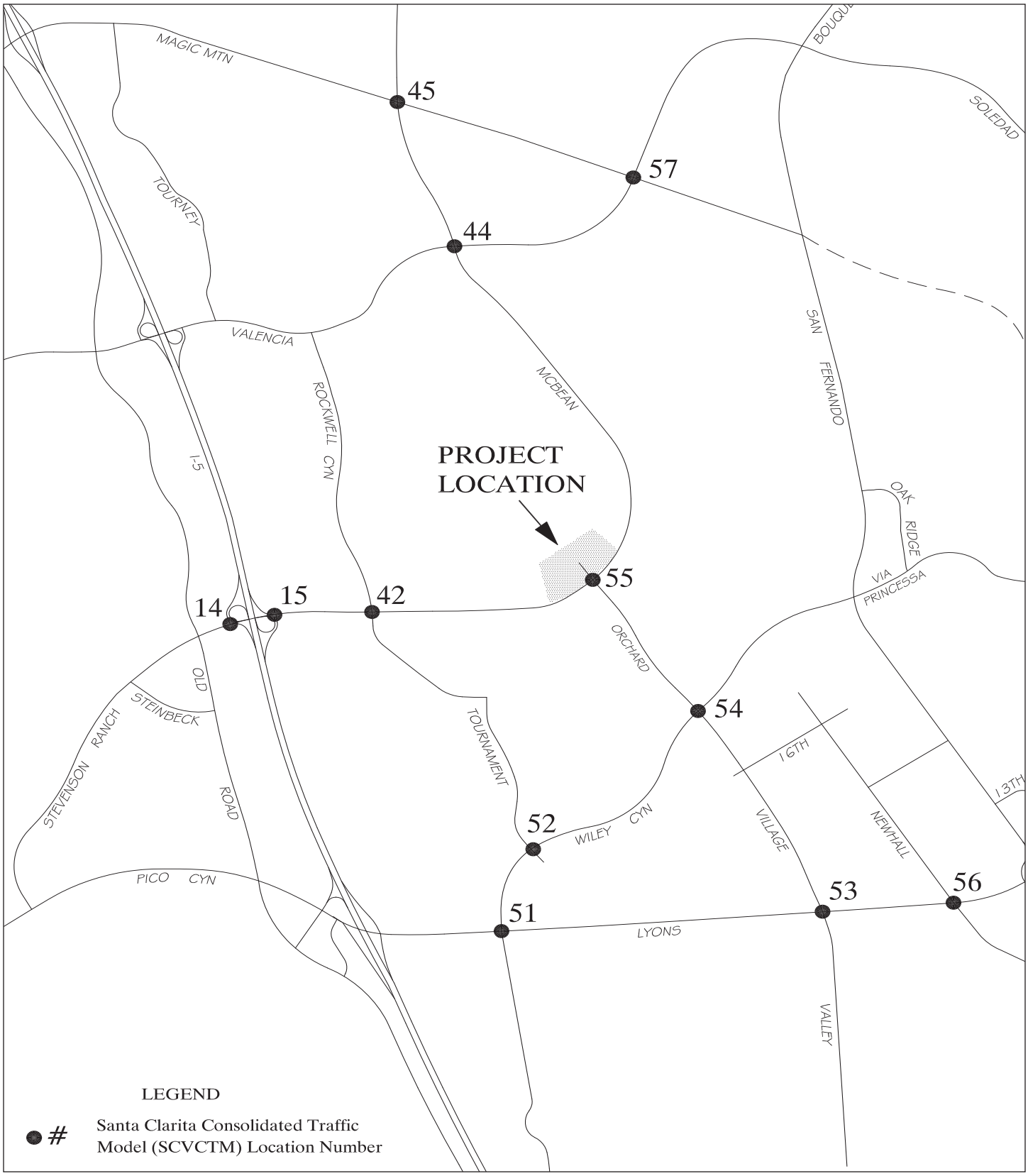
The study area includes the roadways and intersections near to the project site and those locations where project-generated traffic could cause a significant impact. *Exhibit 5.4-1*, *Study Area Intersections*, illustrates the intersections selected for study through consultations with the City's Public Works staff. The selection criteria are generally based on the project generating 50 or more new peak hour trips in the peak direction at an intersection. Some intersections with fewer than 50 project peak hour/peak direction trips have been included as determined on a case-by-case basis, as the intersections are in close proximity to those being studied where the project generates 50 or more new peak hour trips at an intersection

METHODOLOGY

The *Traffic Impact Assessment* evaluates the proposed project under an Interim Year scenario (approximately 2019) and a Long-Range Cumulative Buildout scenario (2030). Under both scenarios, it is assumed that the project has been constructed and is fully operational. However, the two scenarios account for varying levels of anticipated traffic infrastructure improvements and cumulative development within the project area.

The distribution of project traffic under both scenarios was derived using the Santa Clarita Valley Consolidated Traffic Model (SCVCTM). The SCVCTM was developed jointly by the City of Santa Clarita and the County of Los Angeles and is the primary tool used for forecasting traffic volumes for the Santa Clarita Valley.

The impact analysis is based on specific performance criteria that are outlined in the following section. Where appropriate, mitigation measures are identified for those scenarios in which significant impacts are determined based on the established impact thresholds.



Source: Austin-Foust Associates, Inc., May 2008.

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Study Area Intersections

Exhibit 5.4-1

PERFORMANCE CRITERIA

For *CEQA* purposes, defined performance criteria are utilized to determine if a proposed project causes a significant impact. In most traffic studies, performance criteria are based on two primary measures. The first is "capacity," which establishes the vehicle carrying ability of a roadway and the second is "volume." The volume measure is either a traffic count (in the case of existing volumes) or a forecast for a future point in time. The ratio between the volume and the capacity gives a volume/capacity (V/C) ratio and based on that V/C ratio, a corresponding level of service (LOS) is defined. Traffic LOS is designated A through F with LOS A representing free flow conditions and LOS F representing severe traffic congestion. Traffic flow quality for each LOS is described in *Table 5.4-1, Level of Service Descriptions*.

Both the V/C ratio and the LOS are used in determining impact significance. Certain LOS values are deemed unacceptable by the City, and increases in the V/C ratio that cause or contribute to the LOS being unacceptable are defined as a significant impact.

ARTERIAL ROADS

For the arterial system, a number of techniques are available to establish suitable V/C ratios and define the corresponding LOS. These definitions and procedures are established by individual local jurisdictions or by regional programs such as the Congestion Management Program (CMP), which is discussed later in this section.

The analysis of the arterial road system is based on peak hour intersection performance and on total average daily traffic (ADT). For intersections, the intersection capacity utilization (ICU) methodology is applied, providing a planning level basis for determining V/C and LOS. This methodology sums the V/C ratios for the critical movements of an intersection and is the preferred procedure for intersection analysis by the City of Santa Clarita. The ICU methodology is generally compatible with the intersection capacity analysis methodology outlined in the *Highway Capacity Manual 2000* (*HCM 2000)*. For roadway ADT, LOS is determined using capacities identified in the City's Circulation Element and traffic volumes from the SCVCTM.

IMPACT CRITERIA FOR ARTERIAL ROADS

The ICU calculation methodology and associated impact criteria for the study area arterial system are summarized in *Table 5.4-2, Arterial Intersection Performance Criteria*. For locations where arterial roadways intersect with freeway on- and off-ramps, the same ICU methodology is utilized. The performance criteria utilized for the evaluation of roadway segments for long-range cumulative buildout conditions is provided in *Table 5.4-3, Arterial Roadway Performance Criteria*.

FREEWAY SEGMENTS

For the freeway system, the peak hour is the accepted time period used for impact evaluation. The procedures for determining LOS are established by the State of California Department of Transportation (Caltrans) and by regional programs such as the Congestion Management Program (CMP).

Table 5.4-1
Level of Service Descriptions

LOS	Arterial Roads	Freeway Segments
A	Describes primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the given street class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal.	Describes free-flow operations. Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The effects of incidents or point breakdowns are easily absorbed at this level.
B	Describes reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the street class. The ability to maneuver within the traffic stream is only slightly restricted, and control delays at signalized intersections are not significant.	Represents reasonably free flow, and free-flow speeds are maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents and point breakdowns are still easily absorbed.
C	Describes stable operations; however, ability to maneuver and change lanes in midblock locations may be more restricted than at LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50 percent of the free-flow speed for the street class.	Provides for flow with speeds at or near the free-flow speed of the freeway. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, but the local deterioration in service will be substantial. Queues may be expected to form behind any significant blockage.
D	Borders on a range in which small increases in flow may cause substantial increases in delay and decreases in travel speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or a combination of these factors. Average travel speeds are about 40 percent of free-flow speed.	The level at which speeds begin to decline slightly with increasing flows and density begins to increase somewhat more quickly. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.
E	Characterized by significant delays and average travel speeds of 33 percent or less of the free-flow speed. Such operations are caused by a combination of adverse signal progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.	At its highest density value, LOS E describes operation at capacity. Operations at this level are volatile, because there are virtually no usable gaps in the traffic stream. Vehicles are closely spaced, leaving little room to maneuver within the traffic stream at speeds that still exceed 49 miles per hour. Any disruption of the traffic stream, such as vehicles entering from a ramp or a vehicle changing lanes, can establish a disruption wave that propagates throughout the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown with extensive queuing. Maneuverability within the traffic stream is extremely limited, and the level of physical and psychological comfort afforded the driver is poor.
F	Characterized by urban street flow at extremely low speeds, typically one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized locations, with high delays, high volumes, and extensive queuing.	Describes breakdowns in vehicular flow. Such conditions generally exist within queues forming behind breakdown points. LOS F operations within a queue are the result of a breakdown or bottleneck at a downstream point. LOS F is also used to describe conditions at the point of the breakdown or bottleneck and the queue discharge flow that occurs at speeds lower than the lowest speed for LOS E, as well as the operations within the queue that forms upstream. Whenever LOS F conditions exist, they have the potential to extend upstream for significant distances.

Source: *Henry Mayo Newhall Memorial Hospital Master Plan Traffic Impact Analysis*, Austin-Foust Associates, Inc., May 2008.

Table 5.4-2
Arterial Intersection Performance Criteria

V/C Calculation Methodology

Level of service to be based on peak hour intersection capacity utilization (ICU) values calculated using the following assumptions:

Saturation Flow Rates: 1,750 vehicles/hour/lane for all lanes

Clearance Interval: .10

(Source: City of Santa Clarita Preliminary Traffic Impact Report Guidelines)

Performance Standard

LOS D or existing LOS, whichever is more congested.
(Source: City of Santa Clarita General Plan Circulation Element, Policy 1.8)

Impact Thresholds

An intersection is considered to be significantly impacted if:

1. The intersection is forecast to operate deficiently (i.e., worse than the performance standard), and

2. Compared to the ICU in the no-project alternative, the ICU in the with-project alternative increases the ICU by the following:

With-Project ICU	Project Increment
.81 - 90 (LOS D)	greater than or equal to .02
.91 or more (LOS E & F)	greater than or equal to .01

(Source: City of Santa Clarita General Plan Circulation Element, Policy 1.8)

Abbreviations:
V/C – Volume/Capacity Ratio
LOS – Level of Service
ICU – Intersection Capacity Utilization
Source: *Henry Mayo Newhall Memorial Hospital Master Plan Traffic Impact Analysis*, Austin-Foust Associates, Inc., May 2008.

Table 5.4-3
Arterial Roadway Performance Criteria

V/C Calculation Methodology

Level of service to be based on mid-block V/C ratios calculated using the following capacity assumptions:

LOS	8-Lane Divided	6-Lane Divided	4-Lane Divided	4-Lane Undivided	2-Lane Undivided
A	48,000	36,000	24,000 (28,000)	16,000	5,000
B	54,000	40,400	27,000 (32,000)	18,000	7,500
C	60,000	45,000	30,000 (36,000)	20,000	10,000
D	66,000	49,500	33,000 (40,000)	22,000	12,500
E	72,000	54,000	36,000 (44,000)	24,000	15,000
F	This condition represents system breakdown and does not have a specific relationship to service volumes.				

Notes: (XX,XXX) = Capacity with limited access on a 4-Lane Divided arterial.
Values shown for LOS E represent the maximum roadway capacity.

Source: City of Santa Clarita General Plan Circulation Element

Performance Standard

LOS D

(Source: City of Santa Clarita General Plan Circulation Element)

Impact Thresholds

A roadway is considered to be significantly impacted if:

1. The roadway is forecast to operate deficiently (i.e., worse than the performance standard), and

2. The increase in traffic volume due to the project utilizes one percent or more of capacity (i.e., V/C greater than or equal to .01)

Abbreviations:
V/C – Volume/Capacity Ratio
LOS – Level of Service
Source: *Henry Mayo Newhall Memorial Hospital Master Plan Traffic Impact Analysis*, Austin-Foust Associates, Inc., May 2008.

The Caltrans guidelines for the preparation of traffic impact studies define the transition between LOS C and LOS D as the target LOS to be maintained. Caltrans acknowledges that this may not always be feasible and allows for an alternative target LOS when appropriate. If an existing freeway is operating at less (worse) than the appropriate target LOS, the guidelines state that the existing measure of effectiveness (MOE) should be maintained.

The CMP guidelines for a transportation impact analysis require a simplified analysis of freeway impacts that consists of a demand-to-capacity calculation for the affected CMP monitoring locations. The CMP defines a significant impact occurring when the proposed project increases traffic demand by two percent of capacity ($V/C \geq .02$), causing or worsening LOS F.

5.4.2 ENVIRONMENTAL SETTING

The following describes the transportation setting for the traffic analysis. Existing traffic conditions are first discussed, followed by a description of the future circulation system as outlined in the City's *General Plan Circulation Element*. The description of traffic setting includes a description of the study area roadway system, existing traffic volumes, and corresponding levels of service, as defined by the performance criteria outlined previously.

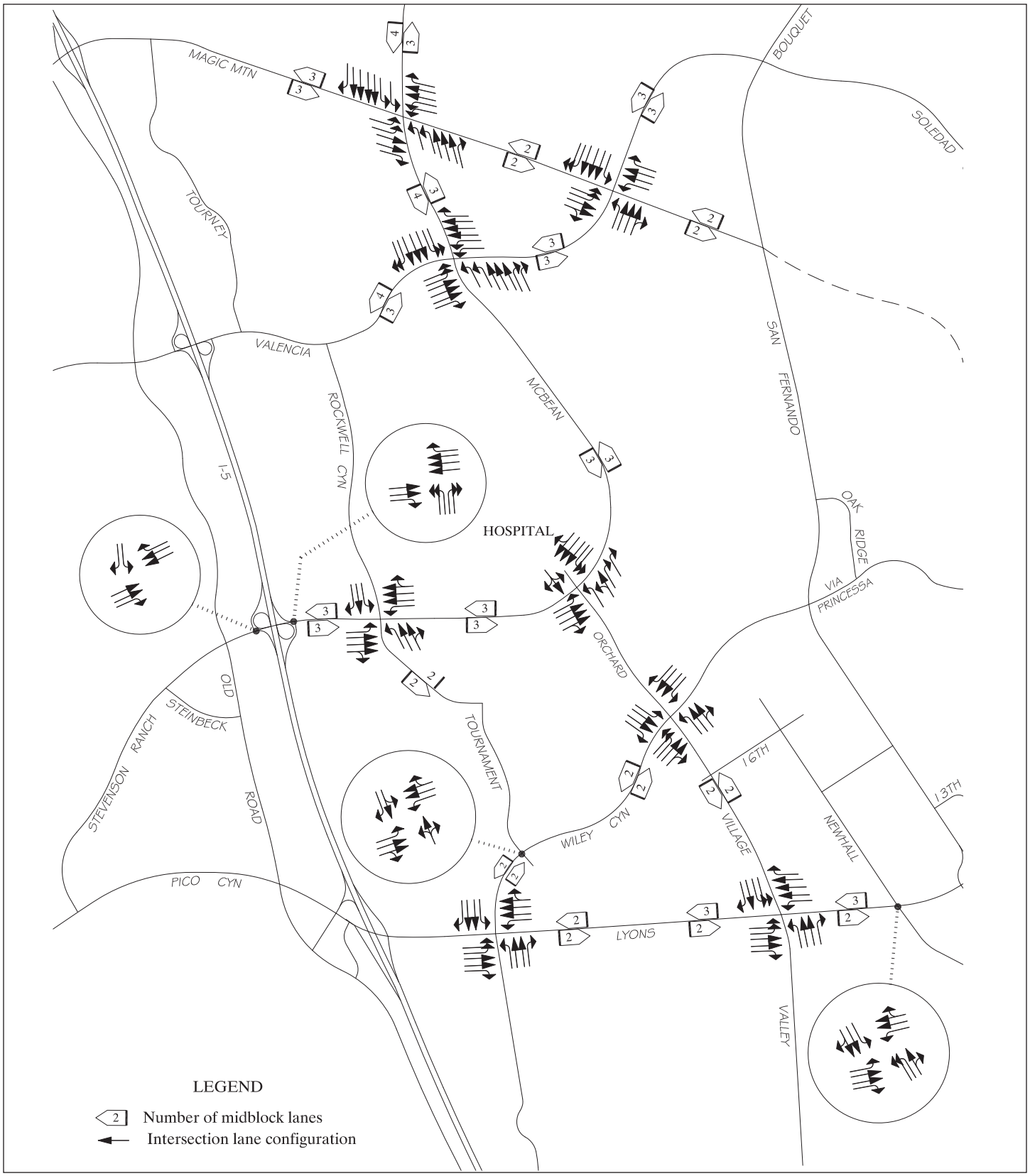
EXISTING ROADWAY SYSTEM

The existing roadway network in the study area is illustrated in *Exhibit 5.4-2, Existing Intersection Lane Configurations*, in the form of mid-block lanes and intersection lane configurations for the intersections being studied. Major arterial streets near the project site consist of McBean Parkway, Orchard Village Road, and Rockwell Canyon Road/Tournament Road.

Interstate 5 (I-5) provides regional access for vehicles traveling to and from the project site. I-5 is located west the project site and can be accessed from the project site via a full interchange at McBean Parkway.

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

The existing without project average daily traffic (ADT) volumes on the study area roadway system are illustrated in *Exhibit 5.4-3, Existing Average Daily Traffic Volumes*. Estimated ADT volumes (based on Institute of Transportation Engineers [ITE] trip generation rates) for existing hospital and medical office uses total 11,163 ADT, which does not account for on-site trip capture. Based on traffic counts at the existing hospital campus driveways, a total of 7,900 ADT occurred. This 29 percent reduction in ADT results from having both hospital and medical office uses on the same campus. Illustrations of existing peak hour turning movement volumes for each study area intersection can be found in *Exhibit 5.4-4, Existing AM Peak Hour Intersection Volumes*, and *Exhibit 5.4-5, Existing PM Peak Hour Intersection Volumes*.



Source: Austin-Foust Associates, Inc., May 2008.

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Existing Intersection Lane Configurations

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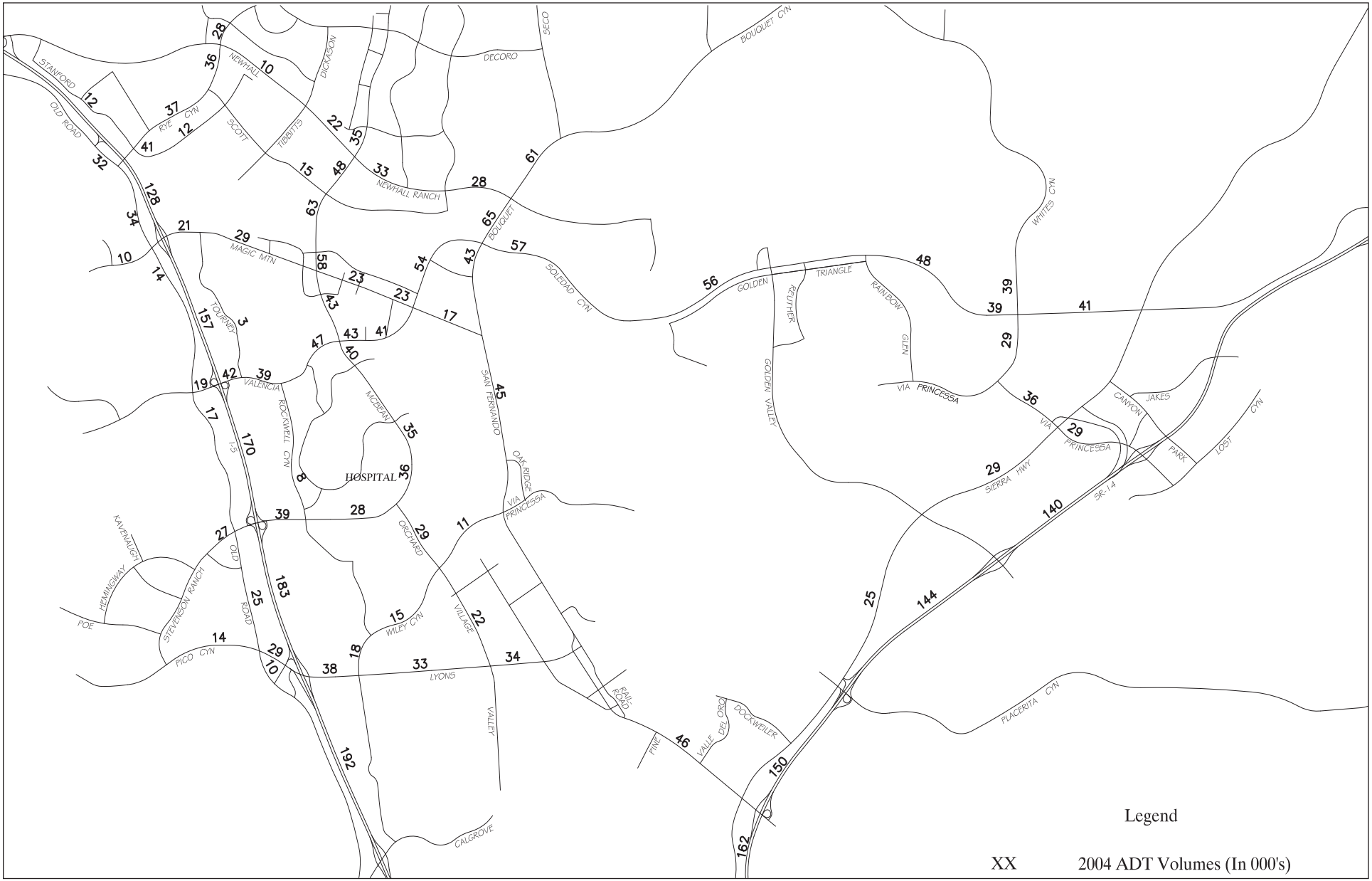
Exhibit 5.4-2



Source: Austin-Foust Associates, Inc., May 2008.

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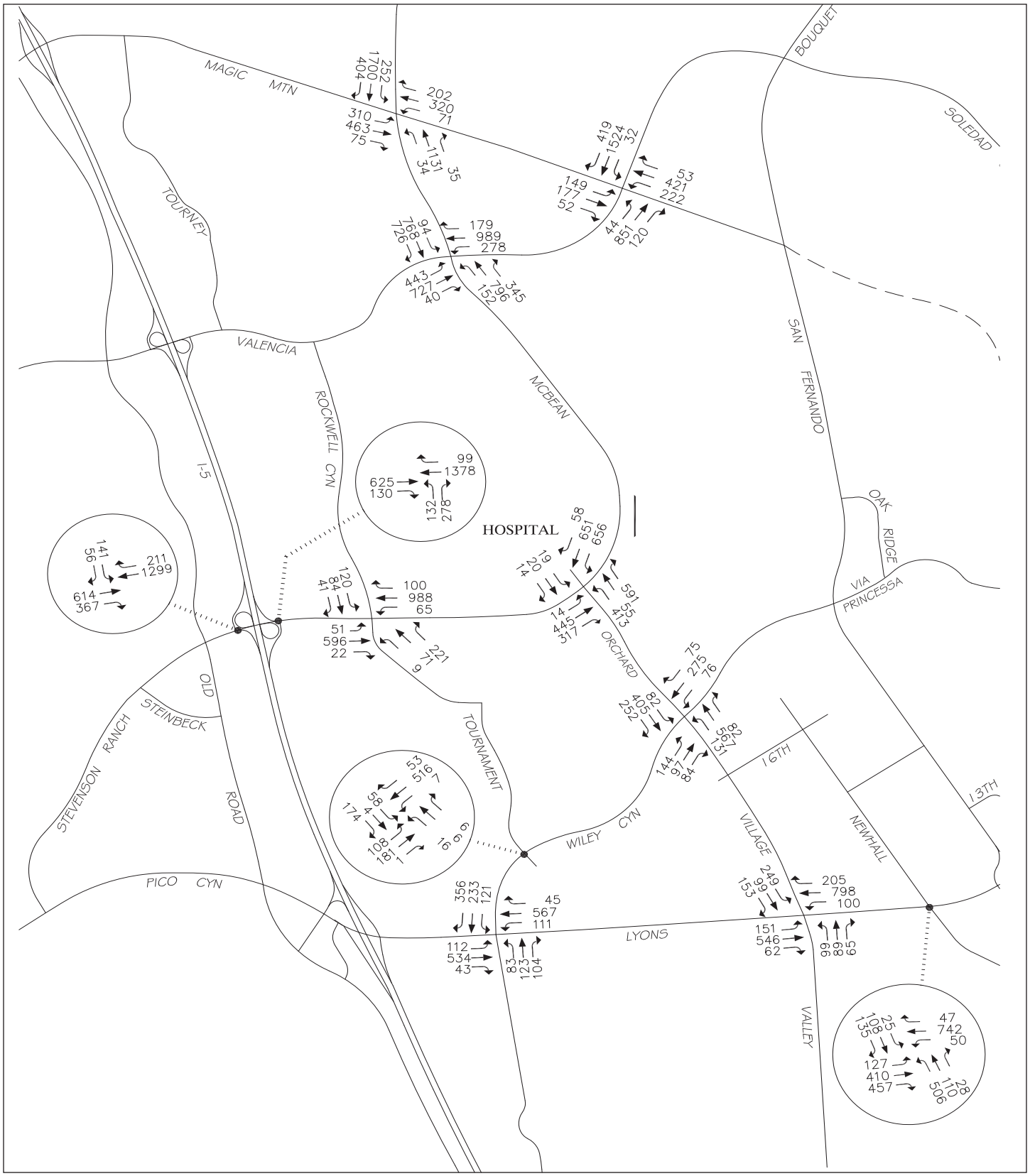
Existing Average Daily Traffic Volumes

Exhibit 5.4-3



Source: Austin-Foust Associates, Inc., May 2008.

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Existing AM Peak Hour Intersection Volumes

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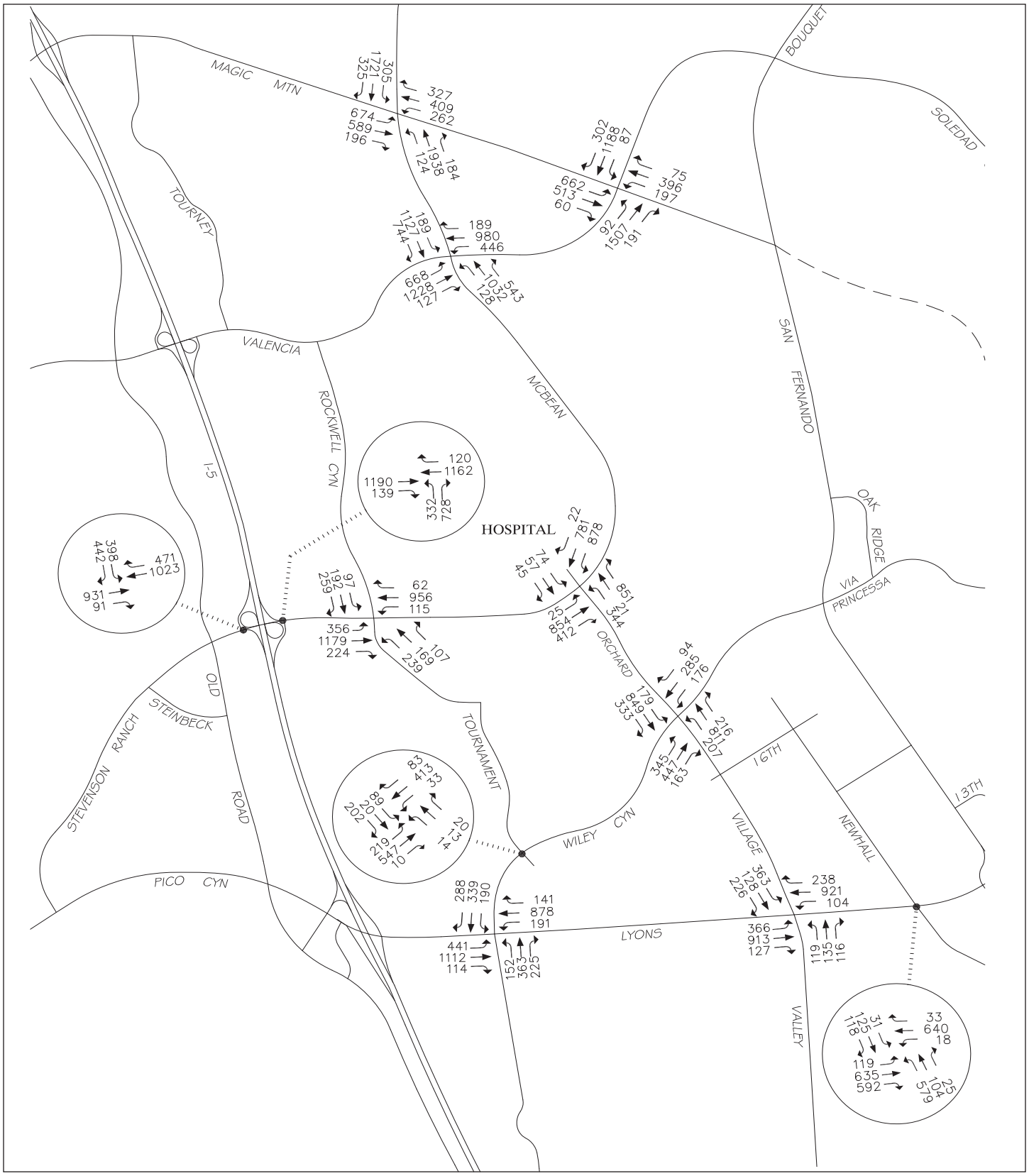
Exhibit 5.4-4



Source: Austin-Foust Associates, Inc., May 2008.

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Existing PM Peak Hour Intersection Volumes

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Exhibit 5.4-5

The counts were collected between May 2003 and January 2005 for the purpose of this study. For a comparison of these counts to conditions in 2007, see Appendix C of the *Traffic Impact Analysis*. The data tabulated in Appendix C indicates that the average annual change in traffic volumes range from a decrease of four percent to an increase of 21 percent. The greatest increases occur in the Copper Hill/Rye Canyon Road area, which is experiencing new development activity. Established areas, such as the Orchard Village Road corridor, show little to no increase in traffic volumes.

As previously discussed, level of service (LOS) is a concept developed to quantify the degree of comfort afforded to drivers as they travel on a given roadway. The degree of comfort includes such elements as travel time, number of stops, total amount of stopped delay, etc. As defined in the *HCM 2000*, six grades (A through F) are used to denote the various LOS.

The results of the ICU LOS analyses for the study area intersections are shown in *Table 5.4-4, ICU Summary – Existing Conditions*. The table shows that each intersection currently meets the performance standard of the City identified in *Table 5.4-2*.

PUBLIC TRANSPORTATION

Santa Clarita Transit currently provides fixed-route transit immediately adjacent to the project site. Routes 5 and 6 pass through the intersection of Orchard Village Road and McBean Parkway and provide service to the Stevenson Ranch Area, Hart High School, the Valencia Town Center, and Canyon Country.

The nearest transit centers are the McBean Transfer Station (MTS), which is located on McBean Parkway approximately one mile north of the project site at the Valencia Town Center, and the Newhall Metrolink station located near Lyons Avenue.

BRIDGE AND THOROUGHFARE DISTRICT FEE

Within the Santa Clarita Valley, the County of Los Angeles and the City of Santa Clarita have established Bridge and Thoroughfare (B&T) Districts to manage the many significant transportation infrastructure improvements planned to occur within the Valley. The project site is located within the Valencia District and the project will pay fees or construct eligible improvements. The Valencia District is a mitigation district, meaning that the fee represents a fair share allocation of required infrastructure within the district.

INTERIM YEAR TRANSPORTATION SYSTEM

For purposes of the traffic analysis, it was assumed that the following buildings would be completed by the dates shown:

- Medical Office Building 1 (MOB1) – 2010
- Inpatient Building and Medical Office Building 2 (MOB2) – 2013 to 2016
- Medical Office Building 3 (MOB3) - 2019

As part of the traffic analysis, the Interim Year transportation system assumes that roadway improvements and future infrastructure consistent with the SCVCTM-identified projects are included within the approximate horizon year of 2019.

Table 5.4-4
ICU Summary – Existing Conditions

Location[1]	AM Peak Hour		PM Peak Hour		Count Date
	ICU	LOS	ICU	LOS	
Freeway On/Off Ramp Intersections					
14. I-5 SB Ramps & McBean	.55	A	.64	B	Jan. 2005
15. I-5 NB Ramps & McBean	.40	A	.65	B	Jan. 2005/Sept. 2003
Intersections					
42. Rockwell & McBean	.45	A	.74	C	Jan. 2005/Sept. 2003
44. McBean & Valencia	.61	B	.73	C	Jan. 2005/Sept. 2003
45. McBean & Magic Mtn	.57	A	.87	D	Jan. 2005/Sept. 2003
51. Wiley & Lyons	.49	A	.74	C	April 2004
52. Tournament & Wiley	.38	A	.45	A	April 2004
53. Orchard Village & Lyons	.49	A	.60	A	April 2004
54. Orchard Village & Wiley	.46	A	.76	C	Jan. 2005
55. Orchard Village & McBean	.57	A	.76	C	Jan. 2005/Sept. 2003
56. Newhall & Lyons	.60	A	.60	A	May 2003
57. Valencia & Magic Mtn	.62	B	.77	C	April 2004/Sept. 2003

Level of service ranges:
.00 - .60 A
.61 - .70 B
.71 - .80 C
.81 - .90 D
.91 - 1.00 E
Above 1.00 F

1. Location number refers to the identification number used in the Santa Clarita Valley Consolidated Traffic Model (SCVCTM).
Source: *Henry Mayo Newhall Memorial Hospital Master Plan Traffic Impact Analysis*, Austin-Foust Associates, Inc., May 2008.

While this horizon does not coincide specifically with the buildout of the proposed project (see assumptions previously noted), it represents the best timeframe for planning purposes, since it includes a comprehensive set of cumulative development projects that have been incorporated into the SCVCTM. With this, a conservative scenario is established for analyzing the impacts of the proposed project combined with projected and approved growth on a reasonably expanded circulation system.

Future roadways that affect the study area include the extension of Newhall Ranch Road east to Golden Valley Road/Soledad Canyon Road, the connection of Via Princessa between its current western terminus (near San Fernando Road) and its current eastern terminus (near Rainbow Glen Drive), and the extension of Magic Mountain Parkway to Via Princessa (coinciding with the initial development of the Whittaker-Bermite Site).

LONG-RANGE CUMULATIVE BUILDOUT TRANSPORTATION SYSTEM

The City's *General Plan Circulation Element* includes significant future roadway projects throughout the Valley that will affect traffic patterns of both existing and future trips. Future roadways such as the Via Princessa connection and Santa Clarita Parkway will have an effect on traffic volumes within the study area.

EXISTING SITE CIRCULATION

Access to the project site is provided by three driveways along McBean Parkway. The main entrance to the project site is provided at a four-way signalized intersection with Orchard Village Road (hereon referred to as the "Center Driveway"). Orchard Village Road is a four-lane roadway that terminates at the project entrance. A second access point is located at the McBean Parkway and Avenida Navarre (hereon referred to as the "East Driveway"). Avenida Navarre is a two-lane local street serving the residential uses south of the project boundary. The third access point is a tee-intersection along McBean Parkway, west of the Orchard Village Road main entrance (hereon referred to as the "West Driveway").

Illustrations of existing peak hour turning movement volumes for each project driveway can be found in *Exhibit 5.4-6, AM Peak Hour Intersection Volumes – Existing Conditions at Project Driveways*, and *Exhibit 5.4-7, PM Peak Hour Intersection Volumes – Existing Conditions at Project Driveways*. The peak hour counts were collected in January 2005. The existing lane configurations are illustrated in *Exhibit 5.4-8, Intersection Lane Configurations - Existing Project Driveways*.

The results of the ICU LOS analyses for the full access project driveways are shown in *Table 5.4-5, ICU Summary – Project Driveways*. The table shows how each intersection currently meets the performance standard of the City.

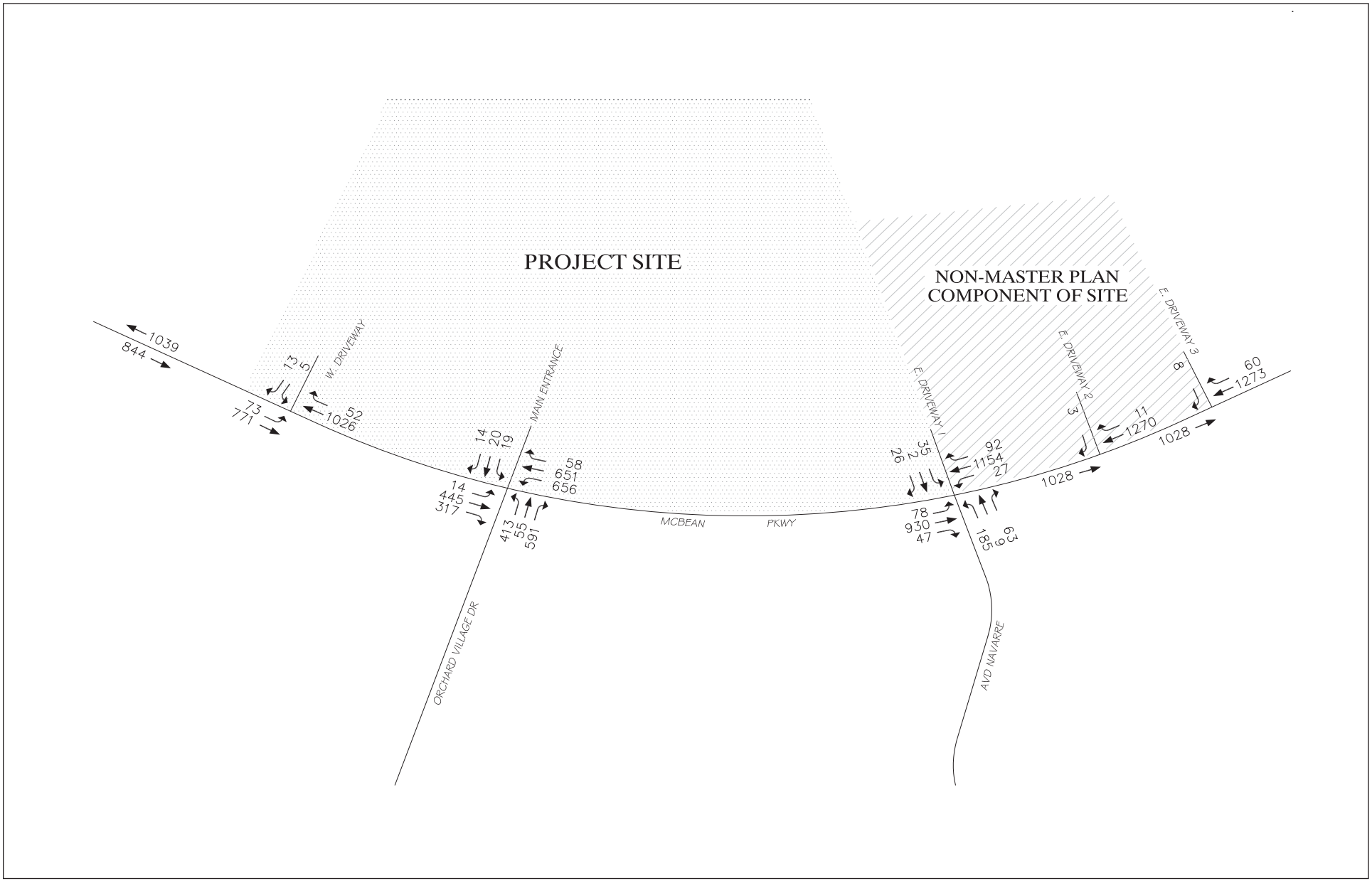
Table 5.4-5
ICU Summary – Project Driveways

Location	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
Existing Conditions				
1. Center Driveway	.57	A	.76	C
2. East Driveway	.49	A	.57	A

- Values in parenthesis represent ICU/LOS with mitigation.
- See Exhibit 5.4-8 for driveway locations.
- Level of service ranges:

.00 - .60	A
.61 - .70	B
.71 - .80	C
.81 - .90	D
.91 - 1.00	E
Above 1.00	F

Source: *Henry Mayo Newhall Memorial Hospital Master Plan Traffic Impact Analysis*, Austin-Foust Associates, Inc., May 2008.



Source: Austin-Foust Associates, Inc., May 2008.

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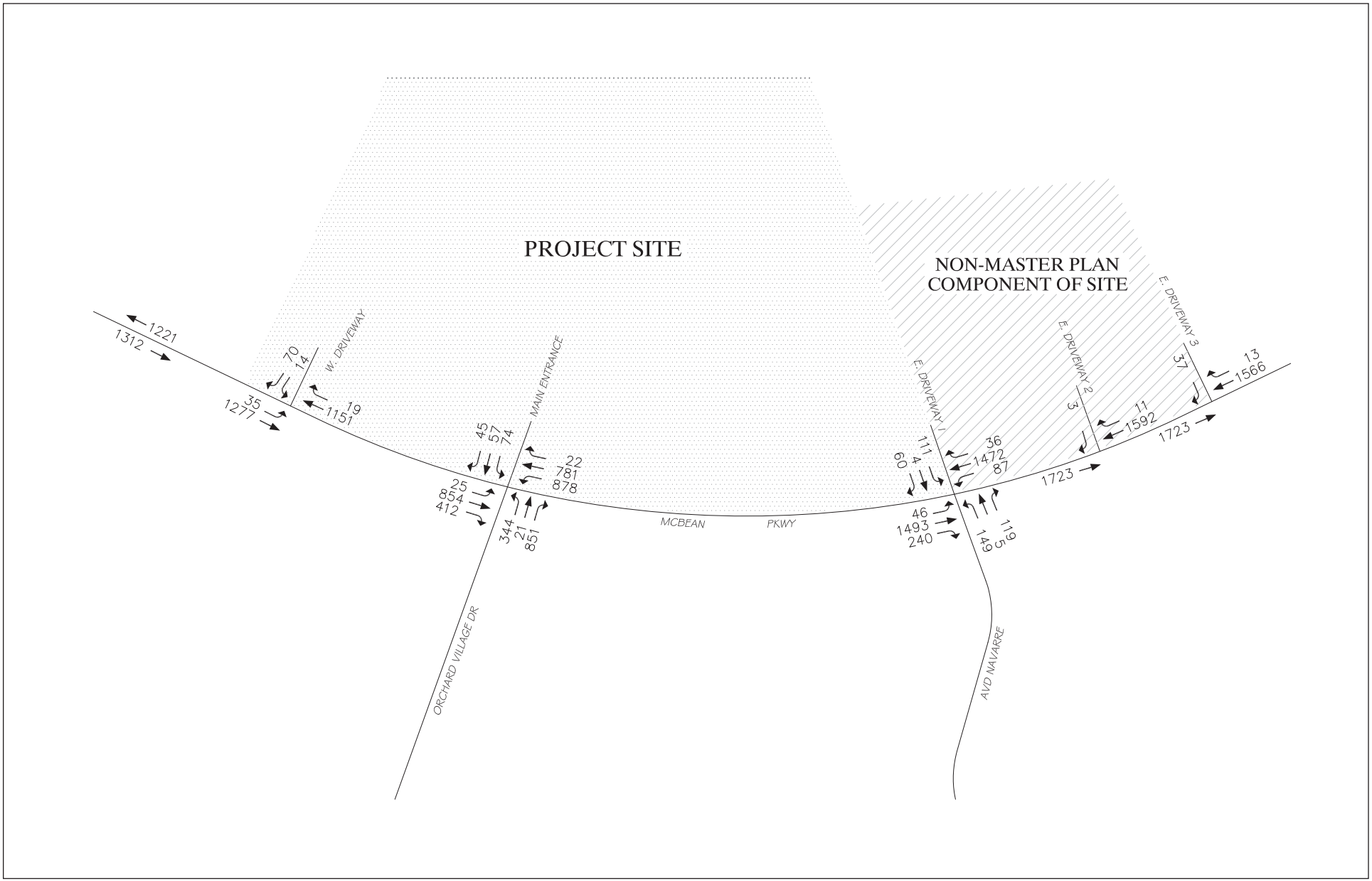
AM Peak Hour Intersection Volumes – Existing Conditions at Project Driveways

Exhibit 5.4-6



Source: Austin-Foust Associates, Inc., May 2008.

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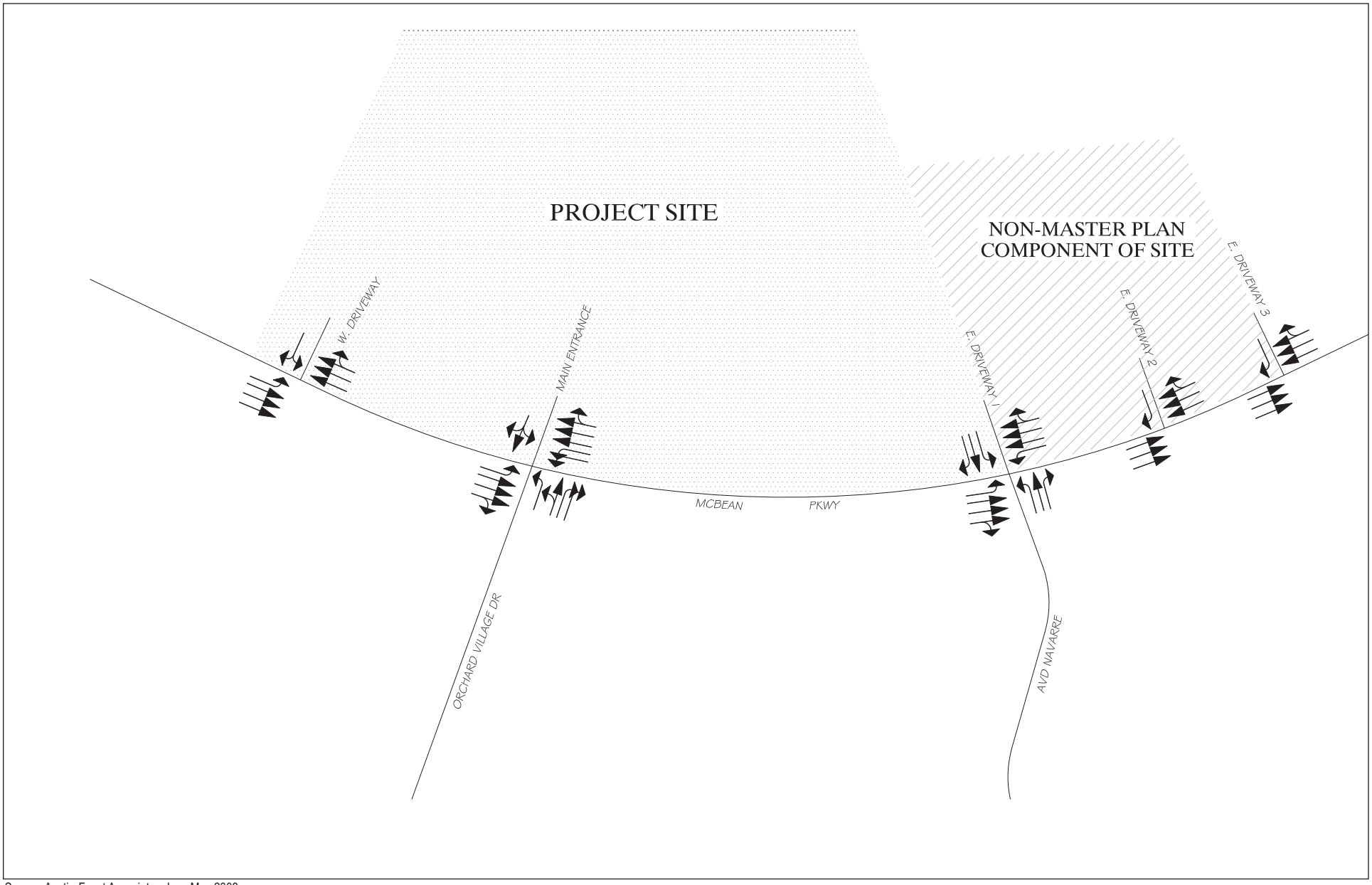
PM Peak Hour Intersection Volumes – Existing Conditions at Project Driveways

Exhibit 5.4-7



Source: Austin-Foust Associates, Inc., May 2008.

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Intersection Lane Configurations – Existing Project Driveways

Exhibit 5.4-8

5.4.3 SIGNIFICANCE THRESHOLD CRITERIA

According to City of Santa Clarita performance criteria, a significant traffic and circulation impact would result if any of the following thresholds, as discussed previously in Performance Criteria, are exceeded.

Intersections (Refer to *Table 5.4-2*)

The intersection is forecast to operate at LOS D or worse; and

The intersection capacity utilization (ICU) incremental increase is greater than or equal to .02 for LOS D, or greater than or equal to 0.01 for LOS E and F.

Roadways (Refer to *Table 5.4-3*)

The roadway is forecast to operate at LOS D or worse; and

The increase in traffic volume utilizes one percent or more of capacity (V/C greater than or equal to 0.01).

5.4.4 IMPACTS AND MITIGATION MEASURES

PROPOSED PROJECT OVERVIEW

The proposed project represents a Master Plan for the buildout of the HMNMH medical campus. Buildout of the campus includes the provision of an additional 125,363 square feet of hospital uses, 192,000 square feet of medical office space (200,000 square feet of new space and a reduction of 8,000 square feet of existing space), and a 10,000 square-foot Central Plant.

Project Trip Generation

Land use and trip generation estimates for the proposed project are shown in *Table 5.4-6*, *Project Land Use Summary*, and *Table 5.4-7*, *Project Trip Generation Summary*. Trip generation was calculated using published data from the Institute of Transportation Engineers (ITE) Seventh Edition, *Trip Generation Manual*. Trip generation on a building-by-building basis is shown in *Table 5.4-8*, *Project Trip Generation Summary – By Building*.

The volume of trips calculated by the ITE trip rates represents the total number of trips for each unique use of the site (i.e., hospital and medical office), as if the uses were stand-alone facilities. Since these uses share a common site, one component of the total trip generation represents the trips between the hospital and the medical offices, which in some cases can be quite substantial. For example, actual field measurements of the existing HMNMH site showed that this on-site trip capture can represent as much as one-third of the total trip generation, as shown in *Table 5.4-9*, *Existing Traffic Volume Summary (On-Site)*. Since the proposed Master Plan land use retains the mix of hospital and medical office facilities, future on-site trip capture is accounted for in the traffic forecasts using a factor of 20 percent, which is a more conservative estimate than the one-third on-

site trip capture that has been observed as occurring under existing conditions. The 20 percent factor was utilized since it accounts for the on-site trip capture known to occur to determine the capacity needs for the site and City roadways.

Table 5.4-6
Project Land Use Summary – Master Plan Buildout

Land Use	Medical Office	Hospital	Ancillary	Total
Existing Medical Campus	104,160	224,208	11,703[1]	340,071
New Construction[2]	200,000	125,363	10,000[2]	335,363
Existing Land Uses to be Demolished	-8,000			-8,000
Net Total	296,160	349,571	21,703	667,434

Notes:
1 Includes mechanical plant and facility office.
2 Proposed central plant.

Table 5.4-7
Project Trip Generation Summary – Master Plan Buildout

Land Use Type	Amount	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
PROPOSED PROJECT (NET INCREASE)								
Medical Office	200.000 TSF[1, 2]	392	104	496	201	543	744	7,226
Hospital	127.363 TSF[3]	102	50	153	50	101	150	2,238
On-Site Volume	--	(65)	(65)	(130)	(89)	(89)	(179)	(1,893)
Total (Off-Site)	--	429	90	519	161	554	715	7,571
TRIP RATES[4]								
Medical Office	TSF	1.96	0.52	2.48	1.00	2.72	3.72	36.13
Hospital	TSF	0.80	0.40	1.20	0.39	0.79	1.18	17.57

1 TSF = Thousand square feet
2 The demolition of the 8,000 square-foot Foundation & Administration Office Building is accounted for under the "Hospital" square footage, below.
3 This square footage includes the construction of In-Patient Building A, the construction of the Central Plant, and the demolition of the Foundation and Administration Office Building (125,363 + 10,000 – 8,000 = 127,363 square feet).
4 Trip Rate Sources:
Medical Office - ITE "Trip Generation", 7th Edition, Category 720 (Medical-Dental Office Building)
Hospital - ITE "Trip Generation", 7th Edition, Category 810 (Hospital)

Table 5.4-8
Project Trip Generation Summary – By Building

Land Use Type	Amount	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
MOB 1	80 TSF	157	42	198	80	218	298	2,890
On-Site Volume		-20	-20	-40	-30	-30	-60	-578
Total (MOB 1)	--	137	22	159	50	188	238	2,312
								30.5%
MOB 2	60 TSF	118	31	149	60	163	223	2,168
On-Site Volume			-15	-15	-30	-22	-22	-45
Total (MOB 1 & 2)	--	240	38	278	88	329	417	4,047
								53.4%
Inpatient Building (IB)	135.363[1]	108	54	162	53	107	160	2,378
On-Site Volume			-16	-16	-32	-16	-16	-32
Total (MOB 1 & 2 & IB)	--	332	76	408	125	420	544	5,949
								78.6%
MOB 3	60 TSF	118	31	149	60	163	223	2,168
Hospital Demolition	-8 TSF	-6	-3	-10	-3	-6	-9	-141
On-Site Volume			-14	-14	-28	-21	-21	-43
Total (All Buildings)	--	429	90	519	160	555	715	7,571
								100.0%

TRIP RATE SOURCES:
Medical Office - ITE "Trip Generation", 7th Edition, Category 720 (Medical-Dental Office Building)
Hospital - ITE "Trip Generation", 7th Edition, Category 810 (Hospital)
Notes:
1. Includes 10,000 square foot Central Plant.

Table 5.4-9
Existing Traffic Volume Summary (On-Site)

Type	Amount	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
EXISTING CAMPUS TRIP GENERATION AS STAND-ALONE FACILITIES								
Medical Office	97.08 TSF[1]	190	51	241	98	264	361	3,508
Medical Office[1]	99.00 TSF	194	52	246	99	269	368	3,577
Hospital	232.11 TSF	187	92	279	90	184	274	4,078
Total	428.19 TSF	571	194	765	287	716	1,003	11,163
PROJECT DRIVEWAY VOLUMES FOR PROJECT SITE (EXISTING)								
Field Survey		428	119	547	225	452	677	7,900
Percent Difference		--	--	-28%	--	--	-33%	-29%
TRIP RATES[2]								
Medical Office	TSF	1.96	0.52	2.48	1.00	2.72	3.72	36.13
Hospital	TSF	0.80	0.40	1.20	0.39	0.79	1.18	17.57

[1] Non-Master Plan component (two buildings located east of Avenida Navarre).
[2] Trip Rate Source:
Medical Office - ITE "Trip Generation", 7th Edition, Category 720 (Medical-Dental Office Building)
Hospital - ITE "Trip Generation", 7th Edition, Category 810 (Hospital)

Off-site estimates are used in this analysis to represent the proposed project's impacts on the analysis area circulation system. The off-site ADT volume of approximately 7,571 ADT represents 80 percent of the proposed project total (with 20 percent remaining on-site as trips between the hospital and medical offices). In the AM and PM peak hours, the off-site volumes of 519 (429 inbound) and 715 (554 outbound), respectively, are also 80 percent of the peak hour totals.

Project Trip Distribution

The geographic distribution of project-generated trips was determined using the SCVCTM. The Interim Year version of the SCVCTM provided the background conditions for a select zone run, with adjustments made to the modeled volumes to account for the specific trip generation characteristics of the ITE trip rates noted in the previous section. The model takes into account the specific type of land use proposed for the site and how that land use would interact with the other land uses in the City.

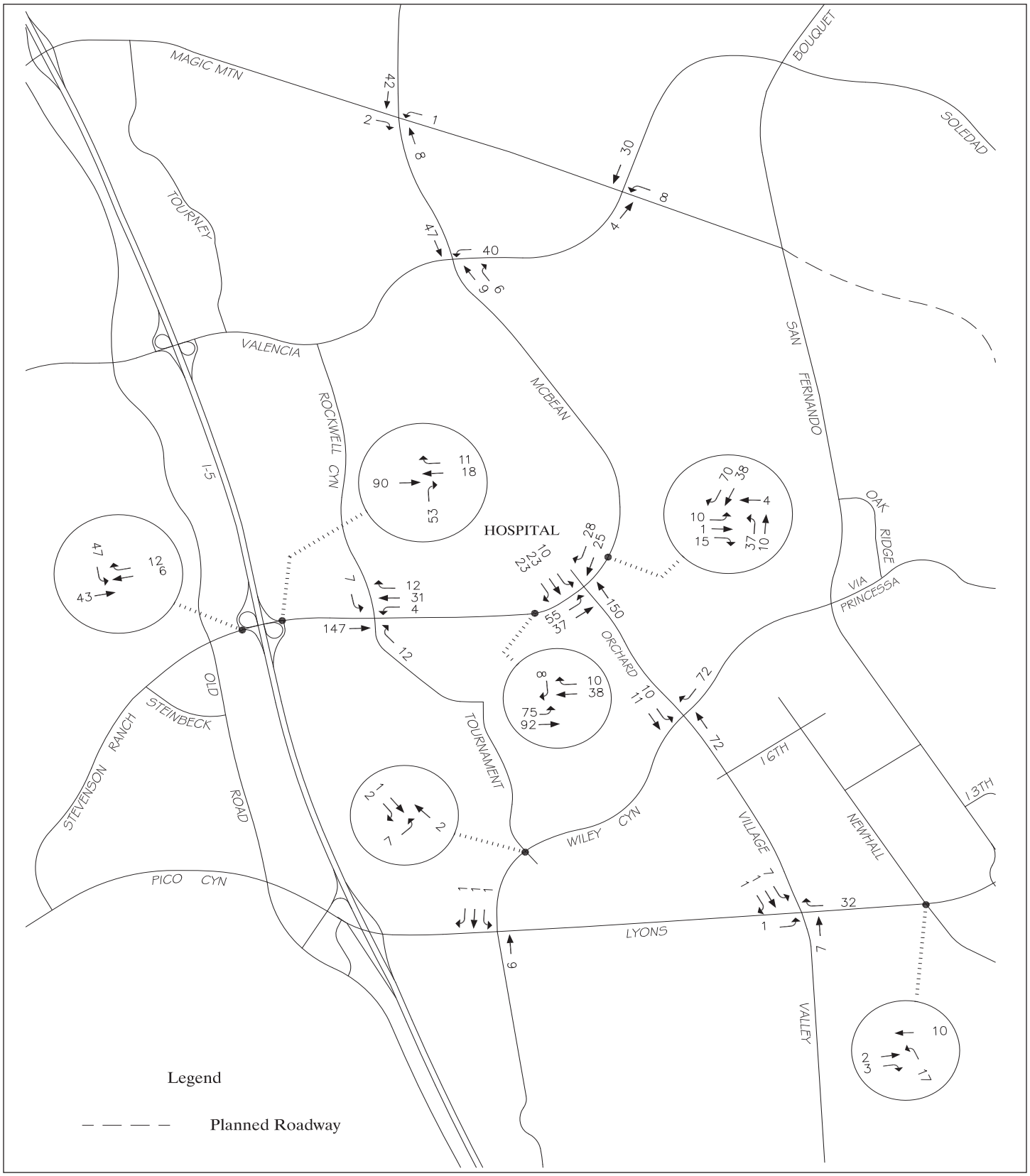
The traffic volumes presented in the following impact discussions represent the net volume of off-site trips and do not include the on-site trips previously discussed. *Exhibit 5.4-9*, *AM Peak Hour Intersection Volumes- Proposed Project*, and *Exhibit 5.4-10*, *PM Peak Hour Intersection Volumes- Proposed Project*, illustrate the project-generated trips for the AM and PM peak hours, respectively, for the study area intersections. *Exhibit 5.4-11*, *Proposed Project ADT Volumes*, illustrates the distribution percentages together with the project-generated average daily trips (ADT) for the proposed project. Since the SCVCTM performs separate assignments for the AM peak hour, the PM peak hour and the off-peak period, the specific volumes for any individual time period will not precisely match the values noted in the distribution percentages.

Approximately 49 percent of the trips generated by the proposed project are assigned west of the project via McBean Parkway and approximately 25 percent of the trips are assigned to the east along McBean Parkway. South of the project, approximately 26 percent of the trips are assigned to Orchard Village Road. Approximately 23 percent of the trips are ultimately assigned to the I-5 freeway (11 percent north of McBean Parkway and 12 percent south of McBean Parkway), while the remainder of the trips utilize arterial roadways in the Santa Clarita Valley.

STATE HIGHWAYS

Project-Related Traffic Volumes on State Highways

The project site is located approximately one mile east of I-5. In the vicinity of the project site, I-5 is an eight-lane freeway under the jurisdiction of Caltrans and would provide regional transportation for patrons of the proposed project. Project traffic would primarily utilize the McBean Parkway interchange for access to the project site.



Source: Austin-Foust Associates, Inc., May 2008.

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AM Peak Hour Intersection Volumes – Proposed Project

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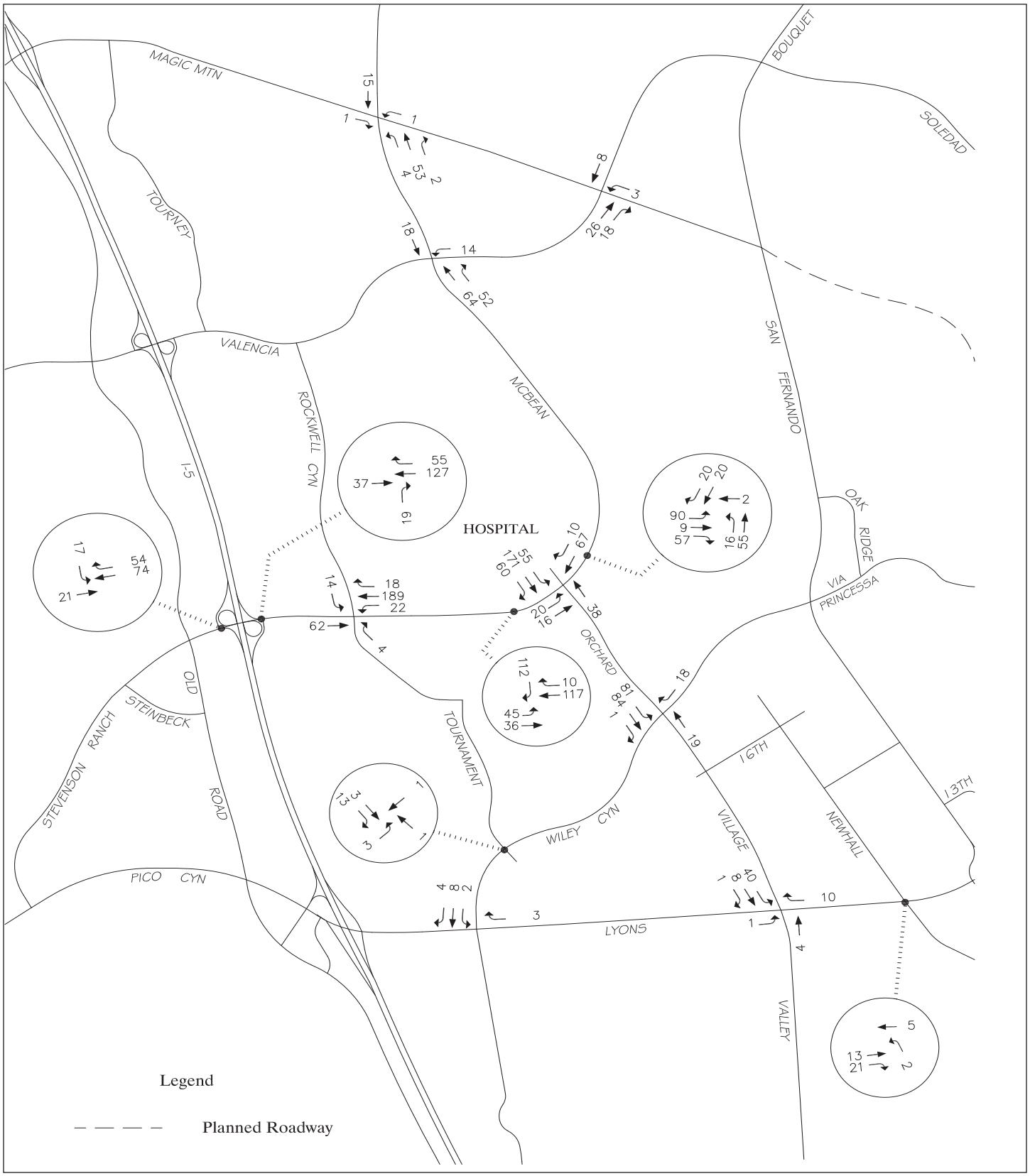
Exhibit 5.4-9



Source: Austin-Foust Associates, Inc., May 2008.

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PM Peak Hour Intersection Volumes – Proposed Project

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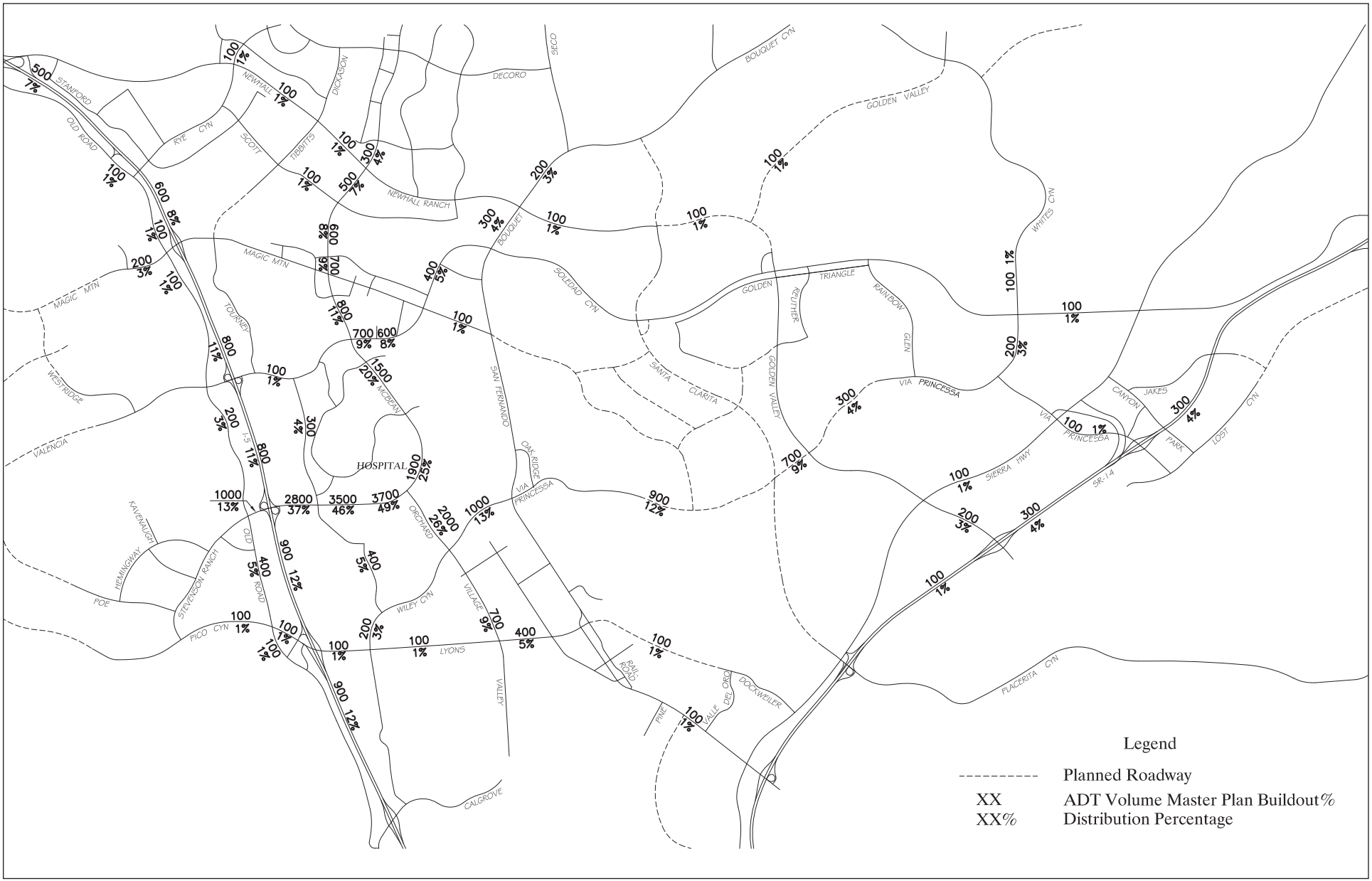
Exhibit 5.4-10



Source: Austin-Foust Associates, Inc., May 2008.

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Proposed Project ADT Volumes

Exhibit 5.4-11

I-5 is part of a recent study prepared by the Los Angeles County Metropolitan Transportation Authority (Metro) and Caltrans. The study identified that the I-5 corridor between SR-14 and SR-126 West will ultimately double from the current four lanes in each direction to eight lanes in each direction. Two of the eight lanes would be for high occupancy vehicles (HOVs), two lanes for trucks, and four lanes for general use. A project is currently in the development stages that will add truck-climbing lanes to the segment of I-5 between SR-14 and Calgrove Boulevard as well as one HOV lane in each direction through the Santa Clarita Valley.

Table 5.4-10, *Project Volumes on State Highways*, summarizes the volume of project traffic forecast to use I-5 in the vicinity of the project site, based on the project distribution presented above.

Table 5.4-10
Project Volumes on State Highways

Location	AM Peak Hour		PM Peak Hour	
	NB	SB	NB	SB
Mainline				
I-5 north of McBean Pkwy	11	47	55	17
I-5 south of McBean Pkwy	53	12	19	54
Ramps				
I-5 northbound off-ramp at McBean Pkwy	53	--	19	--
I-5 northbound on-ramp at McBean Pkwy	11	--	55	--
I-5 southbound off-ramp at McBean Pkwy	--	47	--	17
I-5 southbound on-ramp at McBean Pkwy	--	12	--	54

The affected segment of the freeway does not currently experience significant delay or unstable or forced flow conditions, and project traffic consists of slightly more than 50 peak hour trips (e.g. 53 trips in the AM peak hour and 55 trips in the PM peak hour) on the segments nearest to the project site. The Caltrans *Guide for the Preparation of Traffic Impact Studies* indicates that a traffic impact study for the freeway mainline is not necessary when project volumes are less than 100 peak hour trips and freeway conditions are not exhibiting noticeable delay. This segment of I-5 is the subject of a recent traffic study that demonstrated that with the planned construction of truck climbing lanes and HOV lanes, the freeway will operate at acceptable levels of service for future cumulative conditions that include the project traffic.

PROJECT IMPACTS

The following impact discussions address traffic impacts associated with the project under an interim year scenario and long-range cumulative scenario; a description of each scenario is provided on pages 5.4-12 and 5.4-14, respectively. Traffic conditions with and without the proposed project are described in the following impact discussions, and mitigation measures are identified, as appropriate, to address such impacts.

INTERIM YEAR SCENARIO

Level of Significance Prior to Mitigation: Potentially Significant Impact.

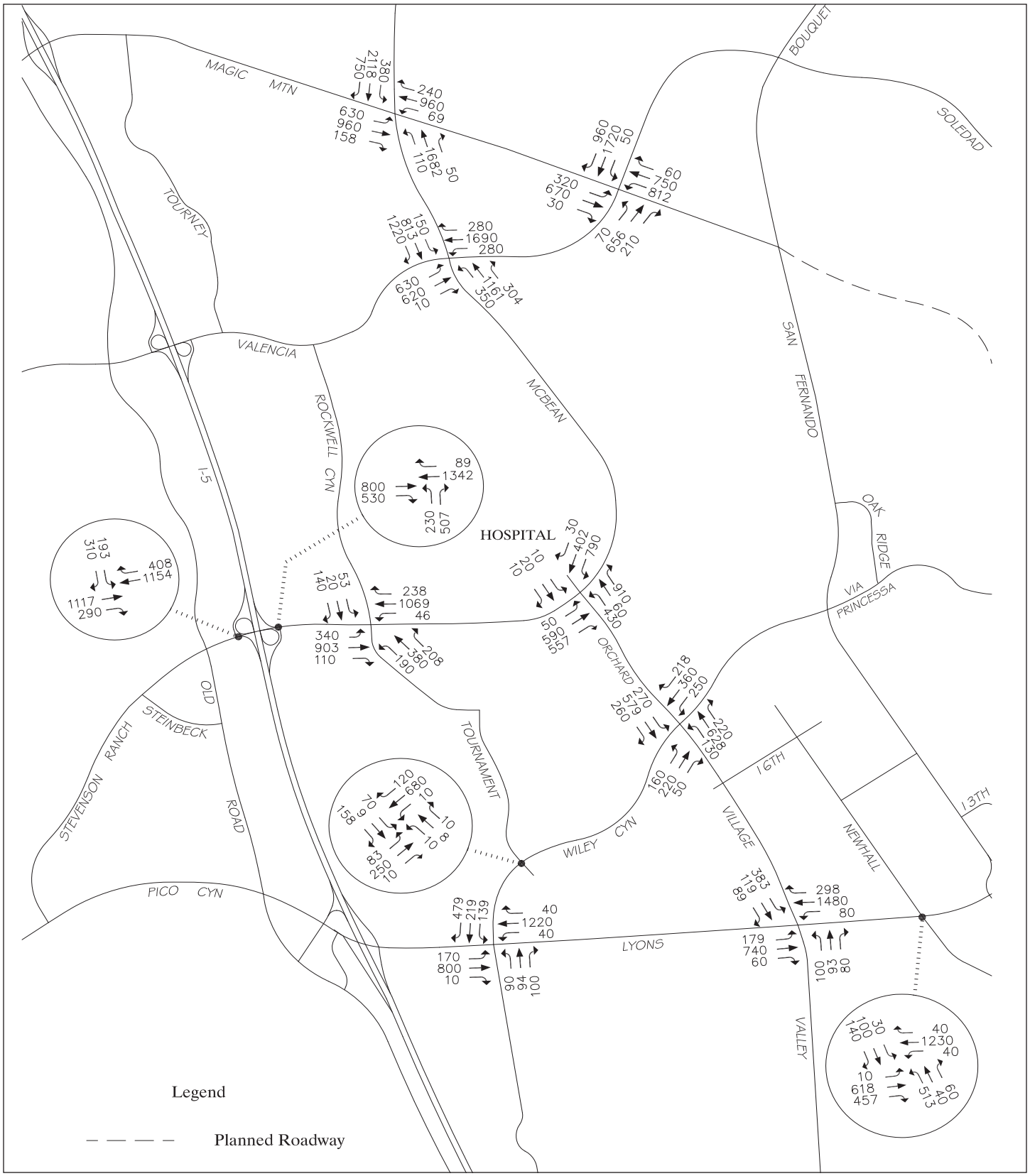
Impact Analysis: The Interim Year traffic conditions are based on the SCVCTM forecasts and form the basis for identifying the potential peak hour traffic impacts of the proposed project at the study area intersections identified above. The following sections discuss Interim Year with project and without project conditions.

Interim Year No Project Traffic Conditions

The Interim Year (no project) peak hour turning movement volumes for the intersections in the study area are illustrated in *Exhibit 5.4-12, AM Peak Hour Intersection Volumes – Interim Year (No Project)* and *Exhibit 5.4-13, PM Peak Hour Intersection Volumes – Interim Year (No Project)*. These volumes include the existing land uses located on the project site. Interim Year ADT volumes for no-project conditions are illustrated in *Exhibit 5.4-14, Interim Year (No Project) ADT Volumes*. A summary of ICU and LOS conditions under this scenario is provided within *Table 5.4-11, ICU and LOS Summary – Interim Year (With and Without Project)*.

Interim Year With Project Traffic Conditions

The project impacts have been determined based on comparing a "no project" condition, which is based on the project site's current uses, and a "with project" condition that was derived by adding the proposed hospital and medical office uses to the model.



Source: Austin-Foust Associates, Inc., May 2008.

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AM Peak Hour Intersection Volumes – Interim Year (No Project)

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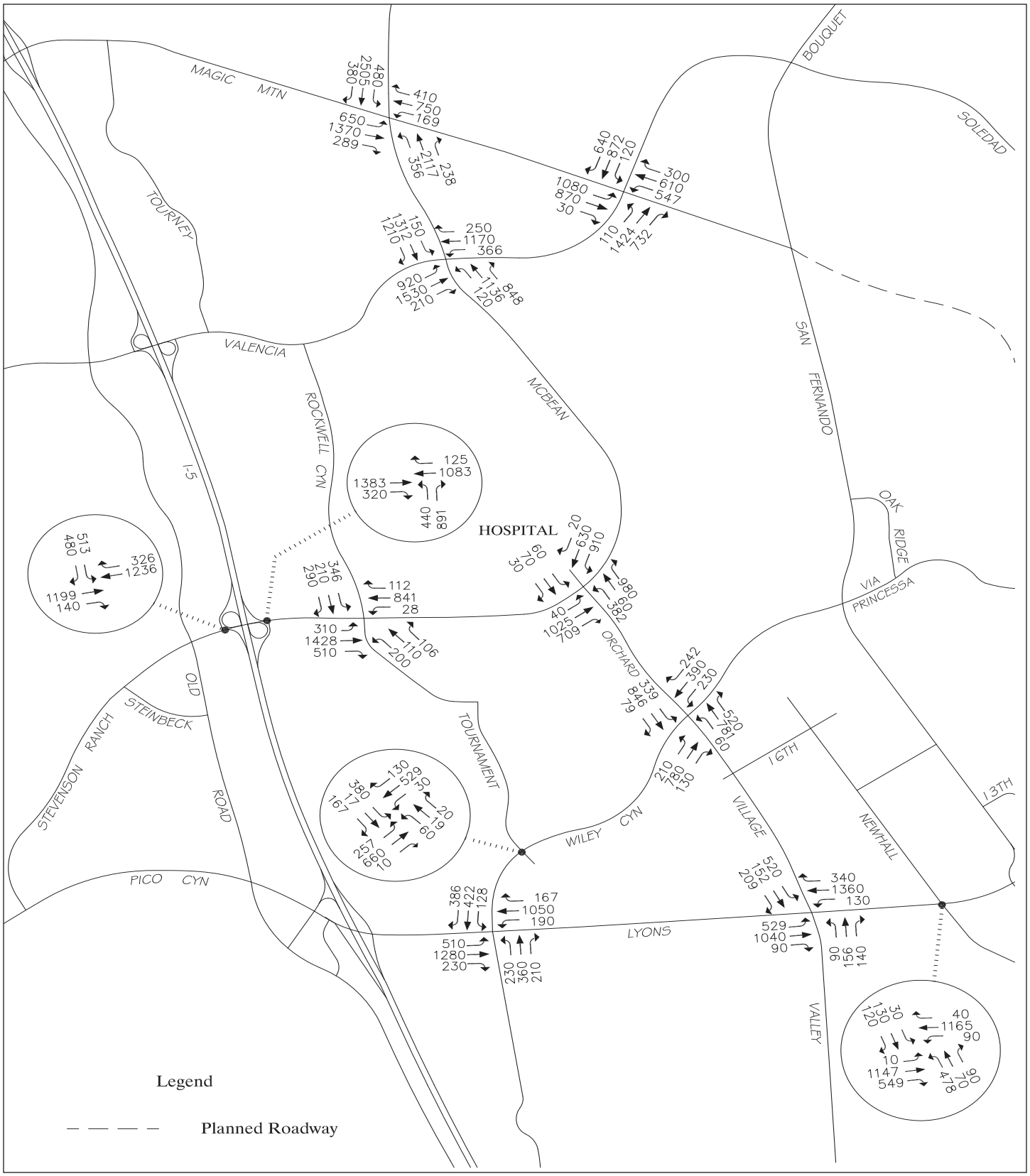
Exhibit 5.4-12



Source: Austin-Foust Associates, Inc., May 2008.

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PM Peak Hour Intersection Volumes – Interim Year (No Project)

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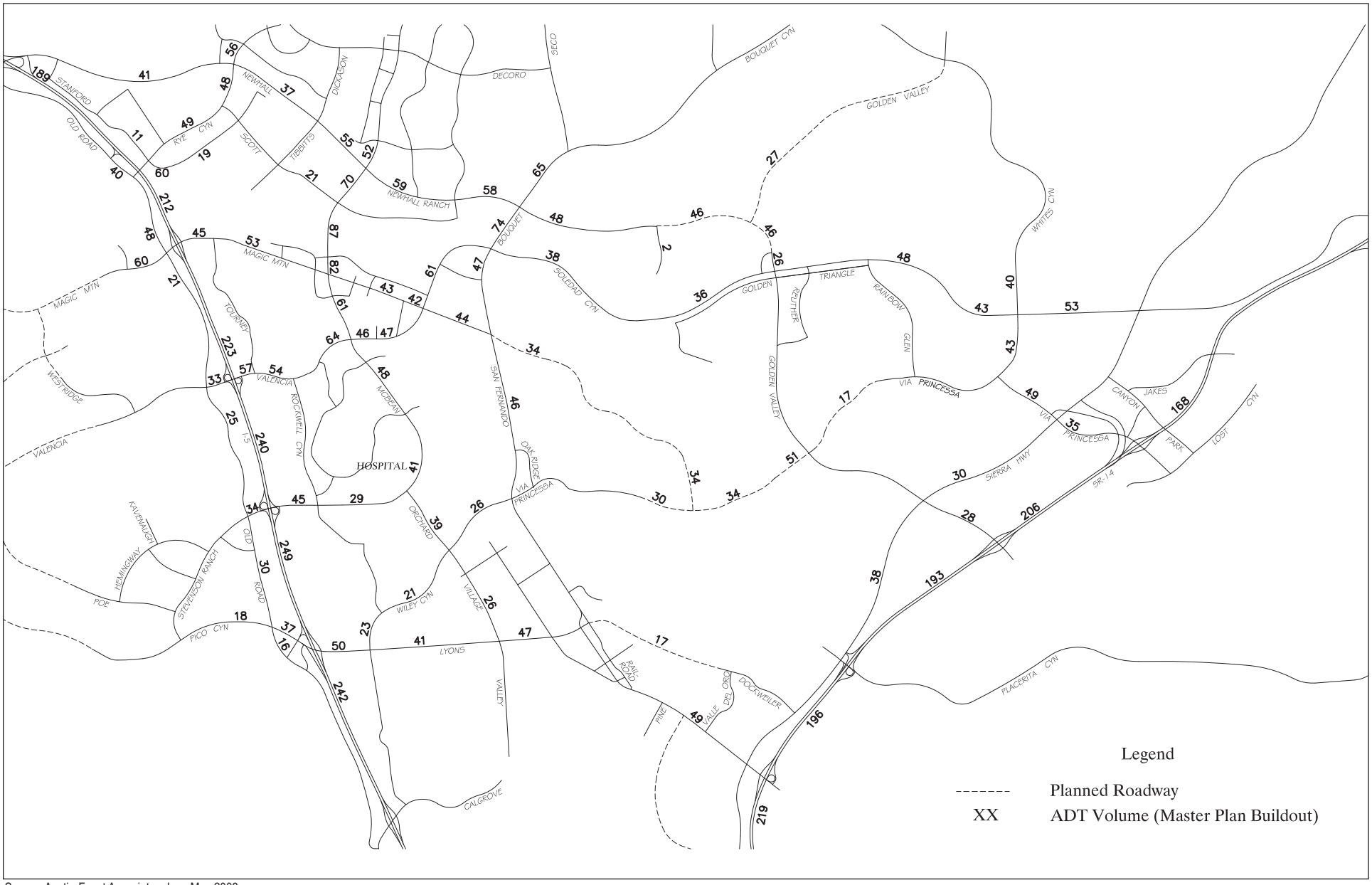
Exhibit 5.4-13



Source: Austin-Foust Associates, Inc., May 2008.

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Interim Year (No Project) ADT Volumes

Exhibit 5.4-14

Project trip generation would result in a net increase (when compared to existing) of 7,571 ADT and peak hour increases of approximately 519 AM trips (429 inbound) and 715 PM trips (554 outbound). Illustrations of Interim Year (with project) peak hour intersection volumes are provided in *Exhibit 5.4-15, AM Peak Hour Intersection Volumes – Interim Year With Project* and *Exhibit 5.4-16, PM Peak Hour Intersection Volumes – Interim Year With Project*. These volumes include the existing land uses located on the project site. Interim Year ADT volumes for no project conditions are illustrated in *Exhibit 5.4-17, Interim Year With Project ADT Volumes*. A summary of ICU and LOS conditions under this scenario is provided within *Table 5.4-11, ICU and LOS Summary – Interim Year (With and Without Project)*.

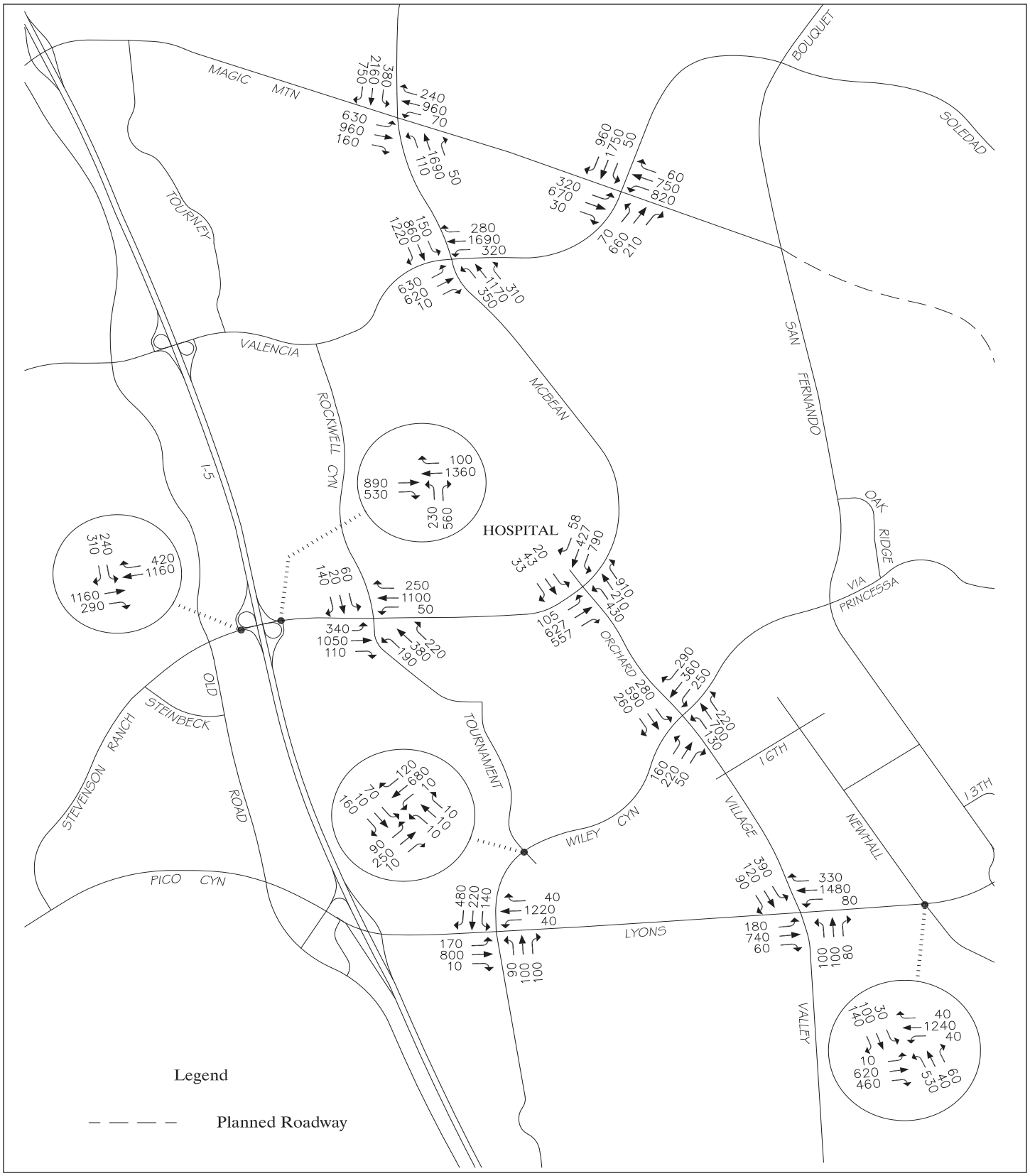
Table 5.4-11
ICU and LOS Summary – Interim Year (With and Without Project)

Intersection	Interim Year (No Project)				Interim Year (With Project)				Increase	
	AM		PM		AM		PM		AM	PM
Freeway On/Off Ramp Intersections										
14. I-5 SB Ramps & McBean	.61	B	.74	C	.61	B	.77	C	.00	.03
15. I-5 NB Ramps & McBean	.48	A	.75	C	.51	A	.77	C	.03	.02
Intersections										
42. Rockwell & McBean	.74	C	.75	C	.75	C	.78	C	.01	.03
44. McBean & Valencia	.87	D	.86	D	.87	D	.86	D	.00	.00
45. McBean & Magic Mtn	.98	E	1.08	F	.98	E	1.09	F	.00	.01*
51. Wiley & Lyons	.67	B	.83	D	.67	B	.83	D	.00	.00
52. Tournament & Wiley	.44	A	.72	C	.44	A	.72	C	.00	.00
53. Orchard Village & Lyons	.57	A	.70	B	.57	A	.72	C	.00	.02
54. Orchard Village & Wiley	.71	C	1.05	F	.74	C	1.11	F	.03	.06*
55. Orchard Village & McBean	.70	B	.87	D	.73	C	1.00	E	.03	.13*
56. Newhall & Lyons	.69	B	.69	B	.70	B	.69	B	.01	.00
57. Valencia & Magic Mtn	1.13	F	1.15	F	1.14	F	1.15	F	.01*	.00

*Significant Impact (See Table 5.4-2)

Level of service ranges:

.00 - .60	A
.61 - .70	B
.71 - .80	C
.81 - .90	D
.91 - 1.00	E
Above 1.00	F



Source: Austin-Foust Associates, Inc., May 2008.

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AM Peak Hour Intersection Volumes – Interim Year With Project

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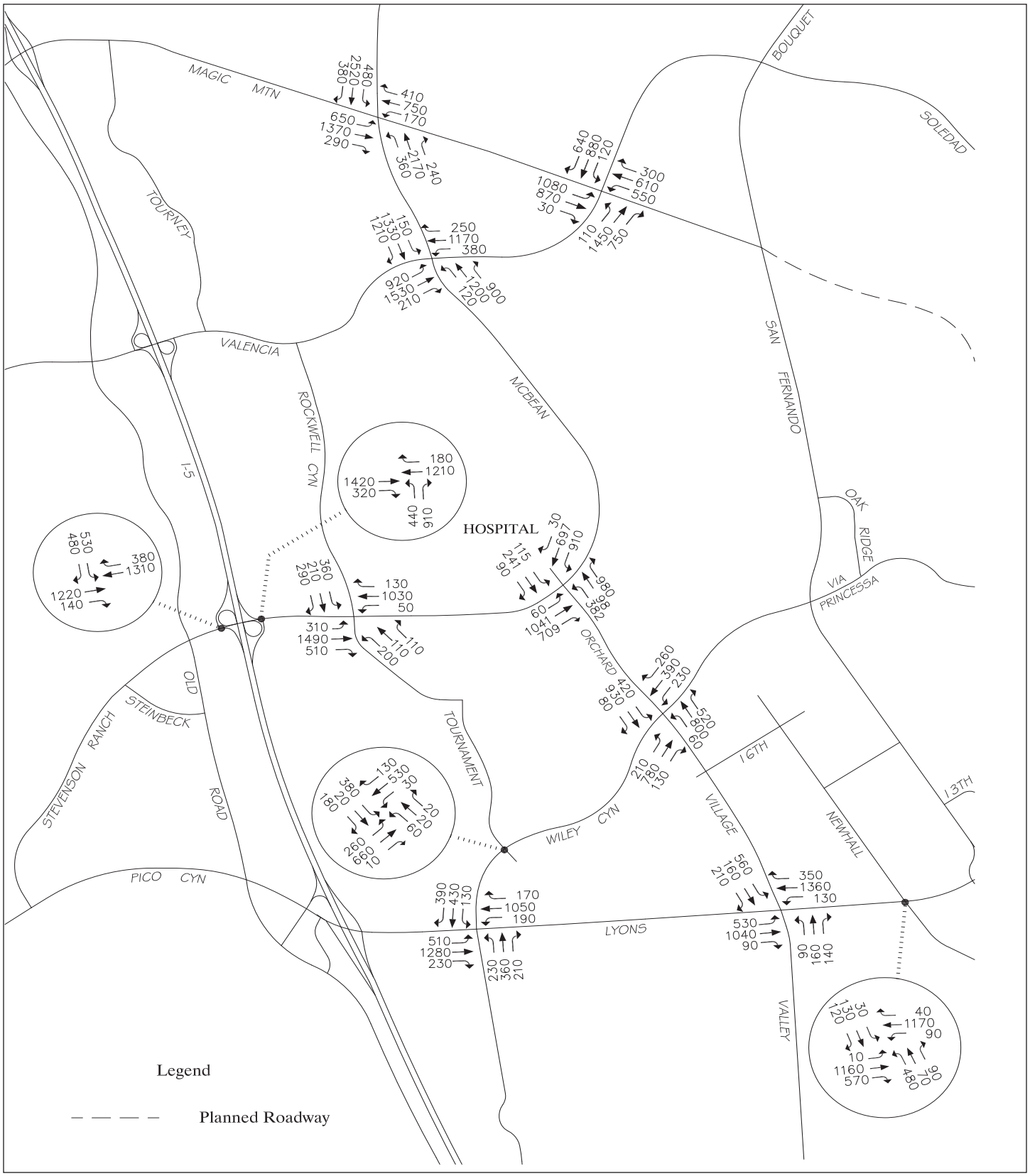
Exhibit 5.4-15



Source: Austin-Foust Associates, Inc., May 2008.

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PM Peak Hour Intersection Volumes – Interim Year With Project

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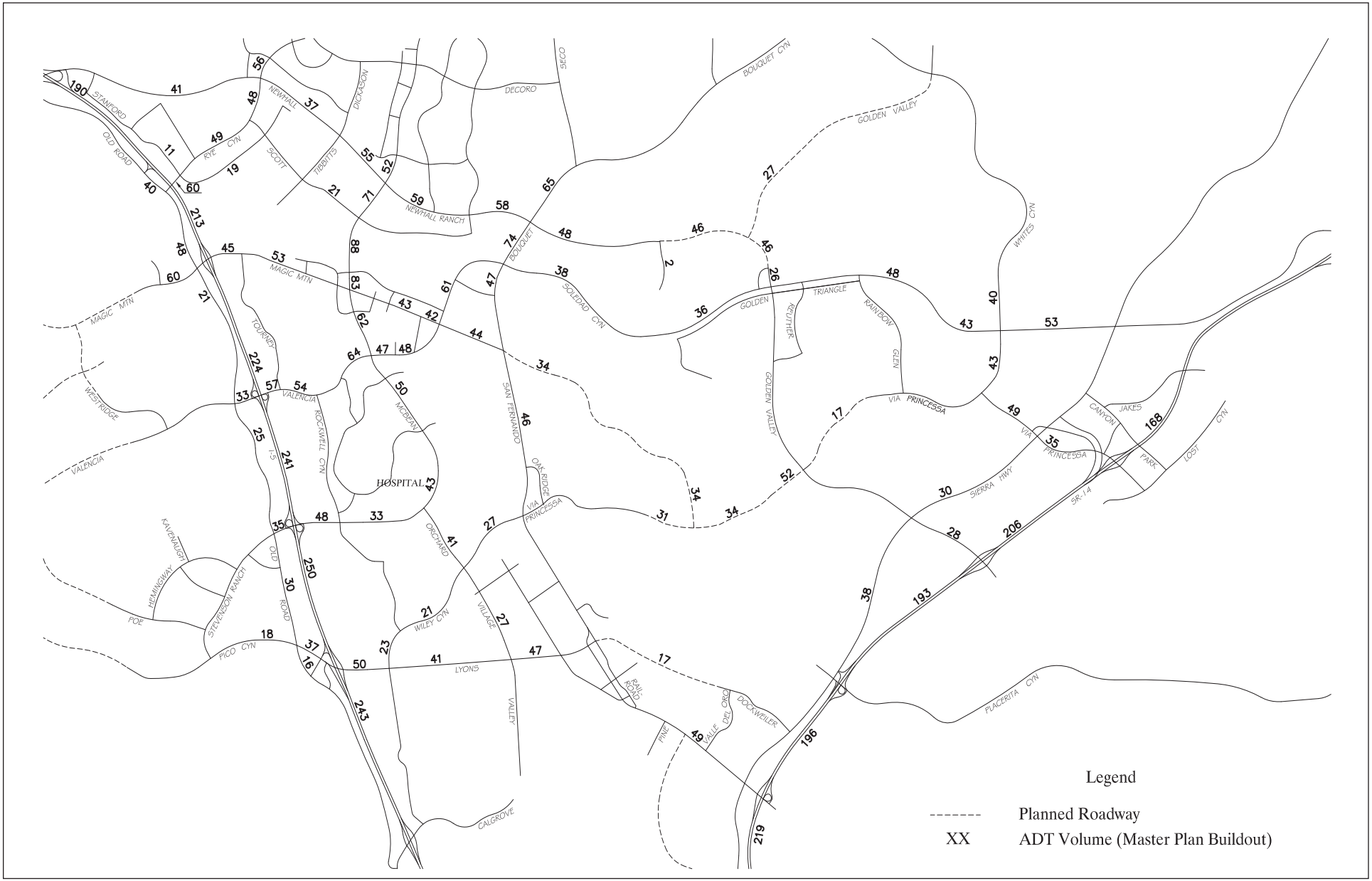
Exhibit 5.4-16



Source: Austin-Foust Associates, Inc., May 2008.

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Interim Year With Project ADT Volumes

Exhibit 5.4-17

Based on the City's impact criteria, significant impacts of the proposed project have been identified for the following four locations for Interim Year conditions:

- McBean Parkway at Magic Mountain Parkway
- Orchard Village Road at Wiley Canyon Road
- Orchard Village Road at McBean Parkway
- Valencia Boulevard at Magic Mountain Parkway

Mitigation Measures TR1 through TR5, described below, would minimize impacts at these four intersections to a less than significant level.

In addition, a supplemental operational analysis was prepared for the proposed project in order to analyze aspects of intersection behavior (such as delay and queue lengths for individual movements or the effect of upstream and downstream intersections). The operational analysis procedures outlined in the *HCM 2000* were utilized to create a model to simulate movement of individual vehicles through the roadway network.

The detailed operational analysis was carried out for the McBean Parkway corridor between I-5 and Decoro Drive, and for Orchard Village Road between McBean Parkway and Lyons Avenue, analyzing a total of 24 intersections. It is the operation of these 24 signalized intersections that largely determine the quality of traffic movement through this corridor. For Interim Year conditions, the operations analysis shows that when project mitigation is implemented, conditions are either LOS D or better, or if worse than LOS D, the mitigation improves operations in comparison to no project conditions.

Mitigation Measures:

TR1 In order to address impacts along McBean Parkway at the Magic Mountain Parkway intersection, the following improvements shall be required:

- Add a third through lane for the westbound direction (re-striping). This improvement shall be implemented in conjunction with the construction of MOB1.
- Add right-turn overlap phasing for the westbound right-turn movement (signal modification). This improvement shall be implemented in conjunction with the construction of MOB1.
- Add a third through lane for the eastbound direction (re-striping). This improvement shall be implemented in conjunction with the construction of the Inpatient Building/MOB2.

TR2 In order to address impacts along Orchard Village Road at the Wiley Canyon Road intersection, the following improvement shall be required:

- Add a separate northbound right-turn lane with right-turn overlap phasing (within existing right-of-way between Wiley Canyon Road and the Santa Clara River South Fork Bridge). This improvement shall be implemented in conjunction with the construction of MOB1.

TR3 In order to address impacts along Orchard Village Road at the McBean Parkway intersection, the following improvements shall be required:

- Widen the southbound approach (project driveway) to allow for a left-turn lane and a second through lane. This improvement shall be implemented in conjunction with the construction of MOB1.
- Add a separate westbound right-turn lane (for project access). This improvement shall be implemented in conjunction with the construction of the Inpatient Building/MOB2.
- Add a separate southbound right-turn lane (project driveway). This improvement shall be implemented in conjunction with the construction of the Inpatient Building /MOB2.

TR4 In order to address impacts along Valencia Boulevard at the Magic Mountain Parkway intersection, the following improvement shall be required:

- Add a second westbound left-turn lane by removing the existing right-turn lane (re-striping the westbound approach as a mirror image of the existing eastbound approach). This improvement shall be implemented in conjunction with the construction of the Inpatient Building/MOB2.

TR5 The project applicant shall pay fees to the established Valencia Bridge and Thoroughfare District, in accordance with City policy, in order to provide a fair-share contribution of funds for future traffic system improvements.

Level of Significance After Mitigation: Less Than Significant Impact.

LOS ANGELES COUNTY CMP ANALYSIS

Level of Significance Prior to Mitigation: Less Than Significant Impact.

Impact Analysis: The Los Angeles County Congestion Management Program (CMP) requires that a proposed development address two major subject areas with respect to traffic impacts. These are the project's impacts on the CMP highway system and on the local and regional transit systems.

According to the CMP guidelines, the geographical area examined in a CMP traffic impact analysis (TIA) consists of the CMP monitoring locations that meet the following criteria:

1. CMP intersections where the proposed project will add 50 or more trips during the AM or PM weekday peak hours (of adjacent street traffic).
2. Mainline freeway-monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

Only the CMP intersection of Magic Mountain Parkway and Valencia Boulevard meets the above criteria for the proposed project. The impact analysis provided above shows that this intersection is significantly impacted by the proposed project, but that the recommended mitigation measures would reduce impacts to a less than significant level.

Another component of the CMP transportation impact analysis is a review of transit impacts. This review includes evidence that transit operators received the Notice of Preparation, identification of existing transit services near the project, estimation of the number of project trips assigned to transit, information on facilities and/or programs that will encourage public transit use, and an analysis of project impacts on transit service.

The proposed project is forecast to generate a net 7,571 ADT. The conversion to person trips is accomplished by using the CMP guidelines (multiplying the ADT by an occupancy factor of 1.4), which results in a total of 10,599 average daily person trips. To estimate the number of transit trips the CMP specifies a factor of 3.5 percent, which results in 318 transit trips to be generated by the proposed project. The Santa Clarita Transit had an annual ridership of 3.3 million persons on its local fixed routes in Fiscal Year 2005/2006. Routes 5 and 6 service the site, and had an average weekday ridership of 3,924 persons in Fiscal Year 2004/2005.[1] It is not expected that the proposed project would result in significant impacts related to public transit, as the 318 transit trips represent approximately eight percent of the average weekday ridership on that bus route. This increase is within the transit system's capacity. In addition, the proposed project is providing two bus turnouts along McBean Parkway.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

SITE ACCESS

Level of Significance Prior to Mitigation: Potentially Significant Impact.

Impact Analysis: Access to the project site would be provided by three project driveways located on McBean Parkway. The main entrance for the project is provided at a four-way signalized intersection with Orchard Village Road. Orchard Village Road is a four-lane roadway in the vicinity of the project and terminates at the project entrance. A second four-way signalized intersection with McBean Parkway is located at Avenida Navarre, a two-lane local street serving the residential uses south of the project boundary.

Illustrations of existing peak hour turning movement volumes for each project driveway can be found in *Exhibit 5.4-6, AM Peak Hour Intersection Volumes – Existing Conditions at Project Driveways* and *Exhibit 5.4-7, PM Peak Hour Intersection Volumes – Existing Conditions at Project Driveways*. The peak hour counts were collected in January 2005. The existing lane configurations are illustrated in *Exhibit 5.4-8, Intersection Lane Configurations – Existing Project Driveways*.

The results of the ICU LOS analyses for the full access project driveways are shown in *Table 5.4-12, Future ICU Summary – Project Driveways*. The table shows how each intersection currently meets the performance standard of the City.

[1] Source: *Santa Clarita Transportation Development Plan 2006-2015*, prepared by Michael Fajans & Associates.

Table 5.4-12
Future ICU Summary – Project Driveways

Location	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
Existing Conditions				
1. Center Driveway	.57	A	.76	C
2. East Driveway	.49	A	.57	A
Interim Year with Project				
1. Center Driveway	.73 (.70)	C (B)	1.00 (.87)	E (D)
2. East Driveway	.51	A	.69	B
Long-Range Cumulative Buildout with Project				
1. Center Driveway	.79 (.67)	C (B)	1.22 (.90)	F (D)

- Values in parenthesis represent ICU/LOS with mitigation.
- See Exhibit 5.4-8 for driveway locations.
- Level of service ranges:

.00 - .60	A
.61 - .70	B
.71 - .80	C
.81 - .90	D
.91 - 1.00	E
Above 1.00	F

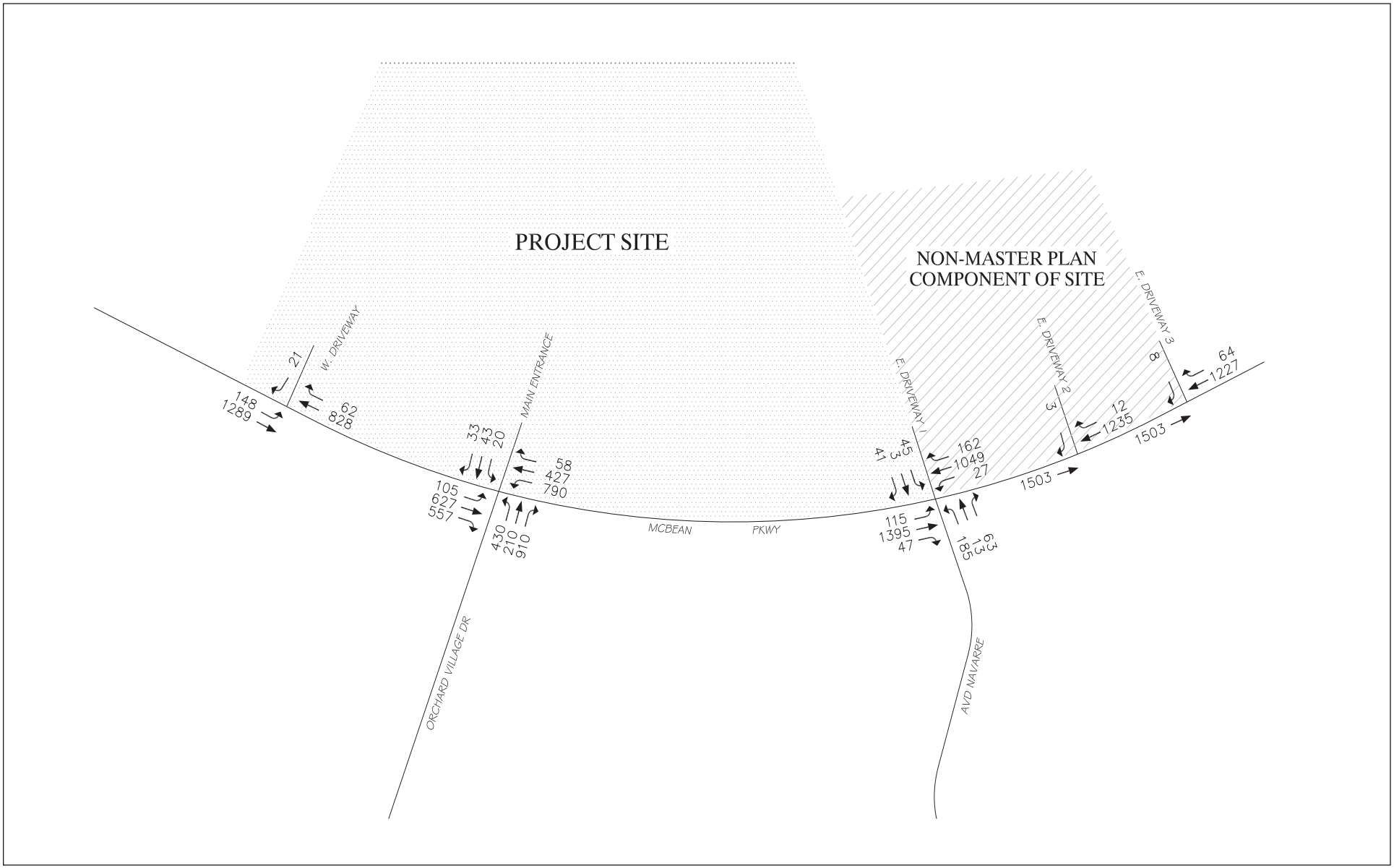
Source: *Henry Mayo Newhall Memorial Hospital Master Plan Traffic Impact Analysis*, Austin-Foust Associates, Inc., May 2008.

Illustrations of future peak hour turning movement volumes for Interim Year conditions for each project driveway can be found in *Exhibit 5.4-18, AM Peak Hour Intersection Volumes – Interim Year Conditions at Project Driveways* and *Exhibit 5.4-19, PM Peak Hour Intersection Volumes – Interim Year Conditions at Project Driveways*.

The increase in traffic volume that is associated with the expansion of the hospital and medical office facilities requires improvements to each intersection that provides access to the hospital site. The lane configurations for accommodating project traffic and the lane configurations for the project site are illustrated in *Exhibit 5.4-20, Intersection Lane Configurations – Project Driveways*, and are provided as conditions of approval or and Mitigation Measure TR3. The proposed project is required to provide separate left-turn phasing to accommodate the increase of left-turn movements out of the site at the Hospital Entrance/Avenida Navarre intersection with McBean Parkway. In addition, the proposed project is required to design the West Hospital Entrance at McBean Parkway to (1) prohibit left turns out of this unsignalized driveway and, (2) add a separate right-turn lane for vehicles turning into the site. These improvements shall be implemented in conjunction with the construction of MOB2. Implementation of Mitigation Measure TR3 would reduce impacts from the proposed project to a less than significant level at the McBean Parkway and Orchard Village Road access point.

Mitigation Measure: Refer to Mitigation Measure TR3. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.



Source: Austin-Foust Associates, Inc., May 2008.

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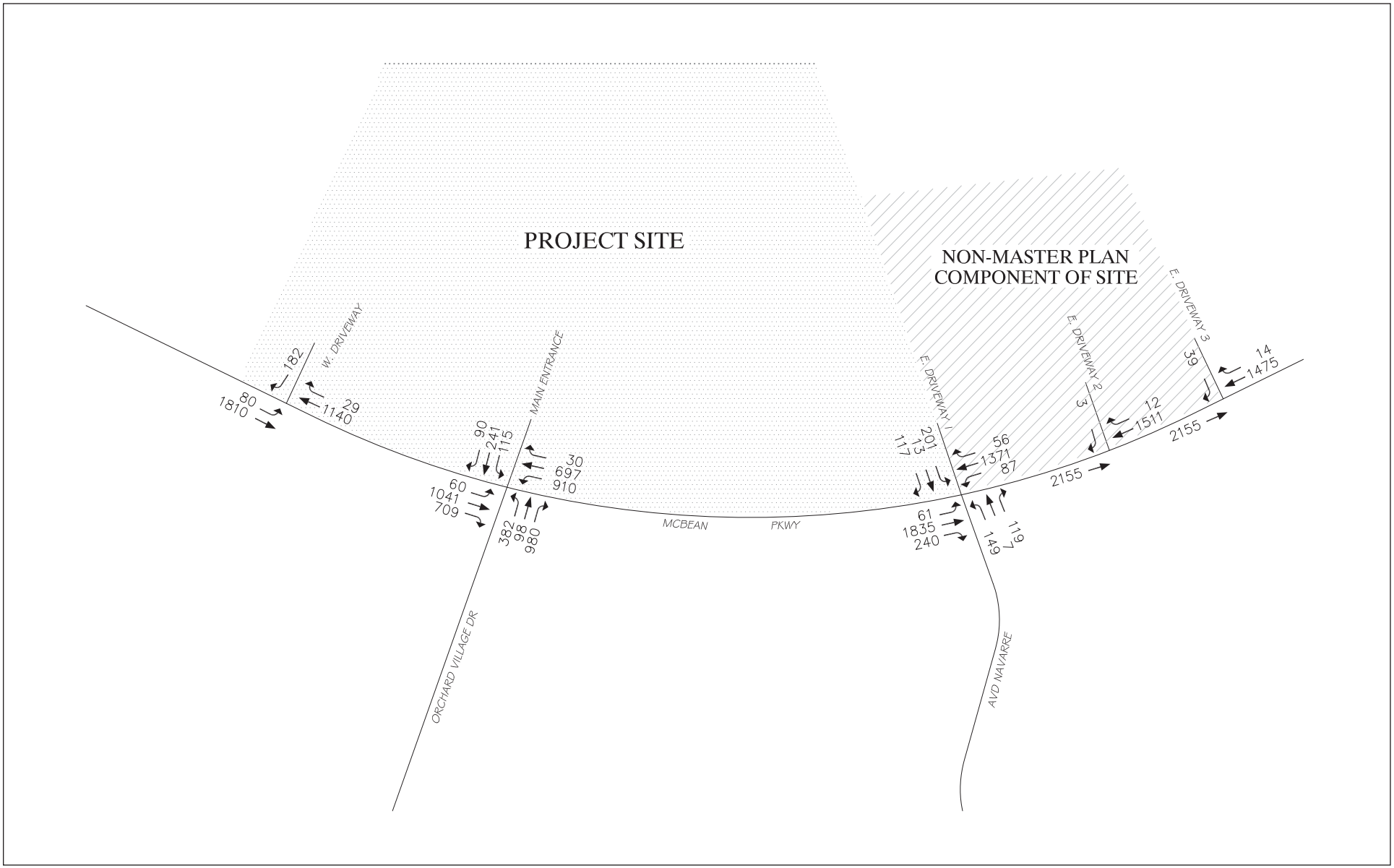
AM Peak Hour Intersection Volumes – Interim Year Conditions at Project Driveways

Exhibit 5.4-18



Source: Austin-Foust Associates, Inc., May 2008.

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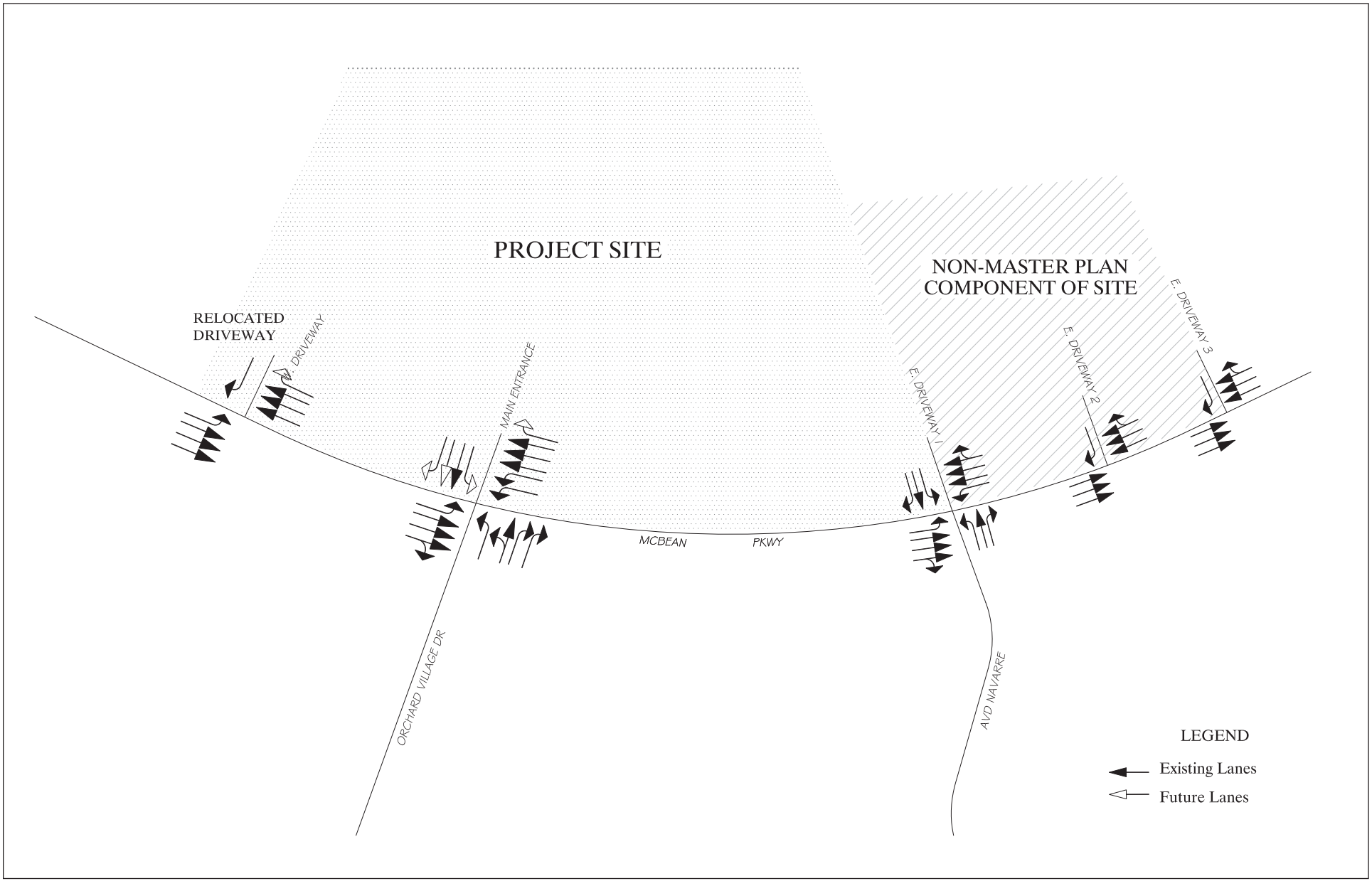
PM Peak Hour Intersection Volumes – Interim Year Conditions at Project Driveways

Exhibit 5.4-19



Source: Austin-Foust Associates, Inc., May 2008.

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Intersection Lane Configurations – Project Driveways

Exhibit 5.4-20

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ON-SITE CIRCULATION

Level of Significance Prior to Mitigation: Less Than Significant Impact.

Impact Analysis: The *Parking Study Report* prepared for the proposed project provides an analysis of potential traffic impacts along internal roadways. The analysis was based upon traffic generation data provided within the *Traffic Impact Analysis* prepared for the proposed project by Austin-Foust Associates, Inc. (refer to Appendix E).

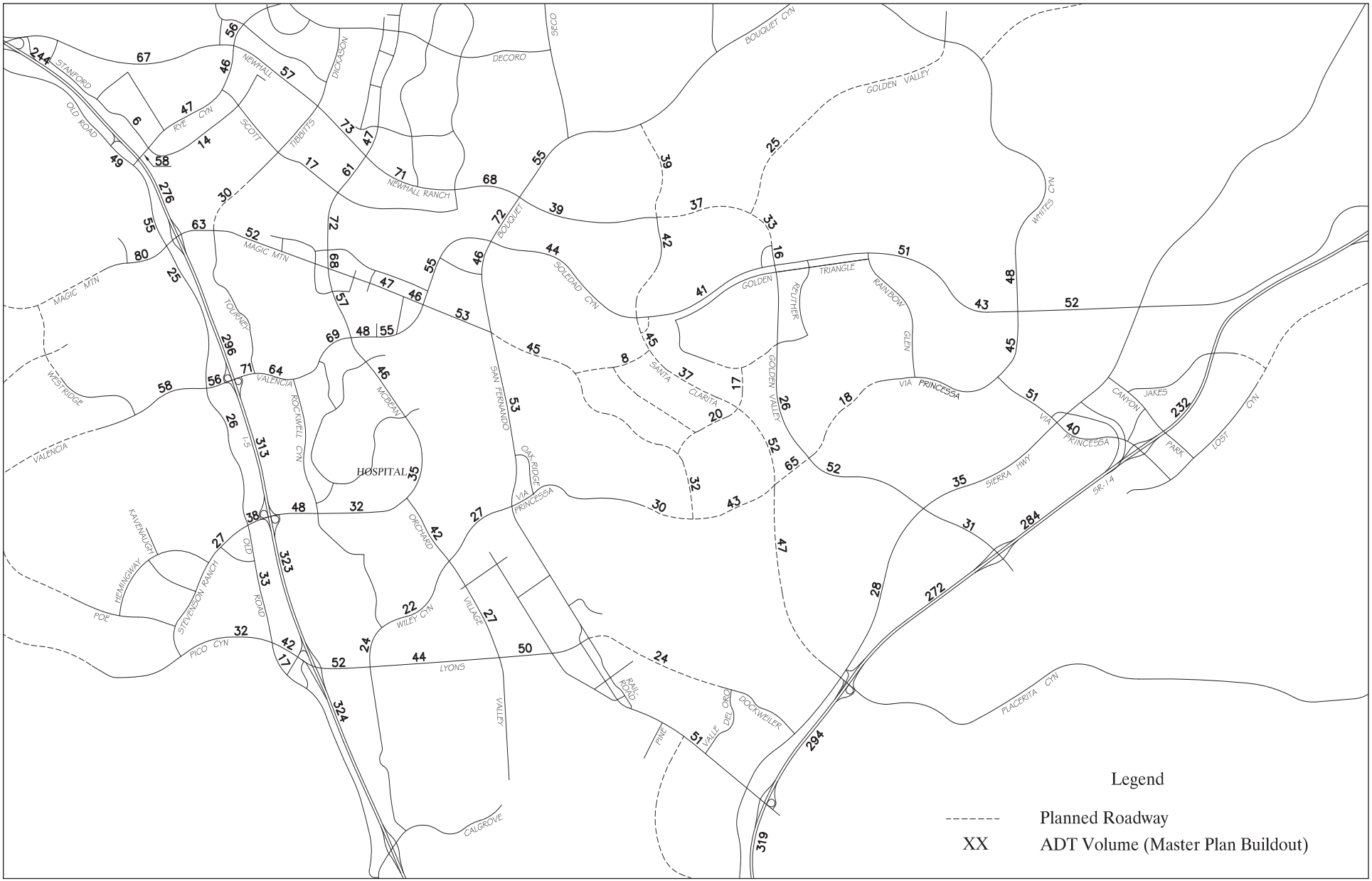
Development of the proposed project would create increased traffic generation on internal circulation roads within the project site. However, development of the proposed Master Plan would leave the overall existing on-site circulation system and connectivity intact, including basic project access facilities and the presence of the "ring road" that traverses the project site. The Avenida Navarre (extended) access would remain unchanged, the outbound road opposite Orchard Village would be enlarged in conjunction with planned intersection improvements at its intersection with McBean Parkway, and the southwestern-most project driveway along McBean Parkway would be relocated closer to the site's southwestern property line.

The "ring road" would remain the basic link from the external street system to on-site parking facilities. Its configuration would be simplified to provide for parallel parking spaces on only the outside curb of its loop. This would be a beneficial impact to on-site circulation, since it alleviates congestion potential and enhances travel by emergency vehicles. The elimination of parallel parking along the inside edge of the roadway would also enhance sight distances along the roadway for intersecting access points serving adjoining parking facilities.

The nature and provision of primarily structured parking to serve the site's existing and future needs would consolidate multiple access intersections along the "ring road" to fewer locations. This is also a beneficial impact, as it would reduce turning movement conflicts along the site's internal circulation system.

Exhibit 5.4-21, *Internal Study Intersections*, identifies internal site intersections identified for internal traffic forecasting and Level of Service (LOS) analysis. These intersections typically correspond to the junction of internal circulation roadways and/or the entrance or exit of key parking lots or structures. A total of seven intersections were analyzed as part of the internal circulation review. Lane geometrics and traffic controls for these intersections are shown in *Exhibit 5.4-22*, *Lane Geometrics and Traffic Controls*.

Exhibit 5.4-23, *Daily Internal Traffic Volumes*, presents daily volumes at buildout along select links of the on-site circulation system. These were developed from the daily traffic volume forecasts of the *Traffic Impact Analysis*, allocated to project access points, in keeping with the distribution and assignment patterns of the *Traffic Impact Analysis* for project traffic. The figure extends the *Traffic Impact Analysis*-based forecasts of project traffic inward to the site in proportion to the trip generation characteristic of existing and added elements of the plan, and further considers the relative "spread" of parking throughout the site to serve individual development components.



Source: Austin-Foust Associates, Inc., May 2008.

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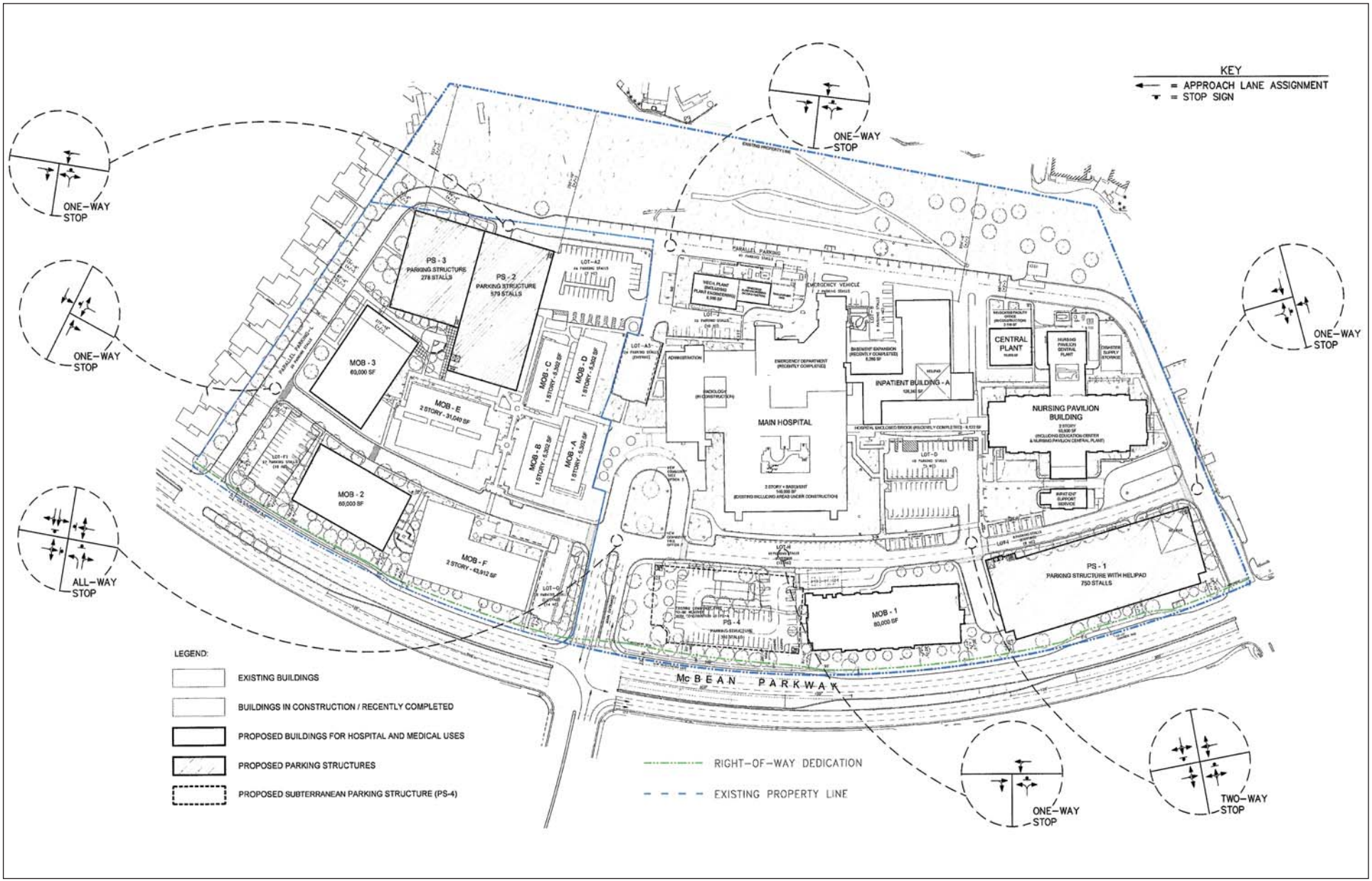
Long-Range Cumulative (No Project) ADT Volumes

Exhibit 5.4-21



Source: Linscott Law & Greenspan; May 19, 2008.

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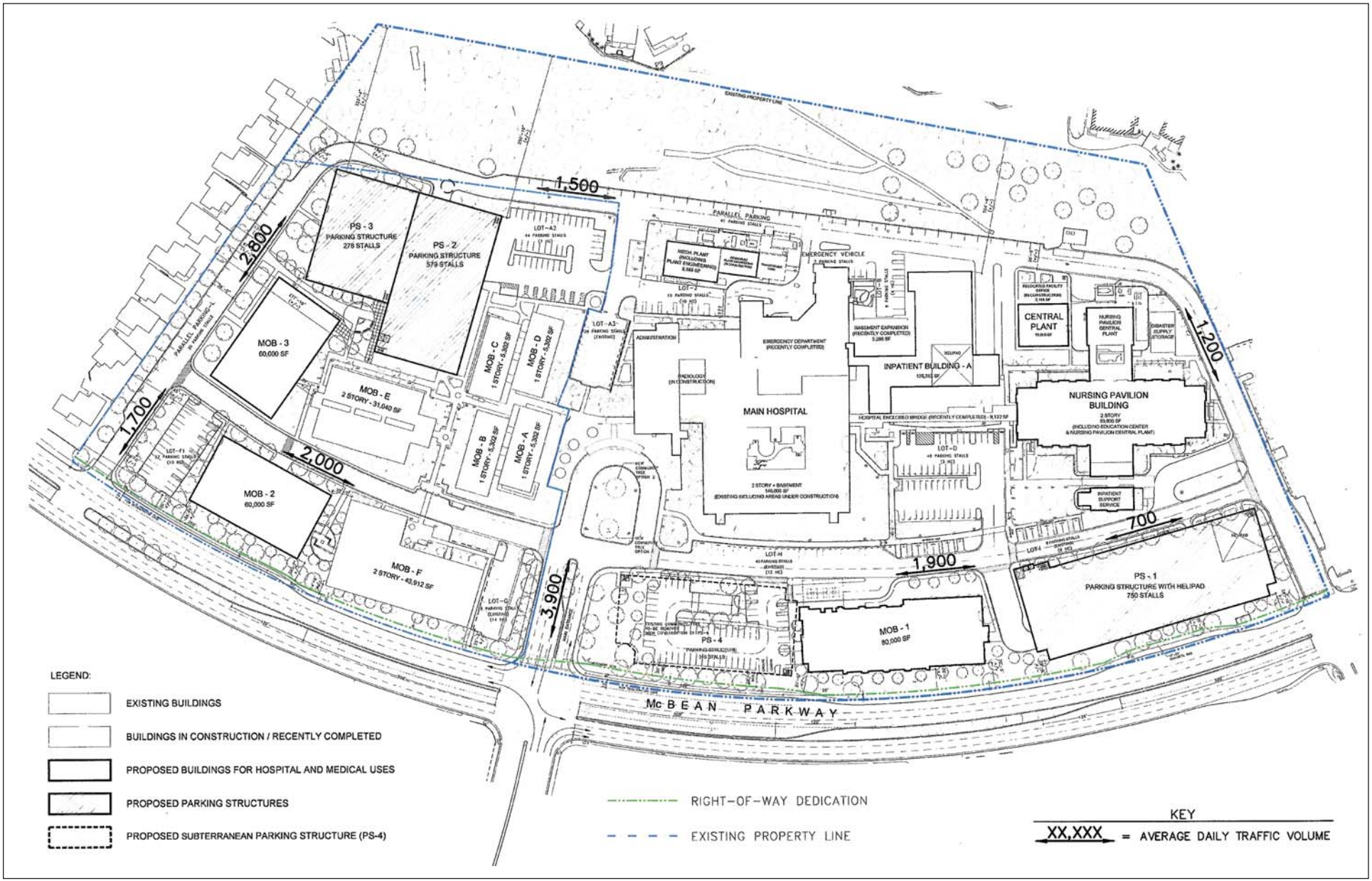
Lane Geometrics and Traffic Controls

Exhibit 5.4-22



Source: Linscott Law & Greenspan; May 19, 2008.

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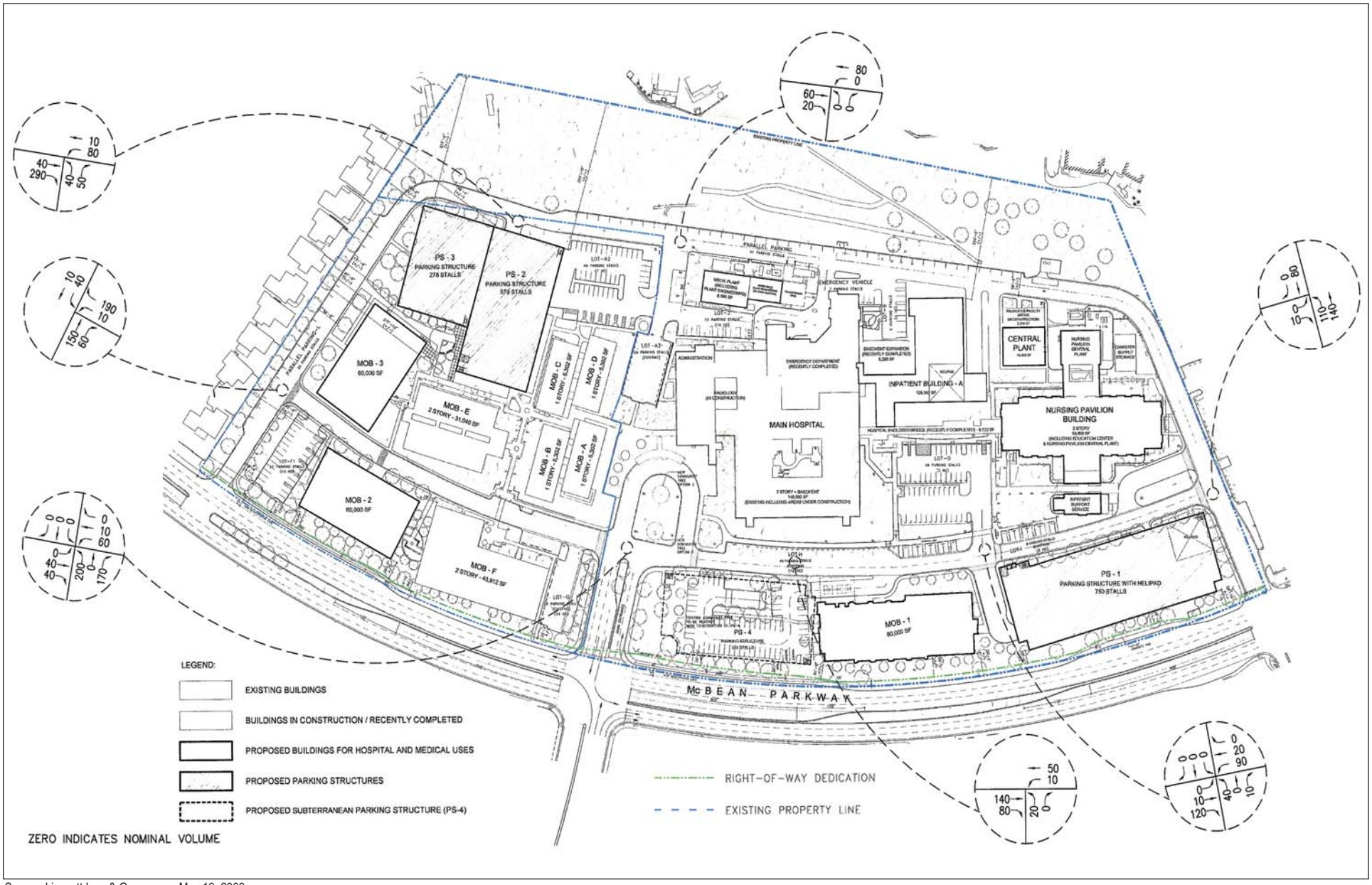
Daily Internal Traffic Volumes

Exhibit 5.4-23



Source: Linscott Law & Greenspan; May 19, 2008.

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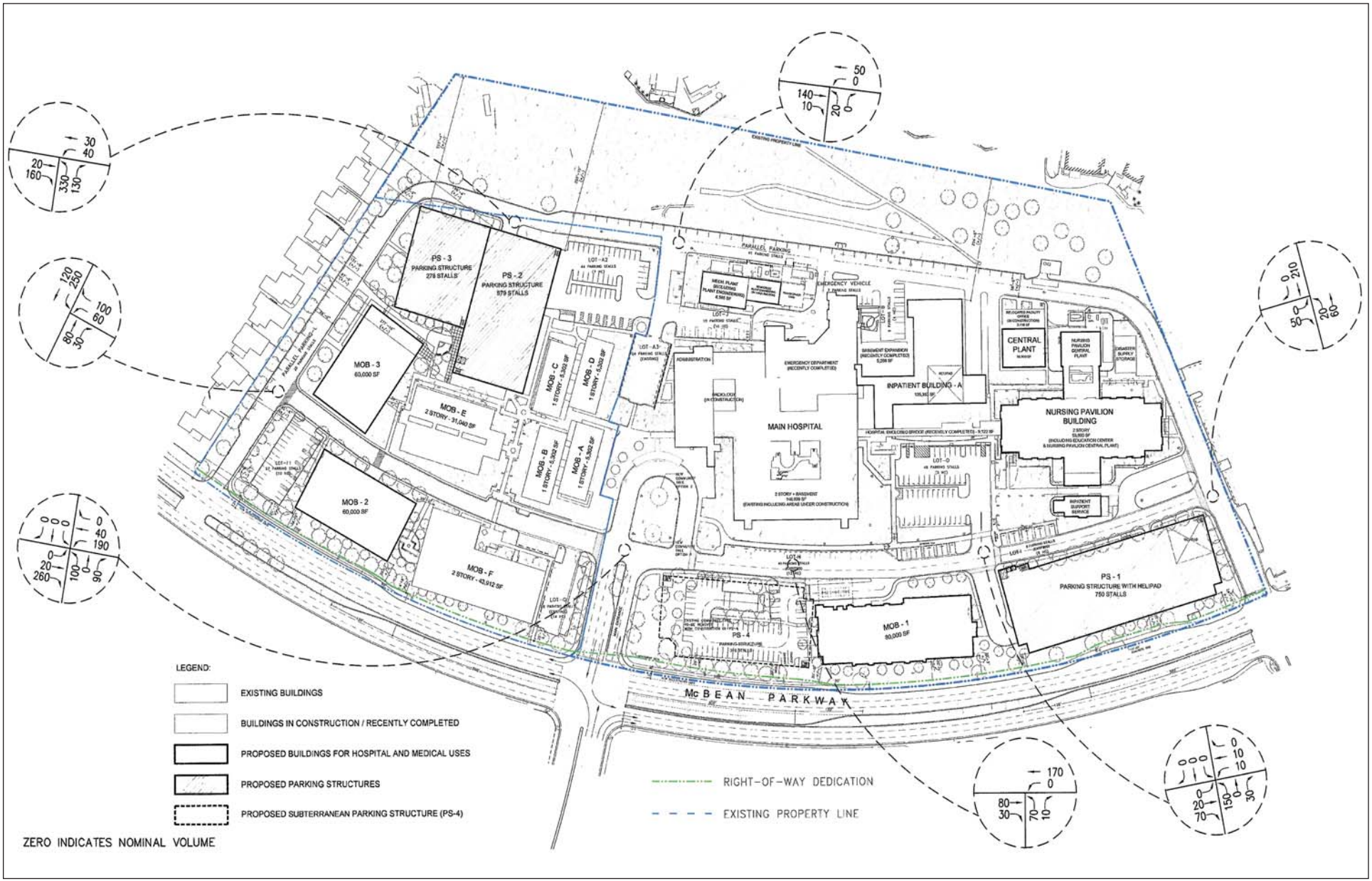
AM Peak Hour Internal Volumes

Exhibit 5.4-24



Source: Linscott Law & Greenspan; May 19, 2008.

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PM Peak Hour Internal Volumes

Exhibit 5.4-25

The volumes on the main entry road would be the greatest (two-way volume of 3,900 vehicles per day). The volumes provided are consistent with the basic lane geometries along the links that make up the internal circulation system.

Exhibit 5.4-24, *AM Peak Hour Internal Volumes* and *Exhibit 5.4-25*, *PM Peak Hour Internal Volumes* provide AM and PM peak hour traffic forecasts, respectively, at the seven key intersections shown on *Exhibit 5.4-21.*

As shown in *Table 5.4-13*, *Internal Intersection Level of Service Analysis*, at Master Plan buildout, the HMNMH would operate at very good levels of service throughout the site during the AM and PM peak hours. Calculated delay values are typically about 10 seconds or less with LOS A or B being the prevalent value. Within *Table 5.4-13*, "Side Approach Stops" are described as being either "one-way" (in the case of a "T" intersection where the stop controlled portion is the stem of the "T") or "two-way" (where both side approaches are stop posted). Additionally, Location 4 is tested as an "all-way" stop, with alternative presumption of an uncontrolled arriving movement from McBean Parkway for which the values are indicated parenthetically. At this location, the all-way stop configuration is preferred, especially in view of the LOS results.

Table 5.4-13
Internal Intersection Level of Service Analysis

Key Intersection	Intersection Control	Time Period	Master Plan Buildout		Significant Impact?
			Delay (Sec/Veh)	LOS	
Location 1	One-Way Stop	AM	10.6	B	No
		PM	15.1	C	No
Location 2	One-Way Stop	AM	0.0	A	No
		PM	9.6	A	No
Location 3	One-Way Stop	AM	10.5	B	No
		PM	13.7	B	No
Location 4	All-Way Stop	AM	8.9 (17.8)	A (C)	No
		PM	9.4 (20.1)	A (C)	No
Location 5	One-Way Stop	AM	10.0	A	No
		PM	10.4	B	No
Location 6	Two-Way Stop	AM	10.3	B	No
		PM	9.8	A	No
Location 7	One-Way Stop	AM	8.7	A	No
		PM	9.6	A	No

Source: *Parking Study Report, Henry Mayo Newhall Memorial Hospital*, Linscott, Law & Greenspan, May 19, 2008.

As shown above, the internal roadway network proposed as part of the HMNMH Master Plan would provide efficient internal circulation for employees and visitors during peak hours. Project implementation would not result in significant impacts in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

5.4.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

Level of Significance Prior to Mitigation: Potentially Significant Impact.

Impact Analysis: The Long-Range Cumulative traffic conditions are based on the long-range (2030) setting previously described. This setting includes the buildout of the City's *General Plan*, including the Circulation Element, and forms the basis for identifying the potential traffic impacts of buildout of the proposed hospital Master Plan. The following impact discussions address traffic impacts of the proposed project under the long-range no project and with project scenarios.

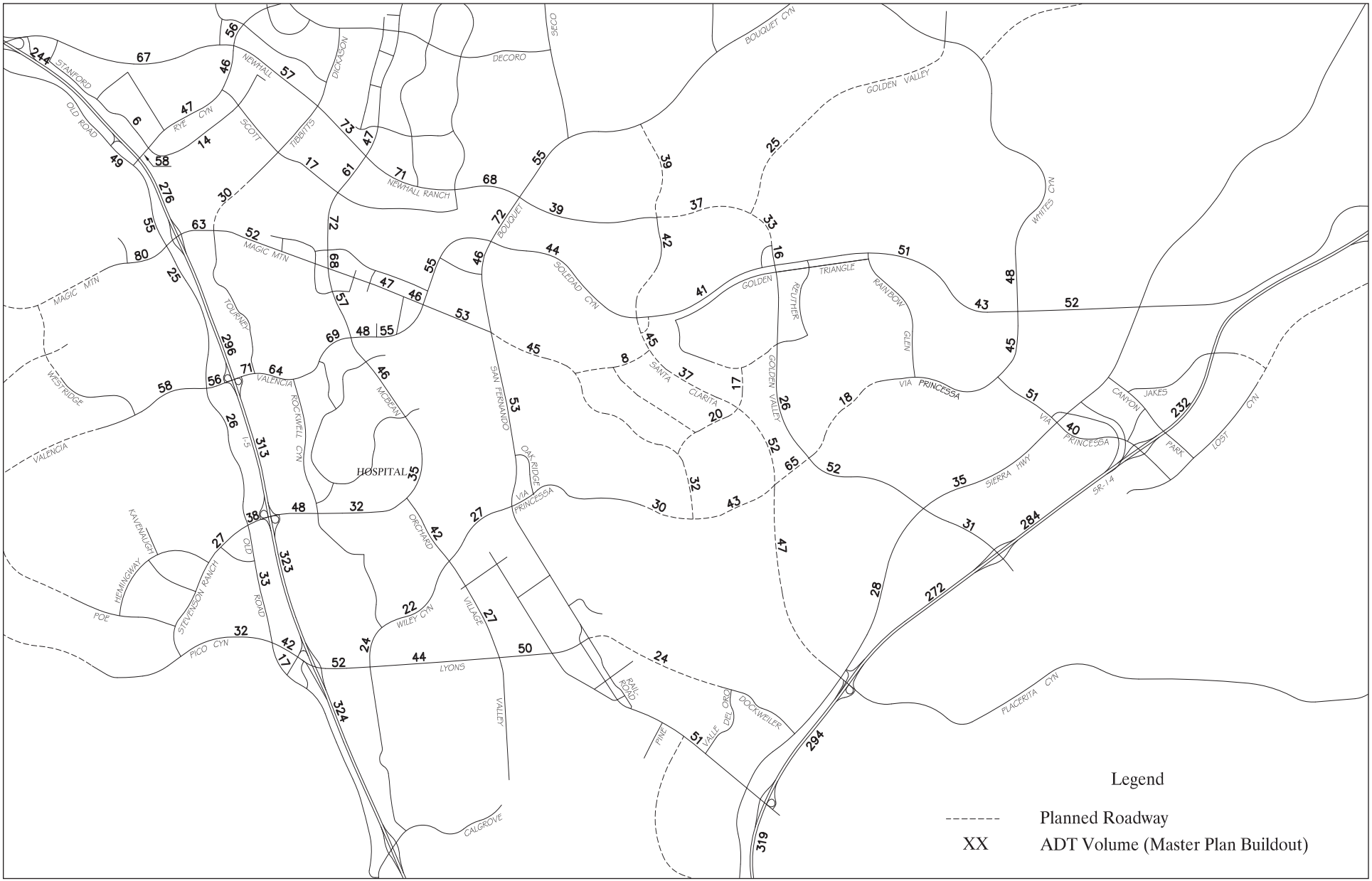
LONG-RANGE CUMULATIVE NO PROJECT TRAFFIC CONDITIONS

The ADT volumes for the long-range cumulative (no project) conditions are illustrated in *Exhibit 5.4-26, Long-Range Cumulative (No Project) ADT Volumes*. These volumes include the existing land uses located on the project site.

LONG-RANGE CUMULATIVE WITH PROJECT TRAFFIC CONDITIONS

As previously discussed, buildout of the proposed project would generate approximately 7,571 vehicle trips per day. This is the forecast used to represent the proposed project's off-site impacts on the analysis area circulation system. The ADT volumes for the long-range cumulative conditions with Master Plan Buildout of the proposed project are illustrated in *Exhibit 5.4-27, Long-Range Cumulative With Project ADT Volumes*.

As previously discussed, a redistribution of non-project traffic occurs when project-generated traffic is added to the circulation system and interacts with the surrounding land uses. The result is a change of travel patterns for some trips that would be occurring with or without the project in place. That is, some existing trips are redistributed to the project site from other similar locations, as well as some non-project trips that would change travel routes due to the influence of the new project traffic. This results in a net change in traffic volume on the arterial roadway system that is less than the gross amount of new trips generated by the proposed project. This net change, which is due to the addition of the hospital Master Plan Buildout (project-generated) trips, is illustrated in *Exhibit 5.4-28, Net Change in ADT Volumes Due to the Project (Long-Range Cumulative Conditions)*, in the form of ADT.



Source: Austin-Foust Associates, Inc., May 2008.

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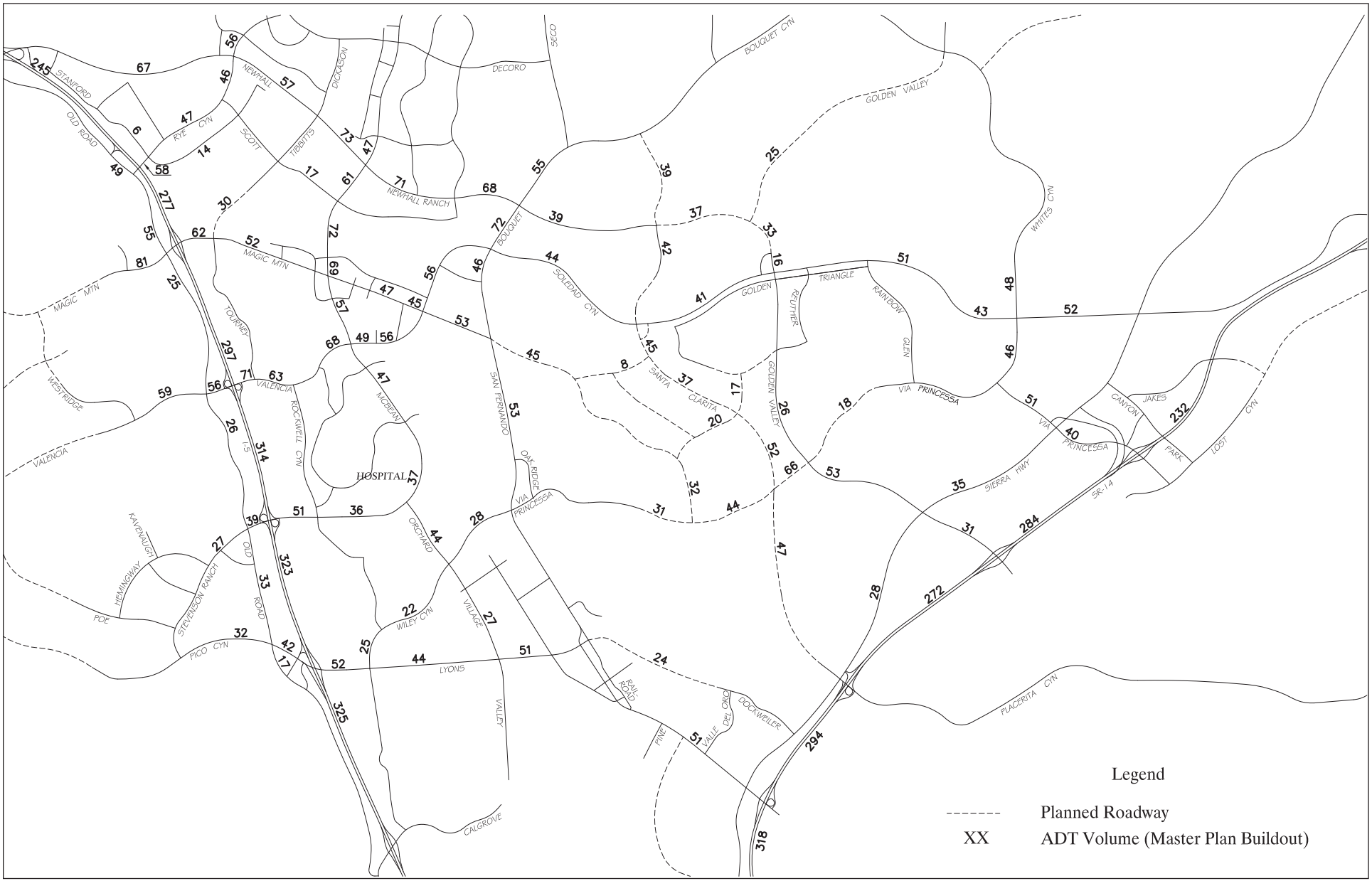
HENRY MAYO NEWHALL MEMORIAL HOSPITAL MASTER PLAN

Long-Range Cumulative (No Project) ADT Volumes

Exhibit 5.4-26



Source: Austin-Foust Associates, Inc., May 2008.

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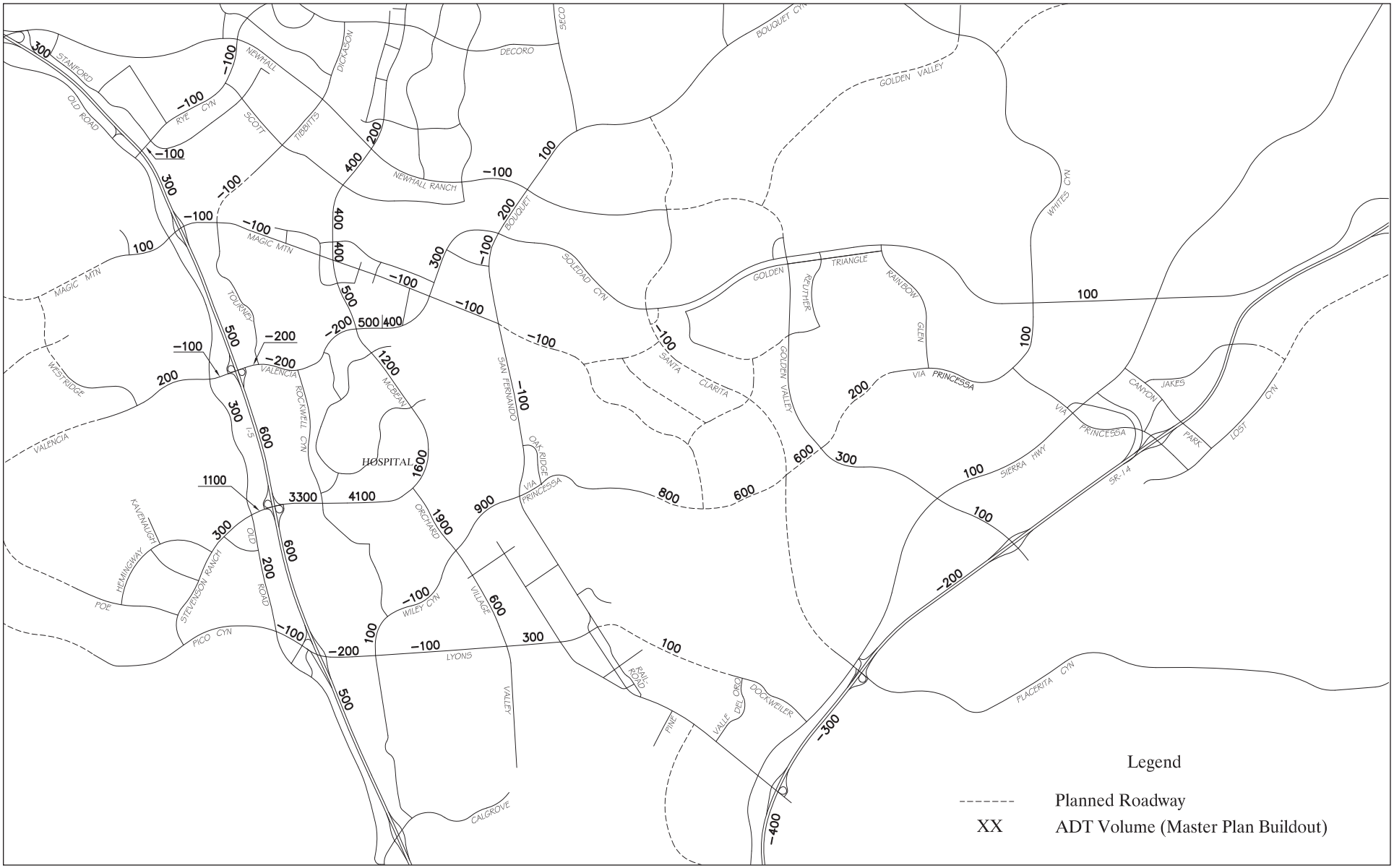
Long-Range Cumulative With Project ADT Volumes

Exhibit 5.4-27



Source: Austin-Foust Associates, Inc., May 2008.

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Net Change in ADT Volumes Due to the Project (Long-Range Cumulative Conditions)

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Exhibit 5.4-28

Table 5.4-14, *ADT LOS Summary – Long-Range Cumulative Conditions With And Without Proposed Project* summarizes the total roadway ADT volumes for the long-range cumulative time frame, both with and without project-generated traffic. Also shown here are the number of traffic lanes, roadway capacities and levels of service for each roadway section based on buildout of the City's Circulation Element. As shown in *Table 5.4-14*, multiple roadway segments do not achieve the City's target level of service of D for the projected total daily traffic volumes.

Following is a list of roadways that show a measurable change due to the proposed project and cumulative projects, and result in the roadway exceeding the target level of service of D for long-range cumulative (2030) buildout conditions:

- McBean Parkway between I-5 NB Ramps and Rockwell Canyon Road
- Valencia Boulevard between McBean Parkway and Citrus Drive

Since the defining capacity limitation of an urban arterial roadway is the capacity of its intersections, major intersections within the roadway segments listed above have been evaluated in regards to peak hour performance. Peak hour intersection performance is also the criteria used by the City to define significant project impacts. This intersection evaluation is based on buildout of the arterial roadway network as outlined in the *General Plan Circulation Element*, and the purpose is to identify locations where the proposed project may result in significant impacts in a long-range setting. The results are summarized in *Table 5.4-15*, *ICU and LOS Summary – Long Range Cumulative Conditions With and Without Project*, which shows that during the critical peak hour time periods, the following two locations are significantly impacted by the proposed project and other cumulative projects:

- McBean Parkway at the Valencia Boulevard intersection
- McBean Parkway at the Orchard Village Road intersection

Table 5.4-14
ADT LOS Summary – Long-Range Cumulative Conditions
With and Without Proposed Project

Location	ID #	Mid-block Lanes	Capacity (000's)	No-Project		With-Project		Change Due to Project	
				Volume (000's)	LOS	Volume (000's)	LOS	Volume (total)	V/C
Bouquet Cyn s/o Soledad	321	6	54,000	46,100	D	46,000	D	-100	0.00
Bouquet Cyn s/o Newhall Ranch	79	8	72,000	71,800	E	72,000	E	200	0.00
Bouquet Cyn w/o Seco	78	8	72,000	54,900	C	55,000	C	100	0.00
Copper Hill e/o Newhall Ranch	65	6	54,000	56,000	F	56,000	F	0	0.00
Golden Valley e/o Newhall Ranch	238	4	36,000	25,000	B	25,000	B	0	0.00
Golden Valley n/o Soledad	130	8	72,000	73,000	F	73,000	F	0	0.00
Golden Valley s/o Soledad	198	6	54,000	16,000	A	16,000	A	0	0.00
Golden Valley w/o SR-14	134	6	54,000	30,900	A	31,000	A	100	0.00
Lyons e/o I-5 NB Ramps	115	6	54,000	52,200	E	52,000	E	-200	0.00
Lyons e/o Wiley	116	6	54,000	44,100	D	44,000	D	-100	0.00
Lyons e/o Orchard Village	117	6	54,000	50,700	E	51,000	E	300	0.01
Lyons e/o San Fernando	122	6	54,000	23,900	A	24,000	A	100	0.00
Magic Mtn w/o Old Road	22	8	72,000	80,900	F	81,000	F	100	0.00
Magic Mtn e/o I-5	88	8	72,000	62,100	D	62,000	D	-100	0.00
Magic Mtn e/o Tourney	89	8	72,000	52,100	C	52,000	C	-100	0.00
Magic Mtn w/o Citrus	90	8	72,000	47,100	B	47,000	B	-100	0.00
Magic Mtn w/o Valencia	320	8	72,000	45,100	B	45,000	B	-100	0.00
Magic Mtn w/o San Fernando	91	6	54,000	53,100	E	53,000	E	-100	0.00
Magic Mtn e/o San Fernando	92	6	54,000	45,100	D	45,000	D	-100	0.00
Magic Mtn n/o Via Princessa	197	6	54,000	32,000	A	32,000	A	0	0.00

Table 5.4-14 (Continued)
ADT LOS Summary – Long-Range Cumulative Conditions
With and Without Proposed Project

Location	ID #	Mid-block Lanes	Capacity (000's)	No-Project		With-Project		Change Due to Project	
				Volume (000's)	LOS	Volume (000's)	LOS	Volume (total)	V/C
McBean w/o Old Road	35	6	54,000	26,700	A	27,000	A	300	0.01
McBean w/o I-5	231	6	54,000	37,900	B	39,000	C	1,100	0.02
McBean w/o Rockwell	36	6	54,000	47,700	D	51,000	E	3,300	0.06
McBean e/o Rockwell	37	6	54,000	31,900	A	36,000	B	4,100	0.08
McBean n/o Orchard Village	119	6	54,000	35,400	B	37,000	B	1,600	0.03
McBean s/o Valencia	38	6	54,000	45,800	D	47,000	D	1,200	0.02
McBean s/o Town Center	39	8	72,000	56,500	C	57,000	C	500	0.01
McBean n/o Magic Mtn	40	8	72,000	68,600	E	69,000	E	400	0.01
McBean s/o Ave Scott	258	8	72,000	71,600	E	72,000	E	400	0.01
McBean s/o Newhall Ranch	41	8	72,000	60,600	D	61,000	D	400	0.01
McBean n/o Newhall Ranch	42	6	54,000	46,800	D	47,000	D	200	0.00
Newhall Ranch e/o I-5	50	8	72,000	64,000	D	64,000	D	0	0.00
Newhall Ranch w/o Rye	51	8	72,000	67,000	E	67,000	E	0	0.00
Newhall Ranch e/o Rye	52	8	72,000	57,000	C	57,000	C	0	0.00
Newhall Ranch w/o Baywood	53	8	72,000	73,000	F	73,000	F	0	0.00
Newhall Ranch e/o McBean	54	8	72,000	71,000	E	71,000	E	0	0.00
Newhall Ranch w/o Bouquet	128	8	72,000	68,100	E	68,000	E	-100	0.00
Newhall Ranch e/o Bouquet	55	6	54,000	39,000	C	39,000	C	0	0.00
Newhall Ranch e/o Santa Clarita	129	6	54,000	37,000	B	37,000	B	0	0.00
Old Road n/o Rye Cyn	27	6	54,000	49,000	E	49,000	E	0	0.00
Old Road n/o Magic Mtn	28	6	54,000	55,000	F	55,000	F	0	0.00
Old Road s/o Magic Mtn	29	6	54,000	25,000	A	25,000	A	0	0.00

Table 5.4-14 (Continued)
ADT LOS Summary – Long-Range Cumulative Conditions
With and Without Proposed Project

Location	ID #	Mid-block Lanes	Capacity (000's)	No-Project		With-Project		Change Due to Project	
				Volume (000's)	LOS	Volume (000's)	LOS	Volume (total)	V/C
Old Road s/o Valencia	30	6	54,000	25,700	A	26,000	A	300	0.01
Old Road s/o McBean	31	6	54,000	32,800	B	33,000	B	200	0.00
Old Road s/o Pico	32	4	36,000	17,000	A	17,000	A	0	0.00
Orchard Village s/o McBean	112	6 (4)[1]	54,000 (36,000)[1]	42,100	C (F)[1]	44,000	D (F)[1]	1,900	0.04 (0.05)[1]
Orchard Village n/o Lyons	220	6	54,000	26,400	A	27,000	A	600	0.01
Pico w/o Old Road	34	6	54,000	32,000	A	32,000	A	0	0.00
Pico Cyn w/o I-5	230	6	54,000	42,100	C	42,000	C	-100	0.00
Porta Bella (n) e/o Magic Mtn	131	4	36,000	8,000	A	8,000	A	0	0.00
Porta Bella (s) w/o Santa Clarita	239	4	36,000	20,000	A	20,000	A	0	0.00
Porta Bella (s) e/o Santa Clarita	132	4	36,000	17,000	A	17,000	A	0	0.00
Rye e/o Scott	64	6	54,000	46,100	D	46,000	D	-100	0.00
Rye w/o Scott	63	6	54,000	47,100	D	47,000	D	-100	0.00
Rye e/o Old Road	62	6	54,000	58,100	F	58,000	F	-100	0.00
San Fernando s/o Magic Mtn	81	6	54,000	53,100	E	53,000	E	-100	0.00
San Fernando n/o Valle Oro	111	6	54,000	51,000	E	51,000	E	0	0.00
Santa Clarita s/o Bouquet	142	6	54,000	39,000	C	39,000	C	0	0.00
Santa Clarita s/o Newhall Ranch	221	6	54,000	42,000	C	42,000	C	0	0.00
Santa Clarita s/o Soledad	222	6	54,000	45,100	D	45,000	D	-100	0.00
Santa Clarita s/o Porta Bella (n)	223	6	54,000	37,000	B	37,000	B	0	0.00
Santa Clarita n/o Via Princessa	224	6	54,000	52,000	E	52,000	E	0	0.00
Santa Clarita s/o Via Princessa	225	6	54,000	47,000	D	47,000	D	0	0.00

Table 5.4-14 (Continued)
ADT LOS Summary – Long-Range Cumulative Conditions
With and Without Proposed Project

Location	ID #	Mid-block Lanes	Capacity (000's)	No-Project		With-Project		Change Due to Project	
				Volume (000's)	LOS	Volume (000's)	LOS	Volume (total)	V/C
Scott w/o Channel	87	4	36,000	17,000	A	17,000	A	0	0.00
Sierra Hwy s/o Via Princessa	161	6	54,000	34,900	B	35,000	B	100	0.00
Sierra Hwy s/o Golden Valley	160	6	54,000	28,000	A	28,000	A	0	0.00
Sierra Hwy s/o Santa Clarita	159	6	54,000	37,000	B	37,100	B	100	0.00
Sierra Hwy s/o San Fernando	164	6	54,000	41,000	C	41,000	C	0	0.00
Soledad e/o Bouquet Cyn	101	6	54,000	44,000	D	44,000	D	0	0.00
Soledad w/o Golden Valley	143	6	54,000	41,000	C	41,000	C	0	0.00
Soledad e/o Rainbow Glen	227	6	54,000	51,000	E	51,000	E	0	0.00
Soledad w/o Whites Cyn	144	6	54,000	43,000	C	43,000	C	0	0.00
Soledad e/o Whites Cyn	145	6	54,000	51,900	E	52,000	E	100	0.00
Stanford n/o Rye Cyn	170	4	24,000	6,000	A	6,000	A	0	0.00
Stanford e/o Rye Cyn	233	4	24,000	14,000	A	14,000	A	0	0.00
Tibbitts n/o Magic Mtn	141	6	54,000	30,100	A	30,000	A	-100	0.00
Valencia w/o Old Road	18	8	72,000	58,800	D	59,000	D	200	0.00
Valencia e/o Old Road	19	8	72,000	56,100	C	56,000	C	-100	0.00
Valencia e/o I-5 NB Ramps	96	8	72,000	71,200	E	71,000	E	-200	0.00
Valencia e/o Tourney	97	8	72,000	63,200	D	63,000	D	-200	0.00
Valencia w/o McBean	98	8	72,000	68,200	E	68,000	E	-200	0.00
Valencia e/o McBean	319	6	54,000	48,500	D	49,000	E	500	0.01
Valencia w/o Citrus	99	6	54,000	55,600	F	56,000	F	400	0.01
Valencia w/o Cinema	100	6	54,000	55,700	F	56,000	F	300	0.01
Via Princessa w/o Magic Mtn	106	6	54,000	30,200	A	31,000	A	800	0.01

Table 5.4-14 (Continued)
ADT LOS Summary – Long-Range Cumulative Conditions
With and Without Proposed Project

Location	ID #	Mid-block Lanes	Capacity (000's)	No-Project		With-Project		Change Due to Project	
				Volume (000's)	LOS	Volume (000's)	LOS	Volume (total)	V/C
Via Princessa e/o Magic Mtn	107	6	54,000	43,400	C	44,000	D	600	0.01
Via Princessa e/o Santa Clarita	155	6	54,000	65,400	F	66,000	F	600	0.01
Via Princessa w/o Rainbow Glen	151	6	54,000	17,800	A	18,000	A	200	0.00
Via Princessa s/o Whites Cyn	153	6	54,000	51,000	E	51,000	E	0	0.00
Via Princessa s/o Sierra Hwy	154	6	54,000	40,000	C	40,000	C	0	0.00
Whites Cyn n/o Soledad	149	6	54,000	48,000	D	48,000	D	0	0.00
Whites Cyn s/o Soledad	150	6	54,000	45,900	D	46,000	D	100	0.00
Wiley e/o Orchard Village	105	6	54,000	27,100	A	28,000	A	900	0.02
Wiley e/o Tournament	104	6	54,000	22,100	A	22,000	A	-100	0.00
Wiley n/o Lyons	103	6	54,000	24,900	A	25,000	A	100	0.00
Wiley s/o Lyons	102	4	36,000	10,000	A	10,000	A	100	0.00

1. Based on the existing 4-Lane Orchard Village Road
Note: Capacity and roadway ADT volumes are given in 000's, project only volumes represent the total (net) change in ADT that occurs due to the project.
Significant impacts are shown in **bold**.

Table 5.4-15
ICU and LOS Summary – Long Range Cumulative Conditions With and Without Project

INTERSECTION	Long-Range Cumulative Without Project				Long-Range Cumulative With Project				Change	
	AM		PM		AM		PM		AM	PM
15. I-5 NB Ramps & McBean	.58	A	.75	C	.61	B	.77	C	.03	.02
42. Rockwell & McBean	.82	B	.77	C	.82	D	.80	C	.00	.03
44. McBean & Valencia	.80	C	.90	D	.79	C	.91	E	-.01	.01*
55. Orchard Village & McBean	.77	C	1.07	F	0.79	C	1.22	F	.02	.15*

*Significant Project Impact (see Table 5.4-2)

Level of service ranges:

.00 - .60	A
.61 - .70	B
.71 - .80	C
.81 - .90	D
.91 - 1.00	E
Above 1.00	F

The Mitigation Phasing Analysis concluded that at the 15-year buildout of the proposed Master Plan, the proposed project's contribution toward the need for the improvements recommended for the McBean Parkway/Valencia Boulevard and McBean Parkway/Orchard Village Road intersections are not yet warranted. However, under the long-range (2030) with project scenario, the proposed project results in a significant cumulative impact to these two intersections. Implementation of Mitigation Measures TR6, TR7, and TR8, below, reduce project-related impacts at these two intersections to less than significant levels. The project's payment of its fair share contribution of the improvements identified in TR7 and TR8 would address project-related impacts at these two intersections; however, given that dedicated funding sources for the remaining costs of these improvements have yet to be determined, there remains a significant cumulative impact.

Mitigation Measures: The following mitigation measures are proposed to address long-range cumulative project impacts to the traffic system.

TR6 In order to address impacts along McBean Parkway at the Orchard Village Road intersection, the following improvement shall be required:

- Restripe the hospital driveway to reconfigure the first through lane to a shared left-turn/through lane. This improvement shall be implemented in conjunction with the construction of MOB3.

TR7 In order to address long-term (2030) impacts along McBean Parkway at the Valencia Boulevard intersection, the following improvement shall be required:

- Add a fourth westbound through lane (requires the widening of Valencia Boulevard).

The project's fair share equals 4.3 percent of the cost of this improvement (refer to *Table 5.4-16*, *Share Summary*). If a fair share program has been adopted or if these improvements have been added to a district, such as a Bridge & Thoroughfare District, payment of fair share costs shall be made prior to the issuance of a building permit for MOB3. This fair share payment shall be considered this project's full compliance of Mitigation Measure TR7 and, if a funding program is established, would reduce impacts to less than significant.

TR8 In order to address long-term (2030) impacts along McBean Parkway at the Orchard Village Road intersection, the following improvement shall be required:

- Add a separate eastbound right-turn lane (requires the widening of McBean Parkway).

The project's fair share equals 30.5 percent of the cost of this improvement (refer to *Table 5.4-16*, *Share Summary*). If a fair share program has been adopted or if these improvements have been added to a district, such as a Bridge & Thoroughfare District, payment of fair share costs shall be made prior to the issuance of a building permit for MOB3. This fair share payment shall be considered this project's full compliance of Mitigation Measure TR8 and, if a funding program is established, would reduce impacts to less than significant.

Table 5.4-17, *ICU and LOS Summary with Project Mitigation*, illustrates the potential project-related impacts after all mitigation measures recommended within the project's *Traffic Impact Analysis* have been applied. However, because there is now no reasonable plan of actual mitigation that has been adopted and is in place, and because these improvements have not been added to a district, such as a Bridge & Thoroughfare District, impacts under the long-range cumulative scenario would result in significant unavoidable impacts at the following two intersections:

- McBean Parkway at Valencia Boulevard
- McBean Parkway at Orchard Village Road

Table 5.4-16
Share Summary

Intersection	Existing Peak Hour Volumes		Long Range Cumulative with Project Peak Hour Volumes		Project Only Peak Hour Volumes		Share
	AM	PM	AM	PM	AM	PM	
44. McBean & Valencia	5,537	7,401	6,830	9,350	40	100	4.3%
55. Orchard Village and McBean	3,253	4,364	4,140	5,840	310	410	30.5%

Table 5.4-17
ICU and LOS Summary with Project Mitigation

Intersection	Existing (2005) Counts		2010 No Project		2010 With MOB 1		2010 With Mitigation		2013 No Project		2013 With MOB 1&2[1]		2013 With Mitigation		
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
14. I-5 SB Ramps & McBean	.55	.64	.55	.68	.56	.68	--	--	.57	.70	.57	.71	--	--	
15. I-5 NB Ramps & McBean	.40	.65	.41	.69	.43	.69	--	--	.44	.71	.46	.72	--	--	
42. Rockwell & McBean	.45	.74	.57	.72	.58	.73	--	--	.65	.72	.66	.74	--	--	
44. McBean & Valencia	.61	.73	.71	.79	.71	.79	--	--	.76	.83	.77	.83	--	--	
45. McBean & Magic Mtn	.57	.87	.73	.93	.73	.94	.68	.91	.81	.98	.75	.99	.75	.93	
51. Wiley & Lyons	.49	.74	.56	.76	.56	.76	--	--	.60	.78	.60	.78	--	--	
52. Tournament & Wiley	.38	.45	.41	.54	.41	.54	--	--	.41	.61	.42	.61	--	--	
53. Valley & Lyons	.44	.56	.47	.60	.47	.60	--	--	.50	.63	.51	.64	--	--	
54. Orchard Village & Wiley	.46	.76	.54	.88	.54	.90	.50	.80	.60	.95	.57	.86	--	--	
55. Orchard Village & McBean	.57	.76	.60	.79	.63	.84	.61	.78	.63	.82	.65	.82	--	--	
56. Newhall & Lyons	.60	.60	.64	.61	.64	.61	--	--	.65	.64	.65	.64	--	--	
57. Valencia & Magic Mtn	.62	.77	.81	.91	.82	.91	--	--	.96	1.02	.97	1.02	.78	1.02	

Intersection	2016 No Project		2016 With MOB 1&2 & Hospital[1]		2016 With Mitigation		Year 2019 No Project		Year (019 With MOB 1,2 & 3 & Hospital[1]		Long Range Cumulative Without Project		Long Range Cumulative With MOB 1,2&3 & Hospital[1]		Long Range Cumulative With Mitigation	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
14. I-5 SB Ramps & McBean	.59	.72	.59	.75	--	--	.61	.74	.61	.77	--	--	--	--	--	--
15. I-5 NB Ramps & McBean	.46	.74	.49	.74	--	--	.48	.75	.51	.77	.58	.75	.61	.77	--	--

Table 5.4-17(Continued)
ICU and LOS Summary with Project Mitigation

Intersection	2016 No Project		2016 With MOB 1&2 & Hospital[1]		2016 With Mitigation		Year 2019 No Project		Year 2019 With MOB 1,2 &3 & Hospital[1]		Long Range Cumulative Without Project		Long Range Cumulative With MOB 1,2&3 & Hospital[1]		Long Range Cumulative With Mitigation	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
42. Rockwell & McBean	.70	.71	.72	.74	--	--	.74	.75	.75	.78	.82	.77	.82	.80	--	--
44. McBean & Valencia	.82	.84	.82	.85	--	--	.87	.86	.87	.86	.80	.90	.79	.91	.73	.85
45. McBean & Magic Mtn	.92	1.04	.84	.96	--	--	.98	1.08	.89	.98	--	--	--	--	--	--
51. Wiley & Lyons	.64	.81	.64	.81	--	--	.67	.83	.67	.83	--	--	--	--	--	--
52. Tournament & Wiley	.43	.66	.43	.66	--	--	.44	.72	.44	.72	--	--	--	--	--	--
53. Valley & Lyons	.54	.67	.55	.68	--	--	.57	.70	.57	.72	--	--	--	--	--	--
54. Orchard Village & Wiley	.67	1.02	.63	.93	--	--	.71	1.05	.68	.96	--	--	--	--	--	--
55. Orchard Village & McBean	.68	.84	.68	**.86**	.67	.84	.70	.87	.70	.87	.77	1.07	.77	**1.10**	.67	.90
56. Newhall & Lyons	.67	.67	.67	.67	--	--	.69	.69	.70	.69	--	--	--	--	--	--
57. Valencia & Magic Mtn	1.06	1.10	.86	1.10	--	--	1.13	1.15	.90	1.15	--	--	--	--	--	--

Significant Impacts shown in **Bold**.
1 Includes mitigation identified in previous phase(s).
Level of service ranges: .00 - .60 A
.61 - .70 B
.71 - .80 C
.81 - .90 D
.91 - 1.00 E
Above 1.00 F

Note: For purposes of the traffic analysis, it was assumed that the following buildings would be completed by the dates shown:
Medical Office Building 1 (MOB1) – 2010
Inpatient Building and Medical Office Building 2 (MOB2) – 2013 to 2016
Medical Office Building 3 (MOB3) – 2019

A description of Interim Year and Long-Range scenarios are provided on page 5.4-13 and 5.4-15, respectively.

Level of Significance After Mitigation: Significant Unavoidable Impact.

5.4.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With imposition of the recommended mitigation measures, implementation of the proposed project would meet the City of Santa Clarita's performance criteria for arterial roadways and intersections and would have less than significant traffic impacts for the interim year scenario, as well as less than significant site access and on-site circulation impacts. All other identified project traffic impacts occurring over the 15-year life of the Master Plan project were concluded to be at less than significant levels, and did not require mitigation.

However, under the long-range cumulative scenario, impacts to two intersections would remain significant and unavoidable despite the imposition of mitigation measures:

- McBean Parkway at the Valencia Boulevard
- McBean Parkway at the Orchard Village Road

If sufficient right-of-way is dedicated and/or improvements are made at the McBean Parkway/Valencia Boulevard intersection at some point in the future, this significant impact would no longer be applicable to the project. However, Mitigation Measure TR7 has been included to require the HMNMH Master Plan to mitigate the project's contribution toward traffic impacts at this intersection prior to construction of MOB3 should a fair share program have been adopted or if these improvements have been added to a district, such as a Bridge & Thoroughfare District.

As noted in Section 3.0, Project Description, the project proposes to dedicate sufficient right-of-way at the McBean Parkway/Orchard Village Road intersection that would accommodate future improvements resulting from cumulative development that is anticipated to occur beyond the 15-year Master Plan. Mitigation Measure TR8 has been included to require the HMNMH Master Plan to mitigate the project's contribution toward these impacts prior to construction of MOB3 should a fair share program have been adopted or if these improvements have been added to a district, such as a Bridge & Thoroughfare District.

If the City of Santa Clarita approves the HMNMH Master Plan, the City shall be required to adopt findings for these two intersections in accordance with Section 15091 of the *CEQA Guidelines* and prepare a Statement of Overriding Considerations in accordance with Section 15093 of the *CEQA Guidelines*.