

Civic Center Master Plan Project Traffic Impact Analysis Moorpark, CA



PREPARED FOR



Moorpark
Life can be this good



August 2022



Balancing the Natural and Built Environment

PSOMAS

**CIVIC CENTER MASTER PLAN PROJECT
TRAFFIC IMPACT ANALYSIS**

MOORPARK, CA

Prepared For



Moorpark
Life can be this good

Prepared By

P S O M A S

Psomas Project No. 3MOO010100

August 2022

TABLE OF CONTENTS

1. INTRODUCTION	1
1.1. STUDY AREA	1
1.2. ANALYSIS METHODOLOGY	7
1.2.1. INTERSECTION CAPACITY UTILIZATION (ICU)	8
1.2.2. HIGHWAY CAPACITY MANUAL (HCM)	8
1.3. ANALYSIS SCENARIOS	8
2. EXISTING STUDY AREA CONDITIONS	10
2.1. ROADWAY NETWORK	10
2.2. EXISTING SITE	11
2.3. TRAFFIC VOLUMES	12
2.4. EXISTING OPERATIONS (2022)	12
3. FUTURE TRAFFIC VOLUMES	15
3.1. FUTURE TRAFFIC VOLUMES WITHOUT PROJECT	15
3.2. PROJECT TRAFFIC VOLUMES	21
3.2.1. PROJECT TRIP GENERATION	21
3.2.2. PROJECT TRIP DISTRIBUTION	22
3.2.3. PROJECT TRAFFIC VOLUMES	22
3.3. FUTURE TRAFFIC VOLUMES WITH PROJECT	26
4. FUTURE OPERATION ANALYSIS	29
4.1. NETWORK IMPROVEMENTS	29
4.2. OPENING YEAR OPERATIONS (2025)	29
4.2.1. OPENING YEAR WITHOUT PROJECT CONDITIONS	29
4.2.2. OPENING YEAR WITH PROJECT CONDITIONS	29
4.2.3. OPENING YEAR WITH PROJECT SIGNIFICANT IMPACT EVALUATION	30
4.3. BUILDOUT YEAR OPERATIONS (2037)	32
4.3.1. BUILDOUT YEAR WITHOUT PROJECT CONDITIONS	32

4.3.2. BUILDOUT YEAR WITH PROJECT CONDITIONS _____	32
4.3.3. BUILDOUT YEAR WITH PROJECT SIGNIFICANT IMPACT EVALUATION ___	32
5. MITIGATION MEASURES _____	35
6. VEHICLE MILES TRAVELED _____	39
7. CONCLUSION _____	41
8. REFERENCES _____	43

APPENDIX A – TRAFFIC VOLUME DATA (2022)

APPENDIX B – ICU/SYNCHRO REPORTS – EXISTING CONDITIONS

APPENDIX C – CUMULATIVE PROJECT LIST

APPENDIX D – INTERNAL CAPTURE TRIP CALCULATIONS

APPENDIX E – PROPOSED HIGH STREET IMPROVEMENT PLANS

APPENDIX F – ICU/SYNCHRO REPORTS – 2025 CONDITIONS

APPENDIX G – ICU/SYNCHRO REPORTS – 2037 CONDITIONS

APPENDIX H – ICU/SYNCHRO REPORTS – WITH MITIGATION MEASURE CONDITIONS

LIST OF TABLES

TABLE 1. INTERSECTION LEVEL OF SERVICE DEFINITIONS _____	7
TABLE 2. SIGNIFICANT TRAFFIC IMPACT STANDARDS _____	8
TABLE 3. EXISTING LAND USE STATISTICAL SUMMARY _____	11
TABLE 4. EXISTING LEVEL OF SERVICE ANALYSIS _____	14
TABLE 5. CUMULATIVE PROJECTS _____	16
TABLE 6. PROJECT TRIP GENERATION (2025) _____	21
TABLE 7. PROJECT TRIP GENERATION (2037) _____	22
TABLE 8. OPENING YEAR (2025) LEVEL OF SERVICE ANALYSIS _____	31
TABLE 9. BUILDOUT YEAR (2037) LEVEL OF SERVICE ANALYSIS _____	34
TABLE 10. OPENING YEAR (2025) TRAFFIC CONDITIONS WITH PROJECT AND MITIGATION _____	36
TABLE 11. BUILDOUT YEAR (2037) TRAFFIC CONDITIONS WITH PROJECT AND MITIGATION _____	36

LIST OF FIGURES

FIGURE 1. PROJECT LOCATION _____	3
FIGURE 2. SITE PLAN _____	4
FIGURE 3. STUDY INTERSECTION LOCATION _____	5
FIGURE 4. INTERSECTION GEOMETRY AND TRAFFIC CONTROL _____	6
FIGURE 5. EXISTING TRAFFIC VOLUMES (2022) _____	13
FIGURE 6. LOCATION OF CUMULATIVE PROJECTS _____	17
FIGURE 7. CUMULATIVE PROJECT TRAFFIC VOLUMES _____	18
FIGURE 8. 2025 WITHOUT PROJECT TRAFFIC VOLUMES _____	19
FIGURE 9. 2037 WITHOUT PROJECT TRAFFIC VOLUMES _____	20
FIGURE 10. PROJECT TRIP DISTRIBUTION _____	23
FIGURE 11. PROJECT TRAFFIC VOLUMES (2025) _____	24
FIGURE 12. PROJECT TRAFFIC VOLUMES (2037) _____	25
FIGURE 13. 2025 WITH PROJECT TRAFFIC VOLUMES _____	27
FIGURE 14. 2037 WITH PROJECT TRAFFIC VOLUMES _____	28
FIGURE 15. PROPOSED EXCLUSIVE NORTHBOUND LEFT TURN LANE _____	37
FIGURE 16. PROPOSED RIGHT-IN AND RIGHT-OUT ACCESS _____	38
FIGURE 17. TRANSIT PRIORITY AREA _____	40

1. INTRODUCTION

This Traffic Impact Analysis provides an evaluation of the proposed Civic Center Master Plan Project located in the central, downtown area of the City of Moorpark in Ventura County, California. The Project location is shown in Figure 1. The project is expected to include construction of a new library with outdoor plaza, a commercial area with a public park, a residential area, a new city hall and mercado, as well as removal of the existing library, city hall and community center/active adult center buildings. The project would include the following phases:

Phase 1: The construction of a 18,000 square foot (sf) library with outdoor plaza and a 4,000 sf future expansion area. The repurpose of the existing city hall into 5,085 sf of office space. Open February 2025.

Phase 2: The construction of a 13,000 sf commercial area with a public park. Open May 2030.

Phase 3: The construction of a 75 unit at 25 dwelling unit per acre residential area. The removal of the existing city hall and community center/active adult center buildings. Open June 2032.

Phase 4: The construction of a 22,000 sf city hall and mercado. Open June 2037.

The site plan is shown in Figure 2. As shown in the site plan, the project will have access from both Moorpark Avenue (SR-23) to the east and West High Street to the south. A detailed site plan with phases will be shown in the EIR report.

1.1. STUDY AREA

The eight study intersections analyzed in this study are listed below. As shown, six intersections are currently signalized, one is unsignalized and the intersection of Gabbert Road and proposed High Street extension will be built as unsignalized. Figure 3 shows the location of the eight study intersections. Figure 4 shows the existing or proposed geometry and traffic control at each of the study intersections.

1. Moorpark Avenue/Walnut Canyon Road and Casey Road (signalized)
2. Moorpark Avenue and Charles Street (unsignalized)
3. Moorpark Avenue and High Street (signalized)
4. Spring Road and High Street/Princeton Avenue (signalized)
5. Moorpark Avenue and First Street/Poindexter Avenue (signalized)
6. Moorpark Avenue and Los Angeles Avenue (signalized)
7. Walnut Canyon Road and Spring Road (signalized)
8. Gabbert Road and proposed High Street extension (unsignalized)





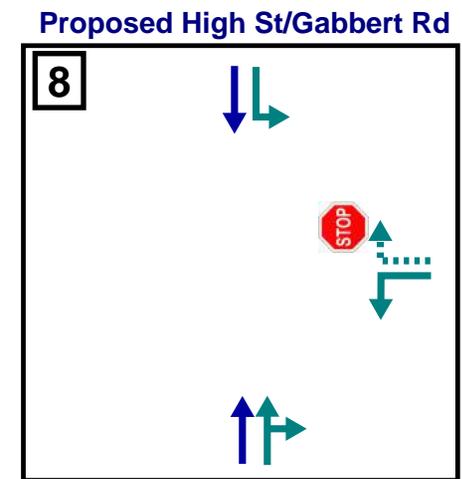
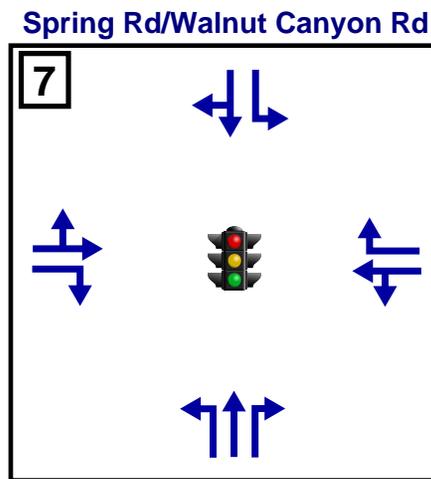
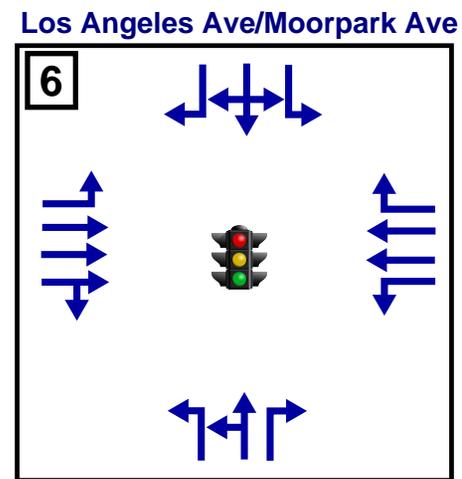
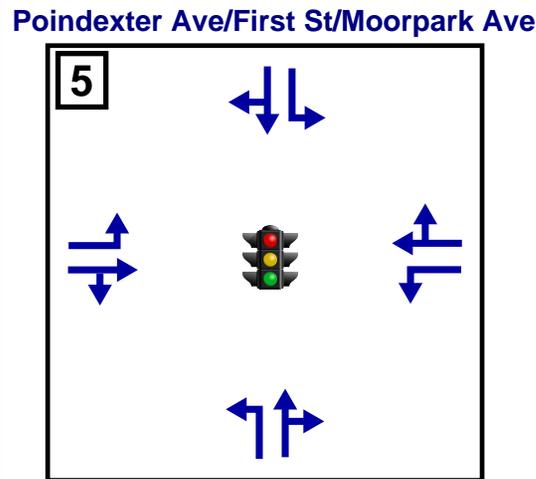
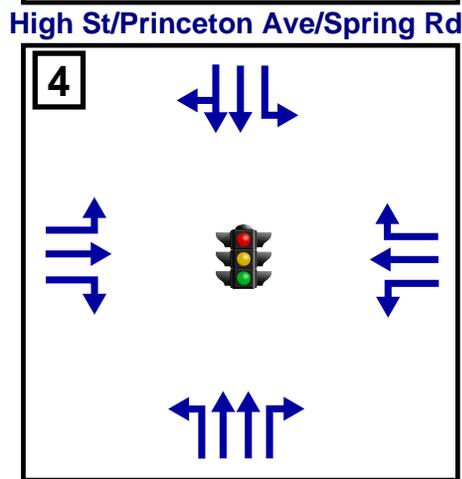
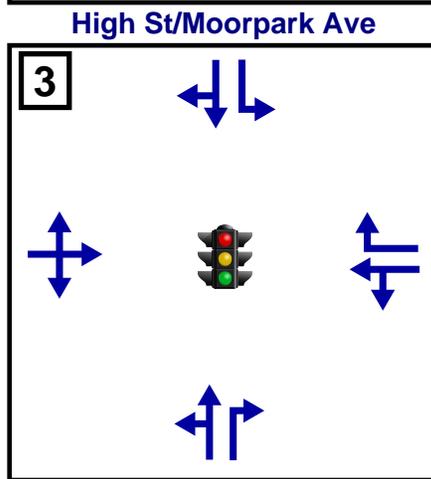
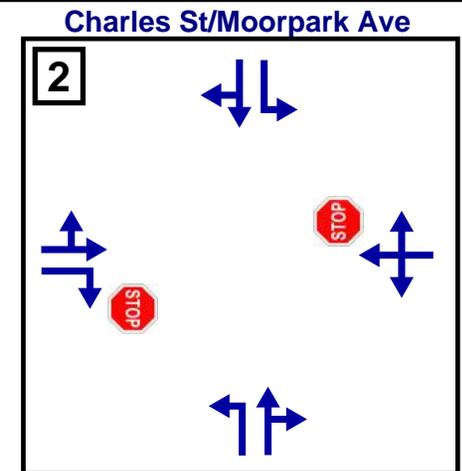
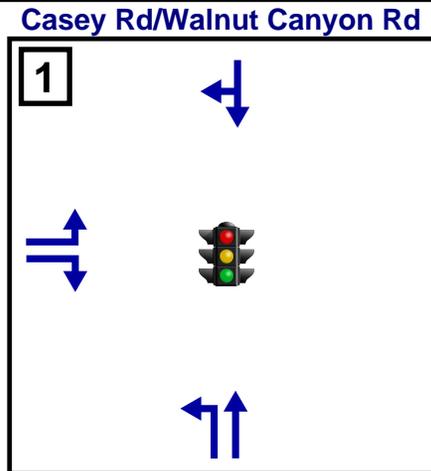
PROPOSED CITY HALL : 22,000 Sq. Ft
PROPOSED LIBRARY : 18,000 Sq. Ft (4,000 Sq. Ft FUTURE EXPANSION)



SEPTEMBER 03, 2020







1.2. ANALYSIS METHODOLOGY

Level of Service (LOS) is the typical measure used to characterize the quality of motorized traffic operations at an intersection or roadway segment. LOS A represents relatively free operating conditions, whereas LOS F has unstable flow and congestion with volumes at or near the capacity of the facility. Significant motorist delays and queues can occur when the LOS reaches level F.

Table 1 provides descriptions and thresholds for LOS A through LOS F for each intersection evaluation methodology used in this report.

Table 1. Intersection Level of Service Definitions

Level of Service	Description	Intersection Volume to Capacity (V/C) Ratio/ICU Value	Signalized Intersection Delay (sec/veh)	Unsignalized Intersection Delay (sec/veh)
A	Primarily free-flow operation	0.000 - 0.600	≤10	≤10
B	Reasonably unimpeded operation	>0.600 - 0.700	>10 and ≤20	>10 and ≤15
C	Stable operation	>0.700 - 0.800	>20 and ≤35	>15 and ≤25
D	Less than stable conditions - small increases in flow may cause substantial increases in delay	>0.800 - 0.900	>35 and ≤55	>25 and ≤35
E	Unstable operation and significant delay	>0.900 - 1.000	>55 and ≤80	>35 and ≤50
F	Congested conditions, including flow at extremely low speed	>1.000	>80	>50

This study follows the *City of Moorpark General Plan Circulation Element*¹ and the *Guidelines for Preparing Traffic and Circulation Studies*². Per the Circulation Element, LOS C shall be the system performance objective for traffic volumes on the circulation system, and for intersections or roadways already operating at less than LOS C, the LOS shall be maintained or improved. Table 2 shows the significant traffic impact standards included in the *Traffic Impact Analysis for Proposed Hitch Ranch Specific Plan*³ and provided by the City of Moorpark for signalized and un-signalized intersections for use in evaluating the project for significant impacts.

Table 2. Significant Traffic Impact Standards

Intersection Type	Criteria
Signalized	Degrading the LOS at a signalized intersection to an unacceptable level of Service (LOS D or worse), or
	Increasing V/C at a signalized intersection operating at LOS F by 0.020 or more
Unsignalized	Degrading the LOS at an un-signalized intersection to an unacceptable level of Service (LOS D or worse), or
	Increasing delay at an un-signalized intersection operating at unacceptable level by five or more seconds, or
	Resulting in satisfying the most recent California Manual on Uniform Traffic Control Devices (CAMUTCD) peak hour volume warrant or other warrants for traffic signal installation at the intersection

1.2.1. Intersection Capacity Utilization (ICU)

The ICU methodology is used to determine the operating LOS of signalized intersections. This methodology requires the calculation of the intersection volume/capacity (V/C) ratio, which is the summation of critical lane group flow ratios with a yellow clearance adjustment. The LOS estimated by the ICU methodology is directly related to the intersection V/C ratio. Per City guidance, a lost time factor of 0.1 and lane capacities of 1,500 vph for left and right turn lanes and 1,600 vph for through lanes should be included throughout the ICU calculation.

1.2.2. Highway Capacity Manual (HCM)

This study applied the *HCM*⁴ methodology to evaluate unsignalized intersections, which defines LOS based on delay. The analyses for the unsignalized intersections were conducted using the software *Synchro*. For unsignalized intersections, delay and LOS are determined based on the worst intersection movement.

1.3. ANALYSIS SCENARIOS

The traffic generated by the project or by the project in combination with other projects in the area could worsen the LOS of an intersection. To assess the potential traffic impacts

due to the project and due to background traffic growth and related projects, the following scenarios were evaluated:

- Existing conditions (2022)
- Opening Year Without Project (2025)
- Opening Year with Project (2025)
- Buildout Year Without Project (2037)
- Buildout Year with Project (2037)

The new library is expected to open to the public in 2025 and the project is expected to be fully built-out by 2037. The existing conditions analysis is included per City requirements to establish a baseline of operations in the study area. The potential impacts and needs for mitigation are determined by the conditions with and without the project from the same year.

2. EXISTING STUDY AREA CONDITIONS

2.1. ROADWAY NETWORK

The roadways in the study area as shown in Figure 3 include the following:

Casey Road is a two-lane undivided roadway with a posted speed limit of 25 mph. The roadway terminates westerly at Walnut Canyon Road and easterly in a cul-de-sac at Walnut Canyon Elementary School. The roadway is classified as a local collector in the *City of Moorpark General Plan Circulation Element (Circulation Element)*.

Charles Street is a two-lane undivided roadway with a posted speed limit of 25 mph. The roadway starts in a cul-de-sac at a residential area to the east and terminates at the current Moorpark City Hall parking lot to the west.

High Street is a two-lane undivided roadway designated as a local collector in the Circulation Element. The roadway has a posted speed limit of 30 mph in the study area and becomes **Princeton Avenue** east of **Spring Road**. High Street is expected to be extended from its current western terminus westward to **Gabbert Road**.

Poindexter Avenue is a two-lane undivided roadway with a posted speed limit of 40 mph. The roadway terminates westerly at Moorpark Avenue and easterly at Gabbert Road and is classified as a local collector in the Circulation Element.

First Street is a two-lane undivided roadway in a residential area. First Street with Poindexter Avenue forms an off-set four-leg intersection at Moorpark Avenue.

Los Angeles Avenue is a six-lane undivided roadway which serves as a State Route (SR-118). The roadway has a posted speed limit of 45 mph near the intersection of Los Angeles Avenue and Moorpark Avenue and is classified as a six-lane arterial in the Circulation Element.

Gabbert Road is a two-lane undivided roadway which connects the residences on the north side of Moorpark with Los Angeles Avenue on the south. The roadway is classified as a local collector in the Circulation Element.

Moorpark Avenue is a two-lane undivided roadway and becomes **Walnut Canyon Road** north of Everett Street. The roadway serves as a State Route (SR-23) and is classified as a local collector in the Circulation Element. The roadway has a posted speed limit of 30 mph for the segment near the project area.

Spring Road is generally a four-lane divided roadway north of Los Angeles Avenue and narrows to a two-lane divided roadway south of Los Angeles Avenue. The roadway has a 40 mph speed limit between East High Street/Princeton Avenue and Los Angeles Avenue. The roadway speed limit increases to 45 mph north and south of the 40 mph roadway section.

2.2. EXISTING SITE

The project site is located at west of Moorpark Avenue, south of Casey Road and north of High Street. The northern portion of the project site is the existing Moorpark Civic Center. The existing Moorpark Civic Center is generally comprised of a 7,800 sf Moorpark City Library, a 9,260 sf Active Adult Center/Community Center and a total floor area of 18,000 sf Moorpark City Hall. The western portion of the project site is currently vacant. Table 3 shows the existing land use statistical summary⁵.

Table 3. Existing Land Use Statistical Summary

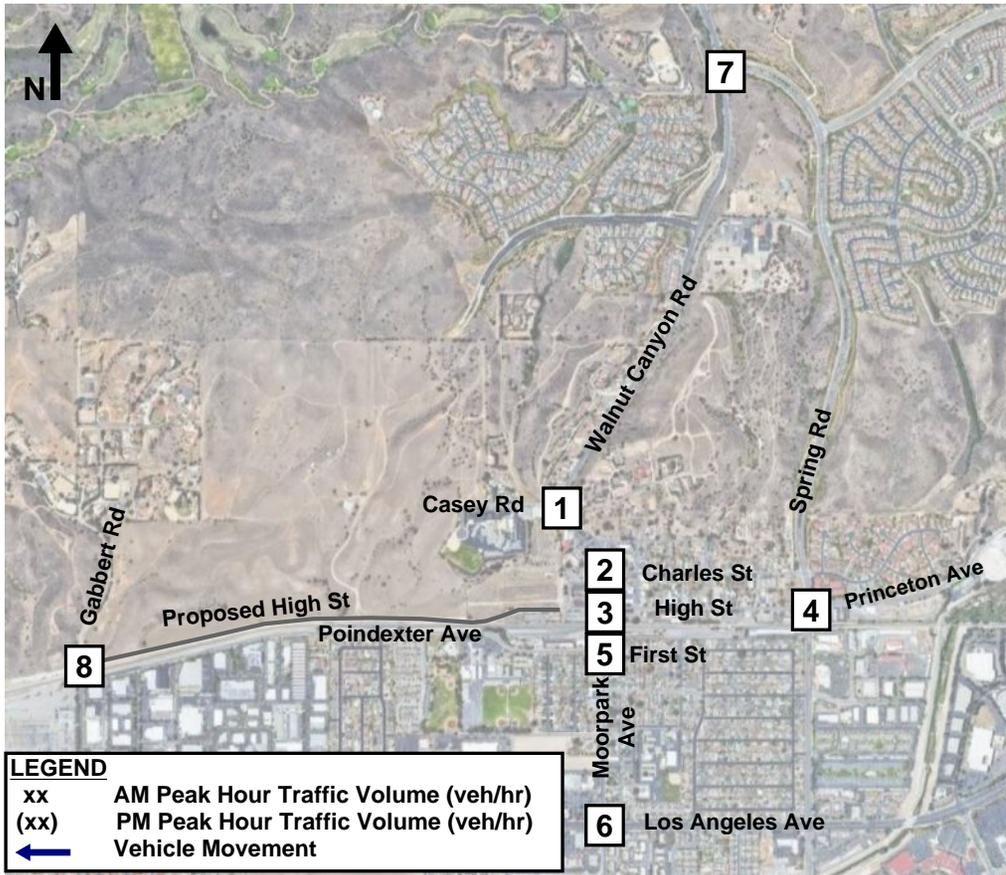
Land Use	Square Feet (sf)	Parking Spaces	Approximate Acres
Existing Moorpark Civic Center			
Moorpark City Library	7,800	42	4.6
Active Adult Center/Community Center	9,260	84	
Administration Building	8,000		
Annex Building ^a	2,100		
Development Services Building ^a	5,800		
File Room/Employee Restrooms/Kitchen ^a	2,100		
Playground	N/A		
<i>Subtotal</i>	<i>35,060</i>	<i>126</i>	
Public Parking Lot	N/A	59	N/A
Vacant Property	N/A	N/A	9.1
sf: square feet; N/A: not applicable			
^a . Modular buildings			

2.3. TRAFFIC VOLUMES

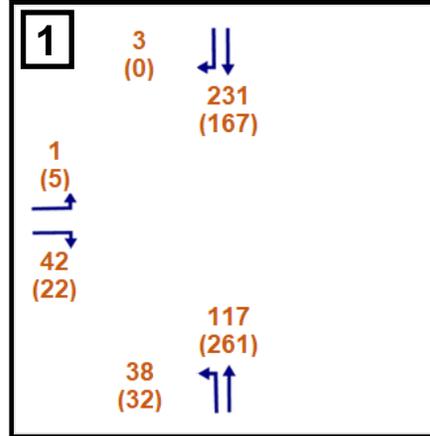
Traffic volume data was collected at the seven intersections in the list in the Section 1.1 and the intersection of Poindexter Avenue and Gabbert Road from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM on Wednesdays in June 2022. The peak hours were found to be from 7:30 AM to 8:30 AM and 4:30 PM to 5:30 PM. Figure 5 shows the existing volumes. Note that the traffic volume at the new planned eighth intersection, at the proposed High Street extension and Gabbert Road, was derived from the data at the intersection of Poindexter Avenue and Gabbert Road. The collected data is included in Appendix A.

2.4. EXISTING OPERATIONS (2022)

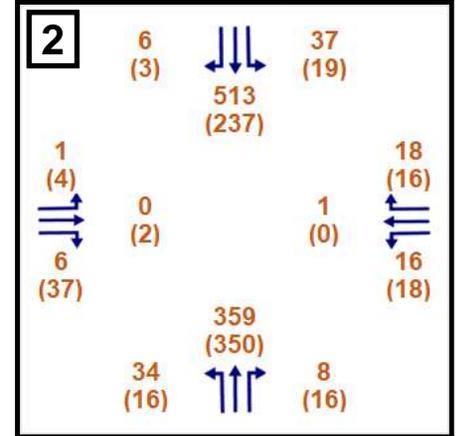
The signalized study intersections were evaluated using the ICU methodology and the unsignalized intersections were evaluated using Synchro delay based methodology. For unsignalized intersections, delay and LOS are evaluated for the worst movement. The LOS is shown in Table 4 for existing conditions. The ICU and Synchro reports are included in Appendix B. As shown in the table, the intersection of Los Angeles Avenue and Moorpark Avenue currently operates at LOS C in the AM peak hour and LOS D in the PM peak hour, all other signalized intersections currently operate at LOS C or better in both peak hours. The worst minor-street (stop controlled) movement at the intersection of Charles Street and Moorpark Avenue currently operates at LOS D in the AM peak hour and LOS C in the PM peak hour.



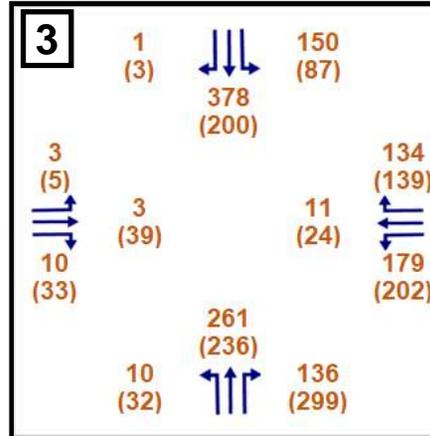
Casey Rd/Walnut Canyon Rd



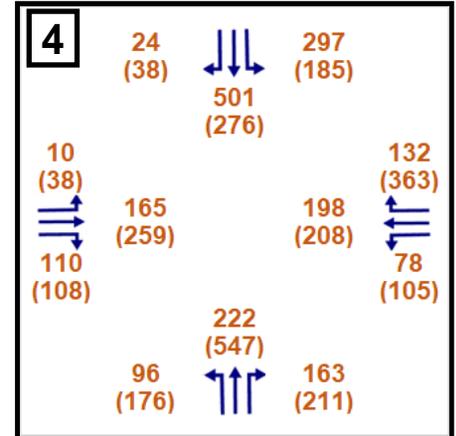
Charles St/Moorpark Ave



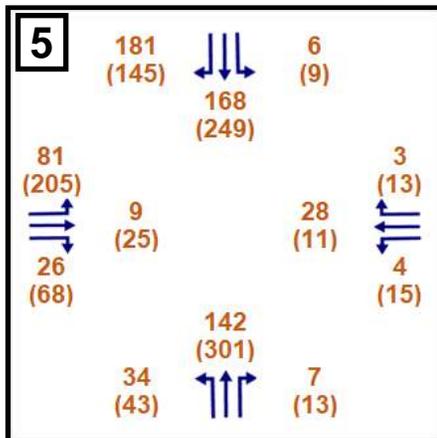
High St/Moorpark Ave



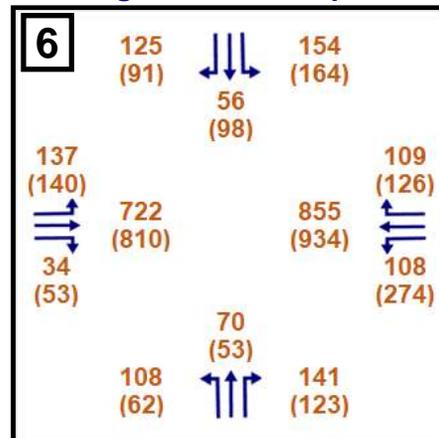
High St/Princeton Ave/Spring Rd



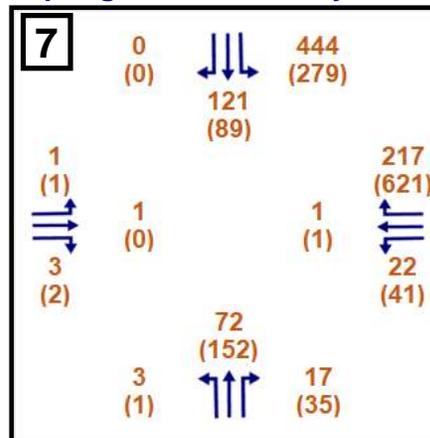
Poindexter Ave/First St/Moorpark Ave



Los Angeles Ave/Moorpark Ave



Spring Rd/Walnut Canyon Rd



High St/Gabbert Rd

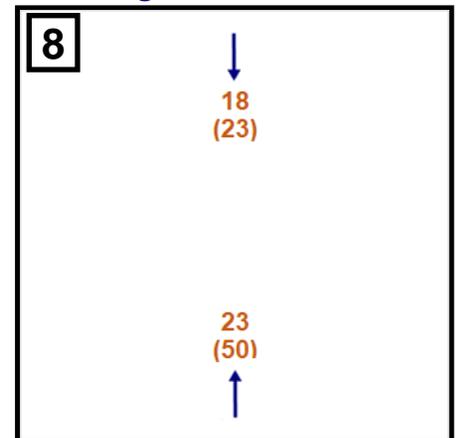


Table 4. Existing Level of Service Analysis

Signalized Intersection	Existing			
	AM Peak Hour		PM Peak Hour	
	V/C	LOS	V/C	LOS
Casey Rd/Walnut Canyon Rd/Moorpark Ave	0.309	A	0.240	A
High St/Moorpark Ave	0.671	B	0.616	B
Princeton Ave/High St/Spring Rd	0.562	A	0.662	B
Poindexter Ave/First Ave/Moorpark Ave	0.430	A	0.544	A
Los Angeles Ave/Moorpark Ave	0.776	C	0.803	D
Spring Rd/Walnut Canyon Rd	0.587	A	0.796	C
Unsignalized Intersection	Existing			
	AM Peak Hour		PM Peak Hour	
	Delay*	LOS	Delay*	LOS
Charles St/Moorpark Ave	26.700	D	16.300	C

*Delays are reported as the worst movement at unsignalized intersections.

3. FUTURE TRAFFIC VOLUMES

3.1. FUTURE TRAFFIC VOLUMES WITHOUT PROJECT

The cumulative traffic volumes are the anticipated traffic volumes in a future year without the project traffic. The anticipated annual growth for the general plan year was estimated to be 0.65% per year between 2020 and 2035 based on population growth estimates in the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).⁶ However, to be conservative, growth between the existing and study years was assumed to occur at 1% per year.

In addition to the growth rate, the estimated traffic from nearby development projects was incorporated. The City of Moorpark provided a list of projects with peak hour and daily trips which are in the entitlement process or are under construction (cumulative projects). There are twenty cumulative projects that could potentially impact traffic at the study intersections, as described in Table 5 and shown in Figure 6. The cumulative project list is included in Appendix C. Twelve of the projects had completed traffic studies which included the trip generation and distribution. For the National Ready Mix batch plant and CEMEX, Wayne J. Sand & Gravel, and Grimes Rock quarry projects, the trip directional distribution rates were calculated based on several similar land use traffic impact study reports. For the remaining projects, the trip directional distribution rates were estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*⁷. The trip distribution was developed based on the location of the project, potential users and different land uses in the study area. The cumulative project volumes were added to the background volumes calculated using the annual growth rate to provide an estimate of study year traffic volumes.

Figure 7 shows the cumulative project traffic volumes. Figures 8 and 9 show the anticipated traffic volumes without the project for 2025 and 2037, respectively.

Table 5. Cumulative Projects

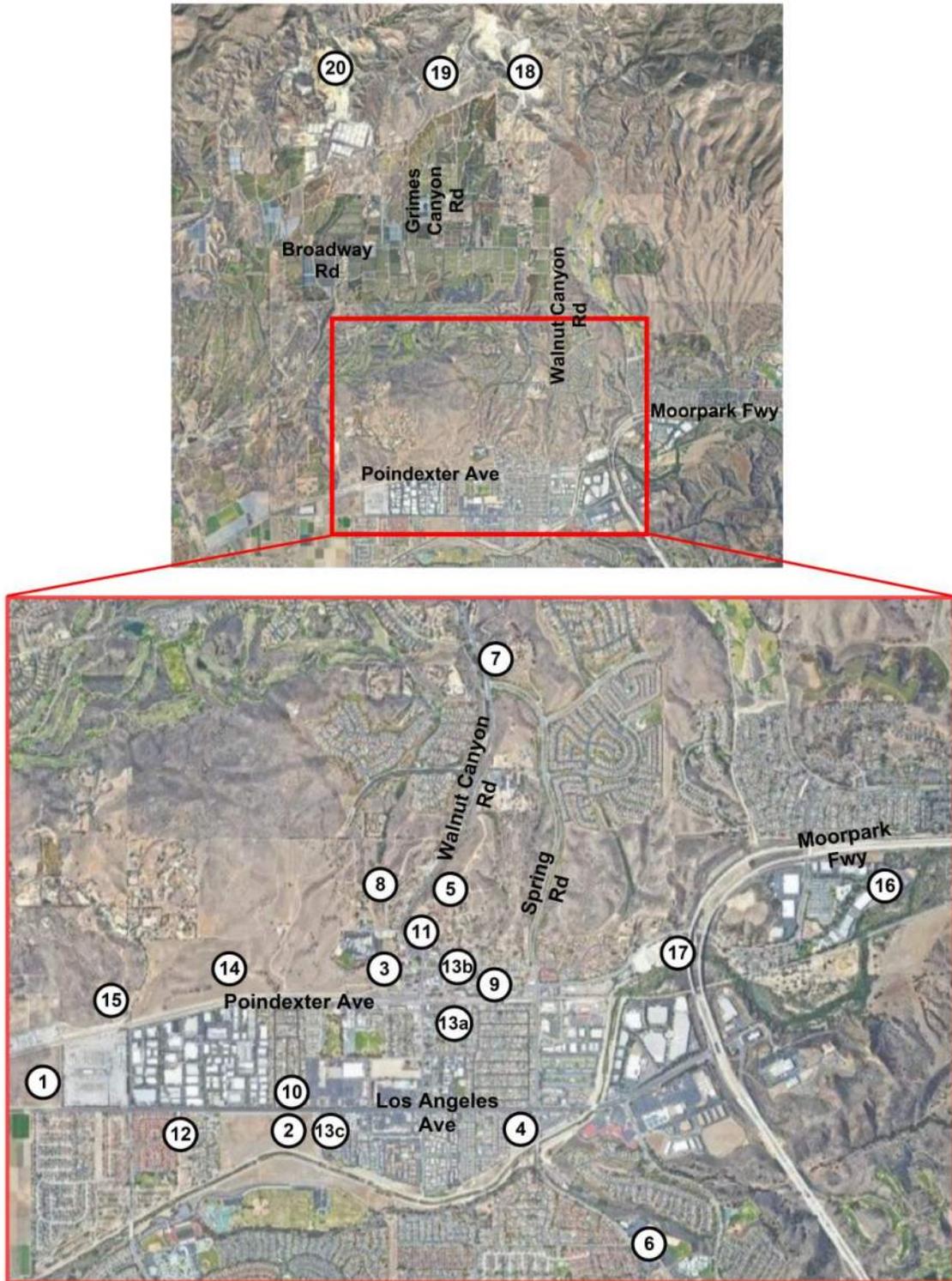
ID #	Project Name	Land Use	Size	Address
1	Triliad Development	Movie Studio	37 Acres	11289 Los Angeles Ave
2	Pacific Communities	Single Family Residential	157 Single Units/300 Condo Units	North of Arroyo Simi creek, south of Los Angeles Avenue, west of Leta Yancy Road
3	Essex Moorpark, LLC	Multi-Family Residential	200 Units	South of Casey Road, west of Walnut Canyon Road
4	Spring Road, LLC	Condominiums	95 Units	South of Los Angeles Avenue, north of Arroyo River, east of Lorraine Lane, west of Spring Road
5	City Ventures	Single Family Residential	110 Units	North of Wicks Road, east of Walnut Canyon Road
6	Oakmont Senior Living	Senior Residential	84 Units/Beds	13960 Peach Hill Rd
7	Birdsall Group, LLC	Single Family Residential	21 Units	East of Walnut Canyon Road and Championship Drive
8	Aldersgate Senior Housing	Senior Residential	390 Units	North of Casey Road, west of Walnut Canyon Road
9	High Street Depot/Daly Group	Downtown Mixed-Use	13,656 SF Retail and 95 Apartments	226 High Street
10	Green Island Villas/Kozar	Condominiums	69 Units	635 Los Angeles Avenue
11	Everett Street Terraces/Chiu	Condominiums	60 Units	Northeast corner of the Everett Street and Walnut Canyon Road Intersection
12	Beltramo Ranch	Single Family Residential	47 Units	South side of Los Angeles Avenue between Tierra Rejada Road and Maureen Avenue
13a	AHA Scattered Sites	Multi-family	22,500 SF	112, 124, 136 First Street
13b	AHA Scattered Sites	Multi-family	15,000 SF	224, 236 Charles Street
13c	AHA Scattered Sites	Multi-family	69,696 SF	Leta Yancy Site
14	Hitch Ranch	Single and Multi-Family	755 units	North of Poindexter Avenue, west of Casey Road, east of Gabbert Road
15	Moorpark 67/Rasmussen	Single Family Residential	144 Units	West of Gabbert Road, north of Poindexter Avenue and the future alignment of North Hills Parkway
16	Amazon Distribution Center*	Industrial	Reuse of 189,364 SF Industrial	5979 Gabbert Road
17	National Ready Mix**	Batch Plant	10 Acres	13950 Princeton Ave
18	CEMEX***	Quarry	N/A	9035 Roseland Ave
19	Wayne J. Sand & Gravel***	Quarry	N/A	9455 Buena Vista St
20	Grimes Rock***	Quarry	N/A	3500 Grimes Canyon Rd

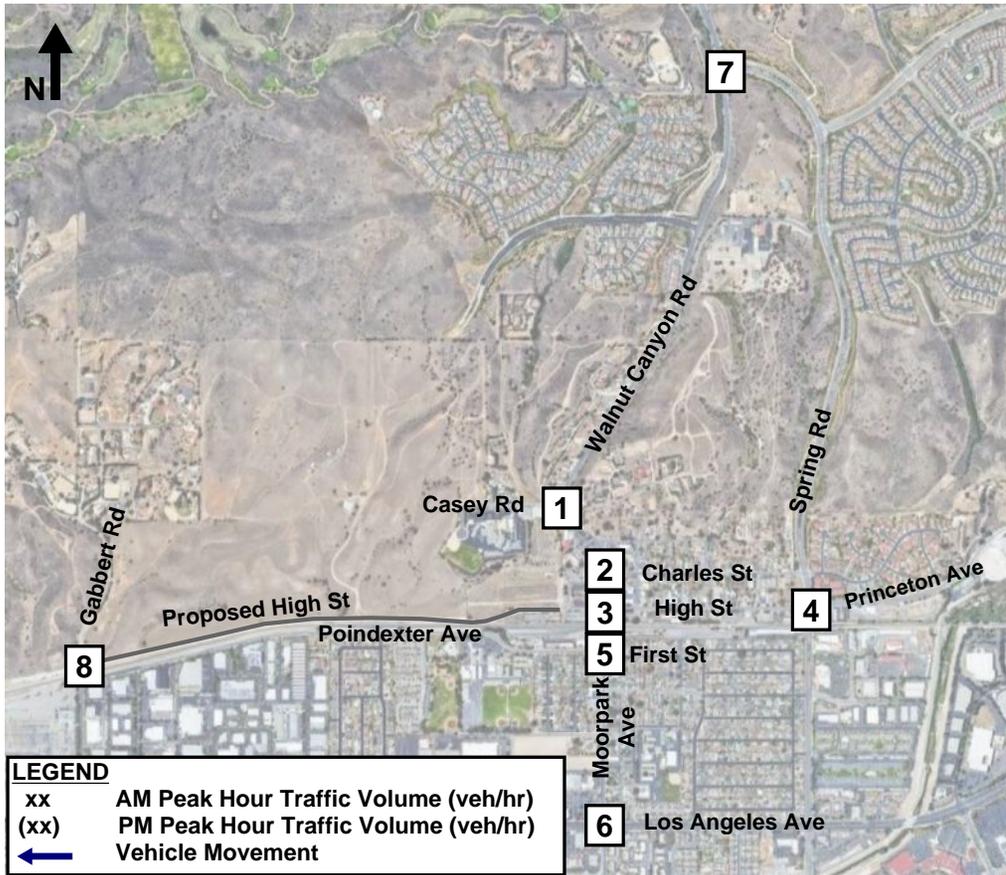
*Trip calculations include baseline of existing industrial use (site is developed). ADT is a gross figure and A.M.

**No proposal to change or expand operations. Existing use creates significant truck traffic through Moorpark.

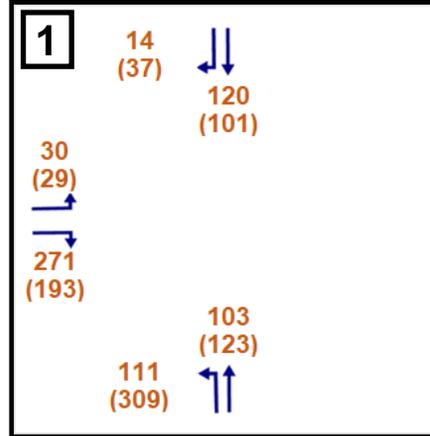
***Operations under County jurisdiction but bring significant truck traffic through Moorpark. Please contact Ventura County to determine whether any active permits for expansion are being reviewed or processed.

Figure 6. Location of Cumulative Projects

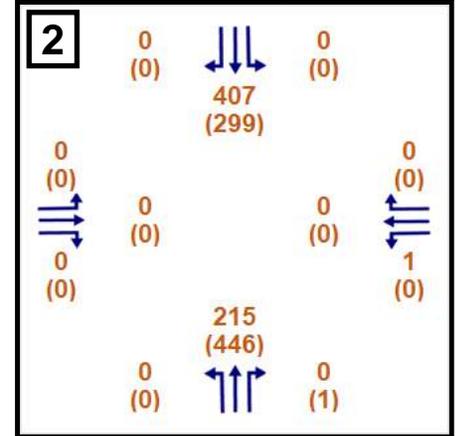




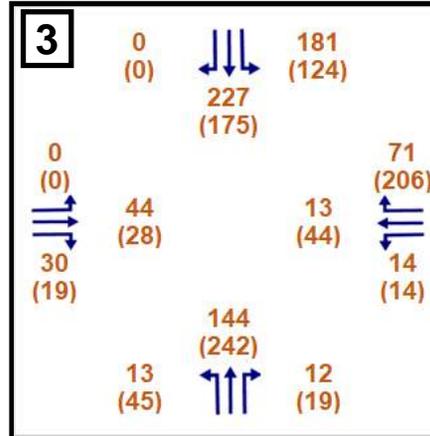
Casey Rd/Walnut Canyon Rd



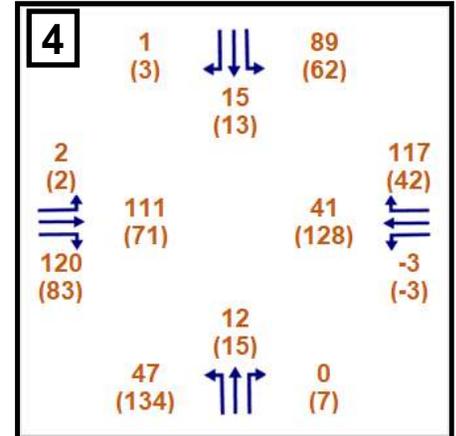
Charles St/Moorpark Ave



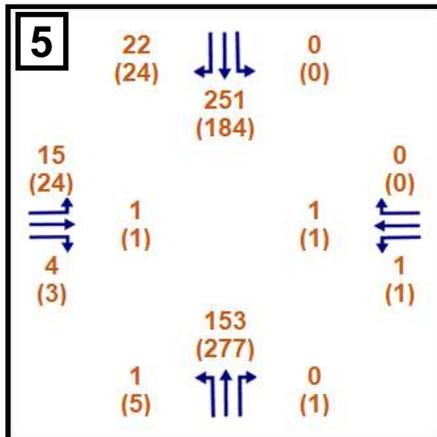
High St/Moorpark Ave



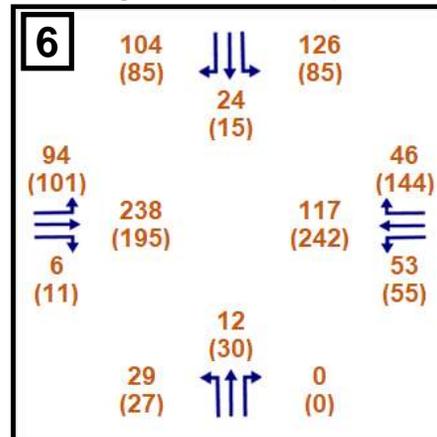
High St/Princeton Ave/Spring Rd



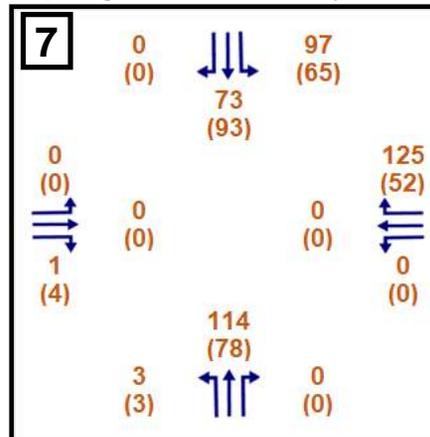
Poindexter Ave/First St/Moorpark Ave



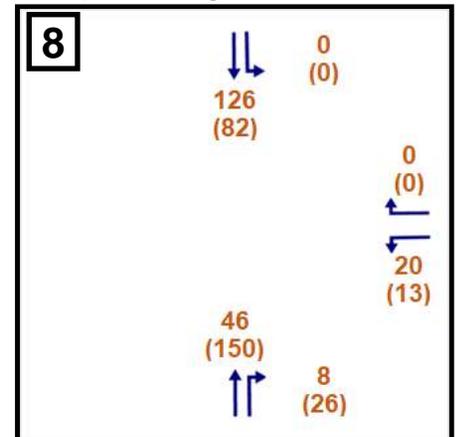
Los Angeles Ave/Moorpark Ave

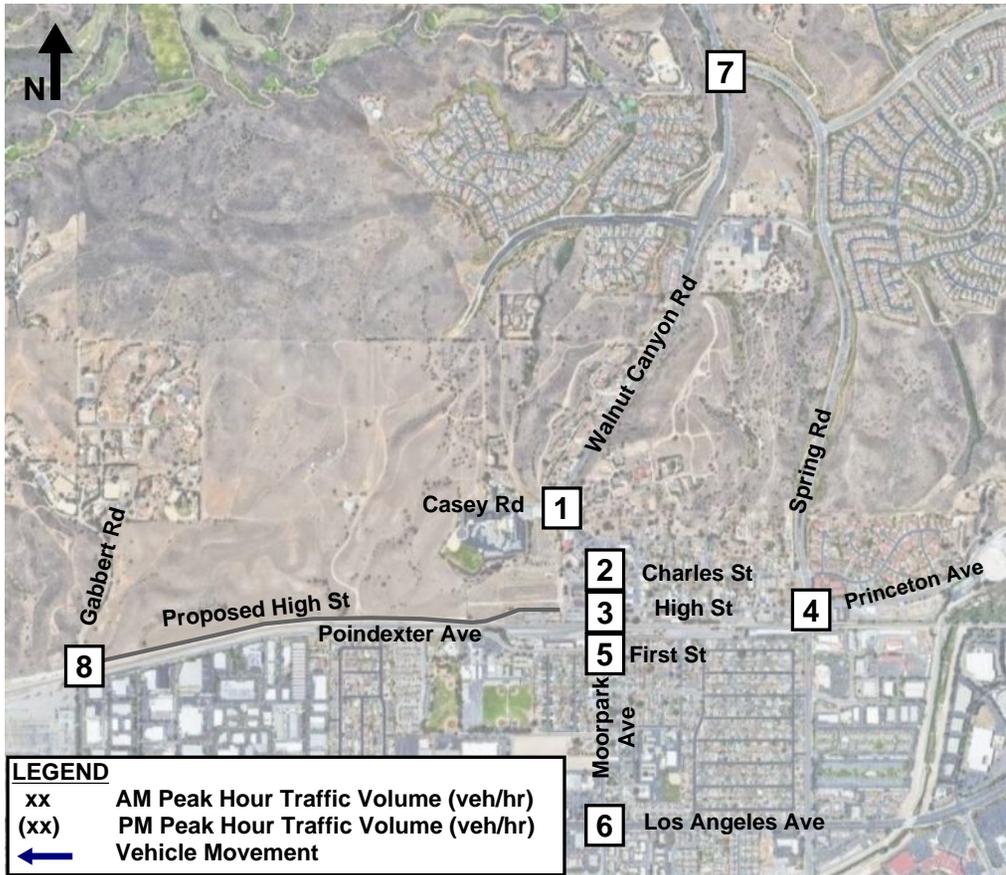


Spring Rd/Walnut Canyon Rd

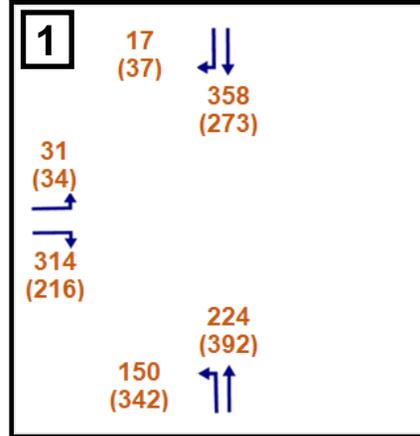


Proposed High St/Gabbert Rd

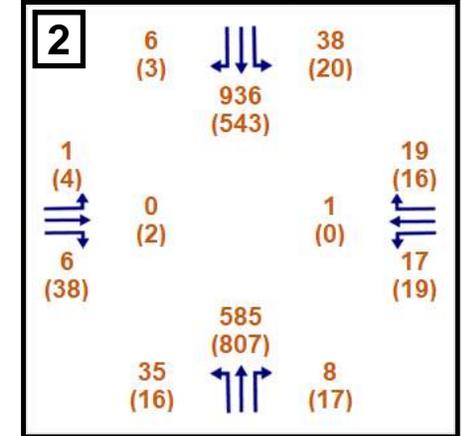




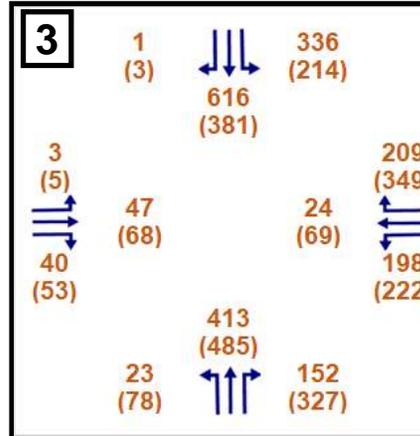
Casey Rd/Walnut Canyon Rd



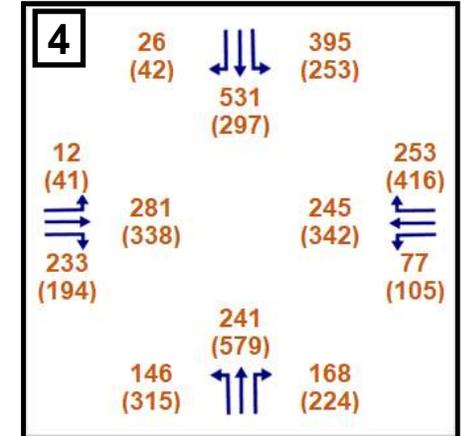
Charles St/Moorpark Ave



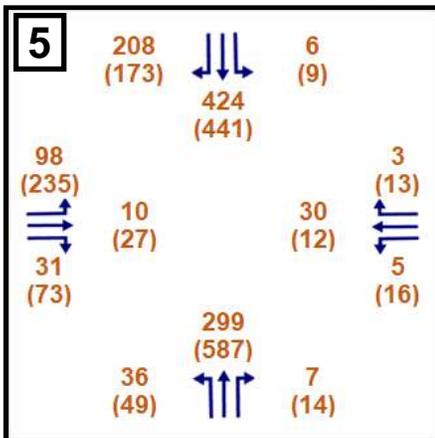
High St/Moorpark Ave



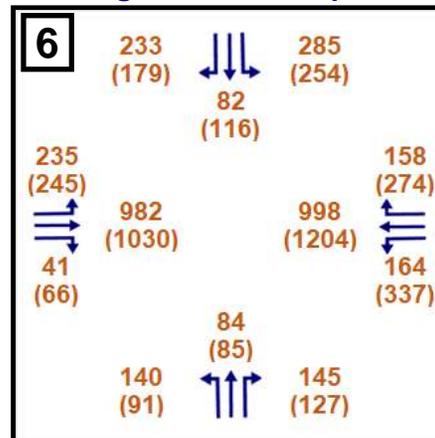
High St/Princeton Ave/Spring Rd



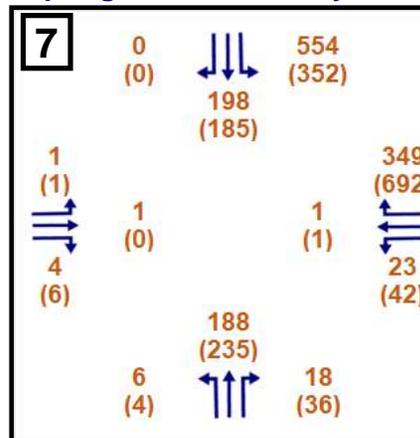
Poindexter Ave/First St/Moorpark Ave



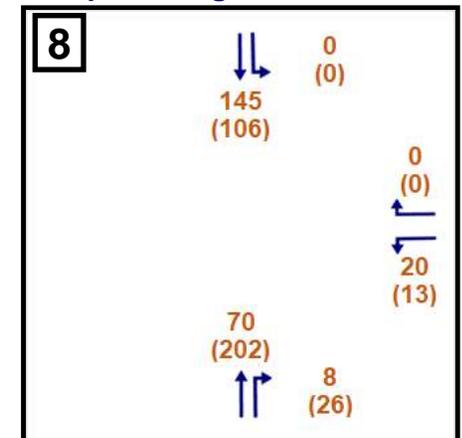
Los Angeles Ave/Moorpark Ave

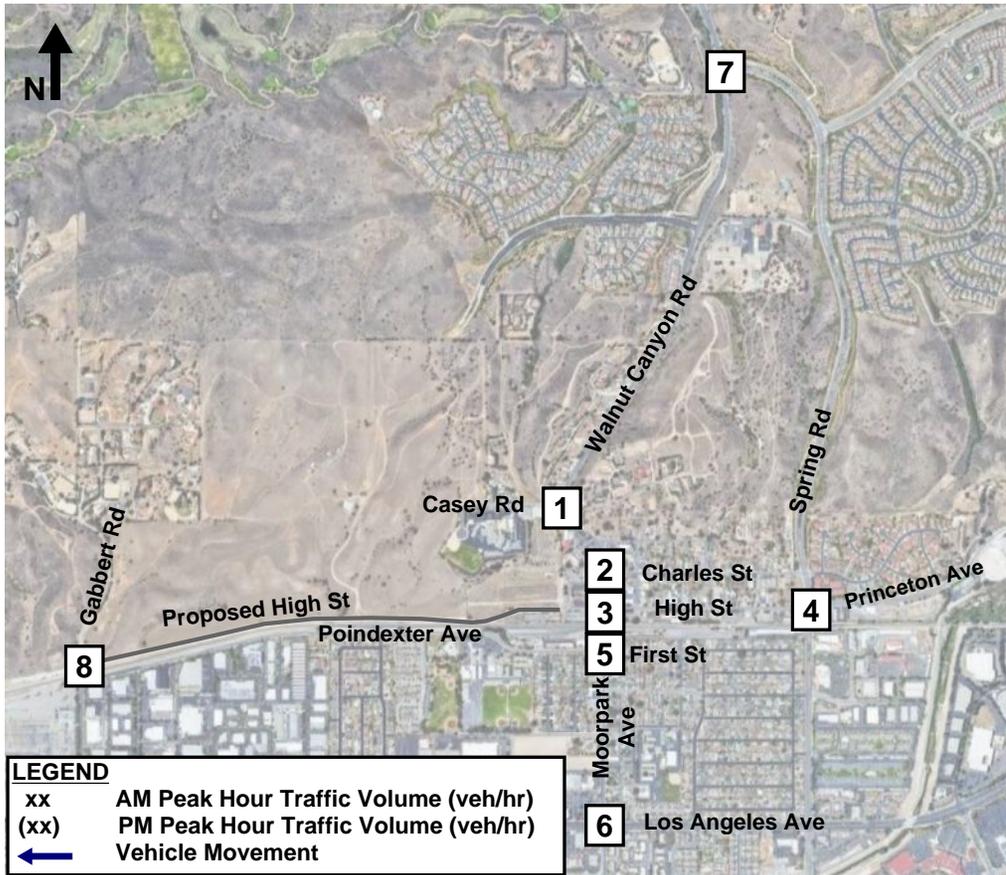


Spring Rd/Walnut Canyon Rd

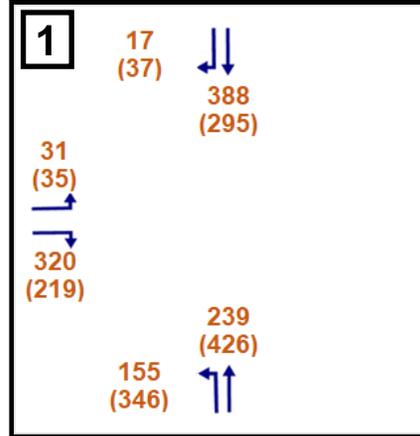


Proposed High St/Gabbert Rd

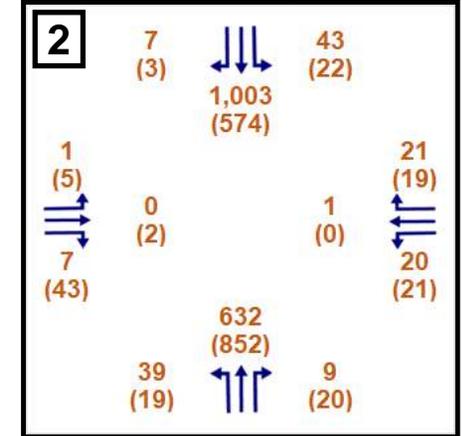




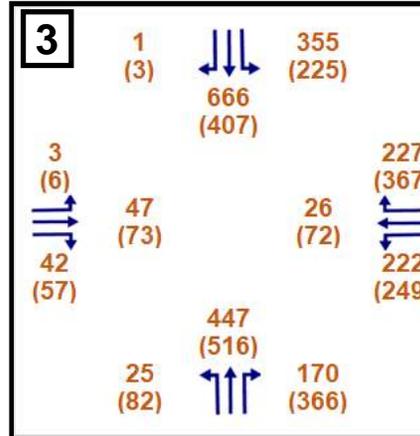
Casey Rd/Walnut Canyon Rd



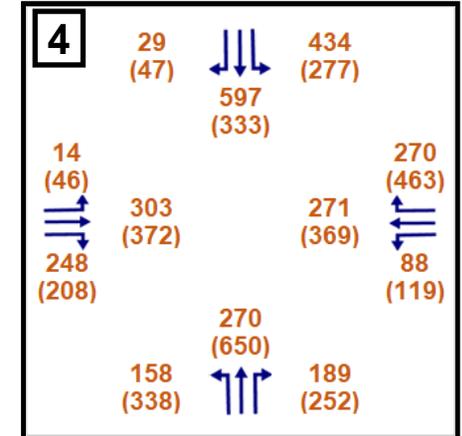
Charles St/Moorpark Ave



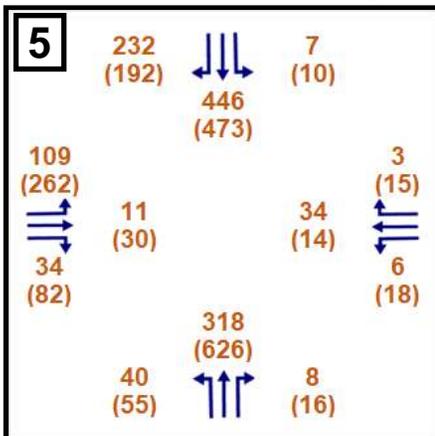
High St/Moorpark Ave



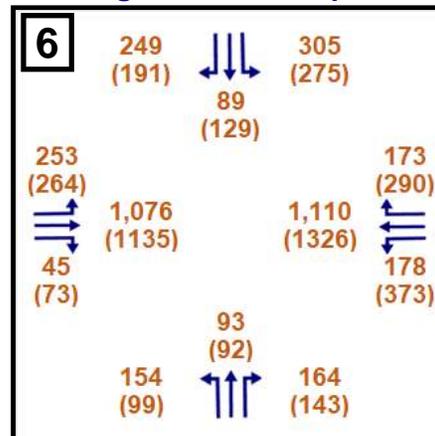
High St/Princeton Ave/Spring Rd



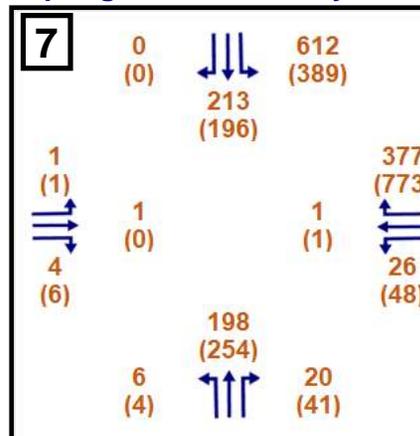
Poindexter Ave/First St/Moorpark Ave



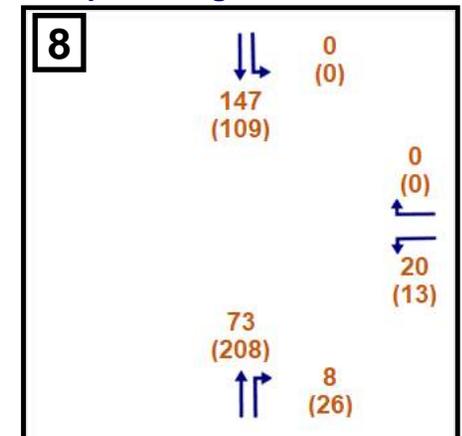
Los Angeles Ave/Moorpark Ave



Spring Rd/Walnut Canyon Rd



Proposed High St/Gabbert Rd



3.2. PROJECT TRAFFIC VOLUMES

3.2.1. Project Trip Generation

The proposed Project would consist of the phased removal of existing buildings and construction of new buildings. The new library is expected to be constructed and the existing city hall is expected to be repurposed to office spaces by 2025. By 2037, a commercial area with a public park, a residential area, a new city hall and mercado are expected to be completed and the existing city hall and community/active adult center buildings are expected to be removed. The trip generation for the project was estimated using the trip generation rates in the ITE *Trip Generation Manual*. The percentage of pass-by trips for the commercial area was estimated based on the ITE *Trip Generation Handbook, 3rd Edition*⁸. The internal trips were calculated based on the ITE *Trip Generation Handbook* and included in Appendix D. Table 6 shows the summary of the net trips generated by the project in 2025. As seen in the table, the project would generate 401 new external daily trips, including 63 trips in the PM peak hour. The AM peak hour traffic volumes would decrease by 42 trips based on the change in land use. Table 7 shows the summary of the net trips generated by the project in 2037. The project would generate 1,329 new external daily trips, including 42 trips in the AM peak hour and 120 trips in the PM peak hour.

Table 6. Project Trip Generation (2025)

Development Type	Units	Number of Units	AM		PM		Daily
			In	Out	In	Out	
PROPOSED LAND USES							
New Library (land use #590)	1,000 SF	18.00	13	5	71	76	1,297
Offices (land use #712)	1,000 SF	5.085	7	2	4	7	73
Total Trips - New Land Uses			20	7	74	84	1,370
EXISTING TRIPS TO BE REPLACED							
Existing Library (land use #590)	1,000 SF	7.80	-6	-2	-31	-33	-562
Existing City Hall (land use #730)	1,000 SF	18.00	-45	-15	-8	-23	-407
Total Trips to be Replaced			-51	-17	-38	-56	-969
Total New Trips			-31	-11	36	27	401

Table 7. Project Trip Generation (2037)

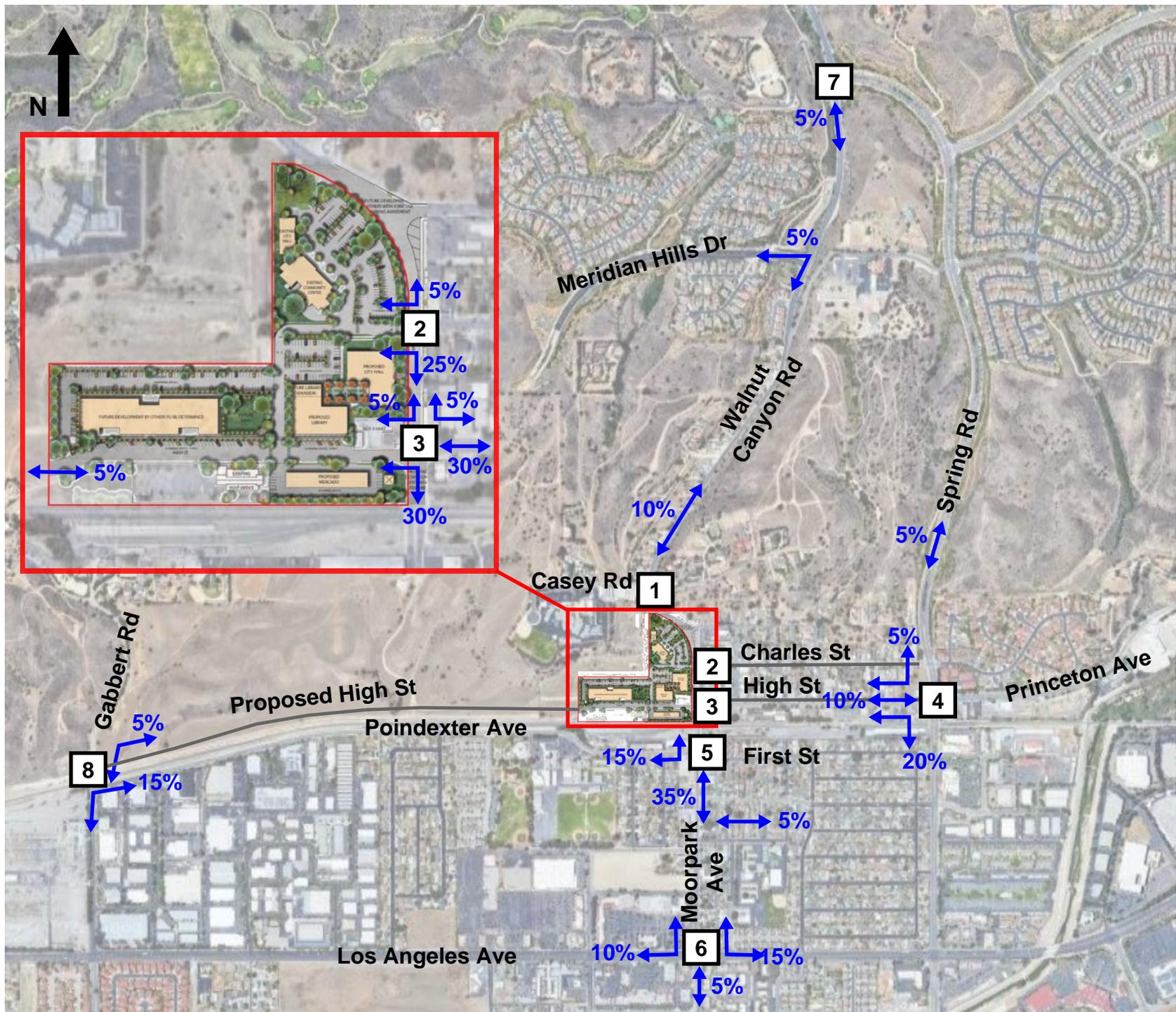
Development Type	Units	Number of Units	AM		PM		Daily
			In	Out	In	Out	
PROPOSED LAND USES							
New Library (land use #590)	1,000 SF	18.00	13	5	71	76	1,297
Commercial Uses with Public Park (land use #822)	1,000 SF	13.00	18	12	43	43	708
<i>Internal Capture</i>			-5	-2	-7	-12	-96
<i>Pass-By Trips</i>			-6	-4	-15	-15	-241
Residential Area (land use #220)	Units	75	7	23	24	14	506
<i>Internal Capture</i>			0	0	-12	-5	-76
New City Hall (land use #730)	1,000 SF	22.00	55	18	9	28	497
<i>Internal Capture</i>			-2	-5	-2	-4	-30
Total Trips - New Land Uses			80	47	111	126	2,565
EXISTING TRIPS TO BE REPLACED							
Existing Library (land use #590)	1,000 SF	7.80	-6	-2	-31	-33	-562
Community/Active Adult Center (land use #495)	1,000 SF	9.26	-12	-6	-11	-12	-267
Existing City Hall (land use #730)	1,000 SF	18.00	-45	-15	-8	-23	-407
Total Trips to be Replaced			-62	-23	-49	-68	-1,235
Total New Trips			18	24	62	58	1329

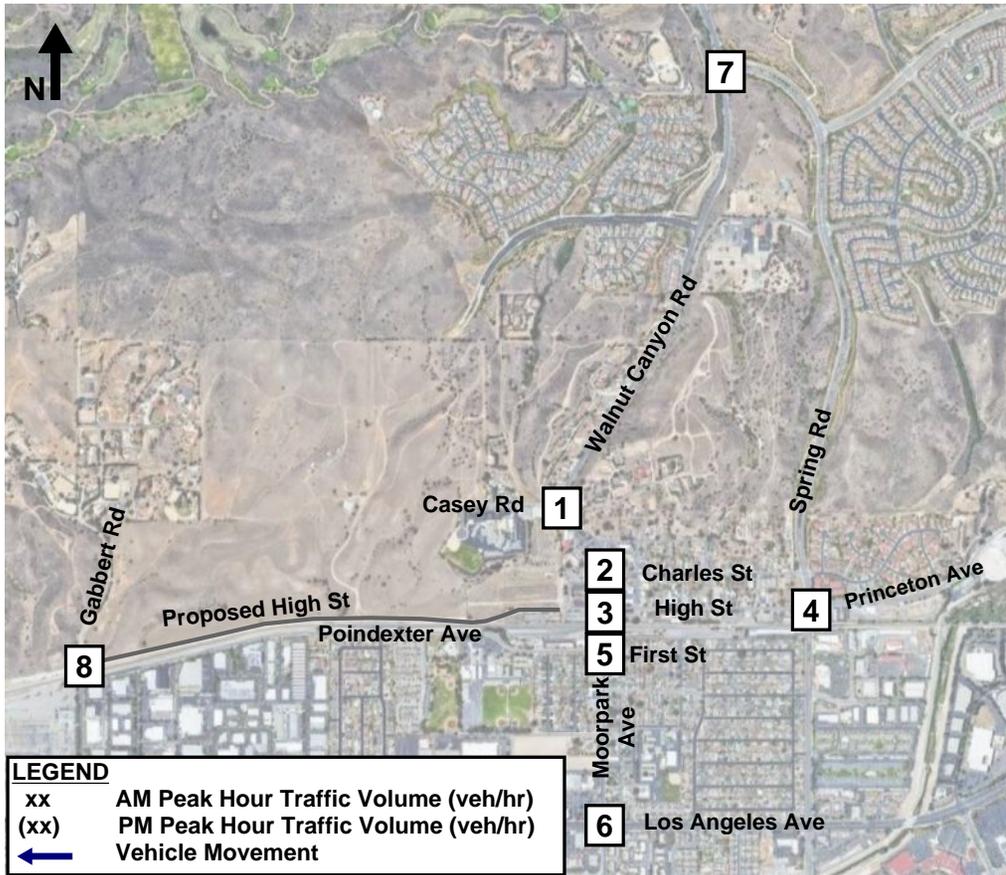
3.2.2. Project Trip Distribution

The project trip distribution was developed based on the location of the proposed project and potential users. As shown in Figure 10, it is estimated that approximately 65% of traffic would access the site via the intersection of High Street and Moorpark Avenue, 5% from/to the west via the proposed High Street extension, and 30% via the intersection of Charles Street and Moorpark Avenue. Out of the pass-by trips, 85% would be drawn from existing traffic on Moorpark Avenue and 15% from the existing westbound left turn traffic at the intersection of High Street and Moorpark Avenue.

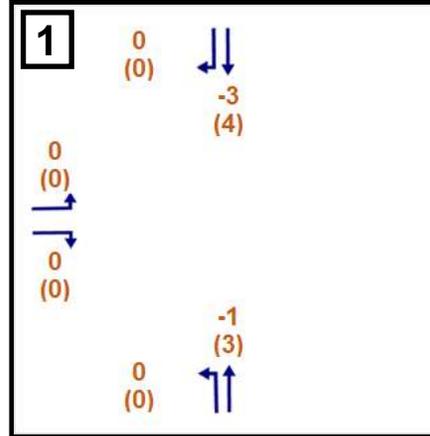
3.2.3. Project Traffic Volumes

Using the project trip generation and trip distribution, the project traffic volumes in 2025 and 2037 were calculated and are shown in Figures 11 and 12, respectively.

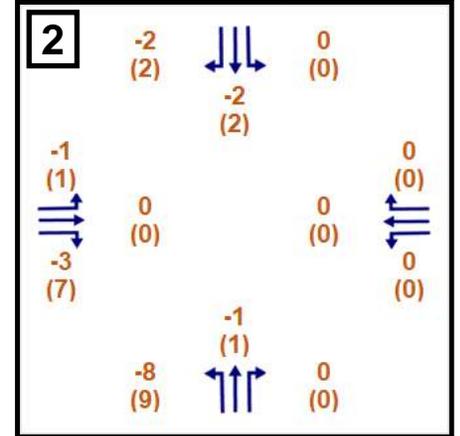




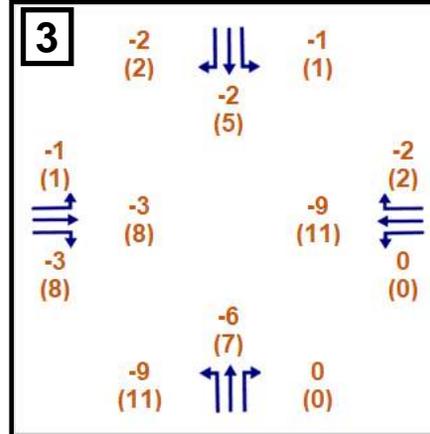
Casey Rd/Walnut Canyon Rd



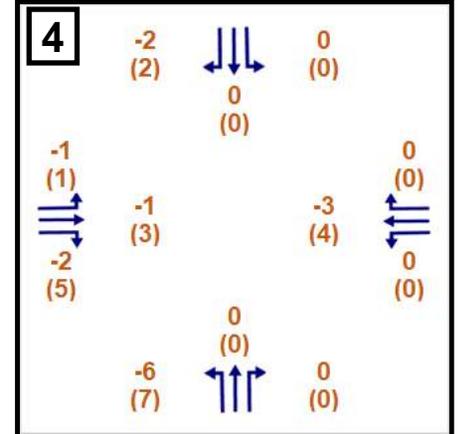
Charles St/Moorpark Ave



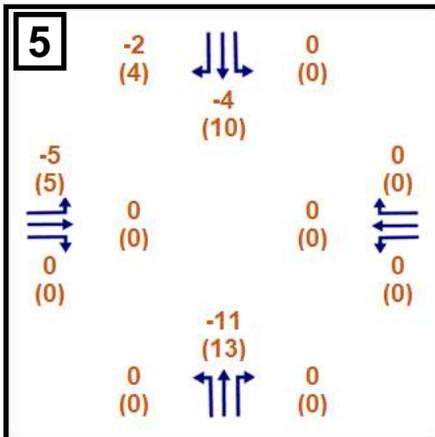
High St/Moorpark Ave



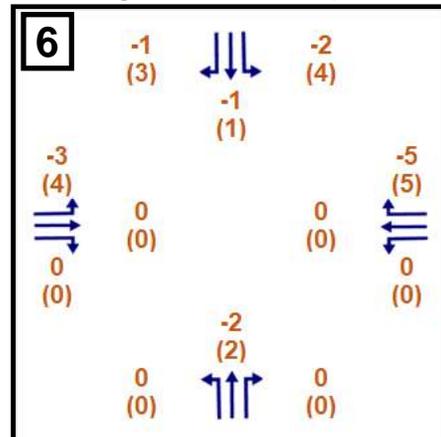
High St/Princeton Ave/Spring Rd



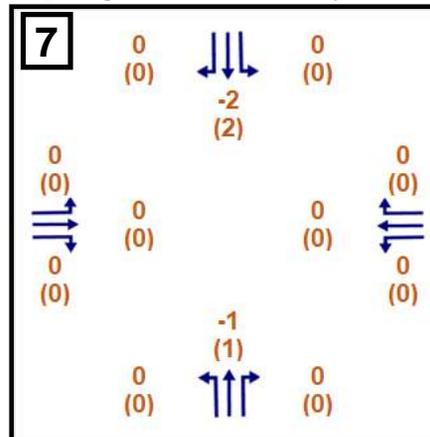
Poindexter Ave/First St/Moorpark Ave



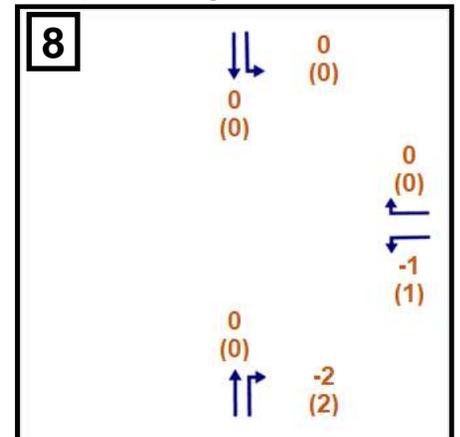
Los Angeles Ave/Moorpark Ave

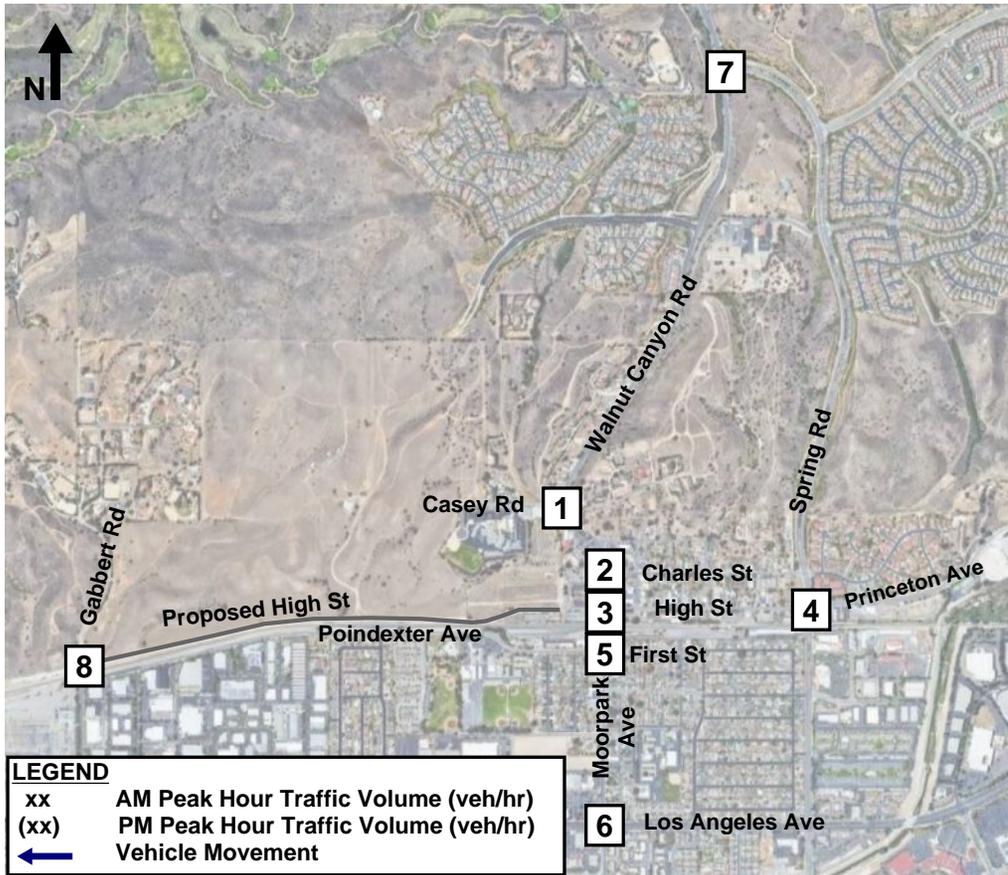


Spring Rd/Walnut Canyon Rd

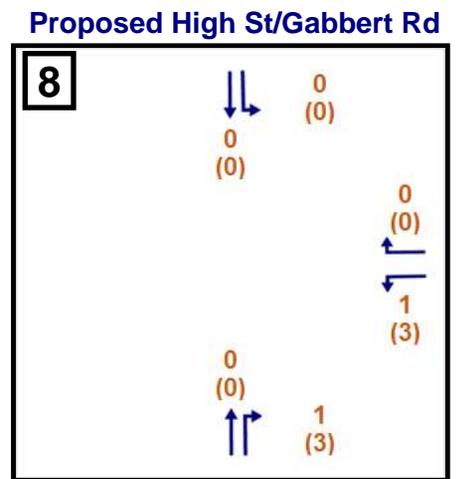
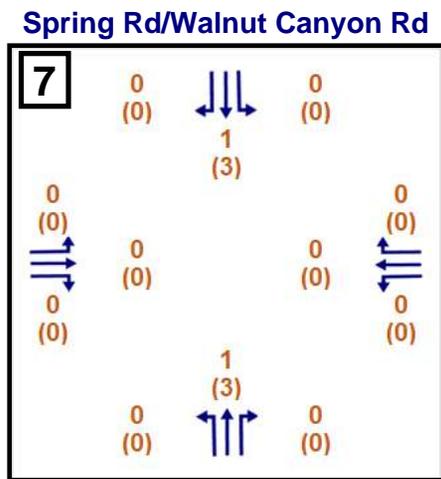
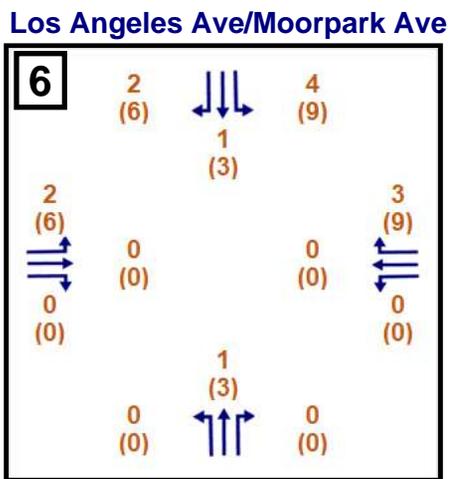
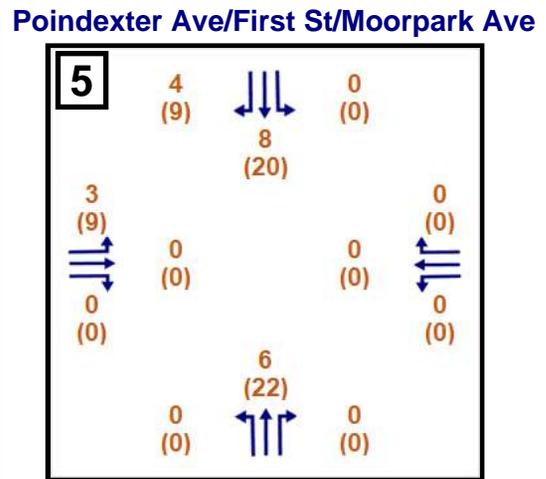
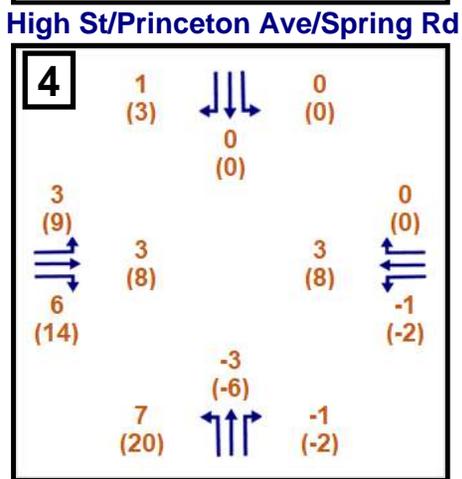
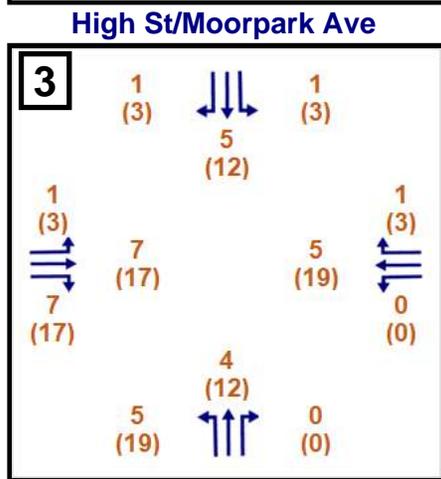
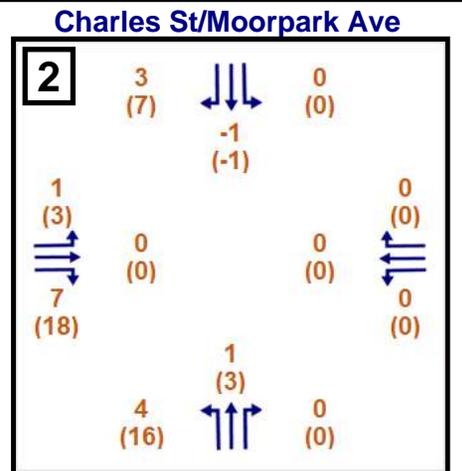
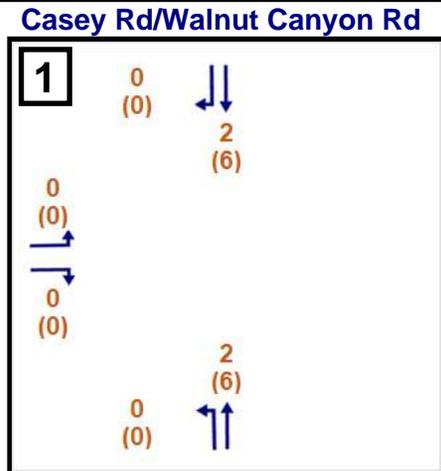


Proposed High St/Gabbert Rd



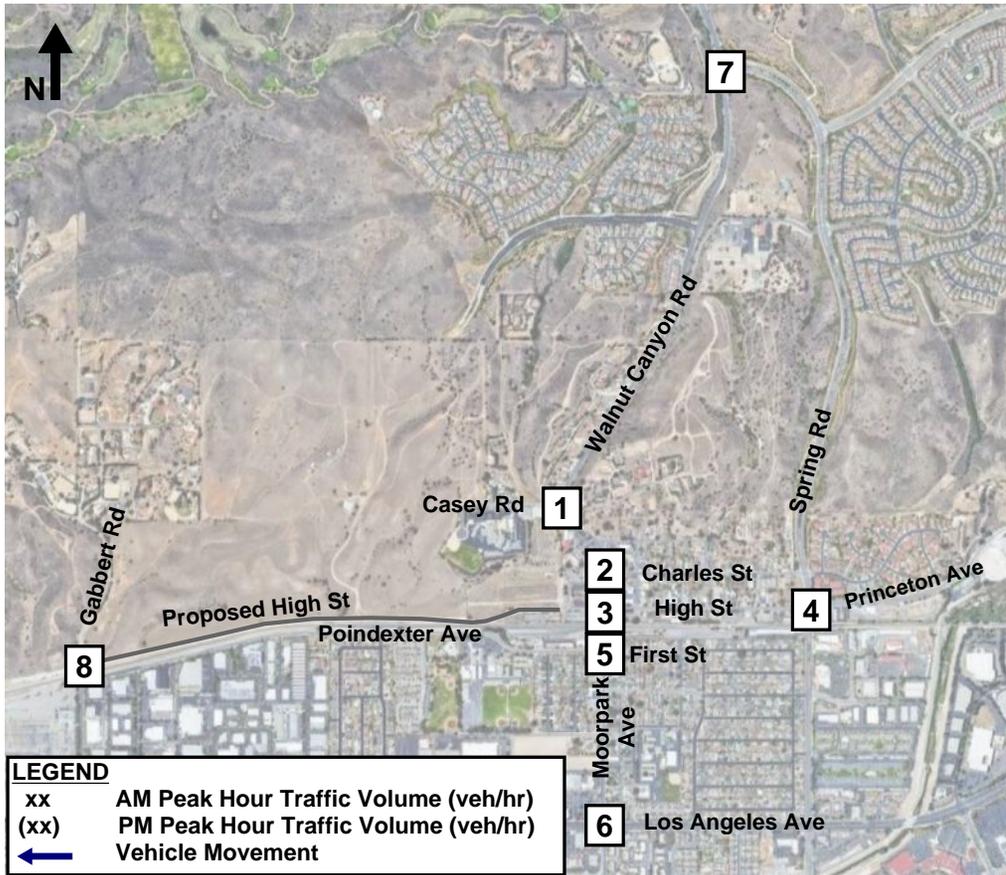


LEGEND
 xx AM Peak Hour Traffic Volume (veh/hr)
 (xx) PM Peak Hour Traffic Volume (veh/hr)
 ← Vehicle Movement

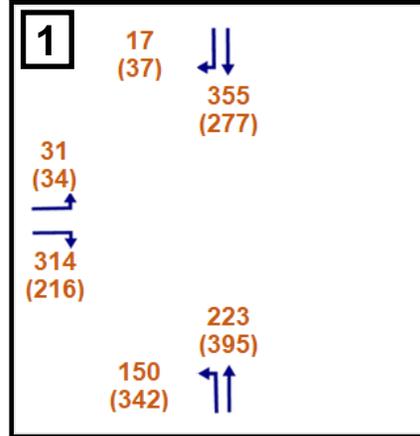


3.3. FUTURE TRAFFIC VOLUMES WITH PROJECT

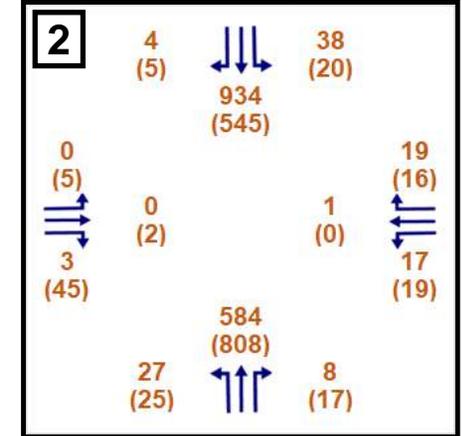
To estimate traffic volumes in a future year, traffic generated by cumulative growth and by the project must be considered. Future volumes with the project were calculated by adding the cumulative growth (including background growth and cumulative projects) and the net site trips. Figures 13 and 14 show the traffic volumes with the project in 2025 and 2037, respectively.



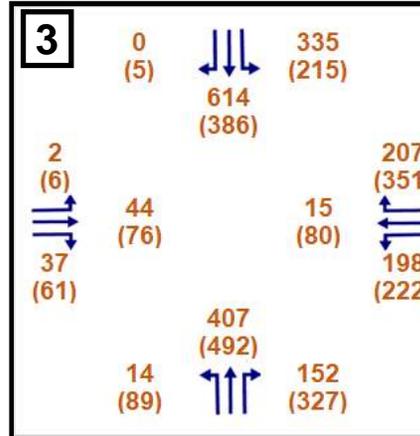
Casey Rd/Walnut Canyon Rd



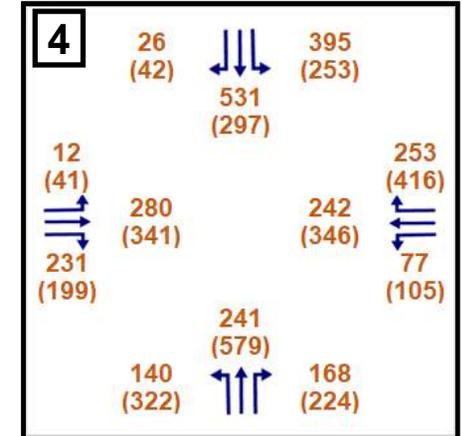
Charles St/Moorpark Ave



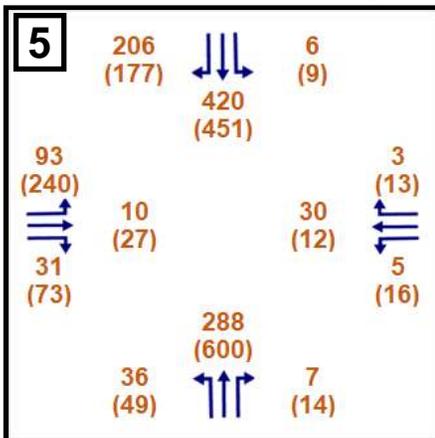
High St/Moorpark Ave



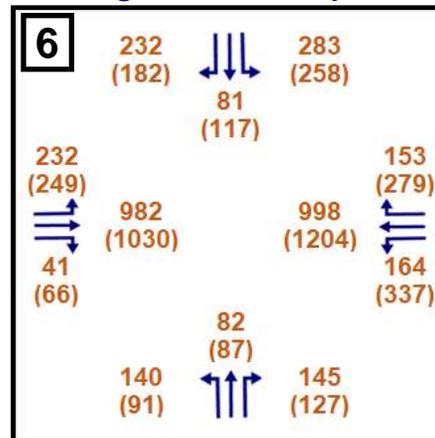
High St/Princeton Ave/Spring Rd



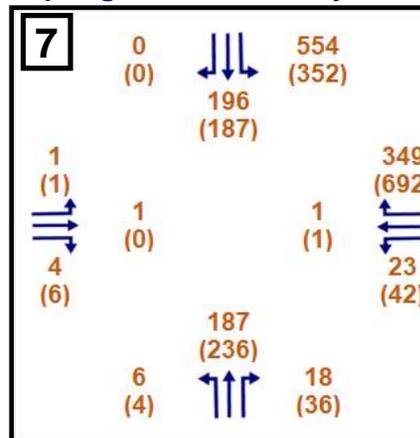
Poindexter Ave/First St/Moorpark Ave



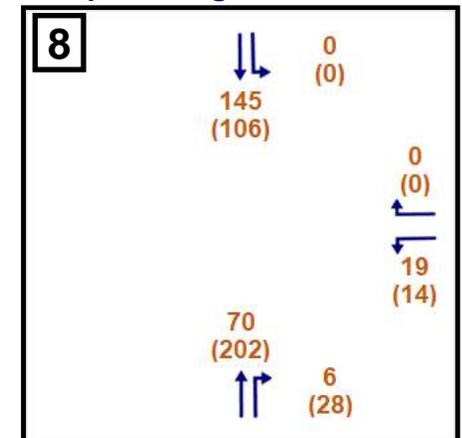
Los Angeles Ave/Moorpark Ave

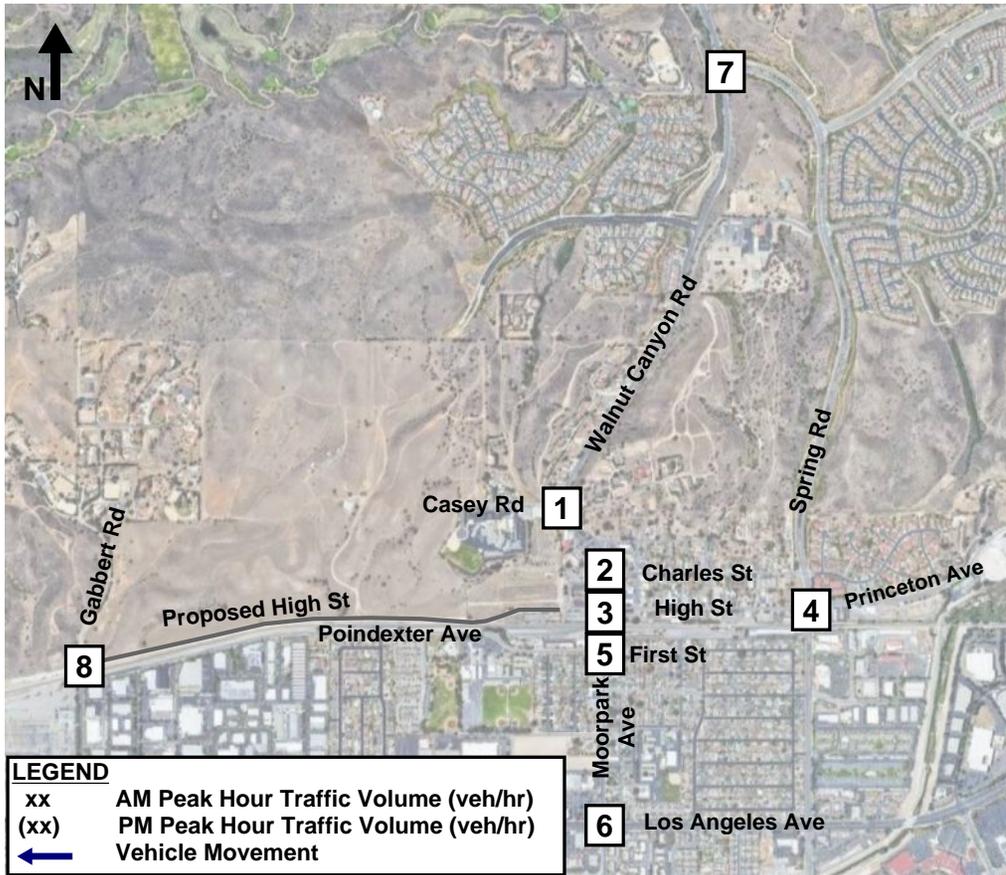


Spring Rd/Walnut Canyon Rd

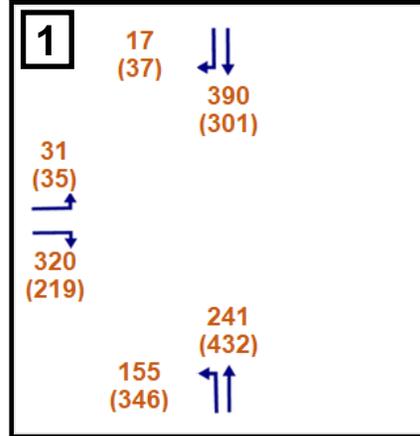


Proposed High St/Gabbert Rd

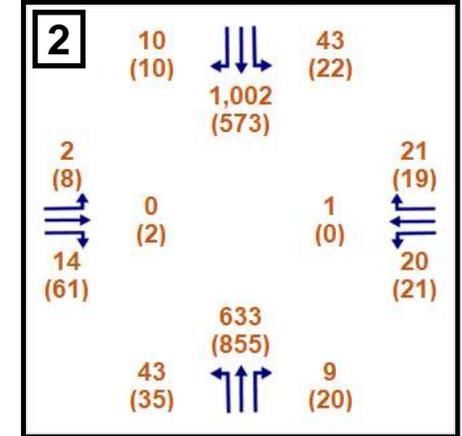




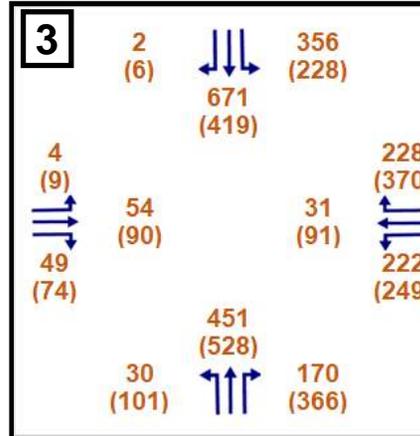
Casey Rd/Walnut Canyon Rd



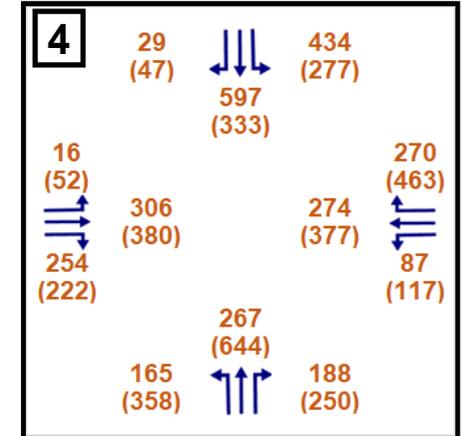
Charles St/Moorpark Ave



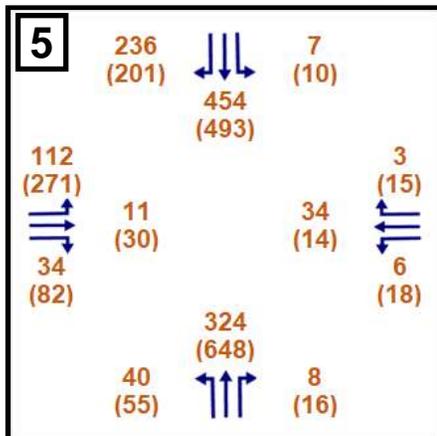
High St/Moorpark Ave



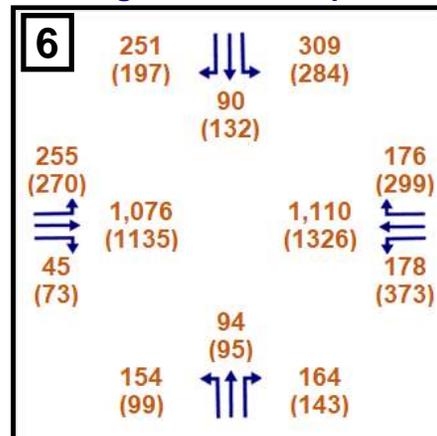
High St/Princeton Ave/Spring Rd



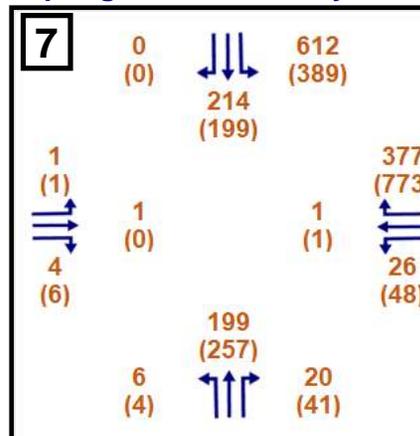
Poindexter Ave/First St/Moorpark Ave



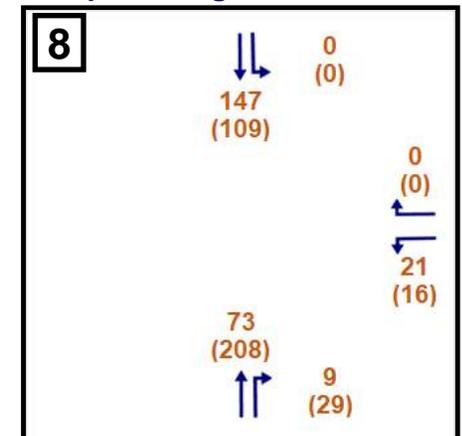
Los Angeles Ave/Moorpark Ave



Spring Rd/Walnut Canyon Rd



Proposed High St/Gabbert Rd



4. FUTURE OPERATION ANALYSIS

4.1. NETWORK IMPROVEMENTS

High Street would be extended westward from its current west end to Gabbert Road along with the construction of the *Hitch Ranch*³ project. The proposed High Street extension would be constructed as a two-lane undivided roadway parallel to Poindexter Avenue and would intersect Gabbert Road at a three-leg stop-controlled intersection. The future roadway extension will provide direct access to the project. The proposed improvement plan is included in Appendix E.

4.2. OPENING YEAR OPERATIONS (2025)

The LOS is shown in Table 8 in Section 4.2.3 for conditions with and without the project in 2025. The ICU and Synchro reports are included in Appendix F.

4.2.1. OPENING YEAR WITHOUT PROJECT CONDITIONS

The signalized study intersections were evaluated using the ICU methodology and the unsignalized intersections were evaluated using delay Synchro methodology. As shown in Table 8, the intersections of Casey Road and Walnut Canyon Road/Moorpark Avenue, Princeton Avenue/High Street and Spring Road, Poindexter Avenue/First Avenue and Moorpark Avenue are expected to operate at LOS C or better in both AM and PM peak hours. The intersections of High Street and Moorpark Avenue, Los Angeles Avenue and Moorpark Avenue, and Spring Road and Walnut Canyon Road are expected to operate below LOS C in both peak hours. The worst minor-street (stop controlled) movement at the intersection of Charles Street and Moorpark Avenue is expected to operate below LOS C in both peak hours and the worst movement at the intersection of High Street and Gabbert Road is expected to operate above LOS C in both peak hours.

4.2.2. OPENING YEAR WITH PROJECT CONDITIONS

For opening year plus project conditions, the same approach was used to evaluate the study intersections. The LOS of all intersections evaluated is expected to stay the same with and without the project except for High Street and Moorpark Avenue, and Charles Street and Moorpark Avenue. In the project scenario High Street and Moorpark Avenue

will improve to LOS E from LOS F in the AM peak hour compared to the no project scenario. The unsignalized intersection of Charles Street and Moorpark Avenue will deteriorate to LOS F from LOS E in the PM peak hour with the project.

4.2.3. OPENING YEAR WITH PROJECT SIGNIFICANT IMPACT EVALUATION

Significant intersection impacts due to changes in vehicle traffic is shown in Table 8. A significant impact occurs when a proposed project degrades the LOS to an unacceptable LOS (LOS D and below), or increases traffic demand at a signalized intersection already operating at an unacceptable LOS by two percent or more of capacity ($V/C \geq 0.020$) or increases the delay at an unsignalized intersection operating at an unacceptable LOS by five or more seconds. Therefore, the intersection of High Street and Moorpark Avenue is forecast to be significantly impacted by the project in the PM peak hour in 2025 as the V/C would increase by 0.029. The intersection of Charles Street and Moorpark Avenue experiences a degradation of LOS but does not exceed the five second significant impact threshold criteria for unsignalized intersections.

Table 8. Opening Year (2025) Level of Service Analysis

Signalized Intersection	2025 Without Project				2025 Plus Project				Change in V/C		Significant Impact?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	
	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS			
Casey Rd/Walnut Canyon Rd/Moorpark Ave	0.659	B	0.679	B	0.657	B	0.681	B	-0.002	0.003	No
High St/Moorpark Ave	1.010	F	1.048	F	0.962	E	1.077	F	-0.048	0.029	Yes
Princeton Ave/High St/Spring Rd	0.702	C	0.754	C	0.702	C	0.755	C	-0.001	0.001	No
Poindexter Ave/First Ave/Moorpark Ave	0.633	B	0.715	C	0.625	B	0.728	C	-0.007	0.013	No
Los Angeles Ave/Moorpark Ave	1.065	F	1.090	F	1.061	F	1.098	F	-0.005	0.008	No
Spring Rd/Walnut Canyon Rd	0.821	D	0.944	E	0.820	D	0.944	E	-0.001	0.001	No
Unsignalized Intersection	2025 Without Project				2025 Plus Project				Change in Delay		Significant Impact?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	
	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS			
Charles St/Moorpark Ave	75.7	F	48.6	E	59.1	F	52.2	F	-16.6	3.6	No
High St/Gabbert Rd	9.9	A	10.6	B	9.9	A	10.6	B	0.0	0.0	No

*Delays are reported as the worst movement at unsignalized intersections.

4.3. BUILDOUT YEAR OPERATIONS (2037)

The study intersections were also evaluated for the full project buildout year in 2037 using ICU and Synchro delay methodology. The LOS is shown in Table 9, Section 4.3.3 for conditions with or without the project in 2037. The ICU and Synchro reports are included in Appendix G.

4.3.1. BUILDOUT YEAR WITHOUT PROJECT CONDITIONS

As shown in Table 9, the intersections of Casey Road and Walnut Canyon Road/Moorpark Avenue, Poindexter Avenue/First Avenue and Moorpark Avenue are expected to operate at LOS C or better. The intersections of High Street and Moorpark Avenue, Los Angeles Avenue and Moorpark Avenue, and Spring Road and Walnut Canyon Road are expected to operate below LOS C in both peak hours. In addition, the intersection of Princeton Avenue/High Street and Spring Road is expected to operate at LOS C in the AM peak hour but LOS D in the PM peak hour. The worst minor-street movement at the intersection of Charles Street and Moorpark Avenue is expected to operate below LOS C. The worse minor-street movement at the intersection of High Street and Gabbert Road is expected to operate above LOS C in both peak hours.

4.3.2. BUILDOUT YEAR WITH PROJECT CONDITIONS

All signalized intersections or the worst minor street movements at unsignalized intersections are expected to operate at the same LOS with or without the project in 2037 except for the intersection of Casey Rd and Walnut Canyon Road/Moorpark Avenue, which will decrease to LOS C from LOS B, as shown in Table 9.

4.3.3. BUILDOUT YEAR WITH PROJECT SIGNIFICANT IMPACT EVALUATION

Intersection significant impacts due to changes in ICU or delay is shown in Table 9. The intersection of High Street and Moorpark Avenue is expected to be significantly impacted since the V/C would increase by 0.023 and 0.057 in the AM and PM peak hours, respectively. This would exceed the 0.020 significant impact threshold for changes in V/C when operating at an unacceptable LOS. The intersection of Charles Street and Moorpark Avenue is also expected to be significantly impacted as the delay would increase by 12.6 and 11.7 seconds in the AM and PM peak hours, respectively, exceeding the significant

impact threshold of an increase of five seconds or more when operating at an unacceptable LOS.

Table 9. Buildout Year (2037) Level of Service Analysis

Signalized Intersection	2037 Without Project				2037 Plus Project				Change in V/C		Significant Impact?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	
	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS			
Casey Rd/Walnut Canyon Rd/Moorpark Ave	0.687	B	0.698	B	0.688	B	0.702	C	0.001	0.004	No
High St/Moorpark Ave	1.086	F	1.107	F	1.109	F	1.165	F	0.023	0.057	Yes
Princeton Ave/High St/Spring Rd	0.763	C	0.827	D	0.764	C	0.831	D	0.001	0.004	No
Poindexter Ave/First Ave/Moorpark Ave	0.676	B	0.774	C	0.686	B	0.799	C	0.010	0.025	No
Los Angeles Ave/Moorpark Ave	1.154	F	1.182	F	1.160	F	1.198	F	0.006	0.016	No
Spring Rd/Walnut Canyon Rd	0.884	D	1.034	F	0.885	D	1.036	F	0.001	0.002	No
Unsignalized Intersection	2037 Without Project				2037 Plus Project				Change in Delay		Significant Impact?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	
	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS			
Charles St/Moorpark Ave	102.3	F	63.4	F	114.9	F	75.1	F	12.6	11.7	Yes
High St/Gabbert Rd	10.0	A	10.6	B	10.0	A	10.7	B	0.0	0.1	No

*Delays are reported as the worst movement at unsignalized intersections.

5. MITIGATION MEASURES

As discussed previously, the intersection of High Street and Moorpark Avenue would be significantly impacted by the addition of the project traffic in the PM peak hour in 2025 and in both peak hours in 2037. The intersection of Charles Street and Moorpark Avenue would be significantly impacted in both peak hours in 2037. The recommended improvements to mitigate the significant impacts of the project are listed below:

- Add a left turn lane on the northbound approach at the intersection of High Street and Moorpark Avenue to address conditions in both 2025 and 2037, as shown in Figure 15 and in the *Hitch Ranch* project report³.
- Change the existing full movement eastbound Charles Street approach to a right-in and right-out access in 2037 as shown in Figure 16, and re-route the impacted traffic to enter or exit the project via the signalized intersection of High Street and Moorpark Avenue to the south. The conversion to right-in and right-out access for the eastbound movement would simplify operations at the intersection. By limiting movements at this intersection and diverting those movements to the signalized intersection at High Street and Moorpark Avenue, it would make it easier for vehicles traveling westbound to find gaps in traffic and would improve the LOS at this intersection.

Tables 10 and 11 show the traffic conditions without the project and with the project plus implementation of the mitigation measures in 2025 and 2037, respectively. The ICU and Synchro reports are included in Appendix H. All significant traffic impacts by the proposed project are expected to be fully mitigated. As shown in Table 10, the LOS of the intersection of High Street and Moorpark Avenue is expected to increase from LOS F to LOS D in the PM peak hour with the implementation of the proposed mitigation measure.

As shown in Table 11, the LOS of the intersection of High Street and Moorpark Avenue is expected to increase from LOS F to LOS D and LOS E in the AM and PM peak hours, respectively. The proposed mitigation plan at the intersection of Charles Street and Moorpark Avenue would reduce the delay at the worst minor street movement by 20.3 and 2.6 seconds in the AM and PM peak hours in 2037.

Table 10. Opening Year (2025) Traffic Conditions with Project and Mitigation

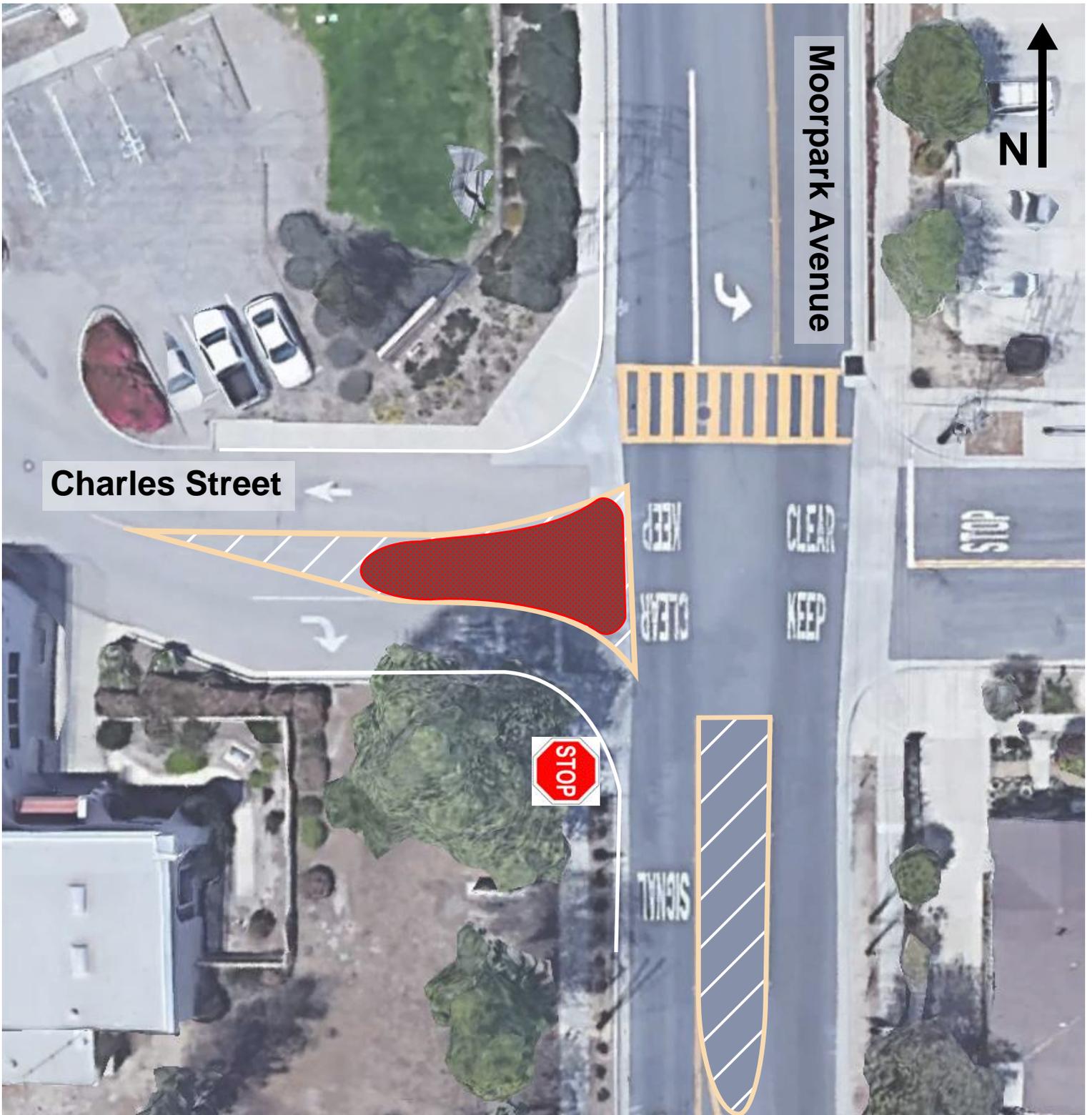
Signalized Intersection	Intersection Type	Peak Hour	2025 Without Project		2025 with Project & Mitigation		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
High St/Moorpark Ave	Signalized	PM	1.048	F	0.880	D	-0.168	No

Table 11. Buildout Year (2037) Traffic Conditions with Project and Mitigation

Signalized Intersection	Intersection Type	Peak Hour	2037 Without Project		2037 with Project & Mitigation		Change in V/C	Significant Impact?
			V/C or Delay*	LOS	V/C or Delay*	LOS		
High St/Moorpark Ave	Signalized	AM	1.086	F	0.862	D	-0.224	No
		PM	1.107	F	0.949	E	-0.159	No
Charles St/Moorpark Ave	Unsignalized	AM	102.3	F	82.0	F	-20.3	No
		PM	63.4	F	60.8	F	-2.6	No

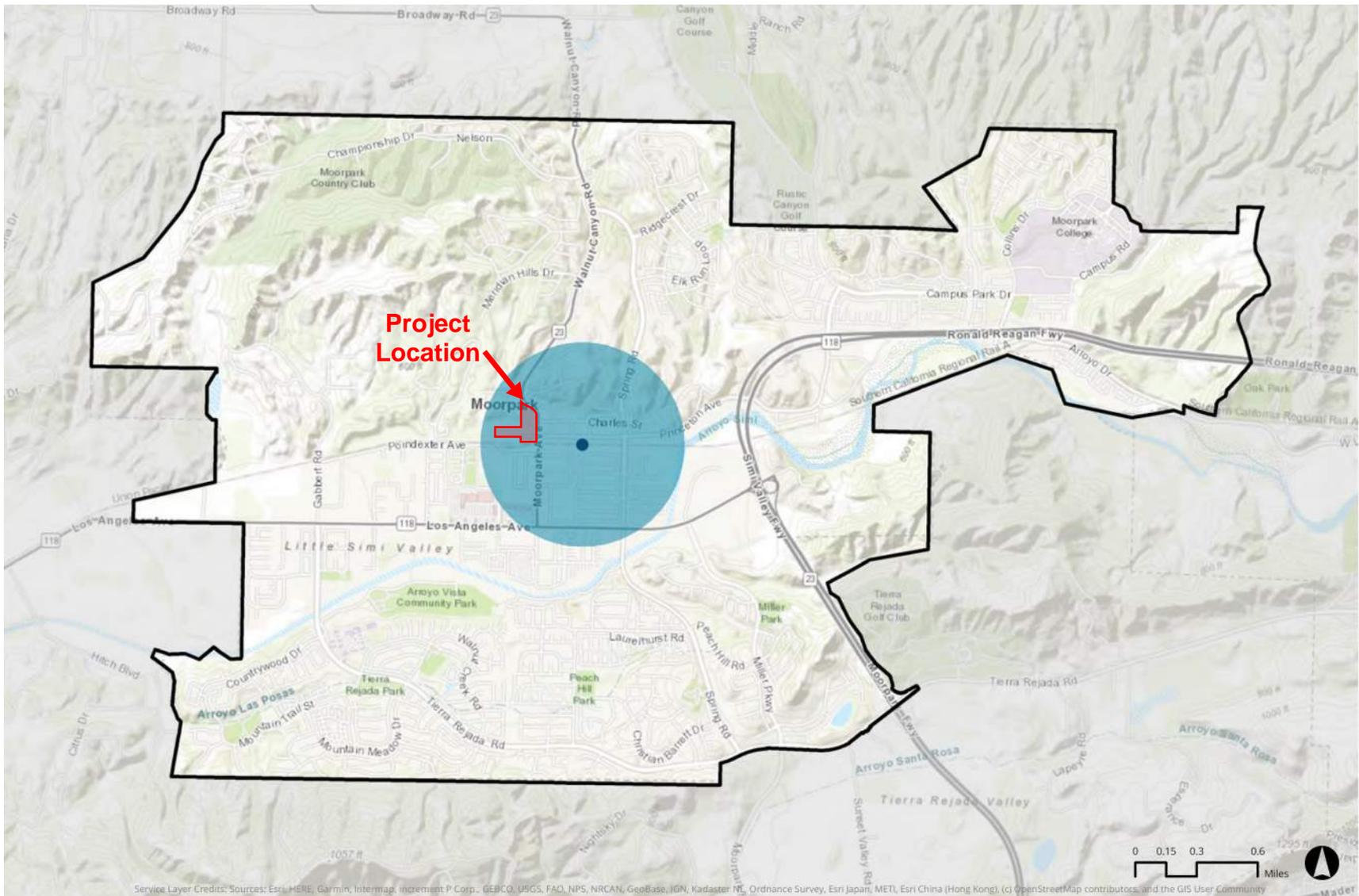
*Delays are reported as the worst movement at unsignalized intersections.





6. VEHICLE MILES TRAVELED

According to the *SCAG Data/Map Book for the City of Moorpark*⁹, the project is located in a Transit Priority Area, as shown in Figure 17. The project is therefore considered to have a less-than-significant impact per the CEQA guidelines and would be exempt from a Vehicle Miles Traveled (VMT) analysis.



- Major Transit Stops
- Transit Priority Areas (Areas within One-Half Mile from Major Transit Stops)

Note: As defined in SB 743, "Transit priority area" means an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations. Major transit stops are extracted from 2045 plan year of the Draft Connect SoCal. Please note that this map may undergo changes as SCAG continues to update its transportation network as part of the Connect SoCal development process and SCAG shall not be responsible for local jurisdiction's use of this map. Updates to this information will be forthcoming as information becomes available.

Data Source: SCAG, County Transportation Commissions, 2019 | Map Created: 6/18/2019

Disclaimer: The information shown on this map reflect jurisdiction's input submitted during the Local Input and Envisioning Process for the Connect SoCal. SCAG shall not be responsible for user's misuse or misrepresentation of this map. For the details regarding the sources, methodologies and contents of this map, please refer to the SCAG Data/Map Book or contact RTPLocalInput@scag.ca.gov.

7. CONCLUSION

The Civic Center Master Plan Project is expected to replace the existing library, city hall and community center/active adult center buildings with a new 18,000 sf library with outdoor plaza, a 13,000 sf commercial area with a public park, a 75 unit (25 du/acre) residential area, a new 22,000 sf city hall and mercado. The proposed project would consist of a phased development. By 2025, the project will generate 401 new external daily trips, including 63 trips in the PM peak hour. However, the AM peak hour traffic will decrease by 42 trips. By 2037, the project will generate 1,329 new external daily trips, including 42 trips in the AM peak hour and 120 trips in the PM peak hour.

Based on the LOS analyses, the existing seven study intersections generally operate at an acceptable LOS under existing conditions except for the intersections of Charles Street and Moorpark Avenue, and Los Angeles Avenue and Moorpark Avenue, which operate at LOS D in the AM peak hour and PM peak hour, respectively. The eighth intersection included in the evaluation High Street and Gabbert Road is expected to be constructed by the project year 2025. In the opening year 2025, the project will create a significant impact at the intersection of High Street and Moorpark Avenue as V/C will increase by more than 0.020 while operating at an unacceptable LOS. The proposed mitigation would be to add a left-turn lane on the northbound intersection approach. This mitigation was evaluated and would effectively mitigate the significant impact.

In the buildout year 2037, the intersection of High Street and Moorpark Avenue is expected to be significantly impacted since the V/C would increase by 0.023 and 0.057 in the AM and PM peak hours, respectively. This significant impact would be successfully mitigated by installation of a new northbound left-turn lane from Moorpark Avenue towards High Street as noted in the 2025 mitigation measures earlier. The intersection of Charles Street and Moorpark Avenue is also expected to be significantly impacted by the project traffic as delay at this location would increase by 12.6 and 11.7 seconds for the worst movement in the AM and PM peak hours, respectively. This significant impact would be mitigated by installation of right-in and right-out access for the eastbound intersection approach. The diversion of traffic resulting from this intersection adjustment would not cause adverse or significant impacts to other intersections in the project area.

Lastly, per CEQA guidelines, the project is located in a TPA; therefore, the project is expected to have a less-than-significant impact on VMT and no detailed VMT analysis is required.

8. REFERENCES

-
- ¹ *City of Moorpark General Plan Circulation Element*. City of Moorpark, May 1992.
- ² *Guidelines for Preparing Traffic and Circulation Studies*. City of Moorpark, November 1993.
- ³ *Traffic Impact Analysis for Proposed Hitch Ranch Specific Plan*. Impact Sciences, January 2021.
- ⁴ *Highway Capacity Manual, 6th Edition*. Transportation Research Board, October 2016.
- ⁵ *Moorpark Civic Center Campus Project Second Revised Screencheck Draft EIR (Section 3.2.2)*. City of Moorpark, December 2009.
- ⁶ *SCAG 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction*.
https://scag.ca.gov/sites/main/files/file-attachments/2016_2040rtpscs_finalgrowthforecastbyjurisdiction.pdf?1605576071,
accessed July 2022.
- ⁷ *Trip Generation, 11th Edition*. Institute of Transportation Engineers, 2021.
- ⁸ *Trip Generation Handbook, 3rd Edition*. Institute of Transportation Engineers, 2014.
- ⁹ *SCAG Data/Map Book for the City of Moorpark*. Southern California Association of Governments (SCAG), November 2019.

Appendix A – Traffic Volume Data (2022)

National Data & Surveying Services Intersection Turning Movement Count

Location: Walnut Canyon Rd/US-23 & Casey Rd
 City: Moorpark
 Control: Signalized

Project ID: 22-050031-001
 Date: 6/15/2022

Data - Totals

NS/EW Streets:	Walnut Canyon Rd/US-23				Walnut Canyon Rd/US-23				Casey Rd				Casey Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	0 ET	1 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
7:00 AM	3	23	0	0	0	49	0	0	0	0	6	0	0	0	0	0	81
7:15 AM	8	20	0	0	0	60	1	0	1	0	2	0	0	0	0	0	92
7:30 AM	9	23	0	0	0	63	2	0	0	0	11	0	0	0	0	0	108
7:45 AM	10	31	0	0	0	63	0	0	1	0	12	0	0	0	0	0	117
8:00 AM	9	27	0	0	0	56	1	0	0	0	9	0	0	0	0	0	102
8:15 AM	10	36	0	0	0	49	0	0	0	0	10	0	0	0	0	0	105
8:30 AM	6	29	0	0	0	55	2	0	0	0	6	0	0	0	0	0	98
8:45 AM	3	29	0	0	0	50	2	0	0	0	8	0	0	0	0	0	92
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	21.01%	78.99%	0.00%	0.00%	0.00%	98.23%	1.77%	0.00%	3.03%	0.00%	96.97%	0.00%	0	0	0	0	795
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	38	117	0	0	0	231	3	0	1	0	42	0	0	0	0	0	432
PEAK HR FACTOR :	0.950	0.813	0.000	0.000	0.000	0.917	0.375	0.000	0.250	0.000	0.875	0.000	0.000	0.000	0.000	0.000	0.923
	0.842				0.900				0.827								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	0 ET	1 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
4:00 PM	5	49	0	0	0	45	2	0	1	0	6	0	0	0	0	0	108
4:15 PM	7	55	0	0	0	38	0	0	0	0	5	0	0	0	0	0	105
4:30 PM	7	63	0	0	0	37	0	0	1	0	5	0	0	0	0	0	113
4:45 PM	9	70	0	0	0	43	0	0	0	0	6	0	0	0	0	0	128
5:00 PM	7	68	0	0	0	42	0	0	2	0	5	0	0	0	0	0	124
5:15 PM	9	60	0	0	0	45	0	0	2	0	6	0	0	0	0	0	122
5:30 PM	15	53	0	0	0	41	0	0	1	0	18	0	0	0	0	0	128
5:45 PM	16	52	0	0	0	33	1	0	1	0	8	0	0	0	0	0	111
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	13.76%	86.24%	0.00%	0.00%	0.00%	99.08%	0.92%	0.00%	11.94%	0.00%	88.06%	0.00%	0	0	0	0	939
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	40	251	0	0	0	171	0	0	5	0	35	0	0	0	0	0	502
PEAK HR FACTOR :	0.667	0.896	0.000	0.000	0.000	0.950	0.000	0.000	0.625	0.000	0.486	0.000	0.000	0.000	0.000	0.000	0.980
	0.921				0.950				0.526								

National Data & Surveying Services Intersection Turning Movement Count

Location: Moorpark Ave/US-23 & Charles St
City: Moorpark
Control: 2-Way Stop (EB/WB)

Project ID: 22-050031-002
Date: 6/8/2022

Data - Totals

NS/EW Streets:	Moorpark Ave/US-23				Moorpark Ave/US-23				Charles St				Charles St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	1	31	1	0	2	53	1	0	0	0	0	0	4	0	1	0	94
7:15 AM	2	38	2	0	2	76	1	0	0	0	0	0	5	0	1	0	127
7:30 AM	4	61	1	0	2	101	1	0	0	0	2	0	5	1	1	0	179
7:45 AM	15	95	2	0	14	142	1	0	0	0	1	0	4	0	5	0	279
8:00 AM	7	136	2	0	8	136	3	0	0	0	2	0	5	0	6	1	306
8:15 AM	8	67	3	0	13	134	1	0	1	0	1	0	1	0	6	0	235
8:30 AM	2	47	3	0	12	80	0	0	0	0	2	0	3	0	3	0	152
8:45 AM	3	52	1	0	3	58	0	0	0	0	0	0	1	1	2	0	121
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	42	527	15	0	56	780	8	0	1	0	8	0	28	2	25	1	1493
	7.19%	90.24%	2.57%	0.00%	6.64%	92.42%	0.95%	0.00%	11.11%	0.00%	88.89%	0.00%	50.00%	3.57%	44.64%	1.79%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	34	359	8	0	37	513	6	0	1	0	6	0	15	1	18	1	999
PEAK HR FACTOR :	0.567	0.660	0.667	0.000	0.661	0.903	0.500	0.000	0.250	0.000	0.750	0.000	0.750	0.250	0.750	0.250	0.816
	0.691				0.885				0.875				0.729				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	6	74	1	0	2	51	1	0	1	0	9	0	6	1	6	0	158
4:15 PM	4	78	4	0	1	60	0	0	0	0	1	0	8	0	10	0	166
4:30 PM	5	89	4	0	3	61	0	0	2	0	5	0	7	0	3	0	179
4:45 PM	4	100	8	0	4	55	2	0	1	0	5	0	7	0	4	0	190
5:00 PM	4	76	3	0	7	52	0	0	0	2	19	0	2	0	6	0	171
5:15 PM	3	85	1	0	5	69	1	0	1	0	8	0	2	0	3	0	178
5:30 PM	2	85	4	0	4	57	1	0	3	0	9	0	3	0	4	0	172
5:45 PM	3	90	5	0	3	43	0	0	0	0	1	0	2	0	8	0	155
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	31	677	30	0	29	448	5	0	8	2	57	0	37	1	44	0	1369
	4.20%	91.73%	4.07%	0.00%	6.02%	92.95%	1.04%	0.00%	11.94%	2.99%	85.07%	0.00%	45.12%	1.22%	53.66%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	16	350	16	0	19	237	3	0	4	2	37	0	18	0	16	0	718
PEAK HR FACTOR :	0.800	0.875	0.500	0.000	0.679	0.859	0.375	0.000	0.500	0.250	0.487	0.000	0.643	0.000	0.667	0.000	0.945
	0.853				0.863				0.512				0.773				

National Data & Surveying Services Intersection Turning Movement Count

Location: Moorpark Ave/US-23 & High St
City: Moorpark
Control: Signalized

Project ID: 22-050031-003
Date: 6/8/2022

Data - Totals

NS/EW Streets:	Moorpark Ave/US-23				Moorpark Ave/US-23				High St				High St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0.5 NL	0.5 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
7:00 AM	1	23	30	0	15	40	0	0	0	0	1	0	29	1	7	0	147
7:15 AM	0	36	19	0	17	64	2	0	0	0	3	0	36	3	8	0	188
7:30 AM	3	43	32	0	21	84	0	0	2	2	3	0	40	3	19	0	252
7:45 AM	2	77	33	0	47	103	0	0	0	0	2	0	70	5	39	0	378
8:00 AM	3	86	37	0	40	103	0	0	1	1	1	0	31	2	53	0	358
8:15 AM	2	55	34	0	42	88	1	0	0	0	4	0	38	1	23	0	288
8:30 AM	3	38	39	0	14	75	1	0	0	2	2	0	40	2	16	0	232
8:45 AM	3	44	42	0	17	39	1	0	0	2	4	0	23	6	10	0	191
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	17	402	266	0	213	596	5	0	3	7	20	0	307	23	175	0	2034
	2.48%	58.69%	38.83%	0.00%	26.17%	73.22%	0.61%	0.00%	10.00%	23.33%	66.67%	0.00%	60.79%	4.55%	34.65%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	10	261	136	0	150	378	1	0	3	3	10	0	179	11	134	0	1276
PEAK HR FACTOR :	0.833	0.759	0.919	0.000	0.798	0.917	0.250	0.000	0.375	0.375	0.625	0.000	0.639	0.550	0.632	0.000	0.844
	0.808				0.882				0.571				0.711				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0.5 NL	0.5 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
4:00 PM	6	60	62	0	18	45	2	0	1	6	5	0	50	4	21	0	280
4:15 PM	10	57	66	0	14	55	1	0	2	6	7	0	48	10	25	0	301
4:30 PM	10	65	68	0	18	49	1	0	1	15	6	0	49	7	33	0	322
4:45 PM	10	67	80	0	21	48	1	0	4	7	11	0	54	11	39	0	353
5:00 PM	4	54	86	1	28	43	0	0	0	10	12	0	57	1	30	0	326
5:15 PM	7	50	65	0	20	60	1	0	0	7	4	0	42	5	37	0	298
5:30 PM	3	63	63	0	18	47	2	0	1	1	7	0	50	3	30	0	288
5:45 PM	3	55	58	0	12	36	0	0	0	2	3	0	35	1	41	0	246
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	53	471	548	1	149	383	8	0	9	54	55	0	385	42	256	0	2414
	4.94%	43.90%	51.07%	0.09%	27.59%	70.93%	1.48%	0.00%	7.63%	45.76%	46.61%	0.00%	56.37%	6.15%	37.48%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	34	243	300	1	81	195	3	0	7	38	36	0	208	29	127	0	1302
PEAK HR FACTOR :	0.850	0.907	0.872	0.250	0.723	0.886	0.750	0.000	0.438	0.633	0.750	0.000	0.912	0.659	0.814	0.000	0.922
	0.920				0.982				0.920				0.875				

National Data & Surveying Services Intersection Turning Movement Count

Location: Spring Rd & High St
 City: Moorpark
 Control: Signalized

Project ID: 22-050031-004
 Date: 6/8/2022

Data - Totals

NS/EW Streets:	Spring Rd				Spring Rd				High St				High St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	1.5 ST	0.5 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
7:00 AM	10	39	19	0	62	96	5	0	2	24	13	0	6	24	28	0	328
7:15 AM	9	35	28	0	59	124	5	0	1	23	12	0	10	23	41	0	370
7:30 AM	22	44	28	0	71	146	8	0	1	43	20	0	20	49	34	1	487
7:45 AM	33	55	52	0	92	130	7	0	2	49	25	0	20	73	25	0	563
8:00 AM	23	63	47	0	87	149	2	0	5	35	30	0	18	40	38	0	537
8:15 AM	18	60	36	0	47	76	7	0	2	38	35	0	19	36	35	0	409
8:30 AM	25	76	41	0	70	149	6	0	4	24	21	0	13	23	32	1	485
8:45 AM	17	64	20	0	51	90	8	0	8	31	26	0	12	19	29	0	375
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	18.17%	50.46%	31.37%	0.00%	34.84%	62.06%	3.10%	0.00%	5.27%	56.33%	38.40%	0.00%	17.64%	42.90%	39.16%	0.30%	3554
PEAK HR:	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:	96	222	163	0	297	501	24	0	10	165	110	0	77	198	132	1	1996
PEAK HR FACTOR:	0.727	0.881	0.784	0.000	0.807	0.841	0.750	0.000	0.500	0.842	0.786	0.000	0.963	0.678	0.868	0.250	0.886
	0.859				0.863				0.938				0.864				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	1.5 ST	0.5 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
4:00 PM	34	149	32	0	39	74	5	0	8	51	21	0	26	40	77	0	556
4:15 PM	44	134	45	0	49	58	11	0	7	55	24	0	18	58	84	0	587
4:30 PM	37	139	60	0	50	62	9	0	12	63	23	0	29	58	82	0	624
4:45 PM	47	136	51	0	40	70	15	0	10	65	28	0	27	47	84	0	620
5:00 PM	49	140	49	0	61	86	9	0	10	74	32	0	20	52	102	0	684
5:15 PM	43	132	51	0	34	58	5	0	6	57	25	0	29	51	95	0	586
5:30 PM	36	139	34	0	40	69	7	0	8	64	22	0	22	49	90	0	580
5:45 PM	39	124	35	0	45	83	6	0	6	53	13	0	21	48	84	0	557
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	18.49%	61.44%	20.07%	0.00%	36.35%	56.85%	6.80%	0.00%	9.09%	65.40%	25.51%	0.00%	14.85%	31.17%	53.98%	0.00%	4794
PEAK HR:	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL:	177	549	205	0	200	276	44	0	39	257	107	0	94	215	352	0	2515
PEAK HR FACTOR:	0.903	0.980	0.854	0.000	0.820	0.802	0.733	0.000	0.813	0.868	0.836	0.000	0.810	0.927	0.863	0.000	0.919
	0.978				0.833				0.869				0.950				

National Data & Surveying Services Intersection Turning Movement Count

Location: Moorpark Ave/US-23 & Poindexter Ave/1st St
City: Moorpark
Control: Signalized

Project ID: 22-050031-005
Date: 6/15/2022

Data - Totals

NS/EW Streets:	Moorpark Ave/US-23				Moorpark Ave/US-23				Poindexter Ave/1st St				Poindexter Ave/1st St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	1	0	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	6	29	0	0	0	40	22	0	18	0	4	0	2	4	1	0	126
7:15 AM	7	30	1	0	0	54	50	0	10	0	8	0	0	3	0	0	163
7:30 AM	6	30	0	0	2	49	42	0	12	1	3	0	2	4	1	0	152
7:45 AM	15	35	1	0	1	39	64	0	25	5	9	0	2	10	1	0	207
8:00 AM	6	34	3	0	2	49	41	0	22	1	4	0	0	7	1	0	170
8:15 AM	7	43	3	0	1	31	34	0	22	2	10	0	0	7	0	0	160
8:30 AM	4	43	0	0	3	39	25	0	19	2	8	0	1	2	4	0	150
8:45 AM	8	36	2	0	0	53	19	0	23	3	5	0	0	3	0	0	152
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	59	280	10	0	9	354	297	0	151	14	51	0	7	40	8	0	1280
APPROACH %'s:	16.91%	80.23%	2.87%	0.00%	1.36%	53.64%	45.00%	0.00%	69.91%	6.48%	23.61%	0.00%	12.73%	72.73%	14.55%	0.00%	
PEAK HR:	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL:	34	129	5	0	5	191	197	0	69	7	24	0	4	24	3	0	692
PEAK HR FACTOR:	0.567	0.921	0.417	0.000	0.625	0.884	0.770	0.000	0.690	0.350	0.667	0.000	0.500	0.600	0.750	0.000	0.836
	0.824				0.945				0.641				0.596				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	1	0	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	12	74	0	0	2	68	32	0	44	7	16	0	5	7	3	0	270
4:15 PM	7	68	1	0	1	68	26	0	37	5	8	0	1	5	2	0	229
4:30 PM	8	84	4	0	6	57	31	0	51	9	13	0	5	1	2	0	271
4:45 PM	14	80	1	0	1	72	35	0	40	2	10	0	4	3	2	0	264
5:00 PM	13	80	3	0	1	55	42	0	61	11	30	0	3	4	4	0	307
5:15 PM	8	57	5	0	1	65	37	0	53	3	15	0	3	3	5	0	255
5:30 PM	8	62	2	0	2	50	35	0	51	4	14	0	5	5	2	0	240
5:45 PM	5	57	1	0	3	50	26	0	38	3	9	0	0	1	1	0	194
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	75	562	17	0	17	485	264	0	375	44	115	0	26	29	21	0	2030
APPROACH %'s:	11.47%	85.93%	2.60%	0.00%	2.22%	63.32%	34.46%	0.00%	70.22%	8.24%	21.54%	0.00%	34.21%	38.16%	27.63%	0.00%	
PEAK HR:	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL:	43	301	13	0	9	249	145	0	205	25	68	0	15	11	13	0	1097
PEAK HR FACTOR:	0.768	0.896	0.650	0.000	0.375	0.865	0.863	0.000	0.840	0.568	0.567	0.000	0.750	0.688	0.650	0.000	0.893
	0.930				0.933				0.730				0.886				

National Data & Surveying Services Intersection Turning Movement Count

Location: Moorpark Ave/US-23 & Los Angeles Ave/CA-118
City: Moorpark
Control: Signalized

Project ID: 22-050031-006
Date: 6/8/2022

Data - Totals

NS/EW Streets:	Moorpark Ave/US-23				Moorpark Ave/US-23				Los Angeles Ave/CA-118				Los Angeles Ave/CA-118				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.5 NL	0.5 NT	1 NR	0 NU	1.3 SL	0.3 ST	1.3 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
7:00 AM	14	10	26	0	19	5	15	0	12	144	4	0	9	148	17	0	423
7:15 AM	21	9	27	0	27	3	24	0	16	117	2	0	9	220	21	0	496
7:30 AM	40	14	52	0	37	9	35	0	23	152	2	0	14	240	31	0	649
7:45 AM	35	20	26	0	38	11	34	0	49	239	13	0	22	211	28	0	726
8:00 AM	13	14	35	0	38	18	30	0	42	183	12	0	39	192	26	0	642
8:15 AM	20	22	28	0	41	18	26	0	23	148	7	0	33	212	24	0	602
8:30 AM	7	12	32	0	38	14	36	0	18	181	3	0	33	207	34	0	615
8:45 AM	12	5	24	0	39	10	24	0	20	142	4	0	24	179	23	0	506
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	162	106	250	0	277	88	224	0	203	1306	47	0	183	1609	204	0	4659
APPROACH %'s:	31.27%	20.46%	48.26%	0.00%	47.03%	14.94%	38.03%	0.00%	13.05%	83.93%	3.02%	0.00%	9.17%	80.61%	10.22%	0.00%	
PEAK HR:	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:	108	70	141	0	154	56	125	0	137	722	34	0	108	855	109	0	2619
PEAK HR FACTOR:	0.675	0.795	0.678	0.000	0.939	0.778	0.893	0.000	0.699	0.755	0.654	0.000	0.692	0.891	0.879	0.000	0.902
	0.752				0.974				0.742				0.940				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.5 NL	0.5 NT	1 NR	0 NU	1.3 SL	0.3 ST	1.3 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
4:00 PM	9	14	31	0	49	25	17	0	25	187	14	0	52	260	32	0	715
4:15 PM	27	19	31	0	47	18	23	0	31	212	12	0	48	252	34	0	754
4:30 PM	15	14	26	0	44	30	24	0	47	223	14	0	66	234	34	0	771
4:45 PM	18	10	33	0	31	22	20	0	28	190	11	0	63	210	25	0	661
5:00 PM	15	14	35	1	59	21	28	0	35	202	15	0	69	244	34	0	772
5:15 PM	13	15	29	0	30	25	19	0	30	195	13	0	76	246	33	0	724
5:30 PM	13	16	34	0	40	21	19	0	23	208	14	0	73	223	23	0	707
5:45 PM	14	13	33	0	39	27	17	0	24	167	11	0	57	212	34	0	648
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	124	115	252	1	339	189	167	0	243	1584	104	0	504	1881	249	0	5752
APPROACH %'s:	25.20%	23.37%	51.22%	0.20%	48.78%	27.19%	24.03%	0.00%	12.58%	82.03%	5.39%	0.00%	19.13%	71.41%	9.45%	0.00%	
PEAK HR:	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL:	75	57	125	1	181	91	95	0	141	827	52	0	246	940	127	0	2958
PEAK HR FACTOR:	0.694	0.750	0.893	0.250	0.767	0.758	0.848	0.000	0.750	0.927	0.867	0.000	0.891	0.933	0.934	0.000	0.958
	0.838				0.850				0.898				0.946				

National Data & Surveying Services Intersection Turning Movement Count

Location: Walnut Canyon Rd & Spring Rd/Bike Trail
City: Moorpark
Control: Signalized

Project ID: 22-050031-007
Date: 6/15/2022

Data - Totals

NS/EW Streets:	Walnut Canyon Rd				Walnut Canyon Rd				Spring Rd/Bike Trail				Spring Rd/Bike Trail				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	0 ET	1 ER	0 EU	1 WL	0 WT	1 WR	0 WU	
7:00 AM	1	26	5	0	93	33	0	0	0	0	1	0	3	0	51	0	213
7:15 AM	2	12	4	0	117	36	0	0	0	0	0	0	1	1	50	0	223
7:30 AM	2	16	6	0	142	38	0	0	1	0	2	0	5	0	65	0	277
7:45 AM	0	17	5	0	105	26	0	0	0	0	0	0	4	0	58	0	215
8:00 AM	0	20	3	0	103	30	0	0	0	1	0	0	5	1	49	0	212
8:15 AM	1	19	3	0	94	27	0	0	0	0	1	0	8	0	45	0	198
8:30 AM	0	22	4	0	104	30	0	0	0	0	0	0	3	0	45	0	208
8:45 AM	0	22	5	0	67	33	0	0	0	0	0	0	2	0	48	0	177
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	3.08%	78.97%	17.95%	0.00%	76.53%	23.47%	0.00%	0.00%	16.67%	16.67%	66.67%	0.00%	6.98%	0.45%	92.57%	0.00%	1723
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	5	71	20	0	457	133	0	0	1	0	3	0	13	1	224	0	928
PEAK HR FACTOR :	0.625	0.683	0.833	0.000	0.805	0.875	0.000	0.000	0.250	0.000	0.375	0.000	0.650	0.250	0.862	0.000	0.838
	0.750				0.819				0.333				0.850				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	0 ET	1 ER	0 EU	1 WL	0 WT	1 WR	0 WU	
4:00 PM	0	30	8	0	48	25	0	0	0	0	0	0	8	0	150	0	269
4:15 PM	0	33	9	0	64	21	1	0	0	0	1	0	7	0	117	0	253
4:30 PM	1	41	8	0	70	22	0	0	1	0	0	0	15	0	150	0	308
4:45 PM	0	38	7	0	71	21	0	0	0	0	1	0	6	1	162	0	307
5:00 PM	0	40	9	0	68	23	0	0	0	0	0	0	8	0	153	0	301
5:15 PM	0	33	11	0	70	23	0	0	0	0	1	0	12	0	156	0	306
5:30 PM	0	35	3	0	64	24	0	0	0	0	0	0	2	0	105	0	233
5:45 PM	0	25	2	0	52	16	0	0	0	0	0	0	4	0	118	1	218
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0.30%	82.58%	17.12%	0.00%	74.23%	25.62%	0.15%	0.00%	25.00%	0.00%	75.00%	0.00%	5.28%	0.09%	94.55%	0.09%	2195
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	152	35	0	279	89	0	0	1	0	2	0	41	1	621	0	1222
PEAK HR FACTOR :	0.250	0.927	0.795	0.000	0.982	0.967	0.000	0.000	0.250	0.000	0.500	0.000	0.683	0.250	0.958	0.000	0.992
	0.940				0.989				0.750				0.981				

National Data & Surveying Services Intersection Turning Movement Count

Location: Gabbert Rd & Poindexter Ave
City: Moorpark
Control: 3-Way Stop (NB/SB/WB)

Project ID: 22-050031-008
Date: 6/8/2022

Data - Totals

NS/EW Streets:	Gabbert Rd				Gabbert Rd				Poindexter Ave				Poindexter Ave					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
7:00 AM	0	1	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	50
7:15 AM	0	0	27	0	4	5	0	0	0	0	0	0	0	35	0	0	0	69
7:30 AM	0	2	30	0	1	3	0	0	0	0	0	0	0	70	0	0	0	106
7:45 AM	0	3	68	0	2	6	0	0	0	0	0	0	0	89	0	2	0	170
8:00 AM	0	6	61	0	2	7	0	0	0	0	0	0	0	44	0	4	0	124
8:15 AM	0	3	39	0	6	2	0	0	0	0	0	0	0	43	0	3	0	96
8:30 AM	0	3	67	0	3	5	0	0	0	0	0	0	0	31	0	3	0	112
8:45 AM	0	4	31	0	1	2	0	0	0	0	0	0	0	32	0	1	0	71
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	24	345	0	19	32	0	0	0	0	0	0	364	0	14	0	798	
	0.00%	6.50%	93.50%	0.00%	37.25%	62.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	96.30%	0.00%	3.70%	0.00%		
PEAK HR :	07:45 AM - 08:45 AM																TOTAL	
PEAK HR VOL :	0	15	235	0	13	20	0	0	0	0	0	0	207	0	12	0	502	
PEAK HR FACTOR :	0.000	0.625	0.864	0.000	0.542	0.714	0.000	0.000	0.000	0.000	0.000	0.000	0.581	0.000	0.750	0.000	0.738	
	0.880				0.917								0.602					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
4:00 PM	0	7	31	0	2	6	0	0	0	0	0	0	39	0	3	0	88	
4:15 PM	0	2	33	0	3	3	0	0	0	0	0	0	39	0	2	0	82	
4:30 PM	0	7	36	0	2	4	0	0	0	0	0	0	29	0	7	0	85	
4:45 PM	0	9	26	0	5	7	0	1	0	0	0	0	41	0	1	0	90	
5:00 PM	0	9	30	0	4	8	0	0	0	0	0	0	51	0	5	0	107	
5:15 PM	0	8	22	0	0	4	0	0	0	0	0	0	30	0	4	0	68	
5:30 PM	0	12	23	0	2	4	0	0	0	0	0	0	38	0	2	0	81	
5:45 PM	0	14	21	0	3	8	0	1	0	0	0	0	23	0	3	0	73	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	68	222	0	21	44	0	2	0	0	0	0	290	0	27	0	674	
	0.00%	23.45%	76.55%	0.00%	31.34%	65.67%	0.00%	2.99%	0.00%	0.00%	0.00%	0.00%	91.48%	0.00%	8.52%	0.00%		
PEAK HR :	04:15 PM - 05:15 PM																TOTAL	
PEAK HR VOL :	0	27	125	0	14	22	0	1	0	0	0	0	160	0	15	0	364	
PEAK HR FACTOR :	0.000	0.750	0.868	0.000	0.700	0.688	0.000	0.250	0.000	0.000	0.000	0.000	0.784	0.000	0.536	0.000	0.850	
	0.884				0.712								0.781					

Appendix B – ICU/Synchro Reports – Existing Conditions

Intersection #1

E-W Street: Casey Rd

N-S Street: Walnut Canyon Rc

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM Existing				PM Existing			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	1	1	1.00	0.00	5	1	1.00	0.00
Comb. L-T		0				0		
EB Thru	0	0	0.00	0.00	0	0	0.00	0.00
Comb. T-R		0				0		
EB Right	42	1	1.00	0.03	22	1	1.00	0.01
Comb. L-T-R		0				0		
WB Left	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T		0				0		
WB Thru	0	0	0.00	0.00	0	0	0.00	0.00
Comb. T-R		0				0		
WB Right	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T-R		0				0		
NB Left	38	1	1.00	0.03	32	1	1.00	0.02
Comb. L-T		0				0		
NB Thru	117	1	1.00	0.07	161	1	1.00	0.10
Comb. T-R		0				0		
NB Right	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T-R		0				0		
SB Left	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T		0				0		
SB Thru	231	0	0.99	0.15	167	0	1.00	0.10
Comb. T-R		1				1		
SB Right	3	0	0.01	0.16	0	0	0.00	0.00
Comb. L-T-R		0				0		

Critical Volumes	E-W:	0.03	E-W:	0.01
	N-S:	0.18	N-S:	0.13
	Total:	0.21	Total:	0.14

Lost Time	0.10	0.10
-----------	------	------

V/C	0.309	0.240
Level of Service	A	A

Intersection #3

E-W Street: High St

N-S Street: Moorpark Ave

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM Existing				PM Existing			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	3	0	0.19	0.01	5	0	0.06	0.05
Comb. L-T		0				0		
EB Thru	3	0	0.19	0.01	39	0	0.51	0.05
Comb. T-R		0				0		
EB Right	10	0	0.63	0.01	33	0	0.43	0.05
Comb. L-T-R		1				1		
WB Left	179	0	0.94	0.13	202	0	0.89	0.15
Comb. L-T		1				1		
WB Thru	11	0	0.06	0.12	24	0	0.11	0.14
Comb. T-R		0				0		
WB Right	134	1	1.00	0.09	139	1	1.00	0.09
Comb. L-T-R		0				0		
NB Left	10	0	0.04	0.18	32	0	0.12	0.18
Comb. L-T		1				1		
NB Thru	261	0	0.96	0.17	236	0	0.88	0.17
Comb. T-R		0				0		
NB Right	136	1	1.00	0.09	299	1	1.00	0.20
Comb. L-T-R		0				0		
SB Left	150	1	1.00	0.10	87	1	1.00	0.06
Comb. L-T		0				0		
SB Thru	378	0	1.00	0.24	200	0	0.99	0.13
Comb. T-R		1				1		
SB Right	1	0	0.00	0.25	3	0	0.01	0.14
Comb. L-T-R		0				0		

Critical Volumes		E-W:	0.14		E-W:	0.20
		N-S:	0.43		N-S:	0.31
		Total:	0.57		Total:	0.52

Lost Time	0.10	0.10
-----------	------	------

V/C	0.671	0.616
Level of Service	B	B

Intersection #4

E-W Street: Princeton Ave

N-S Street: Spring Rd

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM Existing				PM Existing			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	10	1	1.00	0.01	38	1	1.00	0.03
Comb. L-T		0				0		
EB Thru	165	1	1.00	0.10	259	1	1.00	0.16
Comb. T-R		0				0		
EB Right	110	1	1.00	0.07	108	1	1.00	0.07
Comb. L-T-R		0				0		
WB Left	78	1	1.00	0.05	105	1	1.00	0.07
Comb. L-T		0				0		
WB Thru	198	1	1.00	0.12	208	1	1.00	0.13
Comb. T-R		0				0		
WB Right	132	1	1.00	0.09	363	1	1.00	0.24
Comb. L-T-R		0				0		
NB Left	96	1	1.00	0.06	176	1	1.00	0.12
Comb. L-T		0				0		
NB Thru	222	2	2.00	0.07	547	2	2.00	0.17
Comb. T-R		0				0		
NB Right	163	1	1.00	0.11	211	1	1.00	0.14
Comb. L-T-R		0				0		
SB Left	297	1	1.00	0.20	185	1	1.00	0.12
Comb. L-T		0				0		
SB Thru	501	1	1.91	0.16	276	1	1.76	0.10
Comb. T-R		1				1		
SB Right	24	0	0.09	0.18	38	0	0.24	0.10
Comb. L-T-R		0				0		

Critical Volumes	E-W:	0.16	E-W:	0.27
	N-S:	0.31	N-S:	0.29
	Total:	0.46	Total:	0.56

Lost Time	0.10	0.10
-----------	------	------

V/C	0.562	0.662
Level of Service	A	B

Intersection #5

E-W Street: Poindexter Ave/Fir

N-S Street: Moorpark Ave

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM Existing				PM Existing			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	81	1	1.00	0.05	205	1	1.00	0.14
Comb. L-T		0				0		
EB Thru	9	0	0.26	0.02	25	0	0.27	0.06
Comb. T-R		1				1		
EB Right	26	0	0.74	0.02	68	0	0.73	0.06
Comb. L-T-R		0				0		
WB Left	4	1	1.00	0.00	15	1	1.00	0.01
Comb. L-T		0				0		
WB Thru	28	0	0.90	0.02	11	0	0.46	0.02
Comb. T-R		1				1		
WB Right	3	0	0.10	0.02	13	0	0.54	0.02
Comb. L-T-R		0				0		
NB Left	34	1	1.00	0.02	43	1	1.00	0.03
Comb. L-T		0				0		
NB Thru	142	0	0.95	0.09	301	0	0.96	0.20
Comb. T-R		1				1		
NB Right	7	0	0.05	0.10	13	0	0.04	0.21
Comb. L-T-R		0				0		
SB Left	6	1	1.00	0.00	9	1	1.00	0.01
Comb. L-T		0				0		
SB Thru	168	0	0.48	0.22	249	0	0.63	0.25
Comb. T-R		1				1		
SB Right	181	0	0.52	0.23	145	0	0.37	0.26
Comb. L-T-R		0				0		

Critical Volumes		E-W:	0.07		E-W:	0.15
		N-S:	0.26		N-S:	0.29
		Total:	0.33		Total:	0.44

Lost Time		0.10		0.10
-----------	--	------	--	------

V/C		0.430		0.544
Level of Service		A		A

Intersection #6

E-W Street: Los Angeles Ave

N-S Street: Moorpark Ave

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM Existing				PM Existing			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	137	1	1.00	0.09	140	1	1.00	0.09
Comb. L-T		0				0		
EB Thru	722	2	2.87	0.16	810	2	2.82	0.18
Comb. T-R		1				1		
EB Right	34	0	0.13	0.17	53	0	0.18	0.19
Comb. L-T-R		0				0		
WB Left	108	1	1.00	0.07	274	1	1.00	0.18
Comb. L-T		0				0		
WB Thru	855	2	2.00	0.27	934	2	2.00	0.29
Comb. T-R		0				0		
WB Right	109	1	1.00	0.07	126	1	1.00	0.08
Comb. L-T-R		0				0		
NB Left	108	1	1.21	0.06	62	1	1.08	0.04
Comb. L-T		1				1		
NB Thru	70	0	0.79	0.06	53	0	0.92	0.04
Comb. T-R		0				0		
NB Right	141	1	1.00	0.09	123	1	1.00	0.08
Comb. L-T-R		0				0		
SB Left	154	1	0.46	0.22	164	1	0.46	0.24
Comb. L-T		0				0		
SB Thru	56	0	0.17	0.21	98	0	0.28	0.22
Comb. T-R		0				0		
SB Right	125	1	0.37	0.22	91	1	0.26	0.24
Comb. L-T-R		1				1		

Critical Volumes	E-W:	0.36	E-W:	0.39
	N-S:	0.32	N-S:	0.32
	Total:	0.68	Total:	0.70

Lost Time	0.10	0.10
-----------	------	------

V/C	0.776	0.803
Level of Service	C	D

Intersection #7

E-W Street: Spring Rd

N-S Street: Walnut Canyon Rc

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM Existing				PM Existing			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	1	0	0.50	0.00	1	0	1.00	0.00
Comb. L-T		1				1		
EB Thru	1	0	0.50	0.00	0	0	0.00	0.00
Comb. T-R		0				0		
EB Right	3	1	1.00	0.00	2	1	1.00	0.00
Comb. L-T-R		0				0		
WB Left	22	0	0.96	0.02	41	0	0.98	0.03
Comb. L-T		1				1		
WB Thru	1	0	0.04	0.01	1	0	0.02	0.03
Comb. T-R		0				0		
WB Right	217	1	1.00	0.14	621	1	1.00	0.41
Comb. L-T-R		0				0		
NB Left	3	1	1.00	0.00	1	1	1.00	0.00
Comb. L-T		0				0		
NB Thru	72	1	1.00	0.05	152	1	1.00	0.10
Comb. T-R		0				0		
NB Right	17	1	1.00	0.01	35	1	1.00	0.02
Comb. L-T-R		0				0		
SB Left	444	1	1.00	0.30	279	1	1.00	0.19
Comb. L-T		0				0		
SB Thru	121	0	1.00	0.08	89	0	1.00	0.06
Comb. T-R		1				1		
SB Right	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T-R		0				0		

Critical Volumes	E-W:	0.15	E-W:	0.41
	N-S:	0.34	N-S:	0.28
	Total:	0.49	Total:	0.70

Lost Time	0.10	0.10
-----------	------	------

V/C	0.587	0.796
Level of Service	A	C

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	1	0	6	16	1	18	34	359	8	37	513	6
Future Vol, veh/h	1	0	6	16	1	18	34	359	8	37	513	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	50	-	-	-	45	-	-	50	-	-
Veh in Median Storage,-#	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	7	17	1	20	37	390	9	40	558	7

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	1121 1115	562 1114	1114 395	565 0
Stage 1	642 642	- 469	469 -	- -
Stage 2	479 473	- 645	645 -	- -
Critical Hdwy	7.12 6.52	6.22 7.12	6.52 6.22	4.12 -
Critical Hdwy Stg 1	6.12 5.52	- 6.12	5.52 -	- -
Critical Hdwy Stg 2	6.12 5.52	- 6.12	5.52 -	- -
Follow-up Hdwy	3.518 4.018	3.318 3.518	4.018 3.318	2.218 -
Pot Cap-1 Maneuver	183 208	526 185	208 654	1007 -
Stage 1	463 469	- 575	561 -	- -
Stage 2	568 558	- 461	467 -	- -
Platoon blocked, %				- -
Mov Cap-1 Maneuver	167 193	526 173	193 654	1007 -
Mov Cap-2 Maneuver	167 193	- 173	193 -	- -
Stage 1	446 453	- 554	540 -	- -
Stage 2	530 537	- 440	451 -	- -

Approach	EB	WB	NB	SB
HCM Control Delay, s/14		19.9	0.7	0.5
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn	EBLn	WBLn	SBL	SBT	SBR
Capacity (veh/h)	1007	-	-	167	526	280	1160	-	-
HCM Lane V/C Ratio	0.037	-	-	0.007	0.012	0.136	0.035	-	-
HCM Control Delay (s)	8.7	-	-	26.7	11.9	19.9	8.2	-	-
HCM Lane LOS	A	-	-	D	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	0	0.5	0.1	-	-

Intersection

Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↖		↗	↖	
Traffic Vol, veh/h	4	2	37	18	0	16	16	350	16	19	237	3
Future Vol, veh/h	4	2	37	18	0	16	16	350	16	19	237	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	50	-	-	-	45	-	-	50	-	-
Veh in Median Storage,-#	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	2	40	20	0	17	17	380	17	21	258	3

Major/Minor	Minor2	Minor1		Major1		Major2						
Conflicting Flow All	733	733	260	746	726	389	261	0	0	397	0	0
Stage 1	302	302	-	423	423	-	-	-	-	-	-	-
Stage 2	431	431	-	323	303	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuve	836	348	779	330	351	659	1303	-	-	1162	-	-
Stage 1	707	664	-	609	588	-	-	-	-	-	-	-
Stage 2	603	583	-	689	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuve	820	337	779	304	340	659	1303	-	-	1162	-	-
Mov Cap-2 Maneuve	820	337	-	304	340	-	-	-	-	-	-	-
Stage 1	698	652	-	601	580	-	-	-	-	-	-	-
Stage 2	579	575	-	639	652	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	14.7	0.3	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn	EBLn1	WBLn	SBL	SBT	SBR
Capacity (veh/h)	1303	-	-	325	779	407	1162	-	-
HCM Lane V/C Ratio	0.013	-	-	0.02	0.052	0.091	0.018	-	-
HCM Control Delay (s)	7.8	-	-	16.3	9.9	14.7	8.2	-	-
HCM Lane LOS	A	-	-	C	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.3	0.1	-	-

Appendix C – Cumulative Project List

Cumulative Development Projects Trip Generation (As of July 21, 2022)

Project	Land Use	Size	ADT	A.M. Peak Hour	P.M. Peak Hour	Note
Triliad Development ¹	Movie Studio	37 Acres	3,108	174	168	Approved
Pacific Communities ²	Single Family Residential	157 Single Units/300 Condo Units	3,245	250	315	Approved
Essex Moorpark, LLC ³	Multi-Family Residential	200 Units	1,330	102	124	Approved
Spring Road, LLC ⁴	Condominiums	95 Units	552	42	49	Approved
City Ventures	Single Family Residential	110 Units	1,047	83	110	Approved
Oakmont Senior Living ⁵	Senior Residential	84 units/beds	219	16	22	Approved/Under Construction
Birdsall Group, LLC	Single Family Residential	21 Units	200	16	12	Approved
Aldersgate Senior Housing ⁶	Senior Residential	390 Units	1,468	90	125	Approved
High Street Depot/Daly Group ⁷	Downtown Mixed-Use	13,656 sf retail and 95 apartments	1,703	79	144	Approved
Green Island Villas/Kozar ⁸	Condominiums	69 Units	505	32	39	Approved
Everett Street Terraces/ Chiu ⁹	Condominiums	60 Units	292	21	25	Proposed
Beltramo Ranch ¹⁰	Single Family Res	47 units	378	31	43	Proposed
AHA Scattered Sites	Multi-family	107,196 sf	410	26	31	Proposed
Hitch Ranch ¹¹	Single and Multi-Family	755 units	6,436	467	608	Proposed
Moorpark 67/Rasmussen ¹²	Single Family Residential	139 Units	1,359	107	143	Proposed
*Amazon Distribution Center ¹³	Industrial	Reuse of 189,364 sf industrial	994	-17	12	Under Construction
**National Ready Mix	Batch Plant	10 acres	600	20	20	Unknown
***CEMEX	Quarry	N/A	980	276	148	Unknown
***Wayne J. Sand & Gravel	Quarry	N/A	504	92	34	Unknown
***Grimes Rock	Quarry	N/A	480	35	14	Unknown
Total Trips						

*Trip calculations include baseline of existing industrial use (site is developed). ADT is a gross figure and A.M./P.M. are net figures based on previous use.

**No proposal to change or expand operations. Existing use creates significant truck traffic through Moorpark.

***Operations under County jurisdiction but bring significant truck traffic through Moorpark. Please contact Ventura County to determine whether any active permits for expansion are being reviewed or processed.

¹ *Moorpark West Studio Mitigated Negative Declaration (Page B-60)*. Impact Sciences, June 2010.

² *Traffic Impact Analysis for the Pacific Communities (Pacific Arroyo) Residential Project (Page 22)*. KOA Corporation, November 2010.

³ *Traffic Impact Analysis – Essex Apartments, Moorpark (Page 10)*. KOA Corporation, June 2013.

⁴ *Moorpark Development Traffic Study (Page 18)*. STC Traffic Inc, November 2015.

⁵ *Traffic Analysis for the Oakmont Senior Living Project – City of Moorpark (Page 2)*. Associated Transportation Engineers, July 2019.

⁶ *Aldersgate Senior Living Project City of Moorpark, California (Page 9)*. Associated Transportation Engineers, February 2016.

⁷ *Traffic and Parking Study for the Moorpark Railroad Depot Project (Page 8)*. Associated Transportation Engineers, November 2018.

⁸ *Site Access Evaluation for the 635 W. Los Angeles Avenue Residential Project (Page 5)*. Gibson Transportation Consulting, Inc., August 2019.

⁹ *Traffic Impact Study Everett Street Terraces Project (Page 17)*. Linscott, Law & Greenspan, Engineers, February 2016.

¹⁰ *Traffic and Circulation Study for the Beltramo Ranch Residential Project, City of Moorpark (Page 7)*. Associated Transportation Engineers, May 2021.

¹¹ *Traffic Impact Analysis for the Proposed Hitch Ranch Specific Plan (Page 28)*. Impact Sciences, January 2021.

¹² *Traffic Impact Analysis – North Ranch Residential Development (Page 13)*. K2 Traffic Engineering, Inc., December 2021.

¹³ *Traffic Impact Study for 6000 Condor Drive Warehousing/Distribution Facility (Page 13)*. NV5 Engineers and Consultants, Inc., December 2020.

Appendix D – Internal Capture Trip Calculations

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Civic Center Master Plan Project	Organization:	Psomas
Project Location:	Moorpark, CA	Performed By:	QS
Scenario Description:		Date:	Jul-22
Analysis Year:	2022	Checked By:	
Analysis Period:	AM Street Peak Hour	Date:	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				8	7	2
Retail				31	18	12
Restaurant				0		
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses ²				0		
Total				39	25	14

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	39	25	14
Internal Capture Percentage	5%	4%	7%
External Vehicle-Trips ³	37	24	13
External Transit-Trips ⁴	0	0	0
External Non-Motorized Trips ⁴	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	0%	50%
Retail	6%	0%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

³Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

⁴Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Civic Center Master Plan Project
Analysis Period:	AM Street Peak Hour

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	7	7	1.00	2	2
Retail	1.00	18	18	1.00	12	12
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	1	0	0	0
Retail	3		2	0	2	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		6	0	0	0	0
Retail	0		0	0	0	0
Restaurant	1	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	3	0	0		0
Hotel	0	1	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	7	7	7	0	0
Retail	1	17	18	17	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	1	1	2	1	0	0
Retail	0	12	12	12	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

²Person-Trips

³Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Civic Center Master Plan Project	Organization:	Psomas
Project Location:	Moorpark, CA	Performed By:	QS
Scenario Description:		Date:	Jul-22
Analysis Year:	2022	Checked By:	
Analysis Period:	PM Street Peak Hour	Date:	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				11	4	7
Retail				86	43	43
Restaurant				0		
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses ²				0		
Total				97	47	50

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	0	0	0	0
Retail	1		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	97	47	50
Internal Capture Percentage	4%	4%	4%
External Vehicle-Trips ³	93	45	48
External Transit-Trips ⁴	0	0	0
External Non-Motorized Trips ⁴	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	25%	14%
Retail	2%	2%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

³Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

⁴Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Civic Center Master Plan Project
Analysis Period:	PM Street Peak Hour

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	4	4	1.00	7	7
Retail	1.00	43	43	1.00	43	43
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	0	0	0	0
Retail	1		12	2	11	2
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	0	0	0	0
Retail	1		0	0	0	0
Restaurant	1	22		0	0	0
Cinema/Entertainment	0	2	0		0	0
Residential	2	4	0	0		0
Hotel	0	1	0	0	0	

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	1	3	4	3	0	0
Retail	1	42	43	42	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	1	6	7	6	0	0
Retail	1	42	43	42	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

²Person-Trips

³Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Civic Center Master Plan Project	Organization:	Psomas
Project Location:	Moorpark, CA	Performed By:	QS
Scenario Description:		Date:	Jul-22
Analysis Year:	2022	Checked By:	
Analysis Period:	AM Street Peak Hour	Date:	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				31	18	12
Restaurant				0		
Cinema/Entertainment				0		
Residential				30	7	23
Hotel				0		
All Other Land Uses ²				0		
Total				61	25	35

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	60	25	35
Internal Capture Percentage	0%	0%	0%
External Vehicle-Trips ³	60	25	35
External Transit-Trips ⁴	0	0	0
External Non-Motorized Trips ⁴	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	0%	0%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	0%	0%
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

³Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

⁴Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Civic Center Master Plan Project
Analysis Period:	AM Street Peak Hour

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	18	18	1.00	12	12
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	7	7	1.00	23	23
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office	0	0	0	0	0	0
Retail	3	0	2	0	2	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	5	0	0	0
Hotel	0	0	0	0	0	0

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office	6	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	0	1	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	3	0	0	0	0
Hotel	0	1	0	0	0	0

Table 9-A (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	0	18	18	18	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	7	7	7	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	0	12	12	12	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	23	23	23	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

²Person-Trips

³Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Civic Center Master Plan Project	Organization:	Psomas
Project Location:	Moorpark, CA	Performed By:	QS
Scenario Description:		Date:	Jul-22
Analysis Year:	2022	Checked By:	
Analysis Period:	PM Street Peak Hour	Date:	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				86	43	43
Restaurant				0		
Cinema/Entertainment				0		
Residential				38	24	14
Hotel				0		
All Other Land Uses ²				0		
Total				124	67	57

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	11	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	4	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	124	67	57
Internal Capture Percentage	24%	22%	26%
External Vehicle-Trips ³	94	52	42
External Transit-Trips ⁴	0	0	0
External Non-Motorized Trips ⁴	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	9%	26%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	46%	29%
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

³Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

⁴Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Civic Center Master Plan Project
Analysis Period:	PM Street Peak Hour

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	43	43	1.00	43	43
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	24	24	1.00	14	14
Hotel	1.00	0	0	1.00	0	0

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	1		12	2	11	2
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	6	3	0		0
Hotel	0	0	0	0	0	

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	0	0	1	0
Retail	0		0	0	11	0
Restaurant	0	22		0	4	0
Cinema/Entertainment	0	2	0		1	0
Residential	0	4	0	0		0
Hotel	0	1	0	0	0	

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	4	39	43	39	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	11	13	24	13	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	11	32	43	32	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	4	10	14	10	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

²Person-Trips

³Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Civic Center Master Plan Project	Organization:	Psomas
Project Location:	Moorpark, CA	Performed By:	QS
Scenario Description:		Date:	Jul-22
Analysis Year:	2022	Checked By:	
Analysis Period:	AM Street Peak Hour	Date:	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				73	55	18
Retail				31	18	12
Restaurant				0		
Cinema/Entertainment				0		
Residential				30	7	23
Hotel				0		
All Other Land Uses ²				0		
Total				134	80	53

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		5	0	0	0	0
Retail	2		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	133	80	53
Internal Capture Percentage	11%	9%	13%
External Vehicle-Trips ³	119	73	46
External Transit-Trips ⁴	0	0	0
External Non-Motorized Trips ⁴	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	4%	28%
Retail	28%	17%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	0%	0%
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

³Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

⁴Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Civic Center Master Plan Project
Analysis Period:	AM Street Peak Hour

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	55	55	1.00	18	18
Retail	1.00	18	18	1.00	12	12
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	7	7	1.00	23	23
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		5	11	0	0	0
Retail	3		2	0	2	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	5	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		6	0	0	0	0
Retail	2		0	0	0	0
Restaurant	8	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	2	3	0	0		0
Hotel	2	1	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	2	53	55	53	0	0
Retail	5	13	18	13	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	7	7	7	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	5	13	18	13	0	0
Retail	2	10	12	10	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	23	23	23	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

²Person-Trips

³Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Civic Center Master Plan Project	Organization:	Psomas
Project Location:	Moorpark, CA	Performed By:	QS
Scenario Description:		Date:	Jul-22
Analysis Year:	2022	Checked By:	
Analysis Period:	PM Street Peak Hour	Date:	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				38	9	28
Retail				86	43	43
Restaurant				0		
Cinema/Entertainment				0		
Residential				38	24	14
Hotel				0		
All Other Land Uses ²				0		
Total				162	76	85

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	0	0	1	0
Retail	1		0	0	11	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	4	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	161	76	85
Internal Capture Percentage	26%	28%	25%
External Vehicle-Trips ³	119	55	64
External Transit-Trips ⁴	0	0	0
External Non-Motorized Trips ⁴	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	22%	14%
Retail	16%	28%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	50%	36%
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

³Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

⁴Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Civic Center Master Plan Project
Analysis Period:	PM Street Peak Hour

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	9	9	1.00	28	28
Retail	1.00	43	43	1.00	43	43
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	24	24	1.00	14	14
Hotel	1.00	0	0	1.00	0	0

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		6	1	0	1	0
Retail	1		12	2	11	2
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	6	3	0		0
Hotel	0	0	0	0	0	

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	0	0	1	0
Retail	3		0	0	11	0
Restaurant	3	22		0	4	0
Cinema/Entertainment	1	2	0		1	0
Residential	5	4	0	0		0
Hotel	0	1	0	0	0	

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	2	7	9	7	0	0
Retail	7	36	43	36	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	12	12	24	12	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	4	24	28	24	0	0
Retail	12	31	43	31	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	5	9	14	9	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

²Person-Trips

³Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Table 7.1a Adjusted Internal Trip Capture Rates for Trip Origins within a Multi-Use Development

Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Office	0.0%	0.0%
	To Retail	28.0%	20.0%
	To Restaurant	63.0%	4.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	1.0%	2.0%
	To Hotel	0.0%	0.0%
From RETAIL	To Office	29.0%	2.0%
	To Retail	0.0%	0.0%
	To Restaurant	13.0%	29.0%
	To Cinema/Entertainment	0.0%	4.0%
	To Residential	14.0%	26.0%
	To Hotel	0.0%	5.0%
From RESTAURANT	To Office	31.0%	3.0%
	To Retail	14.0%	41.0%
	To Restaurant	0.0%	0.0%
	To Cinema/Entertainment	0.0%	8.0%
	To Residential	4.0%	18.0%
	To Hotel	3.0%	7.0%
From CINEMA/ENTERTAINMENT	To Office	0.0%	2.0%
	To Retail	0.0%	21.0%
	To Restaurant	0.0%	31.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	8.0%
	To Hotel	0.0%	2.0%
From RESIDENTIAL	To Office	2.0%	4.0%
	To Retail	1.0%	42.0%
	To Restaurant	20.0%	21.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	0.0%
	To Hotel	0.0%	3.0%
From HOTEL	To Office	75.0%	0.0%
	To Retail	14.0%	16.0%
	To Restaurant	9.0%	68.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	2.0%
	To Hotel	0.0%	0.0%

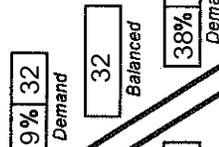
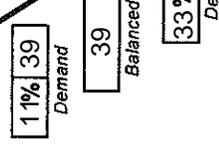
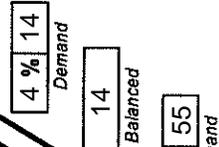
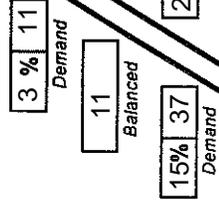
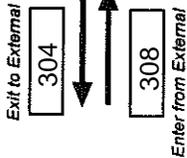
Table 7.2a Adjusted Internal Trip Capture Rates for Trip Destinations within a Multi-Use Development

Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Office	0.0%	0.0%
	From Retail	4.0%	31.0%
	From Restaurant	14.0%	30.0%
	From Cinema/Entertainment	0.0%	6.0%
	From Residential	3.0%	57.0%
	From Hotel	3.0%	0.0%
To RETAIL	From Office	32.0%	8.0%
	From Retail	0.0%	0.0%
	From Restaurant	8.0%	50.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	17.0%	10.0%
	From Hotel	4.0%	2.0%
To RESTAURANT	From Office	23.0%	2.0%
	From Retail	50.0%	29.0%
	From Restaurant	0.0%	0.0%
	From Cinema/Entertainment	0.0%	3.0%
	From Residential	20.0%	14.0%
	From Hotel	6.0%	5.0%
To CINEMA/ENTERTAINMENT	From Office	0.0%	1.0%
	From Retail	0.0%	26.0%
	From Restaurant	0.0%	32.0%
	From Cinema/Entertainment	0.0%	0.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To RESIDENTIAL	From Office	0.0%	4.0%
	From Retail	2.0%	46.0%
	From Restaurant	5.0%	16.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To HOTEL	From Office	0.0%	0.0%
	From Retail	0.0%	17.0%
	From Restaurant	4.0%	71.0%
	From Cinema/Entertainment	0.0%	1.0%
	From Residential	0.0%	12.0%
	From Hotel	0.0%	0.0%

MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

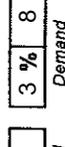
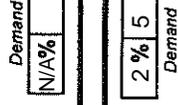
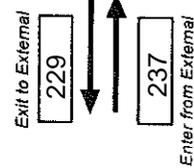
LAND USE A Retail

ITE LU Code <u>822</u>		Size <u>13,000 SF</u>	
Enter	354	Internal	46
Exit	354	External	308
Total	708		612
%	100%		86%



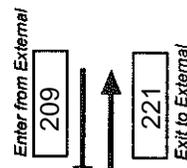
LAND USE B Office

ITE LU Code <u>730</u>		Size <u>22,000 SF</u>	
Enter	248	Internal	11
Exit	248	External	237
Total	497		467
%	100%		94%



LAND USE C Residential

ITE LU Code <u>220</u>		Size <u>75 Units</u>	
Enter	253	Internal	44
Exit	253	External	209
Total	506		430
%	100%		85%



Net External Trips for Multi-Use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL
Enter	308	237	209	754
Exit	304	229	221	754
Total	612	467	430	1509
Single-Use Trip Gen. Est.	708	497	506	1711
			INTERNAL CAPTURE	12%

Source: Kaku Associates, Inc.

Appendix E – Proposed High Street Improvement Plans

TENTATIVE TRACT NO. 5708

HITCH RANCH

IN THE CITY OF MOORPARK

378 NUMBERED LOTS AND 64 LETTERED LOTS (LOTS A-AJ & S1-S28)

PREPARER'S STATEMENT

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

ENGINEER: GREG MUSSER, RCE 77627 DATE: 4/6/2022



SITE SUMMARY

LAND USE	ACRES	DU/AC	DU	%
PLANNING AREA 1	SFD UNITS (4 PRIVATE ST)	25.21	79	46
LOTS 1-29, A, B	OPEN SPACE	12.53	17	33
E.G. S1-S41	MANUFACTURED SLOPES	12.87	23	23
	SUBTOTAL	55.41 ±	143	100
PLANNING AREA 2	RECREATION LOT	3.12	51	51
LOTS C-D1	MANUFACTURED SLOPES	2.26	49	49
	SUBTOTAL	6.08 ±	100	100
PLANNING AREA 3	SFD UNITS (4 PRIVATE ST)	32.27	188	52
LOTS 80-207	OPEN SPACE	7.40	12	12
AJ, AA-AC	MANUFACTURED SLOPES	18.55	39	39
S1-S15	PASSIVE REC LOT	1.55	2	2
	WATER QUALITY	2.53	4	4
	SUBTOTAL	62.10 ±	303	188
PLANNING AREA 4	SFD UNITS (4 PRIVATE ST)	17.28	160	53
LOTS 288-376	MPD UNITS (4 PRIVATE ST)	8.63	93	27
1, 4F-4J	OPEN SPACE	1.60	3	3
S16-S28	MANUFACTURED SLOPES	4.06	12	12
	RECREATION LOT	0.93	3	3
	SUBTOTAL	32.80 ±	271	235
PLANNING AREA 4	MPD UNITS	8.28	235	71
LOT 377	MANUFACTURED SLOPES	3.39	29	29
	SUBTOTAL	11.67 ±	204	100
LOTS W-VI	OPEN SPACE	28.78 ±	100	100
	PUBLIC STREETS	31.66	56	56
	VACUP EASEMENT (LOT AD)	2.68	5	5
	DET. BASIN 2 (LOT 2)	3.67	0	0
	DET. BASIN 2A (LOT 8)	3.67	0	0
	DET. BASIN 2B (LOT VI)	6.30	11	11
	PARK LOT (VI)	6.77	12	12
	SUBTOTAL	57.02 ±	100	100
TOTAL		253.86 ±	2,977	755
LOT 378	CITY DONATION PARCEL (NOT A PART)	23.44 ±	100	100
GRAND TOTAL		277.30 ±		



VICINITY MAP

N.T.S.

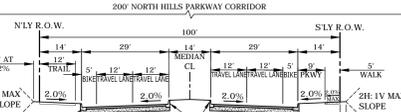
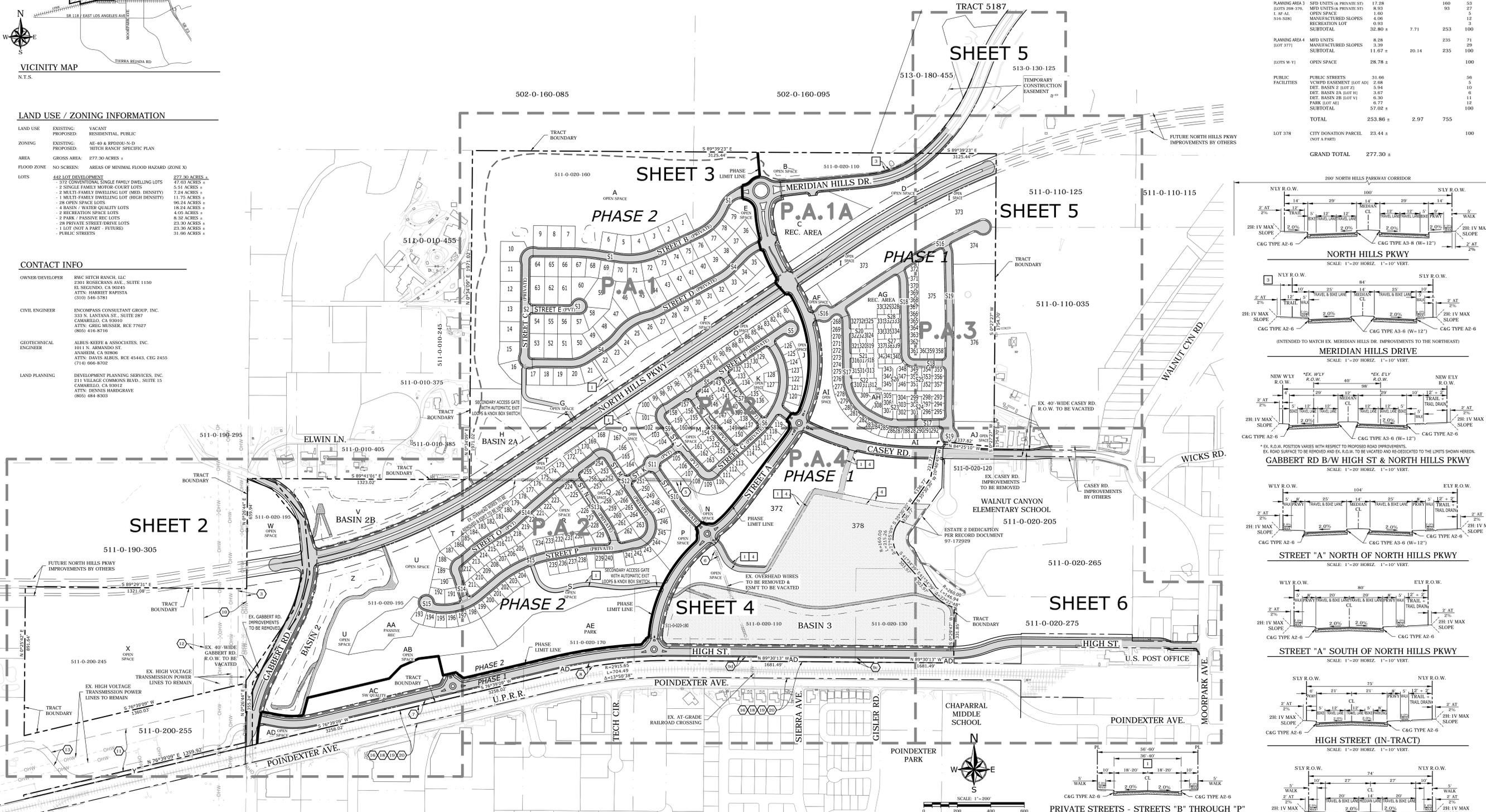


LAND USE / ZONING INFORMATION

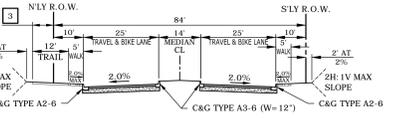
LAND USE	EXISTING	VACANT	PUBLIC
ZONING	EXISTING: AE-40 & RPD00-N-D	PROPOSED: HITCH RANCH SPECIFIC PLAN	
AREA	GROSS AREA: 277.30 ACRES ±		
FLOOD ZONE	NO SCREEN: AREAS OF MINIMAL FLOOD HAZARD (ZONE X)		
LOTS	442 LOT DEVELOPMENT	277.30 ACRES ±	
	372 CONVENTIONAL SINGLE FAMILY DWELLING LOTS	47.83 ACRES ±	
	2 SINGLE FAMILY MOTOR COURT LOTS	5.51 ACRES ±	
	2 MULTI-FAMILY DWELLING LOT (MED. DENSITY)	7.24 ACRES ±	
	1 MULTI-FAMILY DWELLING LOT (HIGH DENSITY)	11.75 ACRES ±	
	28 OPEN SPACE LOTS	96.54 ACRES ±	
	4 BASIN / WATER QUALITY LOTS	18.24 ACRES ±	
	2 RECREATION SPACE LOTS	4.05 ACRES ±	
	2 PARK / PASSIVE REC LOTS	8.52 ACRES ±	
	28 PRIVATE STREET/DRIVE LOTS	23.30 ACRES ±	
	1 LOT (NOT A PART) - FUTURE	23.30 ACRES ±	
	PUBLIC STREETS	31.66 ACRES ±	

CONTACT INFO

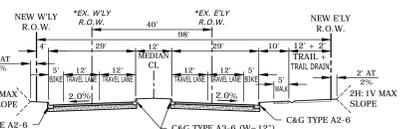
OWNER/DEVELOPER	RWC HITCH RANCH, LLC 2301 ROSEBRAND AVE., SUITE 1150 EL SEGUNDO, CA 90245 ATTN: HARRIET FAPISTA (310) 546-5781
CIVIL ENGINEER	ENCOMPASS CONSULTANT GROUP, INC. 333 N. LANTANA ST., SUITE 287 CARMELITO, CA 90017 ATTN: GREG MUSSER, RCE 77627 (805) 416-8716
GEO/TECHNICAL ENGINEER	ALBUS KEEFE & ASSOCIATES, INC. 101 N. ARMANDO ST. ANAHEIM, CA 92806 ATTN: DAVIS ALBUS, RCE 45443, CEG 2455 (714) 696-8002
LAND PLANNING	DEVELOPMENT PLANNING SERVICES, INC. 211 VILLAGE COMMONS BLVD., SUITE 15 CARMELITO, CA 90012 ATTN: DENNIS HARBARGE (805) 484-8303



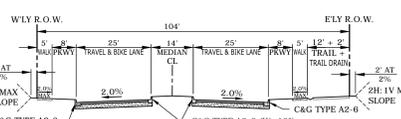
NORTH HILLS PKWY
SCALE: 1"=20' HORIZ. 1"=10' VERT.



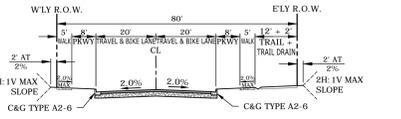
MERIDIAN HILLS DRIVE
SCALE: 1"=20' HORIZ. 1"=10' VERT.



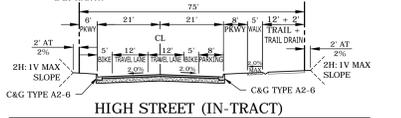
GABBERT RD B/W HIGH ST & NORTH HILLS PKWY
SCALE: 1"=20' HORIZ. 1"=10' VERT.



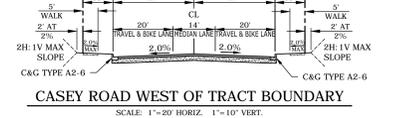
STREET 'A' NORTH OF NORTH HILLS PKWY
SCALE: 1"=20' HORIZ. 1"=10' VERT.



STREET 'A' SOUTH OF NORTH HILLS PKWY
SCALE: 1"=20' HORIZ. 1"=10' VERT.



HIGH STREET (IN-TRACT)
SCALE: 1"=20' HORIZ. 1"=10' VERT.



CASEY ROAD EAST OF TRACT BOUNDARY
SCALE: 1"=20' HORIZ. 1"=10' VERT.

EXISTING EASEMENTS

(SEE TITLE REPORT FOR FULL ITEM SUMMARY)

EASEMENTS LISTED BELOW ARE BASED UPON A PRELIMINARY TITLE REPORT ISSUED BY LAWYERS TITLE AS FILE NO. 414240577 DATED JAN 13, 2016, SAID REPORT IS PRESUMED TO BE COMPLETE AND ACCURATE. ECG DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF SAID PRELIMINARY REPORT.

1. SHM LAND & WATER COMPANY EASEMENT FOR PUBLIC UTILITIES PER BOOK 300, PAGE 100 OF OFFICIAL RECORDS.
2. SOUTHERN CALIFORNIA EDISON COMPANY EASEMENT FOR PUBLIC UTILITIES PER BOOK 908, PAGE 146 OF OFFICIAL RECORDS.
3. SOUTHERN CALIFORNIA EDISON COMPANY EASEMENT FOR PUBLIC UTILITIES PER BOOK 1001, PAGE 544 OF OFFICIAL RECORDS.
4. SOUTHERN CALIFORNIA EDISON COMPANY EASEMENT FOR PUBLIC UTILITIES PER BOOK 1001, PAGE 550 OF OFFICIAL RECORDS.
5. VENTURA COUNTY FLOOD CONTROL DISTRICT EASEMENT FOR FLOOD CONTROL PER BOOK 2141, PAGE 251 OF OFFICIAL RECORDS.
6. VENTURA COUNTY FLOOD CONTROL DISTRICT EASEMENT FOR FLOOD CONTROL PER BOOK 2141, PAGE 254 OF OFFICIAL RECORDS.
7. VENTURA COUNTY FLOOD CONTROL DISTRICT EASEMENT FOR FLOOD CONTROL PER BOOK 2141, PAGE 254 OF OFFICIAL RECORDS.
8. SOUTHERN CALIFORNIA EDISON COMPANY EASEMENT FOR PUBLIC UTILITIES AND ROADS PER BOOK 2347, PAGE 225 OF OFFICIAL RECORDS.
9. SOUTHERN CALIFORNIA EDISON COMPANY EASEMENT FOR ROADS PER BOOK 2343, PAGE 279 OF OFFICIAL RECORDS.
10. SOUTHERN CALIFORNIA EDISON COMPANY EASEMENT FOR PUBLIC UTILITIES AND ROADS PER BOOK 2343, PAGE 287 OF OFFICIAL RECORDS.
11. A-B PROPERTIES, A CALIFORNIA GENERAL PARTNERSHIP, EASEMENT FOR ACCESS ROAD, UTILITIES, AND SLOPE PER AS INSTRUMENT NO. 2009-100766 OF OFFICIAL RECORDS.
12. A-B PROPERTIES, A CALIFORNIA GENERAL PARTNERSHIP, EASEMENT FOR ACCESS ROAD, UTILITIES, AND SLOPE PER AS INSTRUMENT NO. 2009-100766 OF OFFICIAL RECORDS.
13. A-B PROPERTIES, A CALIFORNIA GENERAL PARTNERSHIP, EASEMENT FOR ACCESS ROAD, UTILITIES, AND SLOPE PER AS INSTRUMENT NO. 2009-100766 OF OFFICIAL RECORDS.
14. VENTURA COUNTY WATERWORKS DISTRICT EASEMENT FOR FLOOD CONTROL PURPOSE OF PERIODIC DRAINAGE WITH FLOOD AND/OR STORM DRAINAGE PER AS INSTRUMENT NO. 2012-153707 OF OFFICIAL RECORDS.
15. LEVEL COMMUNICATIONS, LLC EASEMENT FOR TELECOMMUNICATIONS AND INCIDENTAL PURPOSES PER AS INSTRUMENT NO. 2013-146410 OF OFFICIAL RECORDS.
16. LEVEL COMMUNICATIONS, LLC EASEMENT FOR TELECOMMUNICATIONS AND INCIDENTAL PURPOSES PER AS INSTRUMENT NO. 2013-207073 OF OFFICIAL RECORDS.
17. LEVEL COMMUNICATIONS INTERNATIONAL, INC. ET AL EASEMENT FOR TELECOMMUNICATIONS AND INCIDENTAL PURPOSES PER AS INSTRUMENT NO. 2014-011258 OF OFFICIAL RECORDS.

LEGAL DESCRIPTION

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL 1 (ASSESSOR'S PARCEL NO. 511-0-090-170):
LOTS 14 AND 16 AND THAT PORTION OF LOTS 22 AND 23, PRESENT SUBDIVISION OF RANCHO SIMI, IN THE CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 3, PAGE 39 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, LYING NORTHERLY OF THE RIGHT OF WAY OF THE SOUTHERN PACIFIC RAILROAD 100 FEET WIDE, AS DESCRIBED IN DEED RECORDED IN BOOK 58, PAGE 396 OF DEEDS.

PARCEL 2 (ASSESSOR'S PARCEL NO. 511-0-020-130, 190, 190-190):
PART OF TRACT 2, AND 7, OF PART OF TRACT 17, OF RANCHO SIMI, IN THE CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA, AS PER MAP SHOWING THE TOWNSHIP OF MOORPARK AND LOTS OF MARLENE B. POINDEXTER, A RE-SUBDIVISION OF PRESENT TRACT, AS PER MAP RECORDED IN BOOK 5, PAGE 5 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THOSE PORTIONS OF LAND DESCRIBED AS ESTATES 1, 2, AND 3 IN THE FINAL ORDER OF COOPERATION, CASE NO. SC 19973, SUPERIOR COURT OF CALIFORNIA, COUNTY OF VENTURA, A CERTIFIED COPY OF WHICH RECORDED DECEMBER 18, 1997 AS DOCUMENT NO. 97-172929 OF OFFICIAL RECORDS.

PARCEL 3 (ASSESSOR'S PARCEL NO. 511-0-020-195):
(ALSO SUBJECT TO VARIOUS MINERAL RIGHTS RESTRICTIONS. SEE DEED FOR PARTICULARS)

PORTIONS OF LOT "H" AND "S" AS SHOWN ON MAP OF A PART OF TRACT "1" OF THE RANCHO SIMI, IN THE CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA, AS SHOWN ON MAP ENTITLED "MAP OF THE LAND OF RANCHO SIMI, IN VENTURA AND LOS ANGELES COUNTIES, CALIFORNIA," AND RECORDED IN BOOK 3, PAGE 7 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THAT PORTION LYING SOUTHERLY OF THE NORTHERLY LINE OF THAT CERTAIN STRIP 100 FEET WIDE DESCRIBED IN DEED TO THE SOUTHERN PACIFIC RAILROAD COMPANY, RECORDED NOVEMBER 13, 1899 IN BOOK 38, PAGE 306 OF DEEDS.

ALSO EXCEPT THAT PORTION LYING WITHIN THAT CERTAIN STRIP 345 FEET WIDE DESCRIBED IN DEED TO SOUTHERN CALIFORNIA EDISON COMPANY, RECORDED OCTOBER 22, 2010 AS INSTRUMENT NO. 20101022-00103089 OF OFFICIAL RECORDS.

UTILITY PURVEYORS

WATER: VENTURA COUNTY WATERWORKS DISTRICT NO. 1
SEWER: VENTURA COUNTY WATERWORKS DISTRICT NO. 1
ELECTRIC: SOUTHERN CALIFORNIA EDISON
GAS: SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE: FRONTIER COMMUNICATIONS
CABLE TELEVISION: SIMI VALLEY LANDFILL & RECYCLING CENTER
FIBER OPTIC: WASTE MANAGEMENT / C.I. INDUSTRIES
FIRE PROTECTION: VENTURA COUNTY FIRE DEPARTMENT

PROPOSED UTILITY LEGEND

W POTABLE WATER LINE
S SEWER LINE
SD SEWER DRAIN LINE
SM SEWER MANHOLE
SMW SEWER DRAIN MANHOLE

EXISTING UTILITY LEGEND

W POTABLE WATER LINE
S SEWER LINE
E ELECTRICAL LINE
G NATURAL GAS LINE
C COMMUNICATION LINE
OHV OVERHEAD WIRES
FOC FIBER OPTIC CABLE

LEGEND

TRACT BOUNDARY
RIGHT-OF-WAY
EXISTING EASEMENT
PROPOSED EASEMENT
PROPOSED LOT LINE / PROPERTY LINE
STREET CENTER LINE
GRADING DAYLIGHT LINE
CUT/FILL LINE
BASIN FENCING
RETAINING WALL
ASPHALT CONCRETE PAVING
PORTLAND CEMENT CONCRETE PAVING
MOUNTABLE SURFACE AT TRAFFIC CIRCLE
D.G. BASIN ACCESS ROAD
CITY LOT 378 - NOT A PART
MULTI-PURPOSE TRAIL
PHASING LIMITS

PHASE 1
PHASE 2

TENTATIVE TRACT MAP SHEET INDEX

1. TITLE SHEET
2. PRELIMINARY GRADING, DRAINAGE, & UTILITIES
3. PRELIMINARY GRADING, DRAINAGE, & UTILITIES
4. PRELIMINARY GRADING, DRAINAGE, & UTILITIES
5. PRELIMINARY GRADING, DRAINAGE, & UTILITIES
6. PRELIMINARY GRADING, DRAINAGE, & UTILITIES
7. PRELIMINARY INTERSECTION LAYOUTS

EARTHWORK

CUT: 2,550,000 CUBIC YARDS
FILL: 2,550,000 CUBIC YARDS
IMPORT: 0 CUBIC YARDS (NOTE: EARTHWORK IS INTENDED TO BALANCE ON-SITE EXPORT: 0 CUBIC YARDS)

THE ABOVE QUANTITIES ARE APPROXIMATE IN PLACE VOLUMES FOR PERMIT PURPOSES ONLY. THEY HAVE NOT BEEN FACTORED TO ACCOUNT FOR REMEDIAL GRADING CONSTRUCTION METHODS.

SURVEY NOTES

BASIS OF BEARINGS: THE BASIS OF BEARINGS FOR THIS MAP IS THE CALIFORNIA COORDINATE SYSTEM (CCS), ZONE 6, PROJECTIONS 2011 TO AS DETERMINED LOCALLY BY A LINE BETWEEN CONTIGUOUS GLOBAL POSITIONING STATIONS (GPS) AND/OR CONTIGUOUS OPERATING REFERENCE STATIONS (ORS) MWD & TST BEING SOUTH 30° 20' 10" EAST AS DERIVED FROM GEODETIC VALUES PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC).

REMARKS: THE VERTICAL DATUM OF THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV83). PER GRID MODELING GEODETIC AND LEVEL TIES TO POINTS 23 AND 24 FROM VENTURA COUNTY BENCHMARK (VCBD 159), BEING A 3.12" RE-STAMPED VENTURA COUNTY SURVEYOR 1965 BE 37' 17" IN A HEADBOLT ON THE WESTERN SIDE OF GABBERT ROAD, SOUTHERLY OF THE UNION PACIFIC RAILROAD.

GENERAL NOTES

1. ALL DIMENSIONS AND AREAS SHOWN ARE APPROXIMATE ONLY.
2. PROJECT SITE IS WITHIN THE MOORPARK UNIFIED SCHOOL DISTRICT.
3. STREETS B-F SHALL BE PRIVATE AND MAINTAINED BY THE HOA.
4. STREET NAMES SHALL BE DEFINED ON THE FINAL TRACT MAP.
5. NORTH HILLS PKWY, GABBERT RD, MERIDIAN HILLS DR, CASEY RD, HIGH ST, AND STREET A SHALL BE PUBLIC AND MAINTAINED BY THE CITY OF MOORPARK.
6. STREETS SHOWN ON THIS TENTATIVE TRACT MAP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF MOORPARK PUBLIC WORKS AND COMMUNITY DEVELOPMENT DEPARTMENTS.
7. MULTIPLE FINAL MAPS MAY BE RECORDED FROM THIS TENTATIVE TRACT MAP IN ACCORDANCE WITH THE STATE OF CALIFORNIA SUBDIVISION MAP ACT.
8. ALL NEW UTILITIES SHALL BE UNDERGROUND.
9. NEW UTILITY LOCATIONS AND EASEMENTS ARE APPROXIMATE.
10. NEW STORM DRAINAGE IMPROVEMENTS OR PRIVATE STREETS AND ON LETTERED LOTS SHALL BE PRIVATE AND MAINTAINED BY THE HOA. NEW STORM DRAINAGE IMPROVEMENTS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PUBLIC AND MAINTAINED BY THE CITY OF MOORPARK OR VCWD.
11. STORMWATER QUALITY TREATMENT MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE VENTURA COUNTY MUNICIPAL STORMWATER (MS4) PERMIT AND TECHNICAL GUIDANCE MANUAL, FROM PER STORMWATER QUALITY CONTROL MEASURES. WATER QUALITY TREATMENT FACILITIES SHALL BE PRIVATE AND MAINTAINED BY THE HOA.
12. FULL CAPTURE TRASH EXCLUDERS SHALL BE REQUIRED IN ALL PROPOSED STORM DRAINS PER CA STATE WATER RESOURCES CONTROL BOARD RESOLUTION 2015-0019.
13. NEW SEWER MAINS SHALL BE PUBLIC AND DEDICATED TO VENTURA COUNTY WATERWORKS DISTRICT (VCWD) NO. 1. NEW SEWER MAINS SHALL BE PER VCWD NO. 1 STANDARDS.
14. NEW WATER MAINS SHALL BE PUBLIC AND DEDICATED TO VCWD NO. 1. NEW WATER MAINS SHALL BE PER VCWD NO. 1 STANDARDS.
15. FIRE HYDRANT LOCATIONS TO BE DETERMINED BY VENTURA COUNTY FIRE DEPT.
16. ANY EXISTING CONFLICTING UTILITY FACILITIES SHALL BE REMOVED AND/OR RELOCATED TO THE DIRECTION OF THE UTILITY OWNER.
17. PROPOSED STREETS SHALL CONTAIN CONDUIT FOR FUTURE DARK FIBER OPTIC LINES.

ECG

ENCOMPASS CONSULTANT GROUP
2211 LORRAINE ST., SUITE 20, OWENSBORO, KY 40301
PHONE: 502.322.4443 FAX: 502.322.4444
WWW.ENCOMPASS.COM

HITCH RANCH
TENTATIVE TRACT MAP NO. 5708
TITLE SHEET
CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA

DATE: 04/06/2022
PROJECT ENGINEER: GREG MUSSER
R.C.E. 77627

SCALE: HORIZ. AS NOTED VERT. N/A
WORK ORDER: 0047
DRAWN BY: GJM
CHECKED BY: GJM

SHEET NO. 1 OF 7

502-0-160-085

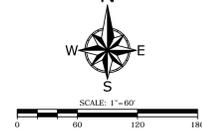
502-0-160-095

513-0-180-455



SHEET 4

SHEET 5



ECG
 Engineering & Construction Group
 3311 LARKSPRING DRIVE, SUITE 200, GARDEN GROVE, CA 92643
 PHONE: 949.322.4443 WEBSITE: WWW.ECGCVI.COM

HITCH RANCH
 TENTATIVE TRACT MAP NO. 5708
 PRELIMINARY GRADING, DRAINAGE, & UTILITIES
 CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA

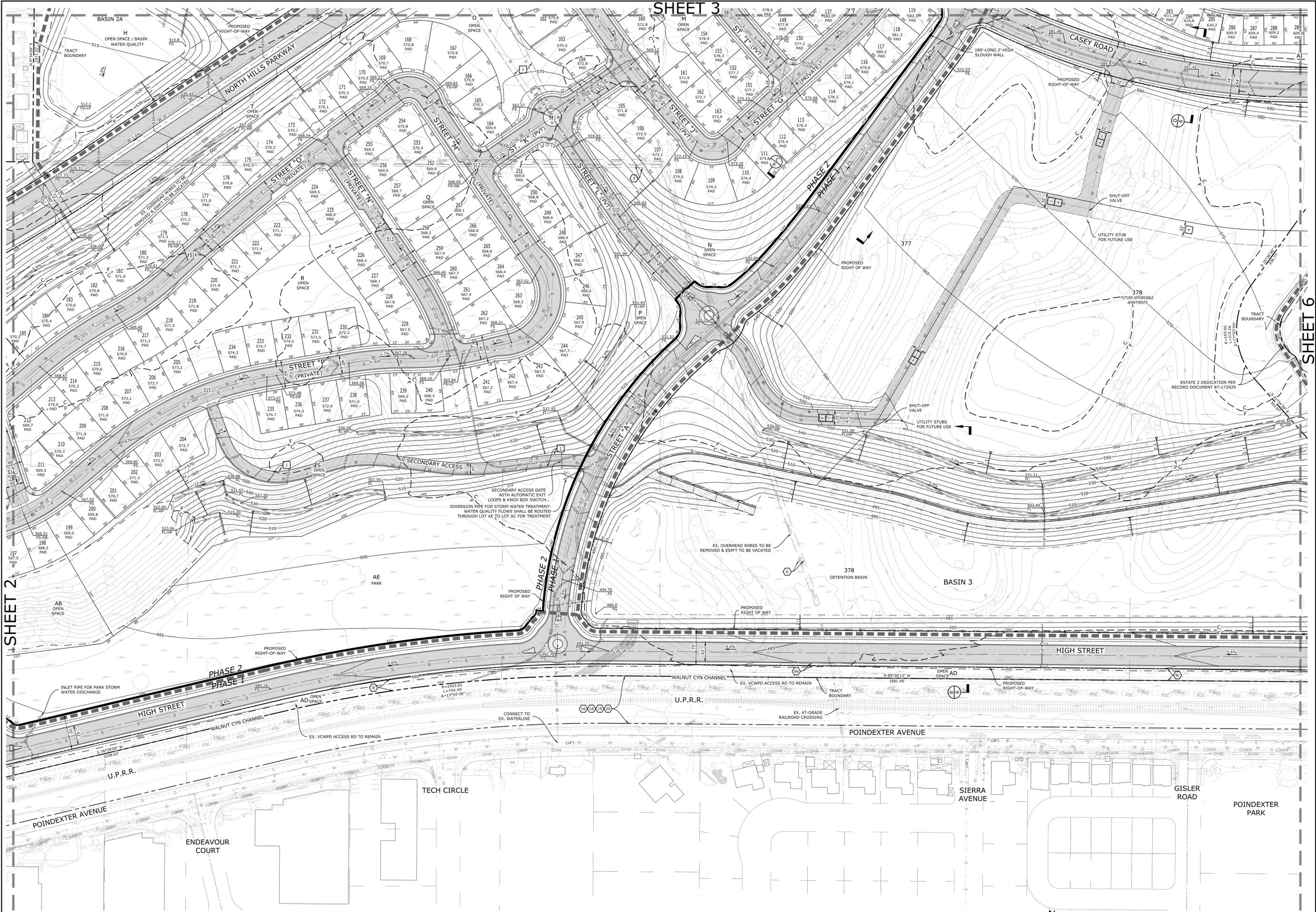
SCALE: HORIZ. AS NOTED VERT. N/A
 WORK ORDER: 0047
 PROJECT ENGINEER: GJM
 CHECKED BY: GJM

DATE: 04/06/2022

SHEET NO. 3 OF 7

DRAWING: n:\projects\0047\2022\hitch_ranch\comanack\engineering\civil\preliminary\map\0047_02.dwg

SHEET 3

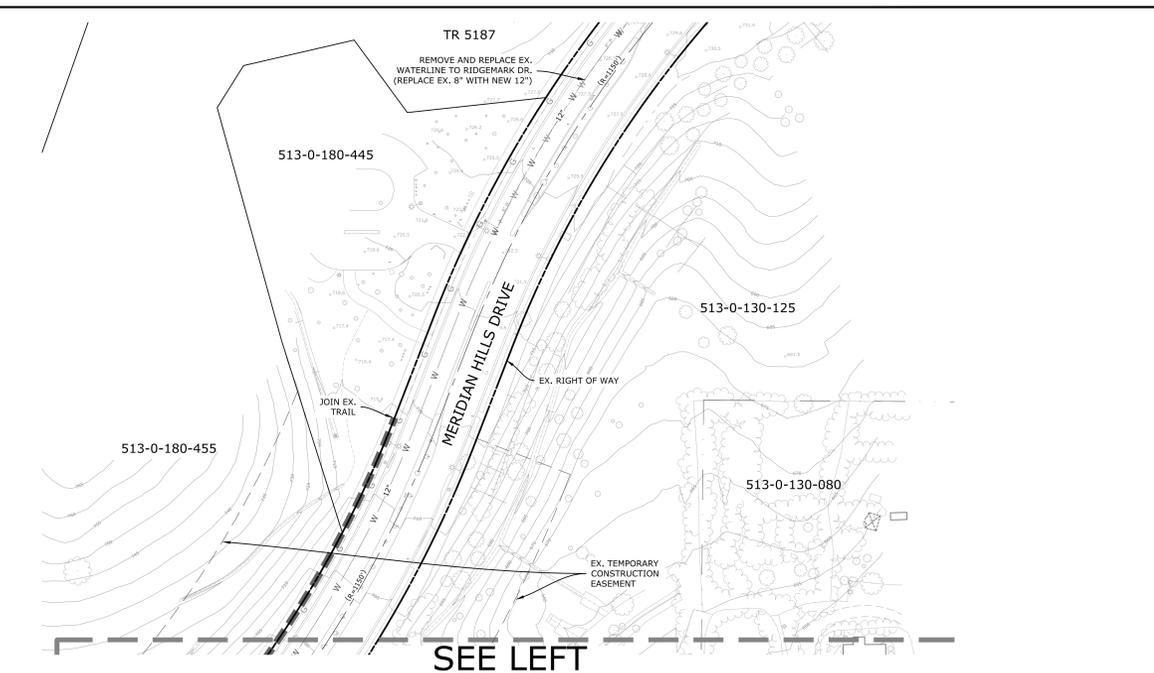
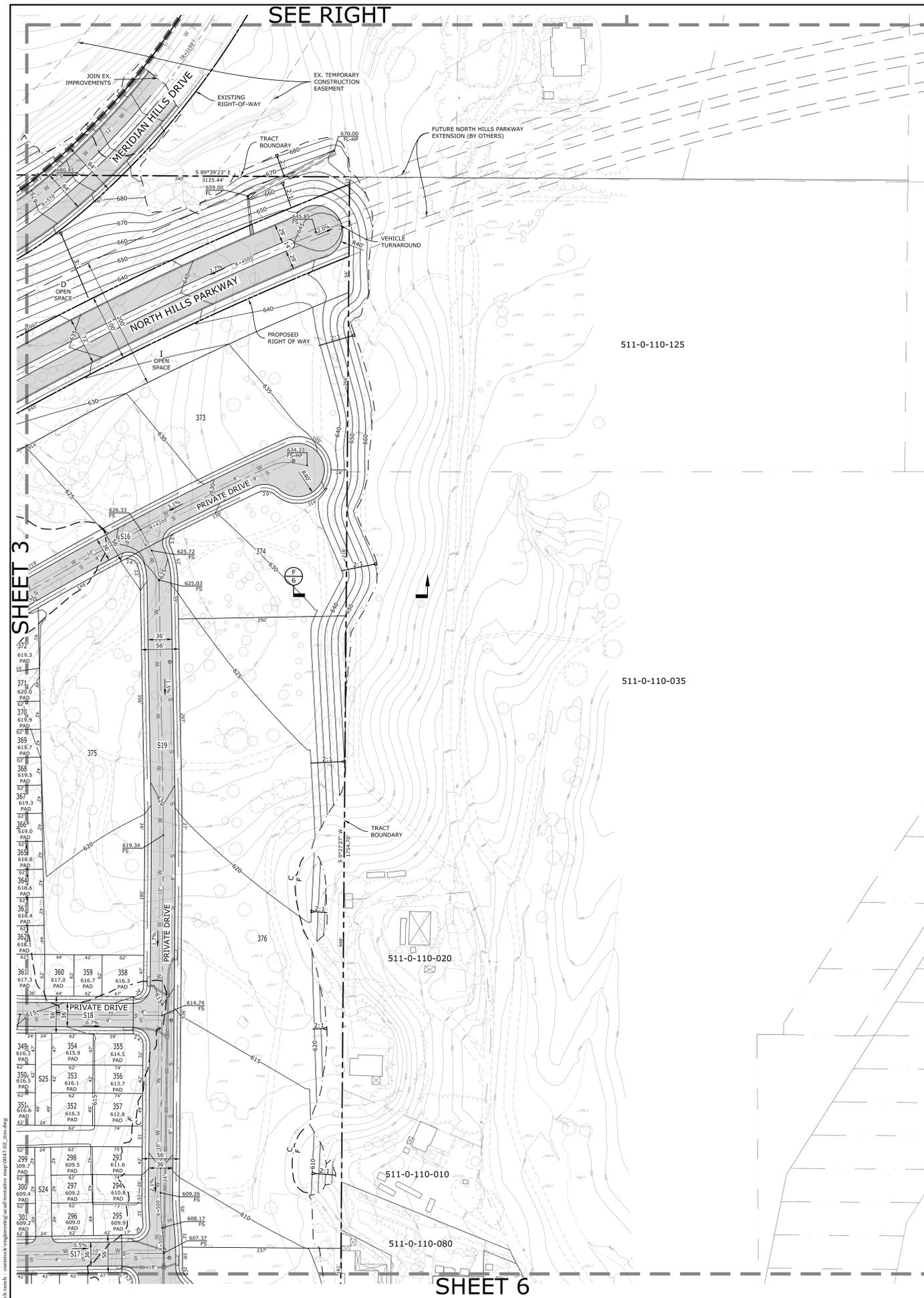


SHEET 2

SHEET 6



<p>ECG CONSULTANTS GROUP 331 N. LINDEN ST., SUITE 205, CARROLL VALLEY, CA 94706 PHONE: 925.322.4443 WEBSITE: WWW.ECGCALIF.COM</p>	<p>HITCH RANCH TENTATIVE TRACT MAP NO. 5708 PRELIMINARY GRADING, DRAINAGE, & UTILITIES CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA</p>		
	<p>SCALE: HORIZ. AS NOTED VERT. N/A</p>	<p>DATE: 04/06/2022</p>	
<p>PROJECT ENGINEER: GJM</p>	<p>WORK ORDER: 0047</p>	<p>SHEET NO. 4 OF 7</p>	
<p>DRAWN BY: GJM</p>	<p>CHECKED BY: GJM</p>		



LOT SUMMARY

LOT TABLE			LOT TABLE																				
LOT	AREA (FT²)	PLANNED USE	LOT	ACRES	PLANNED USE																		
1	10,120	SFD	61	13,211	SFD	121	4,347	SFD	181	5,435	SFD	241	4,484	SFD	301	3,057	SFD	361	3,669	SFD	A	21.35 ±	OPEN SPACE
2	10,450	SFD	62	13,237	SFD	122	4,347	SFD	182	4,981	SFD	242	4,809	SFD	302	3,057	SFD	362	2,655	SFD	B	2.83 ±	OPEN SPACE
3	10,801	SFD	63	14,016	SFD	123	4,347	SFD	183	5,153	SFD	243	5,975	SFD	303	2,604	SFD	363	2,604	SFD	C	3.12 ±	REC. SPACE
4	10,170	SFD	64	9,727	SFD	124	4,347	SFD	184	5,153	SFD	244	5,975	SFD	304	2,604	SFD	364	2,604	SFD	D	2.96 ±	OPEN SPACE
5	10,080	SFD	65	9,200	SFD	125	4,347	SFD	185	5,097	SFD	245	5,975	SFD	305	2,604	SFD	365	2,604	SFD	E	0.39 ±	OPEN SPACE
6	9,804	SFD	66	9,200	SFD	126	4,347	SFD	186	5,048	SFD	246	5,672	SFD	306	2,604	SFD	366	2,604	SFD	F	1.56 ±	OPEN SPACE
7	10,790	SFD	67	9,633	SFD	127	5,119	SFD	187	5,615	SFD	247	5,600	SFD	307	3,341	SFD	367	2,604	SFD	G	4.07 ±	OPEN SPACE
8	10,790	SFD	68	9,266	SFD	128	5,119	SFD	188	6,267	SFD	248	4,453	SFD	308	3,683	SFD	368	2,604	SFD	H	3.67 ±	O.S. / BASIN
9	10,695	SFD	69	8,800	SFD	129	4,335	SFD	189	7,014	SFD	249	4,420	SFD	309	4,312	SFD	369	2,604	SFD	I	1.53 ±	OPEN SPACE
10	14,014	SFD	70	9,621	SFD	130	3,910	SFD	190	7,868	SFD	250	4,420	SFD	310	3,381	SFD	370	2,604	SFD	J	0.83 ±	OPEN SPACE
11	14,357	SFD	71	9,526	SFD	131	3,912	SFD	191	6,881	SFD	251	4,772	SFD	311	2,604	SFD	371	2,858	SFD	K	0.63 ±	OPEN SPACE
12	14,400	SFD	72	9,926	SFD	132	4,286	SFD	192	6,994	SFD	252	4,420	SFD	312	2,604	SFD	372	5,340	SFD	L	0.12 ±	OPEN SPACE
13	14,400	SFD	73	9,418	SFD	133	3,950	SFD	193	5,995	SFD	253	4,420	SFD	313	2,604	SFD				M	0.31 ±	OPEN SPACE
14	14,400	SFD	74	8,684	SFD	134	4,025	SFD	194	5,509	SFD	254	4,940	SFD	314	2,604	SFD				N	2.05 ±	OPEN SPACE
15	14,941	SFD	75	8,574	SFD	135	4,462	SFD	195	5,509	SFD	255	4,649	SFD	315	3,038	SFD				O	2.63 ±	OPEN SPACE
16	11,606	SFD	76	8,819	SFD	136	4,462	SFD	196	5,509	SFD	256	4,420	SFD	316	3,038	SFD				P	1.31 ±	OPEN SPACE
17	7,959	SFD	77	9,343	SFD	137	4,426	SFD	197	5,509	SFD	257	4,420	SFD	317	2,604	SFD				Q	0.21 ±	OPEN SPACE
18	8,240	SFD	78	8,335	SFD	138	4,022	SFD	198	5,509	SFD	258	4,420	SFD	318	2,604	SFD				R	1.28 ±	OPEN SPACE
19	8,271	SFD	79	10,068	SFD	139	4,014	SFD	199	5,509	SFD	259	4,420	SFD	319	2,604	SFD				S	5.45 ±	OPEN SPACE
20	9,759	SFD	80	4,805	SFD	140	4,014	SFD	200	5,005	SFD	260	4,469	SFD	320	2,604	SFD				T	2.54 ±	OPEN SPACE
21	9,888	SFD	81	3,910	SFD	141	4,014	SFD	201	4,930	SFD	261	4,764	SFD	321	3,038	SFD				U	3.99 ±	OPEN SPACE
22	8,240	SFD	82	3,910	SFD	142	3,958	SFD	202	5,132	SFD	262	7,584	SFD	322	3,038	SFD				V	6.30 ±	DET. BASIN
23	8,941	SFD	83	3,910	SFD	143	4,287	SFD	203	5,301	SFD	263	6,580	SFD	323	2,604	SFD				W	2.70 ±	OPEN SPACE
24	8,337	SFD	84	3,910	SFD	144	4,287	SFD	204	5,301	SFD	264	4,420	SFD	324	2,604	SFD				X	25.31 ±	OPEN SPACE
25	9,880	SFD	85	3,910	SFD	145	4,053	SFD	205	5,564	SFD	265	4,420	SFD	325	2,604	SFD				Y	0.78 ±	OPEN SPACE
26	9,743	SFD	86	3,910	SFD	146	4,222	SFD	206	5,055	SFD	266	4,420	SFD	326	2,604	SFD				Z	5.94 ±	DET. BASIN
27	7,719	SFD	87	3,910	SFD	147	4,222	SFD	207	5,073	SFD	267	4,420	SFD	327	3,047	SFD						
28	7,840	SFD	88	3,910	SFD	148	4,222	SFD	208	5,061	SFD	268	3,272	SFD	328	3,038	SFD						
29	7,840	SFD	89	3,910	SFD	149	4,247	SFD	209	5,119	SFD	269	2,604	SFD	329	2,604	SFD						
30	7,840	SFD	90	3,910	SFD	150	4,449	SFD	210	4,930	SFD	270	2,604	SFD	330	2,604	SFD						
31	7,840	SFD	91	3,910	SFD	151	4,290	SFD	211	5,517	SFD	271	2,604	SFD	331	2,604	SFD						
32	7,958	SFD	92	3,910	SFD	152	4,001	SFD	212	6,545	SFD	272	2,604	SFD	332	2,604	SFD						
33	9,004	SFD	93	3,910	SFD	153	4,001	SFD	213	4,932	SFD	273	2,604	SFD	333	3,038	SFD						
34	8,079	SFD	94	3,910	SFD	154	4,001	SFD	214	5,195	SFD	274	2,604	SFD	334	3,038	SFD						
35	8,406	SFD	95	3,910	SFD	155	4,001	SFD	215	5,195	SFD	275	2,604	SFD	335	2,604	SFD						
36	11,323	SFD	96	4,420	SFD	156	3,952	SFD	216	5,018	SFD	276	2,856	SFD	336	2,604	SFD						
37	9,259	SFD	97	4,420	SFD	157	4,287	SFD	217	4,863	SFD	277	2,897	SFD	337	2,604	SFD						
38	9,303	SFD	98	4,379	SFD	158	4,797	SFD	218	5,188	SFD	278	2,897	SFD	338	2,604	SFD						
39	11,100	SFD	99	4,222	SFD	159	4,483	SFD	219	5,677	SFD	279	2,897	SFD	339	3,038	SFD						
40	10,582	SFD	100	8,015	SFD	160	4,518	SFD	220	4,983	SFD	280	2,897	SFD	340	3,296	SFD						
41	10,893	SFD	101	7,832	SFD	161	4,518	SFD	221	4,979	SFD	281	2,874	SFD	341	2,604	SFD						
42	11,203	SFD	102	6,935	SFD	162	4,519	SFD	222	4,984	SFD	282	2,803	SFD	342	2,604	SFD						
43	11,731	SFD	103	6,239	SFD	163	4,811	SFD	223	4,984	SFD	283	2,624	SFD	343	2,809	SFD						
44	12,741	SFD	104	5,625	SFD	164	4,946	SFD	224	5,076	SFD	284	2,897	SFD	344	2,604	SFD						
45	16,815	SFD	105	5,941	SFD	165	5,645	SFD	225	4,845	SFD	285	2,897	SFD	345	3,028	SFD						
46	21,056	SFD	106	4,511	SFD	166	6,635	SFD	226	4,420	SFD	286	2,897	SFD	346	3,028	SFD						
47	12,471	SFD	107	5,360	SFD	167	9,429	SFD	227	4,420	SFD	287	2,686	SFD	347	2,604	SFD						
48	11,235	SFD	108	5,420	SFD	168	8,148	SFD	228	4,671	SFD	288	2,604	SFD	348	2,604	SFD						
49	4,404	SFD	109	7,219	SFD	169	4,393	SFD	229	6,610	SFD	289	2,604	SFD	349	3,034	SFD						
50	12,397	SFD	110	5,496	SFD	170	4,461	SFD	230	5,280	SFD	290	2,604	SFD	350	2,604	SFD						
51	12,385	SFD	111	4,457	SFD	171	4,420	SFD	231	4,930	SFD	291	2,604	SFD	351	3,028	SFD						
52	11,631	SFD	112	4,420	SFD	172	4,460	SFD	232	4,930	SFD	292	2,914	SFD	352	3,028	SFD						
53	12,307	SFD	113	4,420	SFD	173	4,982	SFD	233	5,072	SFD	293	3,114	SFD	353	2,604	SFD						
54	9,843	SFD	114	3,910	SFD	174	4,981	SFD	234	5,227	SFD	294	3,078	SFD	354	2,914	SFD						
55	9,310	SFD	115	3,910	SFD	175	4,981	SFD	235	5,123	SFD	295	3,530	SFD	355	3,447	SFD						
56	9,310	SFD	116	3,959	SFD	176	4,981	SFD	236	4,930	SFD	296	3,057	SFD	356	3,124	SFD						
57	10,698	SFD	117	4,166	SFD	177	4,981	SFD	237	4,930	SFD	297	2,604	SFD	357	3,632	SFD						
58	10,880	SFD	118	4,166	SFD	178	4,981	SFD	238	5,091	SFD	298	2,604	SFD	358	3,796	SFD						
59	24,152	SFD	119	4,618	SFD	179	4,981	SFD	239	4,532	SFD	299	2,604	SFD	359	2,604	SFD						
60	15,705	SFD	120	4,820	SFD	180	5,257	SFD	240	4,709	SFD	300	2,604	SFD	360	2,726	SFD						

LOT TABLE

LOT	ACRES	PLANNED USE
373	4.49 ±	RESIDENTIAL
374	1.02 ±	RESIDENTIAL
375	1.96 ±	RESIDENTIAL
376	5.28 ±	RESIDENTIAL
377	11.67 ±	RESIDENTIAL
378	22.44 ±	NOT A PART*

*LOT 378 SHALL BE DEEDED TO THE CITY OF MOORPARK

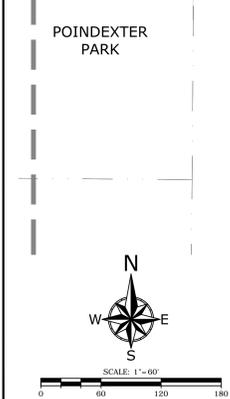
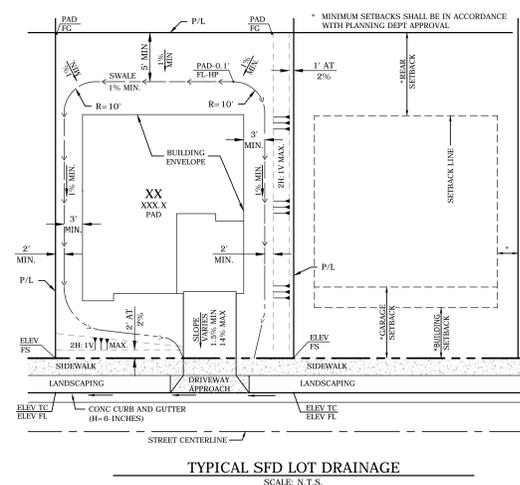
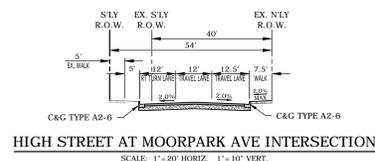
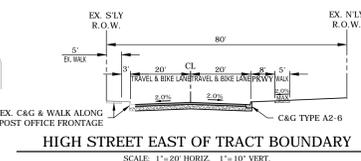
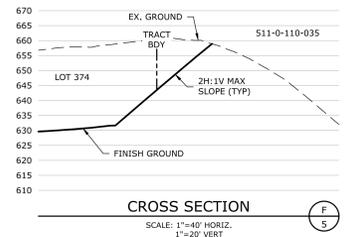
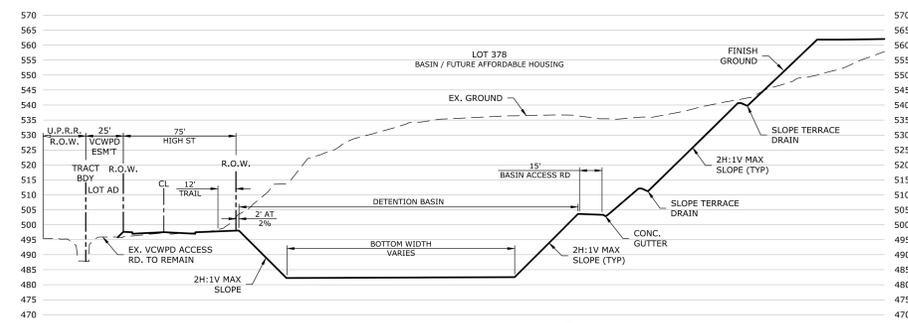
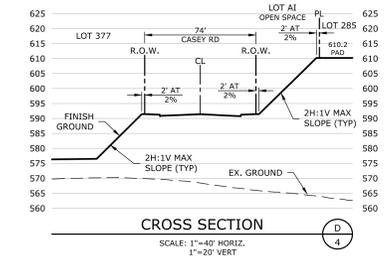
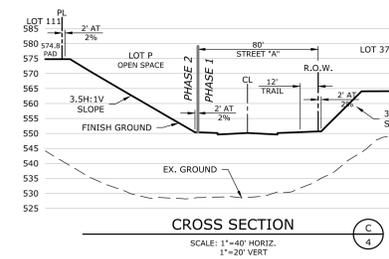
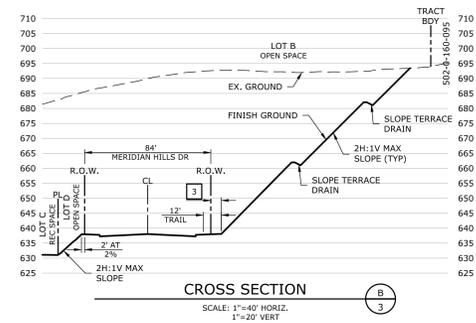
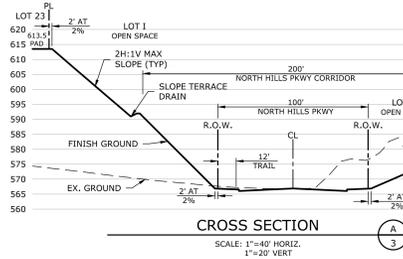
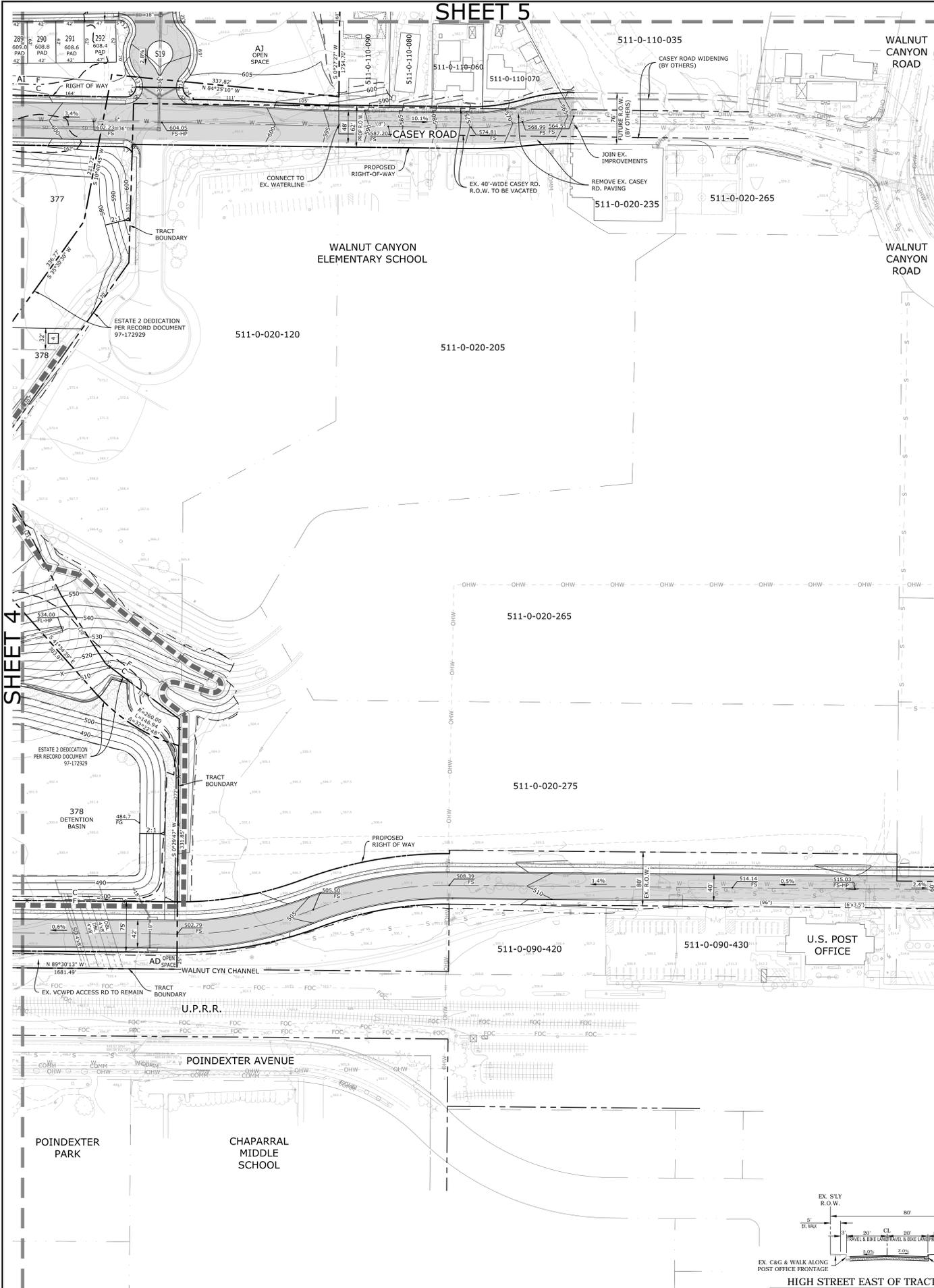
LOT TABLE

LOT	ACRES	PLANNED USE
AA	1.55 ±	PASSIVE REC
AB	4.61 ±	OPEN SPACE
AC	2.33 ±	WATER QUALITY
AD	2.68 ±	OPEN SPACE
AE	6.77 ±	PARK
AF	0.29 ±	OPEN SPACE
AG	0.93 ±	REC. SPACE
AH	0.72 ±	OPEN SPACE
AI	2.32 ±	OPEN SPACE
AJ	0.81 ±	OPEN SPACE

ACRES

LOT	ACRES	PLANNED USE
S1	1.93 ±	PRIVATE STREETS
S2	1.06 ±	PRIVATE STREETS
S3	0.51 ±	PRIVATE STREETS
S4	2.17 ±	PRIVATE STREETS
S5	1.42 ±	PRIVATE STREETS
S6	1.42 ±	PRIVATE STREETS
S7	0.44 ±	PRIVATE STREETS

SHEET 5



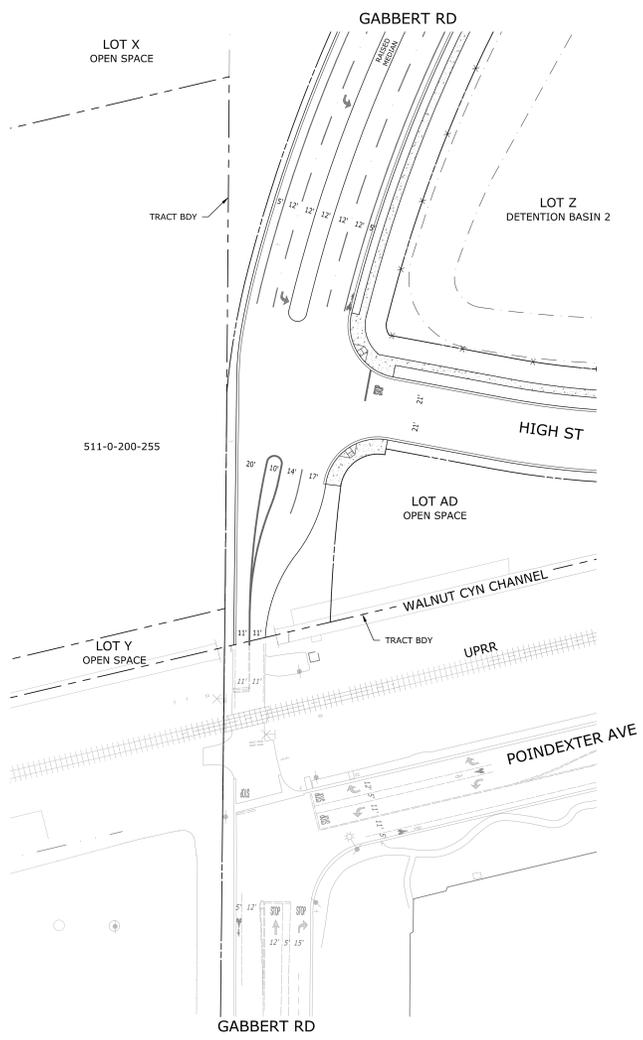
ECG
Engineering & Construction Group
311 N. GARDEN ST., SUITE 200, GARDEN GROVE, CA 92640
PHONE: 949.322.4443 WEBSITE: WWW.ECGCALIF.COM

HITCH RANCH
TENTATIVE TRACT MAP NO. 5708
PRELIMINARY GRADING, DRAINAGE, & UTILITIES
CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA

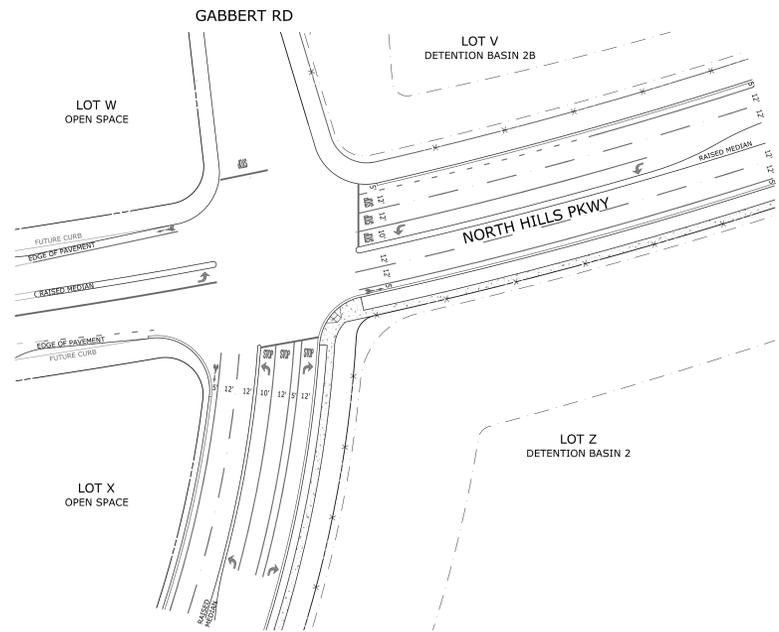
PROJECT ENGINEER: GREGORY J. MUSSER
DRAWN BY: GJM
CHECKED BY: GJM

DATE: 04/06/2022
WORK ORDER: 0047
SCALE: HORIZ. AS NOTED VERT. N/A

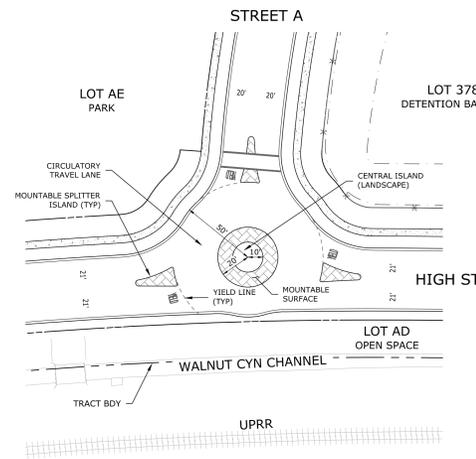
SHEET NO. 6 OF 7



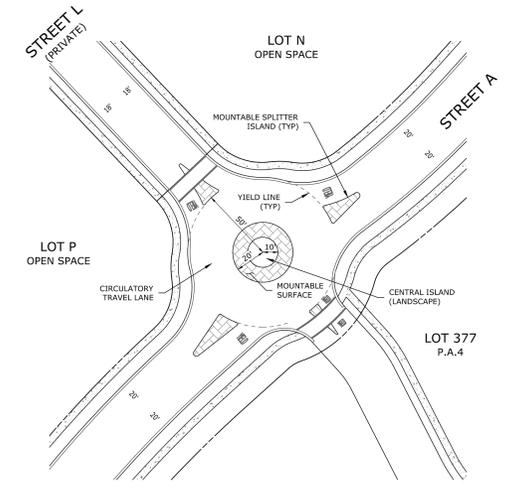
POINDEXTER AVE / GABBERT RD / HIGH ST
SCALE: 1"=40'



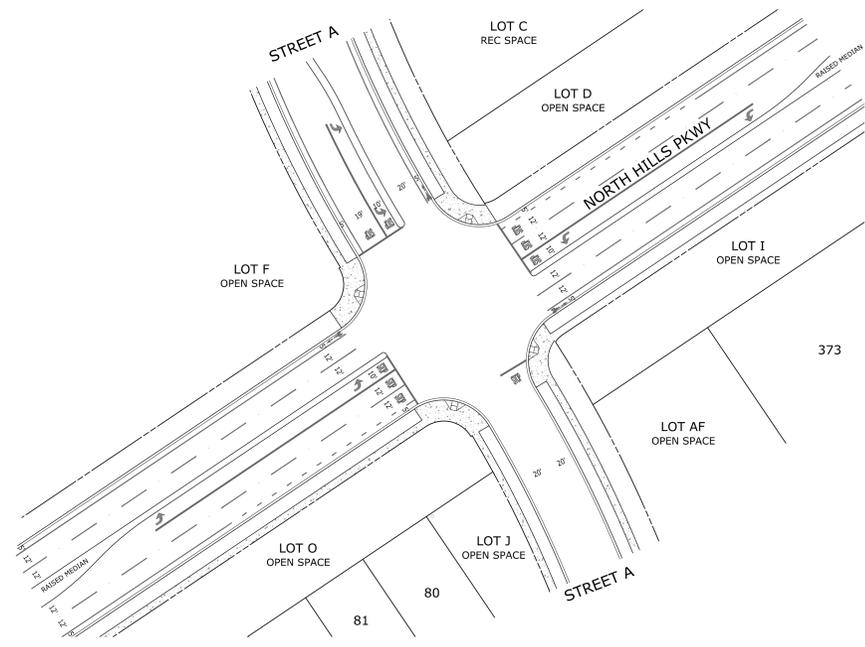
GABBERT RD / NORTH HILLS PKWY
SCALE: 1"=40'



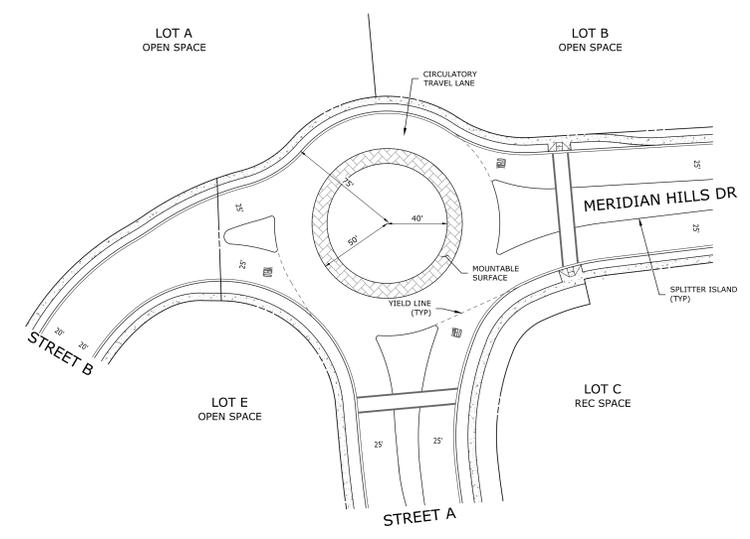
HIGH ST / STREET A
SCALE: 1"=40'



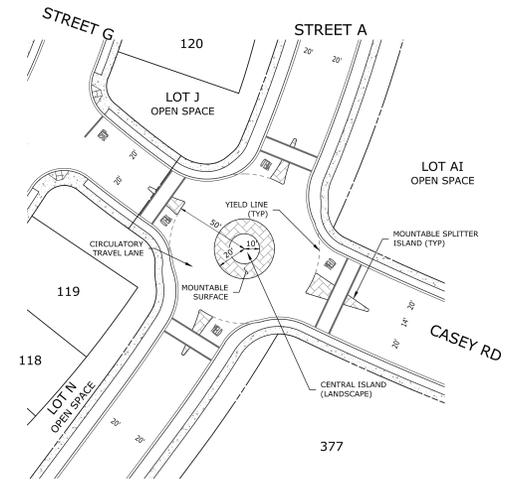
STREET A / STREET L
SCALE: 1"=40'



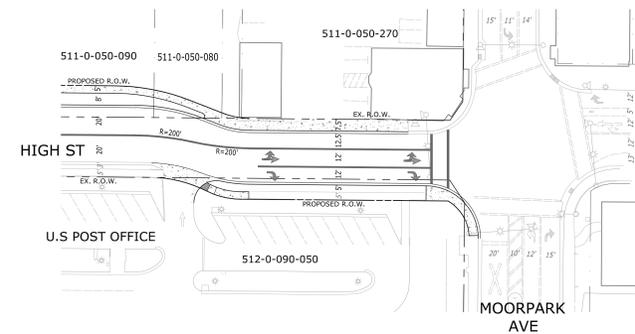
STREET A / NORTH HILLS PKWY
SCALE: 1"=40'



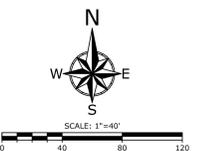
STREET A / MERIDIAN HILLS DR
SCALE: 1"=40'



STREET A / CASEY RD
SCALE: 1"=40'



HIGH ST / MOORPARK AVE
SCALE: 1"=40'



<p>ETC CONSULTING GROUP 333 S. AVENUE 55, SUITE 205, CARROLLVILLE, GA 30086 PHONE: 803.322.4443 WEBSITE: WWW.ECGVLS.COM</p>	<p>HITCH RANCH TENTATIVE TRACT MAP NO. 5708 PRELIMINARY INTERSECTION LAYOUTS CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA</p>							
	<p>PROJECT ENGINEER GREGORY J. MUSSEY R.C.E. 77627</p>	<p>DATE: 04/06/2022</p>	<p>SCALE: HORIZ. AS NOTED VERT. N/A</p> <table border="1"> <tr> <td>WORK ORDER</td> <td>0047</td> </tr> <tr> <td>DRAWN BY</td> <td>GJM</td> </tr> <tr> <td>CHECKED BY</td> <td>GJM</td> </tr> </table>	WORK ORDER	0047	DRAWN BY	GJM	CHECKED BY
WORK ORDER	0047							
DRAWN BY	GJM							
CHECKED BY	GJM							
		<p>SHEET NO. 7 OF 7</p>						

DRAWING: n:\projects\040702_hitch_ranch - consultant\engineering\autocad\dwg\040702_02.dwg

Appendix F – ICU/Synchro Reports – 2025 Conditions

Intersection #1

E-W Street: Casey Rd

N-S Street: Walnut Canyon Rc

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM 2025 without Project				AM 2025 Plus Project				PM 2025 without Project				PM 2025 Plus Project			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	31	1	1.00	0.02	31	1	1.00	0.02	34	1	1.00	0.02	34	1	1.00	0.02
Comb. L-T	0	0			0	0			0	0			0	0		
EB Thru	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. T-R	0	0			0	0			0	0			0	0		
EB Right	314	1	1.00	0.21	314	1	1.00	0.21	216	1	1.00	0.14	216	1	1.00	0.14
Comb. L-T-R	0	0			0	0			0	0			0	0		
WB Left	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T	0	0			0	0			0	0			0	0		
WB Thru	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. T-R	0	0			0	0			0	0			0	0		
WB Right	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T-R	0	0			0	0			0	0			0	0		
NB Left	150	1	1.00	0.10	150	1	1.00	0.10	342	1	1.00	0.23	342	1	1.00	0.23
Comb. L-T	0	0			0	0			0	0			0	0		
NB Thru	224	1	1.00	0.14	223	1	1.00	0.14	392	1	1.00	0.25	395	1	1.00	0.25
Comb. T-R	0	0			0	0			0	0			0	0		
NB Right	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T-R	0	0			0	0			0	0			0	0		
SB Left	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T	0	0			0	0			0	0			0	0		
SB Thru	358	0	0.95	0.23	355	0	0.95	0.23	273	0	0.88	0.19	277	0	0.88	0.20
Comb. T-R	0	1			0	1			0	1			0	1		
SB Right	17	0	0.05	0.25	17	0	0.05	0.25	37	0	0.12	0.21	37	0	0.12	0.21
Comb. L-T-R	0	0			0	0			0	0			0	0		

Critical Volumes		E-W:	0.21	E-W:	0.21	E-W:	0.14	E-W:	0.14
		N-S:	0.35	N-S:	0.35	N-S:	0.43	N-S:	0.44
		Total:	0.56	Total:	0.56	Total:	0.58	Total:	0.58

Lost Time	0.10	0.10	0.10	0.10
-----------	------	------	------	------

V/C	0.659	0.657	0.679	0.681
Level of Service	B	B	B	B

Intersection #3

E-W Street: High St
 N-S Street: Moorpark Ave
 Thru Lane Capacity: 1600
 Turn Lane Capacity: 1500

Movement	AM 2025 without Project				AM 2025 Plus Project				PM 2025 without Project				PM 2025 Plus Project			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	3	0	0.03	0.06	2	0	0.02	0.06	5	0	0.04	0.08	6	0	0.04	0.10
Comb. L-T	0	0			0	0			0	0			0	0		
EB Thru	47	0	0.52	0.06	44	0	0.53	0.05	68	0	0.54	0.08	76	0	0.53	0.09
Comb. T-R	0	0			0	0			0	0			0	0		
EB Right	40	0	0.44	0.06	37	0	0.45	0.06	53	0	0.42	0.08	61	0	0.43	0.10
Comb. L-T-R	1	1			1	1			1	1			1	1		
WB Left	198	0	0.89	0.15	198	0	0.93	0.14	222	0	0.76	0.19	222	0	0.74	0.20
Comb. L-T	1	1			1	1			1	1			1	1		
WB Thru	24	0	0.11	0.14	15	0	0.07	0.13	69	0	0.24	0.18	80	0	0.26	0.19
Comb. T-R	0	0			0	0			0	0			0	0		
WB Right	209	1	1.00	0.14	207	1	1.00	0.14	349	1	1.00	0.23	351	1	1.00	0.23
Comb. L-T-R	0	0			0	0			0	0			0	0		
NB Left	23	0	0.05	0.29	14	0	0.03	0.28	78	0	0.14	0.38	89	0	0.15	0.39
Comb. L-T	1	1			1	1			1	1			1	1		
NB Thru	413	0	0.95	0.27	407	0	0.97	0.26	485	0	0.86	0.35	492	0	0.85	0.36
Comb. T-R	0	0			0	0			0	0			0	0		
NB Right	152	1	1.00	0.10	152	1	1.00	0.10	327	1	1.00	0.22	327	1	1.00	0.22
Comb. L-T-R	0	0			0	0			0	0			0	0		
SB Left	336	1	1.00	0.22	335	1	1.00	0.22	214	1	1.00	0.14	215	1	1.00	0.14
Comb. L-T	0	0			0	0			0	0			0	0		
SB Thru	616	0	1.00	0.39	614	0	1.00	0.38	381	0	0.99	0.24	386	0	0.99	0.24
Comb. T-R	1	1			1	1			1	1			1	1		
SB Right	1	0	0.00	0.41	0	0	0.00	0.00	3	0	0.01	0.26	5	0	0.01	0.26
Comb. L-T-R	0	0			0	0			0	0			0	0		

Critical Volumes	E-W:	0.21	E-W:	0.20	E-W:	0.32	E-W:	0.33
	N-S:	0.70	N-S:	0.66	N-S:	0.63	N-S:	0.65
	Total:	0.91	Total:	0.86	Total:	0.95	Total:	0.98

Lost Time	0.10	0.10	0.10	0.10
-----------	------	------	------	------

V/C	1.010	0.962	1.048	1.077
Level of Service	F	E	F	F

Intersection #4

E-W Street: Princeton Ave
 N-S Street: Spring Rd
 Thru Lane Capacity: 1600
 Turn Lane Capacity: 1500

Movement	AM 2025 without Project				AM 2025 Plus Project				PM 2025 without Project				PM 2025 Plus Project						
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C			
EB Left	12	1	1.00	0.01	11	1	1.00	0.01	41	1	1.00	0.03	42	1	1.00	0.03			
Comb. L-T	0	0			0	0			0	0			0	0					
EB Thru	281	1	1.00	0.18	280	1	1.00	0.18	338	1	1.00	0.21	341	1	1.00	0.21			
Comb. T-R	0	0			0	0			0	0			0	0					
EB Right	233	1	1.00	0.16	231	1	1.00	0.15	194	1	1.00	0.13	199	1	1.00	0.13			
Comb. L-T-R	0	0			0	0			0	0			0	0					
WB Left	77	1	1.00	0.05	77	1	1.00	0.05	105	1	1.00	0.07	105	1	1.00	0.07			
Comb. L-T	0	0			0	0			0	0			0	0					
WB Thru	245	1	1.00	0.15	242	1	1.00	0.15	342	1	1.00	0.21	346	1	1.00	0.22			
Comb. T-R	0	0			0	0			0	0			0	0					
WB Right	253	1	1.00	0.17	253	1	1.00	0.17	416	1	1.00	0.28	416	1	1.00	0.28			
Comb. L-T-R	0	0			0	0			0	0			0	0					
NB Left	146	1	1.00	0.10	140	1	1.00	0.09	315	1	1.00	0.21	322	1	1.00	0.21			
Comb. L-T	0	0			0	0			0	0			0	0					
NB Thru	241	2	2.00	0.08	241	2	2.00	0.08	579	2	2.00	0.18	579	2	2.00	0.18			
Comb. T-R	0	0			0	0			0	0			0	0					
NB Right	168	1	1.00	0.11	168	1	1.00	0.11	224	1	1.00	0.15	224	1	1.00	0.15			
Comb. L-T-R	0	0			0	0			0	0			0	0					
SB Left	395	1	1.00	0.26	395	1	1.00	0.26	253	1	1.00	0.17	253	1	1.00	0.17			
Comb. L-T	0	0			0	0			0	0			0	0					
SB Thru	531	1	1.91	0.17	531	1	1.91	0.17	297	1	1.75	0.11	297	1	1.74	0.11			
Comb. T-R	0	0			0	0			0	0			0	0					
SB Right	26	0	0.09	0.19	24	0	0.09	0.19	42	0	0.25	0.11	44	0	0.26	0.11			
Comb. L-T-R	0	0			0	0			0	0			0	0					
Critical Volumes	E-W: 0.23				E-W: 0.23				E-W: 0.30				E-W: 0.31						
	N-S: 0.38				N-S: 0.38				N-S: 0.35				N-S: 0.35						
	Total: 0.60				Total: 0.60				Total: 0.65				Total: 0.65						
Lost Time				0.10				0.10				0.10				0.10			
V/C				0.702				0.702				0.754				0.755			
Level of Service				C				C				C				C			

Intersection #5

E-W Street: Poindexter Ave/Fir

N-S Street: Moorpark Ave

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM 2025 without Project				AM 2025 Plus Project				PM 2025 without Project				PM 2025 Plus Project				
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	
EB Left	98	1	1.00	0.07	93	1	1.00	0.06	235	1	1.00	0.16	240	1	1.00	0.16	
Comb. L-T	0	0			0	0			0	0			0	0			
EB Thru	10	0	0.24	0.03	10	0	0.24	0.03	27	0	0.27	0.06	27	0	0.27	0.06	
Comb. T-R	1	1			1	1			1	1			1	1			
EB Right	31	0	0.76	0.03	31	0	0.76	0.03	73	0	0.73	0.07	73	0	0.73	0.07	
Comb. L-T-R	0	0			0	0			0	0			0	0			
WB Left	5	1	1.00	0.00	5	1	1.00	0.00	16	1	1.00	0.01	16	1	1.00	0.01	
Comb. L-T	0	0			0	0			0	0			0	0			
WB Thru	30	0	0.91	0.02	30	0	0.91	0.02	12	0	0.48	0.02	12	0	0.48	0.02	
Comb. T-R	1	1			1	1			1	1			1	1			
WB Right	3	0	0.09	0.02	3	0	0.09	0.02	13	0	0.52	0.02	13	0	0.52	0.02	
Comb. L-T-R	0	0			0	0			0	0			0	0			
NB Left	36	1	1.00	0.02	36	1	1.00	0.02	49	1	1.00	0.03	49	1	1.00	0.03	
Comb. L-T	0	0			0	0			0	0			0	0			
NB Thru	299	0	0.98	0.19	288	0	0.98	0.18	587	0	0.98	0.38	600	0	0.98	0.38	
Comb. T-R	1	1			1	1			1	1			1	1			
NB Right	7	0	0.02	0.20	7	0	0.02	0.20	14	0	0.02	0.40	14	0	0.02	0.41	
Comb. L-T-R	0	0			0	0			0	0			0	0			
SB Left	6	1	1.00	0.00	6	1	1.00	0.00	9	1	1.00	0.01	9	1	1.00	0.01	
Comb. L-T	0	0			0	0			0	0			0	0			
SB Thru	424	0	0.67	0.40	420	0	0.67	0.39	441	0	0.72	0.38	451	0	0.72	0.39	
Comb. T-R	1	1			1	1			1	1			1	1			
SB Right	208	0	0.33	0.42	206	0	0.33	0.42	173	0	0.28	0.41	177	0	0.28	0.42	
Comb. L-T-R	0	0			0	0			0	0			0	0			
Critical Volumes	E-W: 0.09				E-W: 0.08				E-W: 0.17				E-W: 0.18				
	N-S: 0.45				N-S: 0.44				N-S: 0.44				N-S: 0.45				
	Total: 0.53				Total: 0.53				Total: 0.62				Total: 0.63				
Lost Time		0.10				0.10				0.10				0.10			
V/C		0.633				0.625				0.715				0.728			
Level of Service		B				B				C				C			

Intersection #6

E-W Street: Los Angeles Ave

N-S Street: Moorpark Ave

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM 2025 without Project				AM 2025 Plus Project				PM 2025 without Project				PM 2025 Plus Project			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	235	1	1.00	0.16	232	1	1.00	0.15	245	1	1.00	0.16	249	1	1.00	0.17
Comb. L-T		0				0				0				0		
EB Thru	982	2	2.88	0.21	982	2	2.88	0.21	1030	2	2.82	0.23	1030	2	2.82	0.23
Comb. T-R		1				1				1				1		
EB Right	41	0	0.12	0.23	41	0	0.12	0.23	66	0	0.18	0.24	66	0	0.18	0.24
Comb. L-T-R		0				0				0				0		
WB Left	164	1	1.00	0.11	164	1	1.00	0.11	337	1	1.00	0.22	337	1	1.00	0.22
Comb. L-T		0				0				0				0		
WB Thru	998	2	2.00	0.31	998	2	2.00	0.31	1204	2	2.00	0.38	1204	2	2.00	0.38
Comb. T-R		0				0				0				0		
WB Right	158	1	1.00	0.11	153	1	1.00	0.10	274	1	1.00	0.18	279	1	1.00	0.19
Comb. L-T-R		0				0				0				0		
NB Left	140	1	1.25	0.07	140	1	1.26	0.07	91	1	1.03	0.06	91	1	1.02	0.06
Comb. L-T		1				1				1				1		
NB Thru	84	0	0.75	0.07	82	0	0.74	0.07	85	0	0.97	0.06	87	0	0.98	0.06
Comb. T-R		0				0				0				0		
NB Right	145	1	1.00	0.10	145	1	1.00	0.10	127	1	1.00	0.08	127	1	1.00	0.08
Comb. L-T-R		0				0				0				0		
SB Left	285	1	0.48	0.40	283	1	0.47	0.40	254	1	0.46	0.37	258	1	0.46	0.37
Comb. L-T		0				0				0				0		
SB Thru	82	0	0.14	0.38	81	0	0.14	0.37	116	0	0.21	0.34	117	0	0.21	0.35
Comb. T-R		0				0				0				0		
SB Right	233	1	0.39	0.40	232	1	0.39	0.40	179	1	0.33	0.37	182	1	0.33	0.37
Comb. L-T-R		1				1				1				1		
Critical Volumes	E-W:			0.47	E-W:			0.47	E-W:			0.54	E-W:			0.54
	N-S:			0.50	N-S:			0.49	N-S:			0.45	N-S:			0.46
	Total:			0.97	Total:			0.96	Total:			0.99	Total:			1.00
Lost Time				0.10	0.10				0.10				0.10			
V/C				1.065	1.061				1.090				1.098			
Level of Service				F	F				F				F			

Intersection #7

E-W Street: Spring Rd

N-S Street: Walnut Canyon Rc

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM 2025 without Project				AM 2025 Plus Project				PM 2025 without Project				PM 2025 Plus Project			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	1	0	0.50	0.00	1	0	0.50	0.00	1	0	1.00	0.00	1	0	1.00	0.00
Comb. L-T		1				1				1				1		
EB Thru	1	0	0.50	0.00	1	0	0.50	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. T-R		0				0				0				0		
EB Right	4	1	1.00	0.00	4	1	1.00	0.00	6	1	1.00	0.00	6	1	1.00	0.00
Comb. L-T-R		0				0				0				0		
WB Left	23	0	0.96	0.02	23	0	0.96	0.02	42	0	0.98	0.03	42	0	0.98	0.03
Comb. L-T		1				1				1				1		
WB Thru	1	0	0.04	0.02	1	0	0.04	0.02	1	0	0.02	0.03	1	0	0.02	0.03
Comb. T-R		0				0				0				0		
WB Right	349	1	1.00	0.23	349	1	1.00	0.23	692	1	1.00	0.46	692	1	1.00	0.46
Comb. L-T-R		0				0				0				0		
NB Left	6	1	1.00	0.00	6	1	1.00	0.00	4	1	1.00	0.00	4	1	1.00	0.00
Comb. L-T		0				0				0				0		
NB Thru	188	1	1.00	0.12	187	1	1.00	0.12	235	1	1.00	0.15	236	1	1.00	0.15
Comb. T-R		0				0				0				0		
NB Right	18	1	1.00	0.01	18	1	1.00	0.01	36	1	1.00	0.02	36	1	1.00	0.02
Comb. L-T-R		0				0				0				0		
SB Left	554	1	1.00	0.37	554	1	1.00	0.37	352	1	1.00	0.23	352	1	1.00	0.23
Comb. L-T		0				0				0				0		
SB Thru	198	0	1.00	0.12	196	0	1.00	0.12	185	0	1.00	0.12	187	0	1.00	0.12
Comb. T-R		1				1				1				1		
SB Right	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T-R		0				0				0				0		

Critical Volumes	E-W:	0.23	E-W:	0.23	E-W:	0.46	E-W:	0.46
	N-S:	0.49	N-S:	0.49	N-S:	0.38	N-S:	0.38
	Total:	0.72	Total:	0.72	Total:	0.84	Total:	0.84

Lost Time	0.10	0.10	0.10	0.10
-----------	------	------	------	------

V/C	0.821	0.820	0.944	0.944
Level of Service	D	D	E	E

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕		↕	↕	
Traffic Vol, veh/h	1	0	6	17	1	19	35	585	8	38	936	6
Future Vol, veh/h	1	0	6	17	1	19	35	585	8	38	936	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	50	-	-	-	45	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	7	18	1	21	38	636	9	41	1017	7

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1831	1824	1021	1823	1823	641	1024	0	0	645	0	0
Stage 1	1103	1103	-	717	717	-	-	-	-	-	-	-
Stage 2	728	721	-	1106	1106	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	59	77	287	60	77	475	678	-	-	940	-	-
Stage 1	256	287	-	421	434	-	-	-	-	-	-	-
Stage 2	415	432	-	255	286	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	52	69	287	54	69	475	678	-	-	940	-	-
Mov Cap-2 Maneuver	52	69	-	54	69	-	-	-	-	-	-	-
Stage 1	242	274	-	397	410	-	-	-	-	-	-	-
Stage 2	374	408	-	238	273	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	26.1		63.4		0.6		0.3	
HCM LOS	D		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn	EBLn	WBLn	SBL	SBT	SBR
Capacity (veh/h)	678	-	-	52	287	100	940	-	-
HCM Lane V/C Ratio	0.056	-	-	0.021	0.023	0.402	0.044	-	-
HCM Control Delay (s)	10.6	-	-	75.7	17.8	63.4	9	-	-
HCM Lane LOS	B	-	-	F	C	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.1	1.7	0.1	-	-

Intersection

Int Delay, s/veh 0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↘	↑	↘	↘	↑
Traffic Vol, veh/h	20	0	70	8	0	145
Future Vol, veh/h	20	0	70	8	0	145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	30	0	-
Veh in Median Storage0#	-	0	-	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	0	76	9	0	158

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	234	76	0
Stage 1	76	-	-
Stage 2	158	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	754	985	-
Stage 1	947	-	-
Stage 2	871	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	754	985	-
Mov Cap-2 Maneuver	754	-	-
Stage 1	947	-	-
Stage 2	871	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBLn1	NBLn2	SBL	SBT
Capacity (veh/h)	-	-	754	-	1512
HCM Lane V/C Ratio	-	-	0.029	-	-
HCM Control Delay (s)	-	-	9.9	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0

Intersection

Int Delay, s/veh 1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↖		↗	↖	
Traffic Vol, veh/h	4	2	38	19	0	16	16	807	17	20	543	3
Future Vol, veh/h	4	2	38	19	0	16	16	807	17	20	543	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	50	-	-	-	45	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	2	41	21	0	17	17	877	18	22	590	3

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	1565	1565	592	1577
Stage 1	636	636	-	920
Stage 2	929	929	-	657
Critical Hdwy	7.12	6.52	6.22	7.12
Critical Hdwy Stg 1	6.12	5.52	-	6.12
Critical Hdwy Stg 2	6.12	5.52	-	6.12
Follow-up Hdwy	3.518	4.018	3.318	3.518
Pot Cap-1 Maneuver	90	111	506	89
Stage 1	466	472	-	325
Stage 2	321	346	-	454
Platoon blocked, %				
Mov Cap-1 Maneuver	82	106	506	78
Mov Cap-2 Maneuver	82	106	-	78
Stage 1	458	458	-	319
Stage 2	299	340	-	403

Approach	EB	WB	NB	SB
HCM Control Delay, s	7.6	47.8	0.2	0.3
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn	EBLn	WBLn	SBL	SBT	SBR
Capacity (veh/h)	983	-	-	89	506	121	758	-	-
HCM Lane V/C Ratio	0.018	-	-	0.073	0.082	0.314	0.029	-	-
HCM Control Delay (s)	8.7	-	-	48.6	12.7	47.8	9.9	-	-
HCM Lane LOS	A	-	-	E	B	E	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	1.2	0.1	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↘	↗	↗	↘	↗
Traffic Vol, veh/h	13	0	202	26	0	106
Future Vol, veh/h	13	0	202	26	0	106
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None		- None		- None	
Storage Length	0	0	-	30	0	-
Veh in Median Storage#	-	0	-	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	0	220	28	0	115

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	335	220	0	0	248	0
Stage 1	220	-	-	-	-	-
Stage 2	115	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuve	660	820	-	-	1318	-
Stage 1	817	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuve	660	820	-	-	1318	-
Mov Cap-2 Maneuve	660	-	-	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	910	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBLn1	NBLn2	SBL	SBT
Capacity (veh/h)	-	-	660	-	1318
HCM Lane V/C Ratio	-	-	0.021	-	-
HCM Control Delay (s)	-	-	10.6	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0

Intersection

Int Delay, s/veh 1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	0	0	3	17	1	19	27	584	8	38	934	4
Future Vol, veh/h	0	0	3	17	1	19	27	584	8	38	934	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	50	-	-	-	45	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	18	1	21	29	635	9	41	1015	4

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	1808	1801	1017	1799
Stage 1	1099	1099	-	698
Stage 2	709	702	-	1101
Critical Hdwy	7.12	6.52	6.22	7.12
Critical Hdwy Stg 1	6.12	5.52	-	6.12
Critical Hdwy Stg 2	6.12	5.52	-	6.12
Follow-up Hdwy	3.518	4.018	3.318	3.518
Pot Cap-1 Maneuver	61	80	288	62
Stage 1	258	288	-	431
Stage 2	425	440	-	257
Platoon blocked, %				
Mov Cap-1 Maneuver	54	73	288	57
Mov Cap-2 Maneuver	54	73	-	57
Stage 1	247	275	-	412
Stage 2	388	421	-	243

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.6	59.1	0.5	0.4
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn	EBLn	WBLn	SBL	SBT	SBR
Capacity (veh/h)	681	-	-	-	288	105	941	-	-
HCM Lane V/C Ratio	0.043	-	-	-0.011	0.383	0.044	-	-	-
HCM Control Delay (s)	10.5	-	-	0	17.6	59.1	9	-	-
HCM Lane LOS	B	-	-	A	C	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	0	1.6	0.1	-	-

Intersection

Int Delay, s/veh 0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↘	↑	↘	↘	↑
Traffic Vol, veh/h	19	0	70	6	0	145
Future Vol, veh/h	19	0	70	6	0	145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	30	0	-
Veh in Median Storage0#	-	0	-	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	0	76	7	0	158

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	234	76	0
Stage 1	76	-	-
Stage 2	158	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	754	985	-
Stage 1	947	-	-
Stage 2	871	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	754	985	-
Mov Cap-2 Maneuver	754	-	-
Stage 1	947	-	-
Stage 2	871	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBLn1	NBLn2	SBL	SBT
Capacity (veh/h)	-	-	754	-	1514
HCM Lane V/C Ratio	-	-	0.027	-	-
HCM Control Delay (s)	-	-	9.9	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕		↕	↕	
Traffic Vol, veh/h	5	2	45	19	0	16	25	808	17	20	545	5
Future Vol, veh/h	5	2	45	19	0	16	25	808	17	20	545	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	50	-	-	-	45	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	2	49	21	0	17	27	878	18	22	592	5

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	1589	1589	595	1605
Stage 1	639	639	-	941
Stage 2	950	950	-	664
Critical Hdwy	7.12	6.52	6.22	7.12
Critical Hdwy Stg 1	6.12	5.52	-	6.12
Critical Hdwy Stg 2	6.12	5.52	-	6.12
Follow-up Hdwy	3.518	4.018	3.318	3.518
Pot Cap-1 Maneuver	87	108	504	85
Stage 1	464	470	-	316
Stage 2	312	339	-	450
Platoon blocked, %				
Mov Cap-1 Maneuver	79	102	504	72
Mov Cap-2 Maneuver	79	102	-	72
Stage 1	451	456	-	307
Stage 2	288	330	-	393

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.2	52.2	0.3	0.3
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn	EBLn	WBLn	SBL	SBT	SBR
Capacity (veh/h)	980	-	-	84	504	113	757	-	-
HCM Lane V/C Ratio	0.028	-	-	0.091	0.097	0.337	0.029	-	-
HCM Control Delay (s)	8.8	-	-	52.1	12.9	52.2	9.9	-	-
HCM Lane LOS	A	-	-	F	B	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	1.3	0.1	-	-

Intersection

Int Delay, s/veh 0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↘	↑	↘	↘	↑
Traffic Vol, veh/h	14	0	202	28	0	106
Future Vol, veh/h	14	0	202	28	0	106
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	30	0	-
Veh in Median Storage#	-	0	-	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	0	220	30	0	115

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	335	220	0
Stage 1	220	-	-
Stage 2	115	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuve	660	820	-
Stage 1	817	-	-
Stage 2	910	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuve	660	820	-
Mov Cap-2 Maneuve	660	-	-
Stage 1	817	-	-
Stage 2	910	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBLn1	NBLn2	SBL	SBT
Capacity (veh/h)	-	-	660	-	1316
HCM Lane V/C Ratio	-	-	0.023	-	-
HCM Control Delay (s)	-	-	10.6	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0

Appendix G – ICU/Synchro Reports – 2037 Conditions

Intersection #1

E-W Street: Casey Rd

N-S Street: Walnut Canyon Rc

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM 2037 Without Project				AM 2037 Plus Project				PM 2037 Without Project				PM 2037 Plus Project			
	Total Volume	No. of Lanes	Equivalent Lanes	Movemen t V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movemen t V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movemen t V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movemen t V/C
EB Left	31	1	1.00	0.02	31	1	1.00	0.02	35	1	1.00	0.02	35	1	1.00	0.02
Comb. L-T	0	0			0	0			0	0			0	0		
EB Thru	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. T-R		0				0				0				0		
EB Right	320	1	1.00	0.21	320	1	1.00	0.21	219	1	1.00	0.15	219	1	1.00	0.15
Comb. L-T-R		0				0				0				0		
WB Left	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T		0				0				0				0		
WB Thru	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. T-R		0				0				0				0		
WB Right	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T-R		0				0				0				0		
NB Left	155	1	1.00	0.10	155	1	1.00	0.10	346	1	1.00	0.23	346	1	1.00	0.23
Comb. L-T		0				0				0				0		
NB Thru	239	1	1.00	0.15	241	1	1.00	0.15	426	1	1.00	0.27	432	1	1.00	0.27
Comb. T-R		0				0				0				0		
NB Right	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T-R		0				0				0				0		
SB Left	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T		0				0				0				0		
SB Thru	388	0	0.96	0.25	390	0	0.96	0.25	295	0	0.89	0.21	301	0	0.89	0.21
Comb. T-R		1				1				1				1		
SB Right	17	0	0.04	0.27	17	0	0.04	0.27	37	0	0.11	0.22	37	0	0.11	0.23
Comb. L-T-R		0				0				0				0		

Critical Volumes	E-W:	0.21	E-W:	0.21	E-W:	0.15	E-W:	0.15
	N-S:	0.37	N-S:	0.37	N-S:	0.45	N-S:	0.46
	Total:	0.59	Total:	0.59	Total:	0.60	Total:	0.60

Lost Time	0.10	0.10	0.10	0.10
-----------	------	------	------	------

V/C	0.687	0.688	0.698	0.702
Level of Service	B	B	B	C

Intersection #3

E-W Street: High St
 N-S Street: Moorpark Ave
 Thru Lane Capacity: 1600
 Turn Lane Capacity: 1500

Movement	AM 2037 Without Project				AM 2037 Plus Project				PM 2037 Without Project				PM 2037 Plus Project			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	3	0	0.03	0.06	4	0	0.04	0.07	6	0	0.04	0.09	9	0	0.05	0.12
Comb. L-T	0	0			0	0			0	0			0	0		
EB Thru	47	0	0.51	0.06	54	0	0.50	0.07	73	0	0.54	0.09	90	0	0.52	0.11
Comb. T-R	0	0			0	0			0	0			0	0		
EB Right	42	0	0.46	0.06	49	0	0.46	0.07	57	0	0.42	0.09	74	0	0.43	0.12
Comb. L-T-R	1	1			1	1			1	1			1	1		
WB Left	222	0	0.90	0.17	222	0	0.88	0.17	249	0	0.78	0.21	249	0	0.73	0.23
Comb. L-T	1	1			1	1			1	1			1	1		
WB Thru	26	0	0.10	0.16	31	0	0.12	0.16	72	0	0.22	0.20	91	0	0.27	0.21
Comb. T-R	0	0			0	0			0	0			0	0		
WB Right	227	1	1.00	0.15	228	1	1.00	0.15	367	1	1.00	0.24	370	1	1.00	0.25
Comb. L-T-R	0	0			0	0			0	0			0	0		
NB Left	25	0	0.05	0.31	30	0	0.06	0.32	82	0	0.14	0.40	101	0	0.16	0.42
Comb. L-T	1	1			1	1			1	1			1	1		
NB Thru	447	0	0.95	0.30	451	0	0.94	0.30	516	0	0.86	0.37	528	0	0.84	0.39
Comb. T-R	0	0			0	0			0	0			0	0		
NB Right	170	1	1.00	0.11	170	1	1.00	0.11	366	1	1.00	0.24	366	1	1.00	0.24
Comb. L-T-R	0	0			0	0			0	0			0	0		
SB Left	355	1	1.00	0.24	356	1	1.00	0.24	225	1	1.00	0.15	228	1	1.00	0.15
Comb. L-T	0	0			0	0			0	0			0	0		
SB Thru	666	0	1.00	0.42	671	0	1.00	0.42	407	0	0.99	0.26	419	0	0.99	0.27
Comb. T-R	1	1			1	1			1	1			1	1		
SB Right	1	0	0.00	0.44	2	0	0.00	0.45	3	0	0.01	0.27	6	0	0.01	0.28
Comb. L-T-R	0	0			0	0			0	0			0	0		

Critical Volumes	E-W:	0.23	E-W:	0.24	E-W:	0.34	E-W:	0.36
	N-S:	0.76	N-S:	0.77	N-S:	0.67	N-S:	0.70
	Total:	0.99	Total:	1.01	Total:	1.01	Total:	1.06

Lost Time	0.10	0.10	0.10	0.10
-----------	------	------	------	------

V/C	1.086	1.109	1.107	1.165
Level of Service	F	F	F	F

Intersection #4

E-W Street: Princeton Ave
 N-S Street: Spring Rd
 Thru Lane Capacity: 1600
 Turn Lane Capacity: 1500

Movement	AM 2037 Without Project				AM 2037 Plus Project				PM 2037 Without Project				PM 2037 Plus Project			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	14	1	1.00	0.01	17	1	1.00	0.01	46	1	1.00	0.03	55	1	1.00	0.04
Comb. L-T	0	0			0	0			0	0			0	0		
EB Thru	303	1	1.00	0.19	306	1	1.00	0.19	372	1	1.00	0.23	380	1	1.00	0.24
Comb. T-R	0	0			0	0			0	0			0	0		
EB Right	248	1	1.00	0.17	254	1	1.00	0.17	208	1	1.00	0.14	222	1	1.00	0.15
Comb. L-T-R	0	0			0	0			0	0			0	0		
WB Left	88	1	1.00	0.06	87	1	1.00	0.06	119	1	1.00	0.08	117	1	1.00	0.08
Comb. L-T	0	0			0	0			0	0			0	0		
WB Thru	271	1	1.00	0.17	274	1	1.00	0.17	369	1	1.00	0.23	377	1	1.00	0.24
Comb. T-R	0	0			0	0			0	0			0	0		
WB Right	270	1	1.00	0.18	270	1	1.00	0.18	463	1	1.00	0.31	463	1	1.00	0.31
Comb. L-T-R	0	0			0	0			0	0			0	0		
NB Left	158	1	1.00	0.11	165	1	1.00	0.11	338	1	1.00	0.23	358	1	1.00	0.24
Comb. L-T	0	0			0	0			0	0			0	0		
NB Thru	270	2	2.00	0.08	267	2	2.00	0.08	650	2	2.00	0.20	644	2	2.00	0.20
Comb. T-R	0	0			0	0			0	0			0	0		
NB Right	189	1	1.00	0.13	188	1	1.00	0.13	252	1	1.00	0.17	250	1	1.00	0.17
Comb. L-T-R	0	0			0	0			0	0			0	0		
SB Left	434	1	1.00	0.29	434	1	1.00	0.29	277	1	1.00	0.18	277	1	1.00	0.18
Comb. L-T	0	0			0	0			0	0			0	0		
SB Thru	597	1	1.91	0.20	597	1	1.90	0.20	333	1	1.75	0.12	333	1	1.74	0.12
Comb. T-R	1	1			1	1			1	1			1	1		
SB Right	29	0	0.09	0.21	30	0	0.10	0.21	47	0	0.25	0.13	50	0	0.26	0.13
Comb. L-T-R	0	0			0	0			0	0			0	0		

Critical Volumes	E-W:	0.25	E-W:	0.25	E-W:	0.34	E-W:	0.35
	N-S:	0.42	N-S:	0.41	N-S:	0.39	N-S:	0.39
	Total:	0.66	Total:	0.66	Total:	0.73	Total:	0.73

Lost Time	0.10	0.10	0.10	0.10
-----------	------	------	------	------

V/C	0.763	0.764	0.827	0.831
Level of Service	C	C	D	D

Intersection #5

E-W Street: Poindexter Ave/Fir

N-S Street: Moorpark Ave

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM 2037 Without Project				AM 2037 Plus Project				PM 2037 Without Project				PM 2037 Plus Project			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	109	1	1.00	0.07	112	1	1.00	0.07	262	1	1.00	0.17	271	1	1.00	0.18
Comb. L-T		0				0				0				0		
EB Thru	11	0	0.24	0.03	11	0	0.24	0.03	30	0	0.27	0.07	30	0	0.27	0.07
Comb. T-R		1				1				1				1		
EB Right	34	0	0.76	0.03	34	0	0.76	0.03	82	0	0.73	0.07	82	0	0.73	0.07
Comb. L-T-R		0				0				0				0		
WB Left	6	1	1.00	0.00	6	1	1.00	0.00	18	1	1.00	0.01	18	1	1.00	0.01
Comb. L-T		0				0				0				0		
WB Thru	34	0	0.92	0.02	34	0	0.92	0.02	14	0	0.48	0.02	14	0	0.48	0.02
Comb. T-R		1				1				1				1		
WB Right	3	0	0.08	0.02	3	0	0.08	0.02	15	0	0.52	0.02	15	0	0.52	0.02
Comb. L-T-R		0				0				0				0		
NB Left	40	1	1.00	0.03	40	1	1.00	0.03	55	1	1.00	0.04	55	1	1.00	0.04
Comb. L-T		0				0				0				0		
NB Thru	318	0	0.98	0.20	324	0	0.98	0.21	626	0	0.98	0.40	648	0	0.98	0.42
Comb. T-R		1				1				1				1		
NB Right	8	0	0.02	0.22	8	0	0.02	0.22	16	0	0.02	0.43	16	0	0.02	0.44
Comb. L-T-R		0				0				0				0		
SB Left	7	1	1.00	0.00	7	1	1.00	0.00	10	1	1.00	0.01	10	1	1.00	0.01
Comb. L-T		0				0				0				0		
SB Thru	446	0	0.66	0.42	454	0	0.66	0.43	473	0	0.71	0.42	493	0	0.71	0.43
Comb. T-R		1				1				1				1		
SB Right	232	0	0.34	0.45	236	0	0.34	0.46	192	0	0.29	0.44	201	0	0.29	0.46
Comb. L-T-R		0				0				0				0		

Critical Volumes		E-W:	0.10	E-W:	0.10	E-W:	0.19	E-W:	0.20
		N-S:	0.48	N-S:	0.49	N-S:	0.48	N-S:	0.50
		Total:	0.58	Total:	0.59	Total:	0.67	Total:	0.70

Lost Time	0.10	0.10	0.10	0.10
-----------	------	------	------	------

V/C	0.676	0.686	0.774	0.799
Level of Service	B	B	C	C

Intersection #6

E-W Street: Los Angeles Ave

N-S Street: Moorpark Ave

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM 2037 Without Project				AM 2037 Plus Project				PM 2037 Without Project				PM 2037 Plus Project			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	253	1	1.00	0.17	255	1	1.00	0.17	264	1	1.00	0.18	270	1	1.00	0.18
Comb. L-T		0				0				0				0		
EB Thru	1076	2	2.88	0.23	1076	2	2.88	0.23	1135	2	2.82	0.25	1135	2	2.82	0.25
Comb. T-R		1				1				1				1		
EB Right	45	0	0.12	0.25	45	0	0.12	0.25	73	0	0.18	0.27	73	0	0.18	0.27
Comb. L-T-R		0				0				0				0		
WB Left	178	1	1.00	0.12	178	1	1.00	0.12	373	1	1.00	0.25	373	1	1.00	0.25
Comb. L-T		0				0				0				0		
WB Thru	1110	2	2.00	0.35	1110	2	2.00	0.35	1326	2	2.00	0.41	1326	2	2.00	0.41
Comb. T-R		0				0				0				0		
WB Right	173	1	1.00	0.12	176	1	1.00	0.12	290	1	1.00	0.19	299	1	1.00	0.20
Comb. L-T-R		0				0				0				0		
NB Left	154	1	1.25	0.08	154	1	1.24	0.08	99	1	1.04	0.06	99	1	1.02	0.06
Comb. L-T		1				1				1				1		
NB Thru	93	0	0.75	0.08	94	0	0.76	0.08	92	0	0.96	0.06	95	0	0.98	0.06
Comb. T-R		0				0				0				0		
NB Right	164	1	1.00	0.11	164	1	1.00	0.11	143	1	1.00	0.10	143	1	1.00	0.10
Comb. L-T-R		0				0				0				0		
SB Left	305	1	0.47	0.43	309	1	0.48	0.43	275	1	0.46	0.40	284	1	0.46	0.41
Comb. L-T		0				0				0				0		
SB Thru	89	0	0.14	0.40	90	0	0.14	0.41	129	0	0.22	0.37	132	0	0.22	0.38
Comb. T-R		0				0				0				0		
SB Right	249	1	0.39	0.43	251	1	0.39	0.43	191	1	0.32	0.40	197	1	0.32	0.41
Comb. L-T-R		1				1				1				1		

Critical Volumes		E-W:	0.52	E-W:	0.52	E-W:	0.59	E-W:	0.59
		N-S:	0.54	N-S:	0.54	N-S:	0.49	N-S:	0.50
		Total:	1.05	Total:	1.06	Total:	1.08	Total:	1.10

Lost Time	0.10	0.10	0.10	0.10
-----------	------	------	------	------

V/C	1.154	1.160	1.182	1.198
Level of Service	F	F	F	F

Intersection #7

E-W Street: Spring Rd

N-S Street: Walnut Canyon Rc

Thru Lane Capacity: 1600

Turn Lane Capacity: 1500

Movement	AM 2037 Without Project				AM 2037 Plus Project				PM 2037 Without Project				PM 2037 Plus Project			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	1	0	0.50	0.00	1	0	0.50	0.00	1	0	1.00	0.00	1	0	1.00	0.00
Comb. L-T		1				1				1				1		
EB Thru	1	0	0.50	0.00	1	0	0.50	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. T-R		0				0				0				0		
EB Right	4	1	1.00	0.00	4	1	1.00	0.00	6	1	1.00	0.00	6	1	1.00	0.00
Comb. L-T-R		0				0				0				0		
WB Left	26	0	0.96	0.02	26	0	0.96	0.02	48	0	0.98	0.03	48	0	0.98	0.03
Comb. L-T		1				1				1				1		
WB Thru	1	0	0.04	0.02	1	0	0.04	0.02	1	0	0.02	0.03	1	0	0.02	0.03
Comb. T-R		0				0				0				0		
WB Right	377	1	1.00	0.25	377	1	1.00	0.25	773	1	1.00	0.52	773	1	1.00	0.52
Comb. L-T-R		0				0				0				0		
NB Left	6	1	1.00	0.00	6	1	1.00	0.00	4	1	1.00	0.00	4	1	1.00	0.00
Comb. L-T		0				0				0				0		
NB Thru	198	1	1.00	0.12	199	1	1.00	0.12	254	1	1.00	0.16	257	1	1.00	0.16
Comb. T-R		0				0				0				0		
NB Right	20	1	1.00	0.01	20	1	1.00	0.01	41	1	1.00	0.03	41	1	1.00	0.03
Comb. L-T-R		0				0				0				0		
SB Left	612	1	1.00	0.41	612	1	1.00	0.41	389	1	1.00	0.26	389	1	1.00	0.26
Comb. L-T		0				0				0				0		
SB Thru	213	0	1.00	0.13	214	0	1.00	0.13	196	0	1.00	0.12	199	0	1.00	0.12
Comb. T-R		1				1				1				1		
SB Right	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00
Comb. L-T-R		0				0				0				0		

Critical Volumes		E-W: 0.25	E-W: 0.25	E-W: 0.52	E-W: 0.52
		N-S: 0.53	N-S: 0.53	N-S: 0.42	N-S: 0.42
		Total: 0.78	Total: 0.79	Total: 0.93	Total: 0.94

Lost Time	0.10	0.10	0.10	0.10
-----------	------	------	------	------

V/C	0.884	0.885	1.034	1.036
Level of Service	D	D	F	F

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕		↕	↕	
Traffic Vol, veh/h	1	0	7	20	1	21	39	632	9	43	1003	7
Future Vol, veh/h	1	0	7	20	1	21	39	632	9	43	1003	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	50	-	-	-	45	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	8	22	1	23	42	687	10	47	1090	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1976	1969	1094	1968	1968	692	1098	0	0	697	0	0
Stage 1	1188	1188	-	776	776	-	-	-	-	-	-	-
Stage 2	788	781	-	1192	1192	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	46	63	260	47	63	444	636	-	-	899	-	-
Stage 1	230	262	-	390	407	-	-	-	-	-	-	-
Stage 2	384	405	-	228	261	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	39	56	260	42	56	444	636	-	-	899	-	-
Mov Cap-2 Maneuver	39	56	-	42	56	-	-	-	-	-	-	-
Stage 1	215	248	-	364	380	-	-	-	-	-	-	-
Stage 2	339	378	-	210	247	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	29.4		102.3		0.6		0.4	
HCM LOS	D		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn	EBLn	WBLn	SBL	SBT	SBR
Capacity (veh/h)	636	-	-	39	260	78	899	-	-
HCM Lane V/C Ratio	0.067	-	-	0.028	0.029	0.585	0.052	-	-
HCM Control Delay (s)	11.1	-	-	99.9	19.3	102.3	9.2	-	-
HCM Lane LOS	B	-	-	F	C	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.1	2.6	0.2	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↘	↑	↘	↘	↑
Traffic Vol, veh/h	20	0	73	8	0	147
Future Vol, veh/h	20	0	73	8	0	147
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None		- None		- None	
Storage Length	0	0	-	30	0	-
Veh in Median Storage0#	-	0	-	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	0	79	9	0	160

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	239	79	0	0	88	0
Stage 1	79	-	-	-	-	-
Stage 2	160	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	749	981	-	-	1508	-
Stage 1	944	-	-	-	-	-
Stage 2	869	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	749	981	-	-	1508	-
Mov Cap-2 Maneuver	749	-	-	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	869	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s10		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBLn1	NBLn2	SBL	SBT
Capacity (veh/h)	-	-	749	-	1508
HCM Lane V/C Ratio	-	-	0.029	-	-
HCM Control Delay (s)	-	-	10	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0

Intersection

Int Delay, s/veh 2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕		↕	↕	
Traffic Vol, veh/h	5	2	43	21	0	19	19	852	20	22	574	3
Future Vol, veh/h	5	2	43	21	0	19	19	852	20	22	574	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	50	-	-	-	45	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	2	47	23	0	21	21	926	22	24	624	3

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	1664	1664	626	1677
Stage 1	674	674	-	979
Stage 2	990	990	-	698
Critical Hdwy	7.12	6.52	6.22	7.12
Critical Hdwy Stg 1	6.12	5.52	-	6.12
Critical Hdwy Stg 2	6.12	5.52	-	6.12
Follow-up Hdwy	3.518	4.018	3.318	3.518
Pot Cap-1 Maneuver	77	97	484	75
Stage 1	444	454	-	301
Stage 2	297	324	-	431
Platoon blocked, %				
Mov Cap-1 Maneuver	69	92	484	64
Mov Cap-2 Maneuver	69	92	-	64
Stage 1	434	439	-	294
Stage 2	272	317	-	375

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	63.4	0.2	0.4
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn	EBLn	WBLn	SBL	SBT	SBR
Capacity (veh/h)	955	-	-	74	484	103	724	-	-
HCM Lane V/C Ratio	0.022	-	-	0.103	0.097	0.422	0.033	-	-
HCM Control Delay (s)	8.9	-	-	59.1	13.2	63.4	10.1	-	-
HCM Lane LOS	A	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	1.8	0.1	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↘	↑	↘	↘	↑
Traffic Vol, veh/h	13	0	208	26	0	109
Future Vol, veh/h	13	0	208	26	0	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None		- None		- None	
Storage Length	0	0	-	30	0	-
Veh in Median Storage#	-	0	-	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	0	226	28	0	118

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	344	226	0	0	254	0
Stage 1	226	-	-	-	-	-
Stage 2	118	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuve	652	813	-	-	1311	-
Stage 1	812	-	-	-	-	-
Stage 2	907	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuve	652	813	-	-	1311	-
Mov Cap-2 Maneuve	652	-	-	-	-	-
Stage 1	812	-	-	-	-	-
Stage 2	907	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBLn1	NBLn2	SBL	SBT
Capacity (veh/h)	-	-	652	-	1311
HCM Lane V/C Ratio	-	-	0.022	-	-
HCM Control Delay (s)	-	-	10.6	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	2	0	14	20	1	21	43	633	9	43	1002	10
Future Vol, veh/h	2	0	14	20	1	21	43	633	9	43	1002	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	50	-	-	-	45	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	15	22	1	23	47	688	10	47	1089	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1988	1981	1095	1983	1981	693	1100	0	0	698	0	0
Stage 1	1189	1189	-	787	787	-	-	-	-	-	-	-
Stage 2	799	792	-	1196	1194	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	46	62	260	46	62	443	635	-	-	898	-	-
Stage 1	229	261	-	385	403	-	-	-	-	-	-	-
Stage 2	379	401	-	227	260	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	39	54	260	39	54	443	635	-	-	898	-	-
Mov Cap-2 Maneuver	39	54	-	39	54	-	-	-	-	-	-	-
Stage 1	212	247	-	357	373	-	-	-	-	-	-	-
Stage 2	332	371	-	203	246	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	30.1		114.9		0.7		0.4	
HCM LOS	D		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn	EBLn	WBLn	SBL	SBT	SBR
Capacity (veh/h)	635	-	-	39	260	73	898	-	-
HCM Lane V/C Ratio	0.074	-	-	0.056	0.059	0.625	0.052	-	-
HCM Control Delay (s)	11.1	-	-	102.7	19.7	114.9	9.2	-	-
HCM Lane LOS	B	-	-	F	C	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.2	2.8	0.2	-	-

Intersection

Int Delay, s/veh 0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↗	↖	↖	↗
Traffic Vol, veh/h	21	0	73	9	0	147
Future Vol, veh/h	21	0	73	9	0	147
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	30	0	-
Veh in Median Storage0#	-	0	-	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	0	79	10	0	160

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	239	79	0
Stage 1	79	-	-
Stage 2	160	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	749	981	-
Stage 1	944	-	-
Stage 2	869	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	749	981	-
Mov Cap-2 Maneuver	749	-	-
Stage 1	944	-	-
Stage 2	869	-	-

Approach	WB	NB	SB
HCM Control Delay, s10		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBLn1	NBLn2	SBL	SBT
Capacity (veh/h)	-	-	749	-	1506
HCM Lane V/C Ratio	-	-	0.03	-	-
HCM Control Delay (s)	-	-	10	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0

Intersection

Int Delay, s/veh 3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↖		↗	↖	
Traffic Vol, veh/h	8	2	61	21	0	19	35	855	20	22	573	10
Future Vol, veh/h	8	2	61	21	0	19	35	855	20	22	573	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	50	-	-	-	45	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	2	66	23	0	21	38	929	22	24	623	11

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	1704	1704	629	1727
Stage 1	677	677	-	1016
Stage 2	1027	1027	-	711
Critical Hdwy	7.12	6.52	6.22	7.12
Critical Hdwy Stg 1	6.12	5.52	-	6.12
Critical Hdwy Stg 2	6.12	5.52	-	6.12
Follow-up Hdwy	3.518	4.018	3.318	3.518
Pot Cap-1 Maneuver	72	91	482	70
Stage 1	443	452	-	287
Stage 2	283	312	-	424
Platoon blocked, %				
Mov Cap-1 Maneuver	64	84	482	56
Mov Cap-2 Maneuver	64	84	-	56
Stage 1	425	437	-	276
Stage 2	254	300	-	352

Approach	EB	WB	NB	SB
HCM Control Delay, s	21.5	75.1	0.3	0.4
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn	EBLn1	WBLn	SBL	SBT	SBR
Capacity (veh/h)	949	-	-	67	482	92	722	-	-
HCM Lane V/C Ratio	0.04	-	-	0.162	0.138	0.473	0.033	-	-
HCM Control Delay (s)	9	-	-	68.9	13.7	75.1	10.2	-	-
HCM Lane LOS	A	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.5	2	0.1	-	-

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↘	↕	↘	↘	↕
Traffic Vol, veh/h	16	0	208	29	0	109
Future Vol, veh/h	16	0	208	29	0	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None		- None		- None	
Storage Length	0	0	-	30	0	-
Veh in Median Storage#	-	0	-	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	0	226	32	0	118

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	344	226	0	0	258	0
Stage 1	226	-	-	-	-	-
Stage 2	118	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuve	652	813	-	-	1307	-
Stage 1	812	-	-	-	-	-
Stage 2	907	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuve	652	813	-	-	1307	-
Mov Cap-2 Maneuve	652	-	-	-	-	-
Stage 1	812	-	-	-	-	-
Stage 2	907	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBLn1	NBLn2	SBL	SBT
Capacity (veh/h)	-	-	652	-	1307
HCM Lane V/C Ratio	-	-	0.027	-	-
HCM Control Delay (s)	-	-	10.7	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0

Appendix H – ICU/Synchro Reports – with Mitigation Measure Conditions

Intersection #3

E-W Street: High St
 N-S Street: Moorpark Ave
 Thru Lane Capacity: 1600
 Turn Lane Capacity: 1500

Movement	PM 2025 without Project				PM 2025 Plus Project & Mitigation			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	5	0	0.04	0.08	6	0	0.04	0.10
Comb. L-T		0				0		
EB Thru	68	0	0.54	0.08	76	0	0.53	0.09
Comb. T-R		0				0		
EB Right	53	0	0.42	0.08	61	0	0.43	0.10
Comb. L-T-R		1				1		
WB Left	222	0	0.76	0.19	222	0	0.74	0.20
Comb. L-T		1				1		
WB Thru	69	0	0.24	0.18	80	0	0.26	0.19
Comb. T-R		0				0		
WB Right	349	1	1.00	0.23	351	1	1.00	0.23
Comb. L-T-R		0				0		
NB Left	78	0	0.14	0.38	89	1	1.00	0.06
Comb. L-T		1				0		
NB Thru	485	0	0.86	0.35	492	1	1.00	0.31
Comb. T-R		0				0		
NB Right	327	1	1.00	0.22	327	1	1.00	0.22
Comb. L-T-R		0				0		
SB Left	214	1	1.00	0.14	215	1	1.00	0.14
Comb. L-T		0				0		
SB Thru	381	0	0.99	0.24	386	0	0.99	0.24
Comb. T-R		1				1		
SB Right	3	0	0.01	0.26	5	0	0.01	0.26
Comb. L-T-R		0				0		

Critical Volumes		E-W:	0.32		E-W:	0.33
		N-S:	0.63		N-S:	0.45
		Total:	0.95		Total:	0.78

Lost Time	0.10	0.10
-----------	------	------

V/C	1.048	0.880
Level of Service	F	D

Intersection #3

E-W Street: High St
 N-S Street: Moorpark Ave
 Thru Lane Capacity: 1600
 Turn Lane Capacity: 1500

Movement	AM 2037 Without Project				PM 2037 Without Project				AM 2037 Plus Project & Mitigation				PM 2037 Plus Project & Mitigation			
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C
EB Left	3	0	0.03	0.06	6	0	0.04	0.09	6	0	0.06	0.07	17	0	0.09	0.12
Comb. L-T		0				0				0				0		
EB Thru	47	0	0.51	0.06	73	0	0.54	0.09	54	0	0.50	0.07	92	0	0.50	0.11
Comb. T-R		0				0				0				0		
EB Right	42	0	0.46	0.06	57	0	0.42	0.09	49	0	0.45	0.07	74	0	0.40	0.12
Comb. L-T-R		1				1				1				1		
WB Left	222	0	0.90	0.17	249	0	0.78	0.21	222	0	0.87	0.17	249	0	0.73	0.23
Comb. L-T		1				1				1				1		
WB Thru	26	0	0.10	0.16	72	0	0.22	0.20	33	0	0.13	0.16	94	0	0.27	0.21
Comb. T-R		0				0				0				0		
WB Right	227	1	1.00	0.15	367	1	1.00	0.24	227	1	1.00	0.15	367	1	1.00	0.24
Comb. L-T-R		0				0				0				0		
NB Left	25	0	0.05	0.31	82	0	0.14	0.40	72	1	1.00	0.05	133	1	1.00	0.09
Comb. L-T		1				1				0				0		
NB Thru	447	0	0.95	0.30	516	0	0.86	0.37	451	1	1.00	0.28	528	1	1.00	0.33
Comb. T-R		0				0				0				0		
NB Right	170	1	1.00	0.11	366	1	1.00	0.24	170	1	1.00	0.11	366	1	1.00	0.24
Comb. L-T-R		0				0				0				0		
SB Left	355	1	1.00	0.24	225	1	1.00	0.15	356	1	1.00	0.24	228	1	1.00	0.15
Comb. L-T		0				0				0				0		
SB Thru	666	0	1.00	0.42	407	0	0.99	0.26	671	0	1.00	0.42	419	0	0.99	0.27
Comb. T-R		1				1				1				1		
SB Right	1	0	0.00	0.44	3	0	0.01	0.27	2	0	0.00	0.45	6	0	0.01	0.28
Comb. L-T-R		0				0				0				0		

Critical Volumes	E-W:	0.23	E-W:	0.34	E-W:	0.24	E-W:	0.37
	N-S:	0.76	N-S:	0.67	N-S:	0.52	N-S:	0.48
	Total:	0.99	Total:	1.01	Total:	0.76	Total:	0.85

Lost Time	0.10	0.10	0.10	0.10
-----------	------	------	------	------

V/C	1.086	1.107	0.862	0.949
Level of Service	F	F	D	E

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗		↕			↖		↗	↖	
Traffic Vol, veh/h	0	0	14	20	0	21	0	635	9	43	1002	10
Future Vol, veh/h	0	0	14	20	0	21	0	635	9	43	1002	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	15	22	0	23	0	690	10	47	1089	11

Major/Minor	Minor2	Minor1		Major1		Major2						
Conflicting Flow All	-	-	1095	1891	1889	695	-	0	0	700	0	0
Stage 1	-	-	-	695	695	-	-	-	-	-	-	-
Stage 2	-	-	-	1196	1194	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	7.12	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-3.318	3.518	4.018	3.318	-	-	-	-2.218	-	-
Pot Cap-1 Maneuver	0	0	260	53	70	442	0	-	-	897	-	-
Stage 1	0	0	-	433	444	-	0	-	-	-	-	-
Stage 2	0	0	-	227	260	-	0	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	-	260	48	66	442	-	-	-	897	-	-
Mov Cap-2 Maneuver	-	-	-	48	66	-	-	-	-	-	-	-
Stage 1	-	-	-	433	444	-	-	-	-	-	-	-
Stage 2	-	-	-	203	246	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.7	82	0	0.4
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	260	88	897	-	-
HCM Lane V/C Ratio	-	-	0.059	0.506	0.052	-	-
HCM Control Delay (s)	-	-	19.7	82	9.2	-	-
HCM Lane LOS	-	-	C	F	A	-	-
HCM 95th %tile Q(veh)	-	-	0.2	2.2	0.2	-	-

Intersection

Int Delay, s/veh 2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↑		↕			↑		↑	↑	
Traffic Vol, veh/h	0	0	61	21	0	19	0	863	20	22	573	10
Future Vol, veh/h	0	0	61	21	0	19	0	863	20	22	573	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	66	23	0	21	0	938	22	24	623	11

Major/Minor	Minor2	Minor1		Major1		Major2						
Conflicting Flow All	-	-	629	1659	1631	949	-	0	0	960	0	0
Stage 1	-	-	-	949	949	-	-	-	-	-	-	-
Stage 2	-	-	-	710	682	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	7.12	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-3.318	3.518	4.018	3.318	-	-	-	-2.218	-	-
Pot Cap-1 Maneuver	0	0	482	78	101	316	0	-	-	717	-	-
Stage 1	0	0	-	313	339	-	0	-	-	-	-	-
Stage 2	0	0	-	424	450	-	0	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	-	482	66	98	316	-	-	-	717	-	-
Mov Cap-2 Maneuver	-	-	-	66	98	-	-	-	-	-	-	-
Stage 1	-	-	-	313	339	-	-	-	-	-	-	-
Stage 2	-	-	-	353	435	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.7	60.8	0	0.4
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	482	106	717	-	-
HCM Lane V/C Ratio	-	-	0.138	0.41	0.033	-	-
HCM Control Delay (s)	-	-	13.7	60.8	10.2	-	-
HCM Lane LOS	-	-	B	F	B	-	-
HCM 95th %tile Q(veh)	-	-	0.5	1.7	0.1	-	-



Balancing the Natural and Built Environment

www.Psomas.com