FINAL REPORT

TRANSPORTATION IMPACT ANALYSIS

for the

LOS ALTOS COMMUNITY POOL
(Los Altos, California)

Prepared for:
David J. Powers Associates

Prepared by:

FEHR & PEERS
TRANSPORTATION CONSULTANTS

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EXECUTIVE SUMMARY

This report presents the results of the Transportation Impact Analysis (TIA) conducted for the proposed Los Altos Community Pool located on Rosita Avenue in Los Altos, California. The purpose of the analysis is to identify the likely transportation impacts of a proposed project on the surrounding roadway system and to identify improvements to mitigate significant impacts. The proposed project includes two swimming pools and a 4,000-square foot building that would provide showers, lockers, and changing areas for pool users. The competition pool would be 25 yards by 25 meters in length and primarily serve lap swimming, training, and other related competitive uses. The second pool will be 25 by 25 yards and be utilized as a teaching pool (lessons, classes, etc.) and for community swim.

The impacts of the proposed project were estimated following guidelines of the City of Los Altos and the Santa Clara Valley Transportation Authority (VTA), which is the Congestion Management Agency (CMA) for Santa Clara County. The operations of six (6) intersections were evaluated during the morning (AM) and evening (PM) peak periods under Existing, Background, Project, and Cumulative Conditions.

Project Trips

The amount of added traffic generated by the proposed project was estimated based on a preliminary schedule provided by SPLASH (likely pool operators), a survey of an existing pool facility, and assumptions regarding the number of participants and length of stay per event. These assumptions and trip estimates were verified by SPLASH and city staff and are considered to be a conservative estimate for an average weekday during the non-summer months when schools are typically in session. Based on these calculations, it is estimated that the proposed swim facility is estimated to generate 1,419 daily trips with 124 AM peak-hour trips (59 inbound/65 outbound) and 116 PM peak-hour trips (74 inbound/42 outbound) during non-summer conditions. For comparison purposes, the project is expected to generate an additional 516 daily trips, 49 fewer AM peak hour trips, and 72 additional PM peak hour trips during the summer months.

A review of existing traffic counts conducted in August and October 2003 showed that the summer peak hour intersection counts were an average of 20 to 40 percent lower as compared to those obtained in October. When the background and project volumes were combined, the highest amount of traffic on the study roadways with the project in place would occur during the non-summer months. Thus, the non-summer period (which is also longer in duration over the year) and the corresponding trip generation estimates were used to identify project impacts.

The trip distribution pattern for project traffic was estimated based on existing travel patterns in the vicinity of the site and the relative locations of complementary land uses. The project-generated traffic was assigned to specific streets, intersections, and turning movements to determine the potential impacts of the proposed project.

Intersection Levels of Service

Using the information supplied by the City of Los Altos (existing counts and signal timings), data obtained in the field, and the description of the proposed project, level of service (LOS) calculations were conducted for Existing, Background, Project, and Cumulative Conditions. The results of the intersection and roadway segment levels of service calculations for each scenario are presented in Table ES-1. The minimum acceptable operating level of service for an intersection in the City of Los Altos is LOS D.

Table ES-1

Intersection Level of Service Summary

Intersection	Peak Hour	Existing		Background		Project				Cumulative	
		Delay (sec)[1]	LOS[2]	Delay (sec)[1]	LOS[2]	Delay (sec)[1]	LOS[2]	Δ in Crit. Delay[3]	Δ in Crit. V/C[4]	Delay (sec)[1]	LOS[2]
El Monte Avenue and Covington Road (s)	AM	12.4	B	12.4	B	12.5	B	0.1	0.003	12.6	B
	PM	9.6	A	9.6	A	9.6	A	0.0	0.003	9.7	A
Campbell Avenue and Cuesta Drive (us)	AM	12.5	B	12.5	B	13.3	B	NA	NA	13.4	B
	PM	11.0	B	11.0	B	11.5	B	NA	NA	11.6	B
Springer Avenue and Cuesta Drive(us)	AM	30.4	D	30.8	D	33.1	D	NA	NA	34.1	D
	PM	28.8	D	29.4	D	31.3	D	NA	NA	31.9	D
Campbell Avenue and Rosita Avenue(us)	AM	10.4	B	10.4	B	11.3	B	NA	NA	11.3	B
	PM	10.1	B	10.1	B	10.9	B	NA	NA	10.9	B
Springer Road and Rosita Avenue(us)	AM	22.3	C	22.7	C	26.0	D	NA	NA	25.8	D
	PM	17.8	C	17.9	C	19.2	C	NA	NA	19.2	C
Campbell Avenue and Covington Road (us)	AM	8.5	A	8.5	A	8.6	A	NA	NA	8.6	A
	PM	7.6	A	7.6	A	7.7	A	NA	NA	7.7	A

Notes: [1] Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections For two-way stop controlled unsignalized intersections, total control delay for the worst movement/approach, expressed in seconds per vehicle, is presented. For all way stop controlled unsignalized intersections, the average control delay of all movements expressed in seconds per vehicle, is presented. Calculations performed using the 2000 *HighwayCapacity Manual* (HCM) methodology contained in TRAFFIX.

[2] LOS = Level of service

[3] Increase in average critical movement delay between Background and Project Conditions for signalized intersections.

[4] Increase in volume to capacity ratio between Background and Project Conditions for signalized intersections.

NA = Not applicable

(s) denotes signalized intersection

(us) denotes unsignalized intersection

Significant impacts highlighted in **bold**

Intersection Impacts

The results of the LOS calculations for Project Conditions were compared to the results for Background Conditions to identify significant project traffic impacts. Implementation of the proposed project would result in a significant impact if the addition of project traffic caused:

Signalized Intersections

1. The level of service at a signalized intersection operating at LOS D or better under Background Conditions to deteriorate to LOS E or F, or

2. An increase in the critical movement delay at a signalized intersection operating at LOS E or F under Background Conditions by four (4) or more seconds and an increase in the critical V/C ratio by 0.01 or more.

Unsignalized Intersections

1. Operations to deteriorate from an acceptable level (LOS D or better) under Background Conditions to an unacceptable level (LOS E or LOS F); or

2. Exacerbation of unacceptable operations (LOS E or F) at an unsignalized intersection by increasing the control delay, and

3. Volumes under Project Conditions to exceed the Caltrans Peak Hour Volume Warrant Criteria.

According to these criteria, the project will not cause a significant intersection impact at any of the study intersections.

Signal Warrant Analysis

Signal warrant analyses were conducted at all five unsignalized study intersections based on criteria published in the Caltrans *Traffic Manual* under Existing, Background, Project, and Cumulative Conditions. The results of this analysis showed that a traffic signal is warranted based on existing AM peak-hour volumes at the Cuesta Drive/Springer Avenue intersection. The addition of traffic under Background and Project Conditions exacerbates this need based on warrants. The results also showed that during the PM peak hour, the peak-hour volume warrant is nearly met under Existing and Background Conditions, and warranted under both the Project and Cumulative Conditions.

According to guidelines in the Caltrans *Traffic Manual*, the decision to install traffic signals should not be based solely on the satisfaction of warrants. Installation of traffic signals should also be based upon other factors such as delay, congestion, driver confusion, etc. The City of Los Altos will ultimately determine the need for a traffic signal at this location.

Site Access and Parking

Based on the projected volume on Rosita Avenue and the project-generated traffic, one driveway is sufficient to accommodate the projected peak-hour traffic volumes. No changes to on-site circulation are recommended.

The combined parking demand of the proposed project and park uses is expected to be 113 spaces on a typical weekday. On weekend days in the summer, it is possible that the peak demand of the pool facility alone could be 100 to 115 parking spaces depending on recreational usage. This would leave a nominal number of spaces for participants in games at Rosita Park and other visitors. Thus, it is recommended that the maximum supply of 126 parking spaces be provided to accommodate not only typical weekday demand, but also the demand for simultaneous baseball or soccer games at Rosita Park.

To properly manage the peak parking demand and to reduce the potential for intrusion into the adjacent neighborhood, the project sponsor could establish a parking management program (PMP). The PMP will involve review of and coordination with schedules of all organized park users and could include establishment of an agreement with the Los Altos School District for shared use of the Covington School parking lot for overflow needs. Coordination with the Los Altos Police Department would also be part of the PMP to ensure periodic enforcement of all traffic laws regarding parking in the Rosita neighborhood.

CHAPTER 1 - INTRODUCTION

This report presents the results of the Transportation Impact Analysis (TIA) conducted for the proposed Los Altos Community Pool located on Rosita Avenue in the City of Los Altos, California. The proposed Community Pool is 35,235 square feet in size and consist of two pools, a wading pool/water play area for younger children, a main building, and a mechanical building. The site location and surrounding roadway network are presented on Figure 1. The proposed project site plan is shown on Figure 2.

The impacts of the development were evaluated following the guidelines of the City of Los Altos and the Santa Clara Valley Transportation Authority (VTA), the congestion management agency of Santa Clara County. The focus of the analysis is the key intersections on the roadway system. The following intersections were included in the analysis:

- El Monte Avenue and Covington Road
- Campbell Avenue and Cuesta Drive
- Springer Road and Cuesta Drive
- Campbell Avenue and Rosita Avenue
- Springer Road and Rosita Avenue
- Campbell Avenue and Covington Road

None of these intersections are designated Congestion Management Program (CMP) intersections monitored by the VTA.

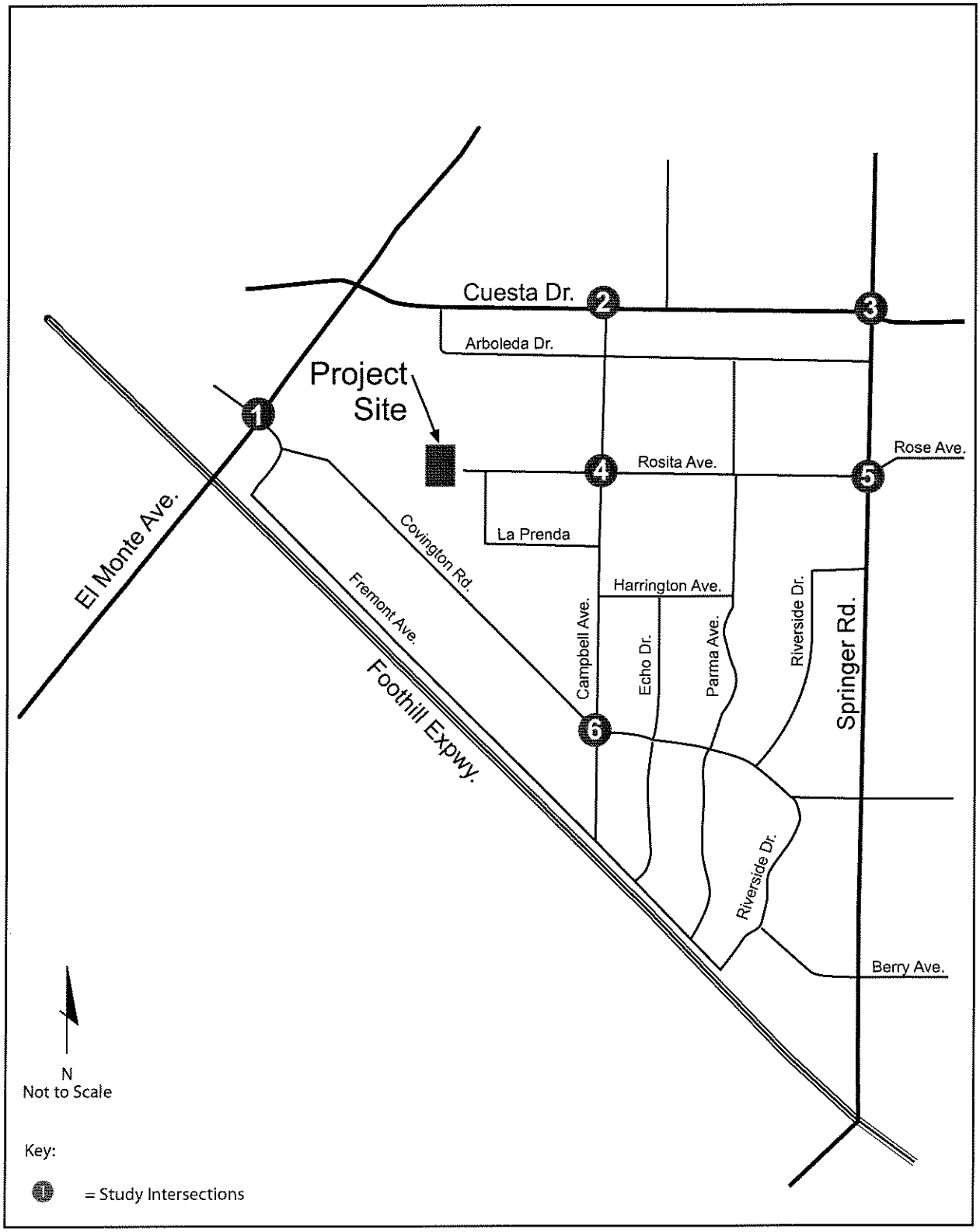
The operations of the key intersections were evaluated during the morning (AM) and evening (PM) peak hours for the following scenarios:

Scenario 1: *Existing Conditions* - Existing volumes obtained from counts.

Scenario 2: *Background Conditions* - Existing volumes plus traffic from approved but not yet constructed developments in the area.

Scenario 3: *Project Conditions* - Background volumes plus traffic generated by the proposed development.

Scenario 4: *Cumulative Conditions* - Project volumes plus a growth factor until the date of final occupancy plus traffic associated with other pending developments in the study area. This methodology is consistent with the City of Los Altos' General Plan.



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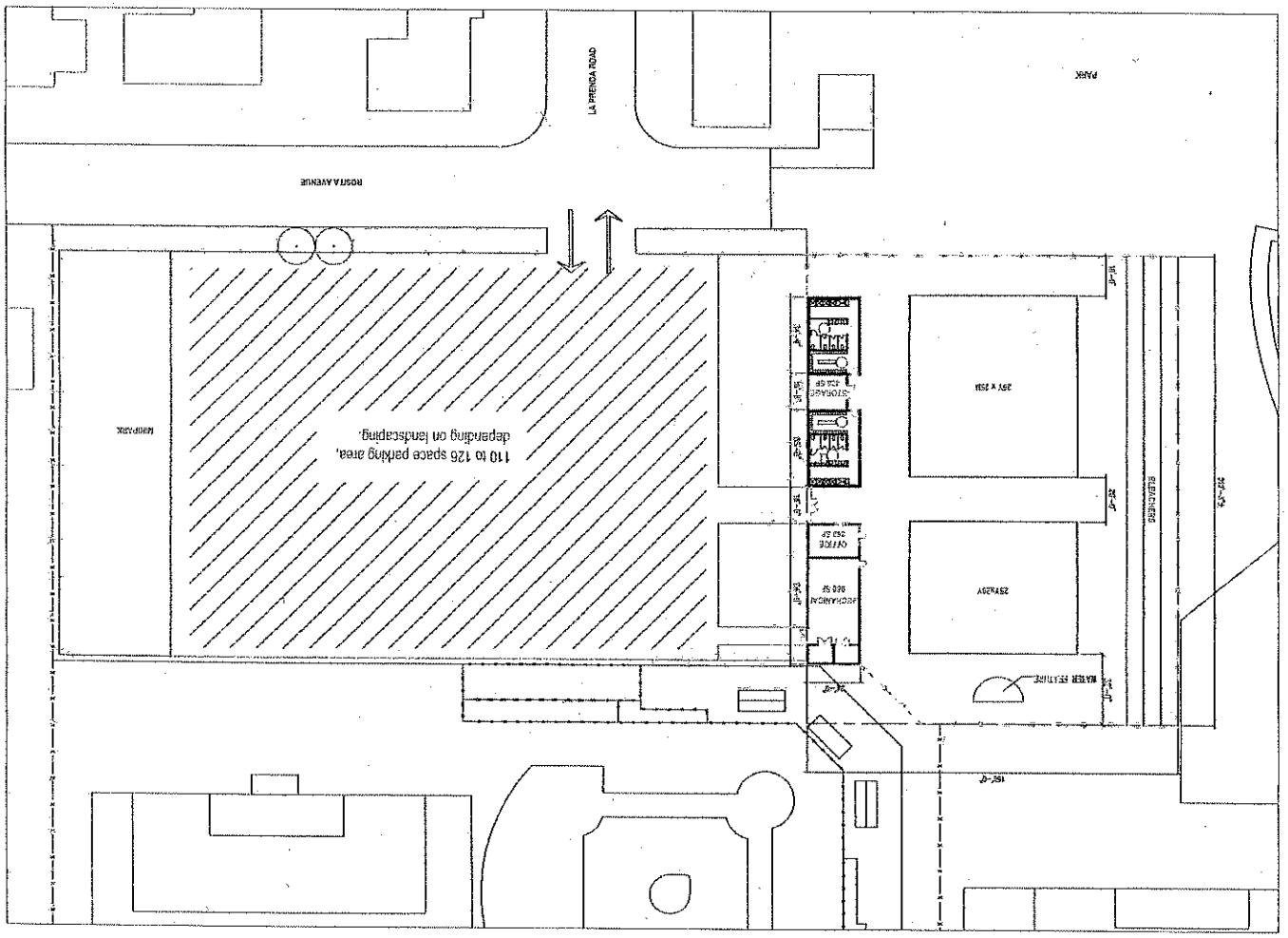
SITE LOCATION
Figure 1



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SITE PLAN
Figure 2

The remainder of this report is divided into six chapters. The existing transportation system serving the site, including the roadway facilities, bicycle and pedestrian facilities, transit service, and the existing operating conditions of the study intersections are presented in Chapter 2. Background Conditions, representing existing conditions plus approved project trips in the area, is contained in Chapter 3. Chapter 4 describes the methodology used to estimate the project traffic and its impacts on the transportation system. Cumulative Conditions, representing Project Conditions plus traffic from pending developments is contained in Chapter 5. Operational issues that include signal warrants, site access, and parking are addressed in Chapter 6. The conclusions of this transportation impact analysis are presented in Chapter 7.

CHAPTER 2 - EXISTING CONDITIONS

This chapter provides a description of the existing transportation system in the vicinity of the project site. The transportation system includes roadway facilities, bicycle and pedestrian facilities, and transit service. Operations of the study intersections are also documented in this chapter.

Existing Roadway Network

Interstate 280 (I-280), Foothill Expressway, and El Camino Real provide regional access to the project site. El Monte Avenue, Cuesta Drive, Springer Road, Campbell Avenue, Covington Road, and Rosita Avenue provide local access to the project site. Descriptions of these are presented below:

I-280 is generally an eight-lane freeway (four mixed-flow lanes in each direction north of the Magdalena Avenue interchange; three mixed-flow lanes plus one high occupancy vehicle (HOV) lane from Magdalena Avenue south). This north-south freeway extends from San Francisco to San Jose. Access between Los Altos and I-280 is provided by El Monte Avenue, Magdalena Avenue, and Foothill Expressway.

Foothill Expressway is a four-lane divided expressway that extends between Cupertino and Palo Alto through Los Altos. Foothill Expressway has eight access points within Los Altos city limits, including an interchange at I-280. The two access points closest to the proposed project are El Monte Avenue and Springer Road.

El Camino Real (SR 82) is a six-lane major arterial extending through Los Altos south towards San Jose and north towards San Francisco. El Camino Real is the historic main highway serving inter-city travel between San Jose and San Francisco. El Camino Real is under the jurisdiction of the California Department of Transportation (Caltrans).

El Monte Avenue is a two-lane roadway north of Foothill Expressway and a four-lane roadway between Foothill Expressway and I-280. El Monte is generally oriented in a northeast-southwest direction with its northern terminus at El Camino Real.

Cuesta Drive is an east-west two-lane road that extends between San Antonio Road and Grant Road. East of Springer Road to Miramonte Avenue in Mountain View, Cuesta Drive includes two lanes plus a two-way center left-turn lane. Between Miramonte Avenue and Grant Road, Cuesta Drive includes two lanes in each direction.

Springer Road is a two-lane street that extends in a north-south direction between Foothill Expressway and El Monte Avenue. Springer Road provides access to El Camino Real to the north in the City of Mountain View. South of Foothill Expressway, Springer Road becomes Magdalena Avenue.

Campbell Avenue is a two-lane north-south residential street that connects Cuesta Drive and Fremont Avenue.

Covington Road is designated as a local collector roadway and is generally oriented in an east-west direction. Covington Road connects Grant Road and El Monte Road where it becomes Giffin Road.

Rosita Avenue is a two-lane roadway that originates at the project site and travels east to Springer Road where it becomes Rose Avenue. Rosita Avenue will provide direct access to the project site.

Existing Transit Service

The Santa Clara Valley Transportation Authority (VTA) operates bus, light rail transit, and paratransit service throughout Santa Clara County. Bus transit service within the City of Los Altos includes six fixed routes and paratransit service (dial-a-ride service for qualified individuals). Bus routes 23 and 52 are the only two routes that operate in the vicinity of the project site.

Route 23 is a bus route operating between Downtown San Jose and San Antonio Shopping Center via Foothill Expressway and San Antonio Road in Los Altos. The weekday hours of operation are from 5:00 am to 12:30 am with 15- to 60-minute headways. Weekend operations are provided between the hours of 6:00 am and midnight with 15- to 60-minute headways.

Route 52 is a bus route operating between Foothill College and Downtown Mountain View via El Camino Real and El Monte Avenue. The weekday hours of operation are from 6:30 am to 10:00 pm with 30- to 60-minute headways. There is no weekend service. Route 52 is the closest transit route to the site operating on El Monte Avenue with bus stops just north of the Covington Road/El Monte Road intersection.

Paratransit service is operated under contract with OUTREACH, a private, non-profit paratransit broker. This door-to-door service is provided within the County to riders who meet the eligibility requirements established by the Americans with Disabilities Act (ADA).

Caltrain provides heavy rail passenger service between Gilroy in Santa Clara County, through San Mateo County, to San Francisco. Service is maintained and operated by the Joint Powers Board. The closest Caltrain stations to Los Altos are located on Central Expressway near San Antonio Road and near Castro Street at the Downtown Mountain View Transit Center. The San Antonio station can be accessed by VTA bus service via Route 23 and a short walk, while VTA access to the Downtown Mountain View station is provided directly via Routes 52 and a short walk.

Existing Bicycle and Pedestrian Facilities

Bicycle facilities comprise bike paths (Class I), bike lanes (Class II), and bike routes (Class III). Bike paths are paved pathways for use by bicycles that are completely separated from roadways. Bike lanes are lanes on roadways designated for bicycle use by special lane markings, pavement legends, and signage. Bike routes are designated with signs only and require bicyclists to share the traveled way with motorists. In the vicinity of the site, bike lanes are delineated on El Monte Avenue and Springer Road, while bike routes are designated on Cuesta Drive and Covington Road. Foothill Expressway has wide shoulder strips that connect to regional bicycle facilities.

Pedestrian facilities improve safety for pedestrians and can also encourage the use of alternative modes of transportation. These facilities include sidewalks, paths, trails, pedestrian bridges, crosswalks, and pedestrian signals with crosswalks at signalized intersections to accommodate pedestrian circulation. Near the site, sidewalks are located along El Monte Avenue and along Cuesta Drive east of El Monte Avenue. Crosswalks are provided at the intersections of El Monte Avenue and Covington Road, El Monte Avenue and Cuesta Drive, Springer Road and Cuesta Drive, Springer Road and Rosita Avenue, and Campbell Avenue and Rosita Avenue. A pathway is located along the north side of Rosita Avenue, and the west side of Campbell Avenue between Rosita and Cuesta.

Existing Intersection Traffic Volumes

Intersection operations were evaluated for both morning (AM) and evening (PM) peak traffic conditions. New intersection turning movement counts were conducted in October and November 2003 and are presented in Appendix A. Additionally intersection turning movement counts were conducted in August 2003 for comparison purposes between Summer and Non-Summer time periods. When comparing the Summer to Non-Summer count data, it was found that the morning peak-hour traffic volumes were approximately forty percent less during the Summer, while evening peak-hour volumes were approximately twenty percent lower. Therefore, using the October counts with higher volumes is more conservative and would result in identifying the most potential impacts. Figure 3 presents the existing AM and PM peak-hour turning movement volumes for the study intersections and Figure 4 presents existing lane configurations. The intersection of El Monte Avenue and Covington Road is controlled with a traffic signal while the rest of the intersections are controlled by stop signs.

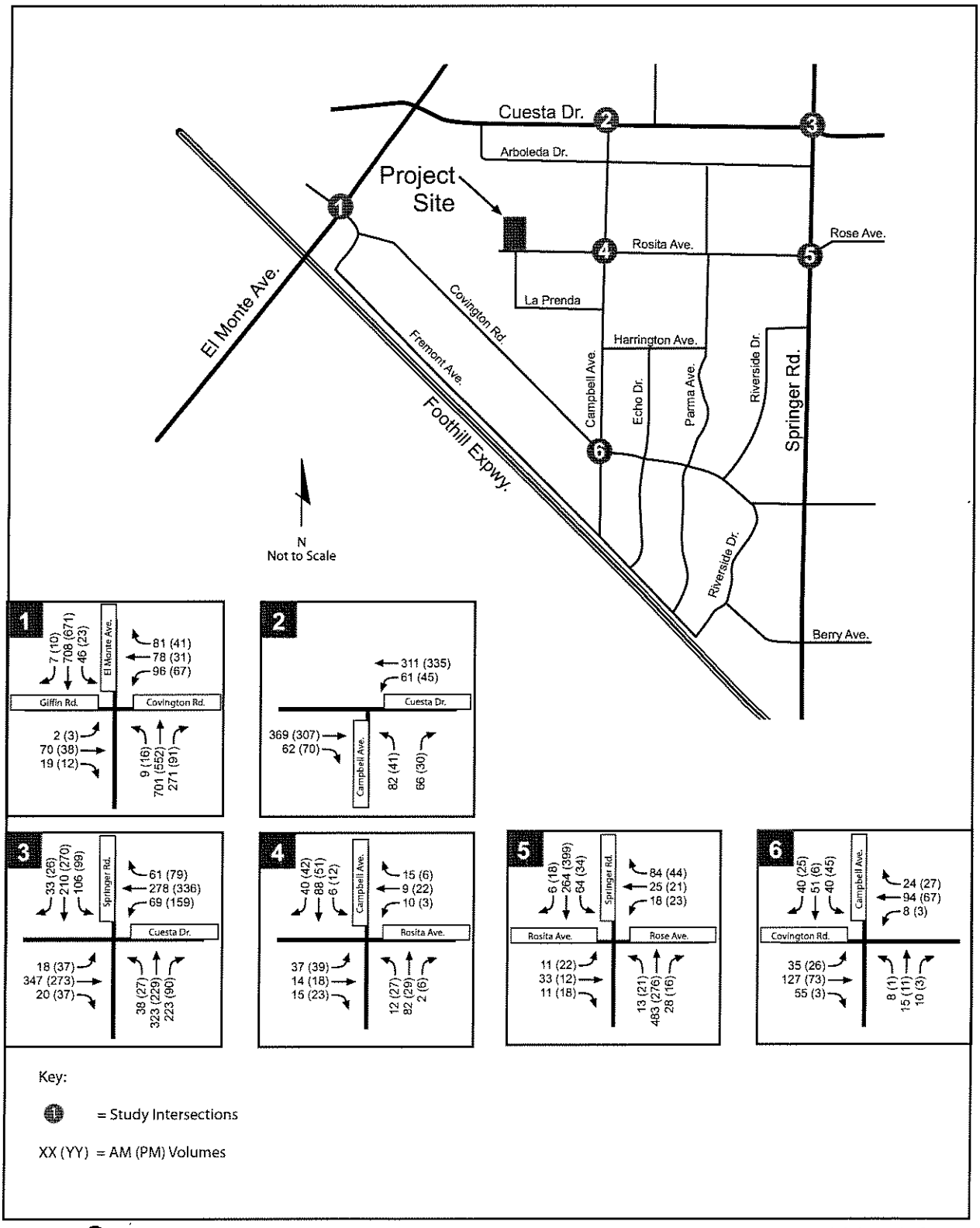
Existing Intersection Levels of Service

The operations of the study intersections were evaluated using Level of Service (LOS) calculations. *Level of Service* is a qualitative description of an intersection's operation, ranging from LOS A, or free-flow conditions, to LOS F, or oversaturated conditions.

Signalized study intersections were evaluated with the method adopted by the City of Los Altos and the VTA. This method evaluates intersection operations based on the average control vehicular delay for all vehicles entering the intersection as described in the *2000 Highway Capacity Manual* with adjustments to the saturation flow rates to reflect local (Santa Clara County) conditions. The average control delay for signalized intersections was calculated using the TRAFFIX analysis software and correlated to a LOS designation as shown in Table 1. The level of service standard (i.e., minimum acceptable operations) for the City of Los Altos is LOS D.

For unsignalized intersections (all way stop-controlled and side street stop-controlled), the level of service calculations were conducted using the methodology contained in Chapter 17 of the *2000 Highway Capacity Manual.* The LOS rating at all way stop-controlled intersections is based on the weighted average control delay expressed in seconds per vehicle for all approaches. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration. At two-way or side street-controlled intersections, level of service is calculated for each controlled movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. Table 2 summarizes the relationship between delay and LOS for unsignalized intersections.

To evaluate current operations of the study intersections, existing volumes and lane configurations were used as inputs to the TRAFFIX level of service program. The results are presented in Table 3 and the corresponding LOS calculation sheets are presented in Appendix B.



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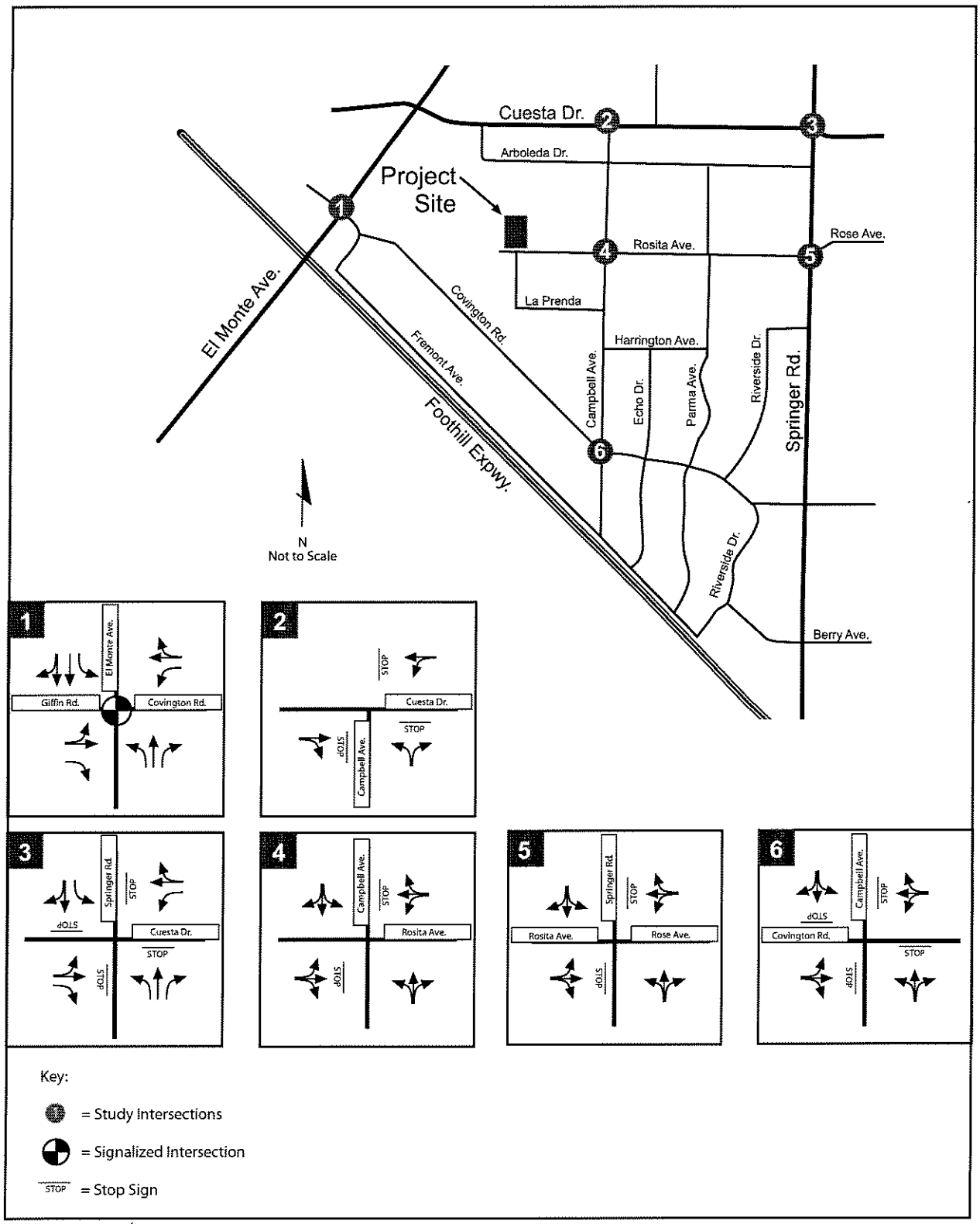
EXISTING PEAK-HOUR INTERSECTION VOLUMES

Figure 3



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EXISTING INTERSECTION LANE CONFIGURATIONS

Figure 4

Table 1

Signalized Intersection Level of Service Definitions

Level of Service	Average Control Delay Per Vehicle (Seconds)	Description
A	≤ 10.0	Operations with very low delay occurring with favorable progression and/or short cycle lengths.
B+ B B-	10.1 to 12.0 12.1 to 18.0 18.1 to 20.0	Operations with low delay occurring with good progression and/or short cycle lengths.
C+ C C-	20.1 to 23.0 23.1 to 32.0 32.1 to 35.0	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.
D+ D D-	35.1 to 39.0 39.1 to 51.0 51.1 to 55.0	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.
E+ E E-	55.1 to 60.0 60.1 to 75.0 75.1 to 80.0	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.
F	> 80.0	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.

Source: VTA's *Congestion Management Program Transportation Impact Analysis Guidelines*, June 2003 and *Highway Capacity Manual* 2000.

Table 2

Level of Service Criteria for Unsignalized Intersections

Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Little or no delay	≤ 10.0
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays with intersection capacity exceeded	> 50.0

Source: Transportation Research Board, *Highway Capacity Manual*, 2000.

Table 3

Existing Intersection Levels of Service

Intersection	Peak Hour	Count Date	Delay (sec)[1]	LOS[2]
El Monte Avenue and Covington Road (s)	AM	10/09/03	12.4	B
	PM	10/09/03	9.6	A
Campbell Avenue and Cuesta Drive (us)	AM	10/09/03	12.5	B
	PM	10/09/03	11.0	B
Springer Avenue and Cuesta Drive(us)	AM	11/13/03	30.4	D
	PM	10/09/03	28.8	D
Campbell Avenue and Rosita Avenue(us)	AM	10/09/03	10.4	B
	PM	10/09/03	10.1	B
Springer Road and Rosita Avenue(us)	AM	10/09/03	22.3	C
	PM	10/09/03	17.8	C
Campbell Avenue and Covington Road (us)	AM	10/09/03	8.5	A
	PM	10/09/03	7.6	A

Notes:
[1] Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. For two-way stop controlled unsignalized intersections, total control delay for the worst movement/approach, expressed in seconds per vehicle, is presented. For all way stop controlled unsignalized intersections, the average control delay of all movements expressed in seconds per vehicle, is presented. Calculations performed using the 2000 *HighwayCapacity Manual* (HCM) methodology contained in TRAFFIX.
[2] LOS = Level of service
(s) denotes signalized intersection
(us) denotes unsignalized intersection

Under existing peak-hour conditions, all of the study intersections operate at LOS D or better during both peak hours. Based on the City of Los Altos standard, all of the key intersections currently operate at an acceptable level.

CHAPTER 3 - BACKGROUND CONDITIONS

This chapter discusses the operations of the intersections under Background Conditions. Background Conditions are defined as conditions prior to completion of the proposed project. Traffic volumes for Background Conditions are comprised of existing volumes plus traffic generated by approved developments in the area. This chapter describes the procedure used to determine the background traffic volumes and the results of the level of service analysis for Background Conditions.

Background Traffic Estimates

The traffic volumes for Background Conditions were estimated by adding traffic generated by approved but not yet constructed projects in the vicinity of the site to the existing volumes. Two approved projects that were identified by city staff to be included under Background Conditions at the time that this report was prepared are: 1) The Trader Joe's market in the Foothill Plaza shopping center and 2) a 56-unit residential development on El Camino Real. Traffic volumes for each use were estimated using rates published in *Trip Generation* by the Institute of Transportation Engineers (ITE) and were distributed to City streets based on existing travel patterns and complementary land uses. Approved trips were assigned to the study intersections and then added to existing volumes. The resulting background traffic volumes are presented on Figure 5.

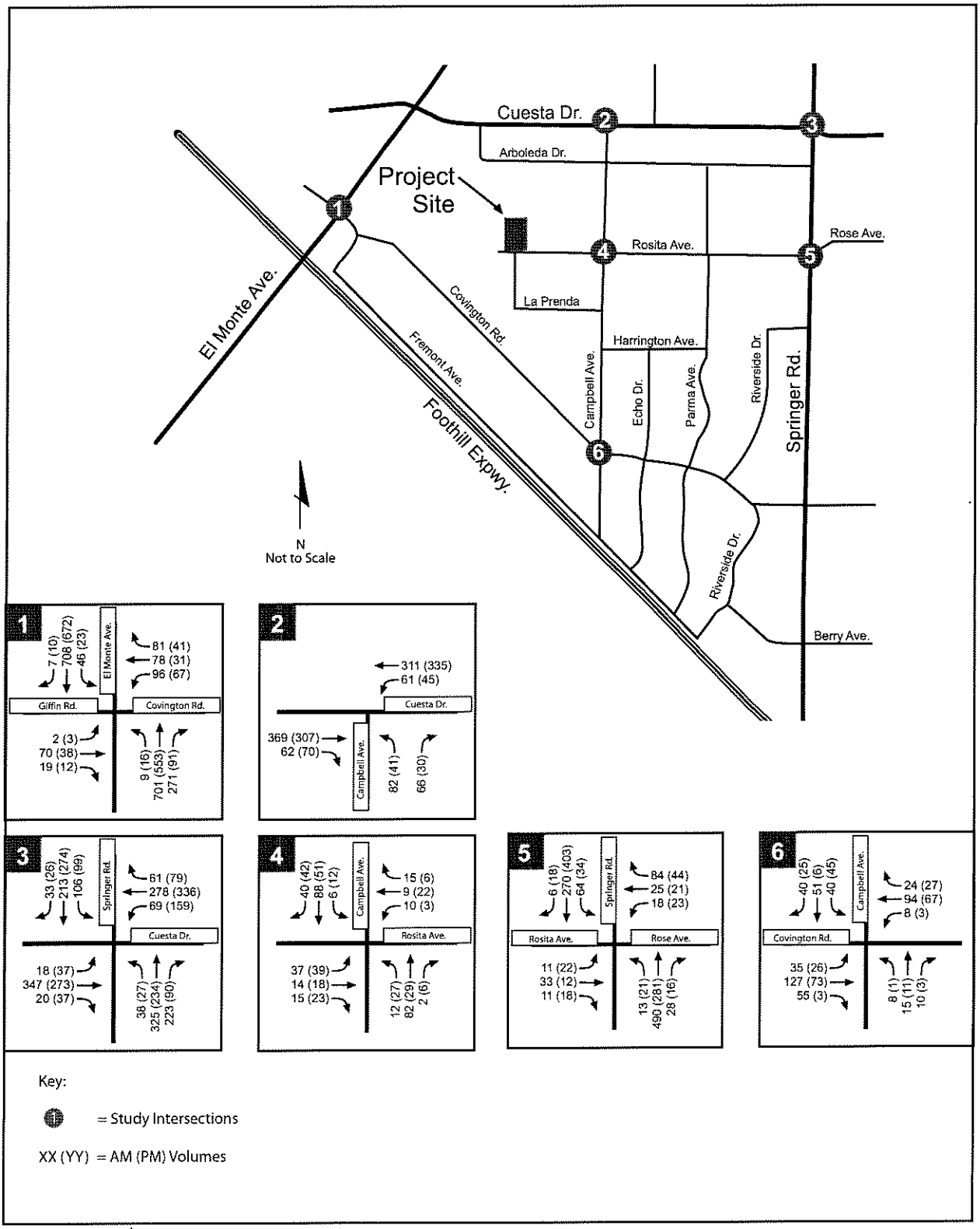
Background Roadway Improvements

No planned and funded intersection improvements were identified by the city staff for this study.

Background Intersection Levels of Service

Table 4 presents the LOS calculation results for the study intersections under Background Conditions. These calculations assume no changes to the existing intersection lane configurations or traffic control devices and include background traffic volumes. The LOS calculation sheets are contained in Appendix B.

All study intersections are expected to continue to operate at the same level of service as under Existing Conditions (LOS D or better during both peak hours) with the addition of traffic from approved but not yet constructed developments.



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BACKGROUND PEAK-HOUR INTERSECTION VOLUMES

Figure 5

Table 4

Background Intersection Levels of Service

Intersection	Peak Hour	Delay (sec)[1]	LOS[2]
El Monte Avenue and Covington Road (s)	AM	12.4	B
	PM	9.6	A
Campbell Avenue and Cuesta Drive (us)	AM	12.5	B
	PM	11.0	B
Springer Avenue and Cuesta Drive(us)	AM	30.8	D
	PM	29.4	D
Campbell Avenue and Rosita Avenue(us)	AM	10.4	B
	PM	10.1	B
Springer Road and Rosita Avenue(us)	AM	22.7	C
	PM	17.9	C
Campbell Avenue and Covington Road (us)	AM	8.5	A
	PM	7.6	A

Notes:

[1] Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. For two-way stop controlled unsignalized intersections, total control delay for the worst movement/approach, expressed in seconds per vehicle, is presented. For all way stop controlled unsignalized intersections, the average control delay of all movements expressed in seconds per vehicle, is presented. Calculations performed using the 2000 *HighwayCapacity Manual* (HCM) methodology contained in TRAFFIX.

[2] LOS = Level of service

(s) denotes signalized intersection

(us) denotes unsignalized intersection

CHAPTER 4 - PROJECT CONDITIONS

The impacts of the proposed development on the surrounding roadway system are discussed in this chapter. First, the methodology used to estimate the amount of traffic generated by the project is described. Then, the distribution of project-generated traffic to the roadway system is discussed. The operations of the study intersections were analyzed under Project Conditions with level of service calculations. The intersection impacts of the project are identified by comparing the results of the level of service calculations for Project Conditions to the results for Background Conditions.

Project Traffic Estimates

The amount of traffic associated with a project is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In the first step, the amount of traffic entering and exiting the site is estimated on both a daily and a peak-hour basis. In the second step, the directions the trips use to approach and depart from the site are estimated. The trips are assigned to specific street segments and intersection turning movements in the third step. The results of this analysis are described in the following sections.

Trip Generation

The proposed Community Pool consists of constructing two swimming pools, a wading pool, and a 4,000-square foot building that would provide showers, lockers, and changing areas for pool users. The competition pool would be 25 yards by 25 meters in length and primarily serve lap swimming, training, and other related competitive uses. The second pool will be 25 yards by 25 yards and be utilized as a teaching pool (lessons, classes, etc.).The wading pool will be less than 1,000 square feet.

The amount of added traffic generated by the proposed project was estimated based on a preliminary schedule provided by SPLASH (likely pool operators), a survey of an existing pool facility, and assumptions regarding the number of participants and length of stay per event. These assumptions and trip estimates were verified by SPLASH and city staff and are considered to be a conservative estimate for an average weekday during the non-summer months when schools are typically in session. A detailed summary of these trip generation estimates and the schedules are presented in Appendix C.

Based on these calculations, it is estimated that the proposed swim facility is estimated to generate 1,419 daily trips with 124 AM peak-hour trips (59 inbound/65 outbound) and 116 PM peak-hour trips (74 inbound/42 outbound). The trip generation estimates are presented in Table 5.

For comparison purposes, the project is estimated to generate a total of 1,935 daily trips, 75 AM peak hour trips, and 188 PM peak hour trips during the summer months. Although the daily and PM peak hour totals for summer conditions are higher than the corresponding non-summer totals, the amount of existing traffic is an average of 20 to 40 percent less during summer month peak hours. This non-summer time period was chosen for this analysis due to the higher existing volumes on the roadways in comparison to the summer time period. Accordingly, the total intersection volumes with the project used for the non summer months would represent a more conservative analysis. According to the project sponsor, the summer month programs would only occur when schools as not in session.

Table 5

Project Trip Generation Estimates

Land Use	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Community Pool	1,419	59	65	124	74	62	116

Source: Trip estimate assumptions summarized in Appendix C.

Trip Distribution

The trip distribution pattern for the proposed pool facility was estimated based on existing travel patterns in the vicinity of the site, the relative locations of complementary land uses in the area, and information regarding participants provided by SPLASH. The major directions of approach and departure for the project site are shown on Figure 6.

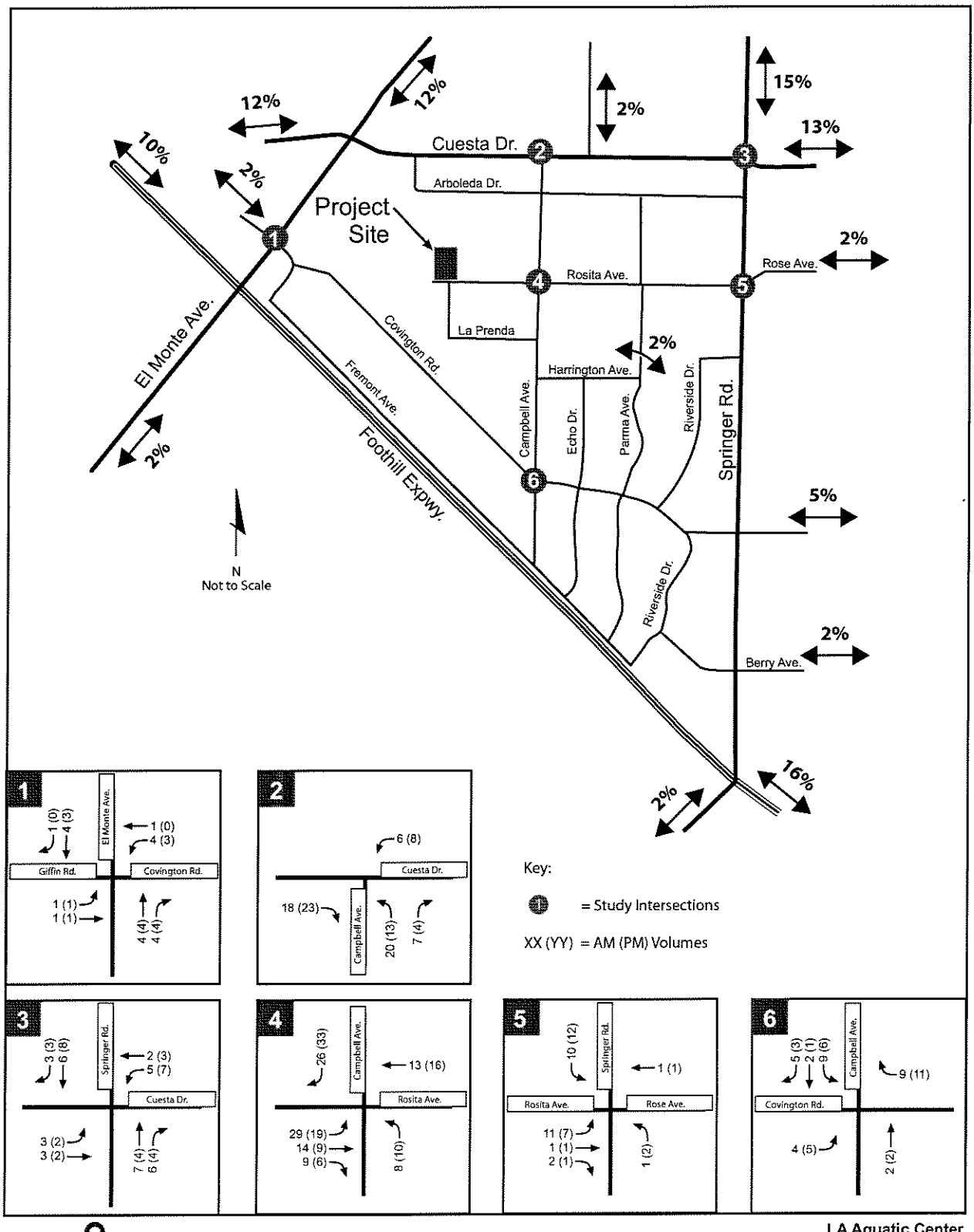
Trip Assignment

The trips generated by the proposed Community Pool were assigned to the roadway system based on the directions of approach and departure discussed above. The project trip assignment is presented on Figure 6. Project trips were added to Background traffic volumes to estimate volumes under Project Conditions. These volumes are presented on Figure 7.

Project Intersection Levels of Service

Intersection level of service calculations were conducted to evaluate the operating conditions of the intersections with project traffic to identify potential impacts to the local roadway system. The results of the intersection level of service calculations for Background and Project Conditions are summarized in Table 6. The changes in critical movement delay and critical volume-to-capacity ratio for the signalized intersection due to the addition of project traffic is also presented in Table 6. The intersection LOS calculation sheets and comparison reports (for critical movement delay) are included in Appendix B.

All of the study intersections will continue to operate at acceptable levels of service under Project Conditions (LOS D or better) during both peak hours with the addition of traffic from the proposed project.



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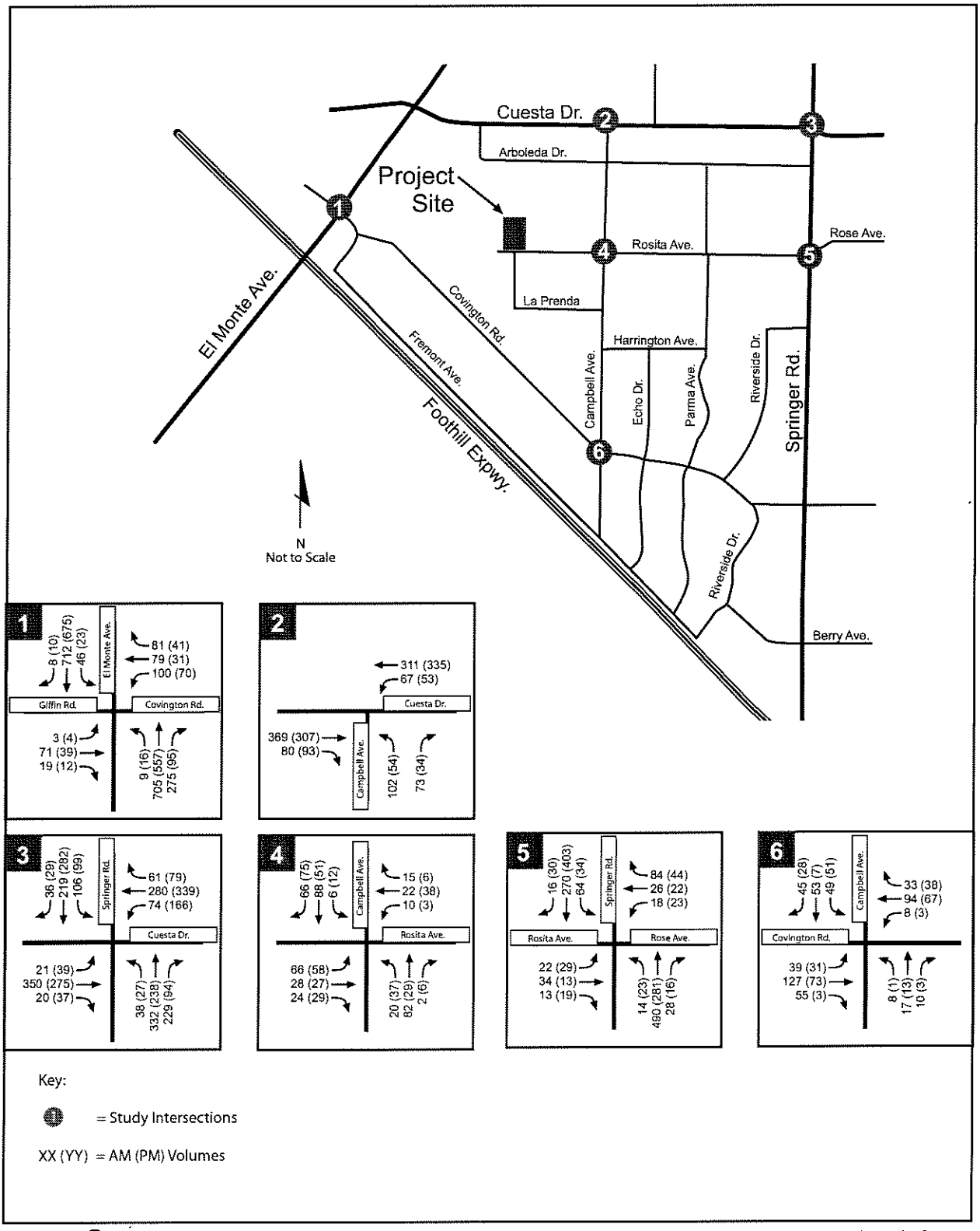
PROJECT TRIP ASSIGNMENT AND DISTRIBUTION

Figure 6



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PROJECT PEAK-HOUR INTERSECTION VOLUMES

Figure 7

Table 6

Background and Project Intersection Levels of Service

Intersection	Peak Hour	Background		Project			
		Delay (sec)[1]	LOS[2]	Delay (sec)	LOS	Δ in Crit. Delay[3]	Δ in Crit. V/C[4]
El Monte Avenue and	AM	12.4	B	12.5	B	0.1	0.003
Covington Road (s)	PM	9.6	A	9.6	A	0.0	0.003
Campbell Avenue and	AM	12.5	B	13.3	B	NA	NA
Cuesta Drive (us)	PM	11.0	B	11.5	B	NA	NA
Springer Avenue and	AM	30.8	D	33.1	D	NA	NA
Cuesta Drive(us)	PM	29.4	D	31.3	D	NA	NA
Campbell Avenue and	AM	10.4	B	11.3	B	NA	NA
Rosita Avenue(us)	PM	10.1	B	10.9	B	NA	NA
Springer Road and	AM	22.7	C	26.0	D	NA	NA
Rosita Avenue(us)	PM	17.9	C	19.2	C	NA	NA
Campbell Avenue and	AM	8.5	A	8.6	A	NA	NA
Covington Road (us)	PM	7.6	A	7.7	A	NA	NA

Notes: [1] Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. For two-way stop controlled unsignalized intersections, total control delay for the worst movement/approach, expressed in seconds per vehicle, is presented. For all way stop controlled unsignalized intersections, the average control delay of all movements expressed in seconds per vehicle, is presented. Calculations performed using the 2000 *HighwayCapacity Manual* (HCM) methodology contained in TRAFFIX.

[2] LOS = Level of service

[3] Increase in average critical movement delay between Background and Project Conditions for signalized intersections.

[4] Increase in volume to capacity ratio between Background and Project Conditions for signalized intersections.

NA = Not applicable

(s) denotes signalized intersection

(us) denotes unsignalized intersection

Significant impacts highlighted in **bold**

Project Intersection Impacts

The results of the LOS calculations for Project Conditions were compared to the results for Background Conditions to identify significant project traffic impacts. Implementation of the proposed project would result in a significant impact if the addition of project traffic caused:

Signalized Intersections

1. The level of service at a signalized intersection operating at LOS D or better under Background Conditions to deteriorate to LOS E or F, or

2. An increase in the critical movement delay at a signalized intersection operating at LOS E or F under Background Conditions by four (4) or more seconds and an increase in the critical V/C ratio by 0.01 or more.

Unsignalized Intersections

1. Operations to deteriorate from an acceptable level (LOS D or better) under Background Conditions to an unacceptable level (LOS E or LOS F); or
2. Exacerbation of unacceptable operations (LOS E or F) at an unsignalized intersection by increasing the control delay, and
3. Volumes under Project Conditions to exceed the Caltrans Peak Hour Volume Warrant Criteria.

According to these criteria, the project will not cause a significant intersection impact at any of the study intersections.

CHAPTER 5 - CUMULATIVE CONDITIONS

This chapter presents the results of the level of service calculations under Cumulative Conditions. Cumulative Conditions are defined as Project Condition volumes plus a growth factor applied to the existing volumes to account for regional growth in the area. A completion and occupancy time period of two years was assumed for the proposed project.

Cumulative Traffic Estimates

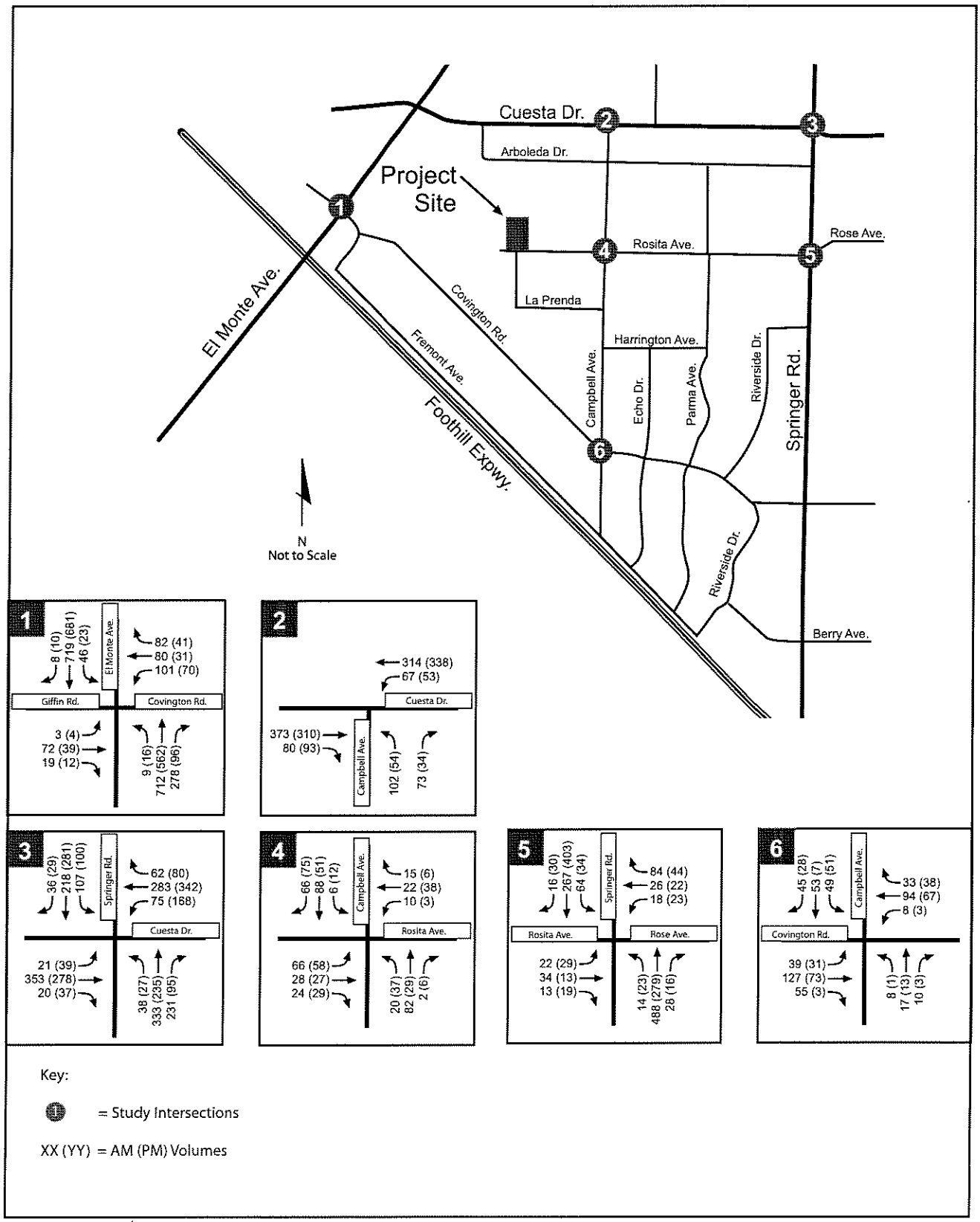
Cumulative traffic volumes include existing volumes that are increased by an annual growth factor through the project's completion date plus traffic generated by the proposed project. Typically traffic from pending projects is included under this scenario; however, city staff indicated that no foreseeable future projects would affect the study intersections.

The traffic analysis for the Circulation Element of the General Plan includes a growth factor applied to the existing volumes to account for regional growth on roadways in the city that may be used by vehicles destined to locations outside the city. A growth factor of one half percent per year was used in this analysis for a period of two years to be consistent with the methodology used in the General Plan. The resulting traffic volumes are shown on Figure 8.

Cumulative Intersection Levels of Service

Intersection operations were evaluated with level of service calculations. The results of the LOS analysis for the key intersections are summarized in Table 7.

All six of the study intersections are projected to continue to operate at the same levels of service (acceptable) as under Project Conditions. Based on the criteria outlined under Project Conditions, these intersections would not have a significant cumulative impact.



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CUMULATIVE PEAK-HOUR INTERSECTION VOLUMES

Figure 8

Table 7

Cumulative Intersection Levels of Service

Intersection	Peak Hour	Delay (sec)[1]	LOS[2]
El Monte Avenue and Covington Road (s)	AM	12.6	B
	PM	9.7	A
Campbell Avenue and Cuesta Drive (us)	AM	13.4	B
	PM	11.6	B
Springer Avenue and Cuesta Drive(us)	AM	34.1	D
	PM	31.9	D
Campbell Avenue and Rosita Avenue(us)	AM	11.3	B
	PM	10.9	B
Springer Road and Rosita Avenue(us)	AM	25.8	D
	PM	19.2	C
Campbell Avenue and Covington Road (us)	AM	8.6	A
	PM	7.7	A

Notes:

[1] Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. For two-way stop controlled unsignalized intersections, total control delay for the worst movement/approach, expressed in seconds per vehicle, is presented. For all way stop controlled unsignalized intersections, the average control delay of all movements expressed in seconds per vehicle, is presented. Calculations performed using the 2000 *HighwayCapacity Manual* (HCM) methodology contained in TRAFFIX.

[2] LOS = Level of service

(s) denotes signalized intersection

(us) denotes unsignalized intersection

CHAPTER 6 – OPERATIONAL ISSUES

This chapter discusses other operational issues such as traffic signal warrants, site access, and parking that may affect the transportation system in the vicinity of the project site.

Signal Warrant Analysis

The City of Los Altos' General Plan provides an Implementation Plan to put into action the policies and plans outlined in the General Plan. On page 29 of the Circulation Element C9, subpoint four states, "Consider installation of a traffic signal or other control device (e.g., traffic circle/roundabout) at a stop sign-controlled intersection if one or more of the controlled movements operates at LOS E or F, signal warrants are met to the satisfaction of the Public Works Department, or a safety problem exists." Therefore, signal warrant analyses were conducted at all five unsignalized study intersections based on criteria published in the Caltrans *Traffic Manual* under Existing, Background, Project, and Cumulative Conditions.

When analyzing the unsignalized study intersections, the two-way stop sign controlled intersections of Campbell Avenue/Rosita Avenue and Springer Road/Rosita Avenue reported the worst case movement/approach as the level of service. The level of service for the individual approaches/movements was also evaluated for the all-way stop sign controlled intersections to comply with the Circulation Element. All of the unsignalized intersections operate at an acceptable level of service (LOS D or better) under Existing, Background, Project, and Cumulative Conditions. The Cuesta Drive/Springer Avenue intersection has approaches that provide unacceptable operations during both peak hours. During the AM peak hour, the eastbound approach operates at LOS E under all scenarios, while the westbound approach operates at LOS E, during the PM peak hour, under Existing, Background, Project, and Cumulative Conditions.

The results of the warrant analysis showed that a traffic signal is warranted based on existing AM peak-hour volumes at the Cuesta Drive/Springer Avenue intersection. The addition of traffic under Background and Project Conditions exacerbates this need based on warrants. The results also showed that during the PM peak hour, the peak-hour volume warrant is nearly met under Existing and Background Conditions, and warranted under both the Project and Cumulative Conditions. The volumes and graphics used to conduct this analysis are presented in Appendix D. The peak-hour volume warrants were not exceeded for any of the other study intersections.

According to guidelines in the Caltrans *Traffic Manual*, the decision to install traffic signals should not be based solely on the satisfaction of warrants. Installation of traffic signals should also be based upon other factors such as delay, congestion, driver confusion, etc. The City of Los Altos will ultimately determine the need for a traffic signal at this location.

Site Access

The project site plan showing the location of the project driveway is shown on Figure 2. This project proposes to provide one driveway on Rosita Avenue directly across from La Prenda Road forming a fourth leg to this intersection. Based on the projected volume on Rosita Avenue and the project-generated traffic, one driveway is sufficient to accommodate the projected volumes.

Parking

There are no standard parking rates for Community Pools. The parking demand for the proposed

project was estimated by observing parking demand at an existing facility. The preliminary site plan shows a possible range of 110 to 126 parking spaces to serve the two pools. In comparison, the Summer Sanders Community Pool (SSAC) in Roseville, California has 100 designated parking spaces, plus 80 overflow spaces in an adjacent dirt lot, plus access to another 75 parking spaces in the adjacent high school for a total of 250 spaces for its three pools. Observations conducted by Fehr & Peers Associates, Inc. at the SSAC indicated that, during typical summer weekdays, the peak parking demand is approximately 125 parked vehicles for their three swimming pools. This results in a rate of 41.7 parking spaces per pool. Using this rate would require the proposed project to provide 84 spaces to accommodate typical weekday parking demand.

The parking lot is also expected to serve the existing uses at Rosita Park. Current users include visitors and organized sports teams that practice on weekday afternoons during the PM peak period (i.e. between 4:00 and 6:00 pm) and play games on weekends. Since the existing gymnasium will be removed prior to construction of the proposed project, no parking demand for that facility was assumed under Project Conditions. According to data provided by the City Recreation Department, the parking demand of vehicles generated by evening practices is estimated to be 24 (four coaches and 20 parents) spaces. It is conservatively estimated that another 5 vehicles could be generated by other visitors to the park during the PM peak hour.

The sum of the project (i.e., pool-generated) demand (84) plus the existing sports use demand (24) plus the other visitor demand (5) yields an estimated total weekday PM peak hour parking demand of 113 spaces. This demand could be accommodated by the proposed maximum supply of 126 spaces.

On weekends during the summer months, the pool facility is conservatively estimated to generate demand for a maximum of up to 115 spaces depending on the number of recreational swimmers after after 12:00 pm. This is the number of spaces needed during the transition between classes as some patrons are arriving before the previous patrons depart. After classes begin, the demand would be reduced. With this estimated peak demand, the remaining supply for park users including sports teams and other visitors may temporarily be as few as 10 spaces. According to information provided by the Parks and Recreation Department, the demand from the sports users could be as high as 75 spaces. Thus, it is possible that the combined pool and Rosita Park parking demand may exceed the proposed supply times at some times on weekend days during summer months depending on pool and park usage. During the fall, winter, and, spring pool usage will be lower and the estimated project parking demand will be substantially lower.

Excessive demand in the project lot could result in parking intrusion into the adjacent neighborhood. Although all of the space on the adjacent streets is public and can be used by anyone, it is strongly desirable to minimize the on-street parking demand of the project in the adjacent neighborhood. Accordingly, it is recommended that all 126 spaces be provided to accommodate not only the typical weekday demand, but also the demand for major pool events and all weekend activities.

Since the demand for the proposed use, as well as for the playfield uses, can vary from weekend to weekend, a parking management program (PMP) could reduce the potential for parking intrusion into the adjacent neighborhood. Part of the PMP could be an agreement with the Los Altos School District to allow pool event parking in the adjacent Covington School lot to accommodate overflow parking needs during multi-event weekends or major pool events. The PMP could include coordination with organized park users (e.g., baseball and soccer leagues) for potential peak days and times for parking. The pool schedule could minimize overlap with sporting events in the park. All pool employees could be required to park in the Covington School lot on peak demand days, and

visiting swim teams could also be required to park in this lot if numerous games/events are scheduled at the park. This Covington School lot includes at least 80 additional spaces to accommodate additional demand. If needed, the PMP could also include personnel to re-direct drivers to the Covington School lot should the project lot be at capacity.

While a PMP would help to manage the parking demand, it is acknowledged that some pool or park patrons will park on the adjacent neighborhood streets because of the convenience. This activity is expected in the vicinity of a public park, but drivers of these vehicles are required to obey all traffic laws including not blocking driveways. The PMP should also include coordination with Los Altos Police Department to request periodic enforcement if needed.

CHAPTER 7 - CONCLUSIONS

The proposed Community Pool development is estimated to generate 1,419 daily trips with 124 AM peak-hour trips (59 inbound/65 outbound) and 116 PM peak-hour trips (74 inbound/42 outbound) on a typical non-summer weekday. Daily and PM peak hour project trip generation during the summer months would be higher, the background traffic would be substantially lower, resulting in overall summer volumes that are lower than overall non-summer volumes. The impacts of the added trips on the surrounding roadway system were evaluated following guidelines of the City of Los Altos and the Santa Clara Valley Transportation Authority (VTA) for non-summer weekday conditions.

According to the impact criteria, a project is defined as causing a significant impact if the addition of project traffic causes a signalized intersection to operate LOS E or F or exacerbates LOS E or F operations by increasing the critical movement delay by four or more seconds. The project is also defined as causing a significant impact if the addition of project traffic causes an unsignalized intersection to operate at LOS E or F and it meets the *Caltrans* peak-hour volume warrant. The results of the analysis show that the project development would not have a significant impact on any of the study intersections under near-term project or cumulative conditions.

Access to the project is provided via one driveway on Rosita Avenue. No changes to the site plan are recommended. The proposed maximum parking supply of 126 parking spaces should be provided to accommodate the projected parking demand. A parking management plan (PMP) should be implemented to address potential parking issues associated with weekend demand during the summer months. The PMP would help to minimize the potential for neighborhood parking intrusion by establishing an agreement with the Los Altos School District to share parking areas and by maintaining coordination with the Los Altos Police Department to ensure traffic and parking law compliance in the neighborhood.

APPENDIX C

Trip Generation Memorandum

FEHR & PEERS
TRANSPORTATION CONSULTANTS

MEMORANDUM

Date: October 17, 2003

To: James Walgren, City of Los Altos
Demetri Loukas, David J Powers Associates
Kamrin Knight-Desmond, SPLASH

From: Sohrab Rashid, P.E.
Jason Nesdahl

Subject: ***Los Altos Aquatic Center Trip Generation Estimates***

1035-619

Fehr & Peers Associates, Inc. has estimated trip generation for the Los Altos Aquatic Center project based on surveys of Eagle Pool in Mountain View, California and schedules provided by Swimmers Promoting Los Altos Aquatics Safety and Health (SPLASH). This memorandum presents these estimates and requests comments and/or verification from for the City of Los Altos and SPLASH in the use of these estimates for the traffic analysis. The proposed project will construct a swim center that will contain two swimming pools and other related facilities.

Trip Generation Surveys

Peak-hour trip generation surveys were conducted at the Eagle Pool facility in the City of Mountain View, California to determine the current trip generation rates of this facility. Personal interviews were conducted with people exiting the Eagle Pool facility on August 14, 2003 from 7:00 am to 9:00 am and 4:00 pm to 6:00 pm. Surveys were conducted at this time to obtain trip generation information on swimming activities during the peak Summer months.

During the AM peak hours, the only activities that occurred at Eagle Pool were two Masters swim sessions. Based on information provided by the Masters coach, there were approximately 50 total Master's swimmers at these two sessions on this morning. The results of the survey show that the Master's swimmers generated 38 trips (14 inbound/24 outbound) during the AM peak hour. Approximately five percent of the participants surveyed used an alternative mode of travel (i.e. walk, bicycle, etc.).

During the PM peak hour, four 30-minute sessions of swimming lessons were the only events that occurred at Eagle Pool. It was estimated from the surveys that approximately 110 children participated in the four sessions. The results of these surveys show that 91 trips (51 inbound/40 outbound) were generated during the PM peak hour. Less than five percent of the participants surveyed used an alternative mode of travel. It was also calculated that approximately 25 percent of the vehicles carried more than one participant to the pool resulting in an average participants/vehicle ratio of 1.22.

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www.fehrandpeers.com

Trip Generation Assumptions

Schedules for the Summer peak and the Non-Summer periods were provided (by SPLASH) in the attached spreadsheets, showing a schedule for the proposed pool facility uses broken down by time as well as the anticipated number of participants. Further information is needed concerning the dates of the Summer and Non-Summer months and the possible overlapping of the two. Conservative assumptions used in calculating trip generation estimates were based on discussions with Kamrin-Knight Desmond of SPLASH (e.g. the maximum number of a range of participants was used to calculate trip generation). Specific assumptions for each class are presented below.

Masters Swimming

- 5% arrive/depart by non-vehicular means year round

Youth Swim Team

- A designated percentage, based on the length of the program and age group, was assumed to be dropped off and picked up from the program. Group A was assumed to have 25% participants driving and staying the length of the program and 75% picking up and dropping off at the beginning and end of program. Group B has a 50/50 percent split and Group C has 75% staying at the class and 25% picking up and dropping off
- For classes that are only an hour in length, it was assumed that 100% of the vehicles stayed during the program
- 25% of participants carpool
- During the Summer, dry land time is assumed to be 30 minutes for programs in competition pool. Dry land time is time before actual program starts to prepare for pool time (changing, stretching, etc.)
- During Non-Summer schedule, dry land time assumed to be 45 minutes before and after in competition pool

Lap Swim

- 2 persons per lane
- Average swim time 45 minutes
- 100% of participants drive single occupant vehicles

Recreational Swim

- 20 people in pool for average of one hour during Summer schedule (A range of 2 to 20 people estimated to be in pool at any one time. The maximum number taken as a conservative estimate.)
- 15 people in pool for average of one hour during Non-Summer schedule
- 10% travel by non-vehicular mode
- 25% of participants carpool

Water Fitness/Weekly Rental of Facility

- 100% of designated participants drive to class in single occupant vehicle

Lessons

- 100% of designated participants at each 30 minute class
- 100% of drivers stay at pool the duration of class

- 25% of participants carpool

Conclusion

Based on the calculations using the above assumptions and the schedules provided it is estimated that the proposed swim facility would generate 1,935 daily trips with 75 AM peak-hour trips (26 inbound/49 outbound) and 188 PM peak-hour trips (124 inbound/64 outbound) during the Summer period. The proposed project is estimated to generate 1,419 daily trips with 124 AM peak-hour trips (59 inbound/65 outbound) and 116 PM peak-hour trips (74 inbound/42 outbound) during Non-Summer months. These trip generation estimates provide a conservative estimate of project-generated traffic both Summer and Non-Summer time periods. We appreciate any comments or questions to further refine these estimates.

Los Altos Community Aquatics Facility
Conceptual Pool Usage
(Non-Summer, M-F)

	COMPETITION POOL (11 LANES x 25 yards) 75 ft x 83 ft x 7 ft.	# of users in competition pool		TEACHING POOL (8 LANES x 75 ft.) 75 ft. x 60 ft. x 3 to 5 feet depth Steps down long side	# of users in teaching pool	Total # of users in both pools
6:00	Masters 6 lanes (25) / Youth Swim Team 5 lanes (25)		6:00	Adult Lap Swim 8 lanes		
6:30			6:30			
7:00			7:00			
7:30			7:30			
8:00	Recreational Swim 9 lanes / Adult Lap Swim 2 lanes		8:00	Adult Lap Swim 2 lanes / Recreational Swim 6 lanes		
8:30			8:30			
9:00			9:00			
9:30			9:30			
10:00			10:00			
10:30			10:30			
11:00	Deep Water Fitness 4 lanes		11:00			
11:30			11:30			
12:00	Masters 9 lanes 15-24 per 90 min / Adult Lap Swim 2 lanes 4 per 30 min		12:00	Water Fitness for Older Adults 6 lanes 10-20 per hour		
12:30			12:30			
1:00			1:00	Recreational Swim 6 lanes		
1:30			1:30			
2:00	Recreational Swim 2 per 20 min		2:00	Lessons 8 lanes 32 per 30 min		
2:30			2:30			
3:00			3:00			
3:30			3:30			
4:00	Youth Swim Team 6 lanes Group A (30) / Youth Swim Team 5 lanes Group B (30)		4:00	Youth Swim Team 8 lanes (20)		
4:30			4:30			
5:00			5:00	Youth Swim Team 8 lanes (20)		
5:30			5:30			
6:00	Masters 6 lanes (25) / Youth Swim Team 5 lanes Group C (30)		6:00	Adult lap 8 lanes		
6:30			6:30			
7:00			7:00			
7:30	Rental 4 nights Weekly (Mon thru Thursday only) Kayak and/or Scuba Instruction (15)		7:30	Rental 4 nights Weekly (Mon thru Thursday only) Kayak and/or Scuba Instruction (15)		
8:00			8:00			
8:30			8:30			

Los Altos Community Pool
Conceptual Two Pool Usage
(Summer, M-F)

	COMPETITION POOL (11 LANES x 25 yards) 75 ft x 83 ft x 7 ft.	# of users in competition pool		TEACHING POOL (8 LANES x 75 ft.) 75 ft. x 60 ft. x 3 to 5 feet depth Steps down long side	# of users in teaching pool	Total # of users in both pools
6:00	Masters (25) (9 lanes) / Adult Lap Swim 2 lanes		6:00	Adult Lap Swim 3 lanes		
6:30			6:30			
7:00			7:00			
7:30	Youth Swim Team Group A (30) 5 lanes / Youth Swim Team Group B (30) 6 lanes		7:30			
8:00			8:00	Youth Swim Team (20) 5 lanes		
8:30			8:30			
9:00	Youth Swim Team Group C (30) 6 lanes		9:00	Youth Swim Team (20) 5 lanes		
9:30			9:30			
10:00	Lessons 11 lanes (20 per 1/2 hour)		10:00	Lessons (32 per 1/2 hour) 8 lanes		
10:30			10:30			
11:00	Lessons 7 lanes (10) / Water Fitness (20) (4 lanes)		11:00			
11:30			11:30			
12:00	Masters (25) (9 lanes) / Lap Swim 2 lanes		12:00	Lap Swim 3 lanes / Water Fitness Older Adults (20) (5 lanes)		
12:30			12:30			
1:00			1:00	Lessons (32 per 1/2 hour) 8 lanes		
1:30	Youth Programs 6 lanes 25 students / Recreational Swim 5 lanes		1:30			
2:00			2:00			
2:30			2:30			
3:00			3:00	Recreational Swim 8 lanes		
3:30			3:30			
4:00	Youth Swim Team Class A (6 lanes) 30 students / Youth Swim Team Class B (5 lanes) 30 students		4:00			
4:30			4:30			
5:00	Youth Swim Team Class C (5 lanes) 30 students		5:00	Lessons (32 per 1/2 hour) 8 lanes		
5:30			5:30			
6:00	Masters (25) (9 lanes) / Adult Lap Swim (2 lanes)		6:00			
6:30			6:30			
7:00			7:00	Adult Lap Swim 3 lanes / Water Fitness - Aquacize (20)(5 lanes)		
7:30	Rental 4 nights Weekly (Mon thru Thursday only) Kayak and/or Scuba Instruction (15)		7:30			
8:00			8:00	Rental 4 nights Weekly - (Mon thru Thurs only) Kayak and/or Scuba Instruction (15)		
8:30			8:30			

Los Altos Community Pool
Conceptual Pool Usage
(Summer, SAT.)

	COMPETITION POOL (11 LANES x 25 yards) 75 ft x 83 ft x 7 ft.		# of users in competition pool		TEACHING POOL (8 LANES x 75 ft.) 75 ft. x 60 ft. x 3 to 5 feet depth Steps down long side		# of users in teaching pool	Total # of users in both pools
6:00	Youth Swim Team (11 lanes) 40 kids			6:00	Lap Swim 3 lanes			
6:30				6:30				
7:00				7:00		Youth Swim Team 5 lanes 20 kids		
7:30				7:30				
8:00	Masters (9 lanes) (25)	Adult Lap Swim (2 lanes)		8:00		Youth Swim Team 5 lanes 20 kids		
8:30				8:30				
9:00				9:00		Lessons 5 lanes 28 per 1/2 hour		
9:30	Masters (9 lanes) (25)			9:30				
10:00				10:00				
10:30				10:30				
11:00	Adult Lap Swim (9 lanes)	Deep Water Exercise (20)(3 lanes)		11:00				
11:30				11:30				
12:00	Recreational Swim 8 lanes	Lap Swim (3 lanes)		12:00		Water Fitness (20)(5 lanes)		
12:30				12:30				
1:00				1:00		Recreational Swim 5 lanes		
1:30				1:30				
2:00				2:00				
2:30				2:30				
3:00				3:00				
3:30				3:30				
4:00				4:00				
4:30				4:30				
5:00				5:00				
5:30				5:30				
6:00	Family Swim Night 11 lanes	Special Event Night will be held periodically during summer		6:00	Family Swim Night 8 lanes			
6:30				6:30				
7:00				7:00				
7:30				7:30				

Los Altos Community Pool
Conceptual Pool Usage
(Non-Summer, SAT.)

	COMPETITION POOL (11 LANES x 25 yards) 75 ft x 83 ft x 7 ft.		# of users in competition pool		TEACHING POOL (8 LANES x 75 ft.) 75 ft. x 60 ft. x 3 to 5 feet depth Steps down long side		# of users in teaching pool	Total # of users in both pools
6:00	Youth Swim Team Age A (11 lanes) 40 kids			6:00	Lap Swim 2 lanes			
6:30				6:30				
7:00				7:00		Youth Swim Team 5 lanes 20 kids		
7:30				7:30				
8:00	Masters (9 lanes) (25)	Adult Lap Swim (2 lanes)		8:00		Youth Swim Team 5 lanes 20 kids		
8:30				8:30				
9:00				9:00		Lessons 8 lanes Spring and Fall only 32 per 1/2 hour		
9:30	Masters (9 lanes) (25)			9:30				
10:00				10:00				
10:30				10:30				
11:00	Adult Lap Swim (9 lanes)	Deep Water (20)		11:00				
11:30				11:30				
12:00	Recreational Swim 8 lanes	Lap Swim (3 lanes)		12:00		Water Fitness (5 lanes) (20)		
12:30				12:30				
1:00				1:00		Recreational Swim 6 lanes		
1:30				1:30				
2:00				2:00				
2:30				2:30				
3:00				3:00				
3:30				3:30				
4:00				4:00				
4:30				4:30				
5:00				5:00				
5:30				5:30				