

**Appendix G:
Traffic Impact Analysis**

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TRANSPORTATION ASSESSMENT
**NEW OUTDOOR POOL FACILITY AND SOUTH
CAMPUS IMPROVEMENT PROJECT**
City of La Cañada Flintridge, California
April 10, 2020

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TRANSPORTATION ASSESSMENT
**NEW OUTDOOR POOL FACILITY AND
SOUTH OF CAMPUS IMPROVEMENT PROJECT**
City of La Cañada Flintridge, California
April 10, 2020

1.0 INTRODUCTION

This transportation assessment has been conducted to identify and evaluate the potential transportation impacts associated with the construction of the proposed New Outdoor Pool Facility and South of Campus Improvement Project at the La Cañada High School (proposed project) on the surrounding street system. The project site location and general vicinity are shown in *Figure 1-1*.

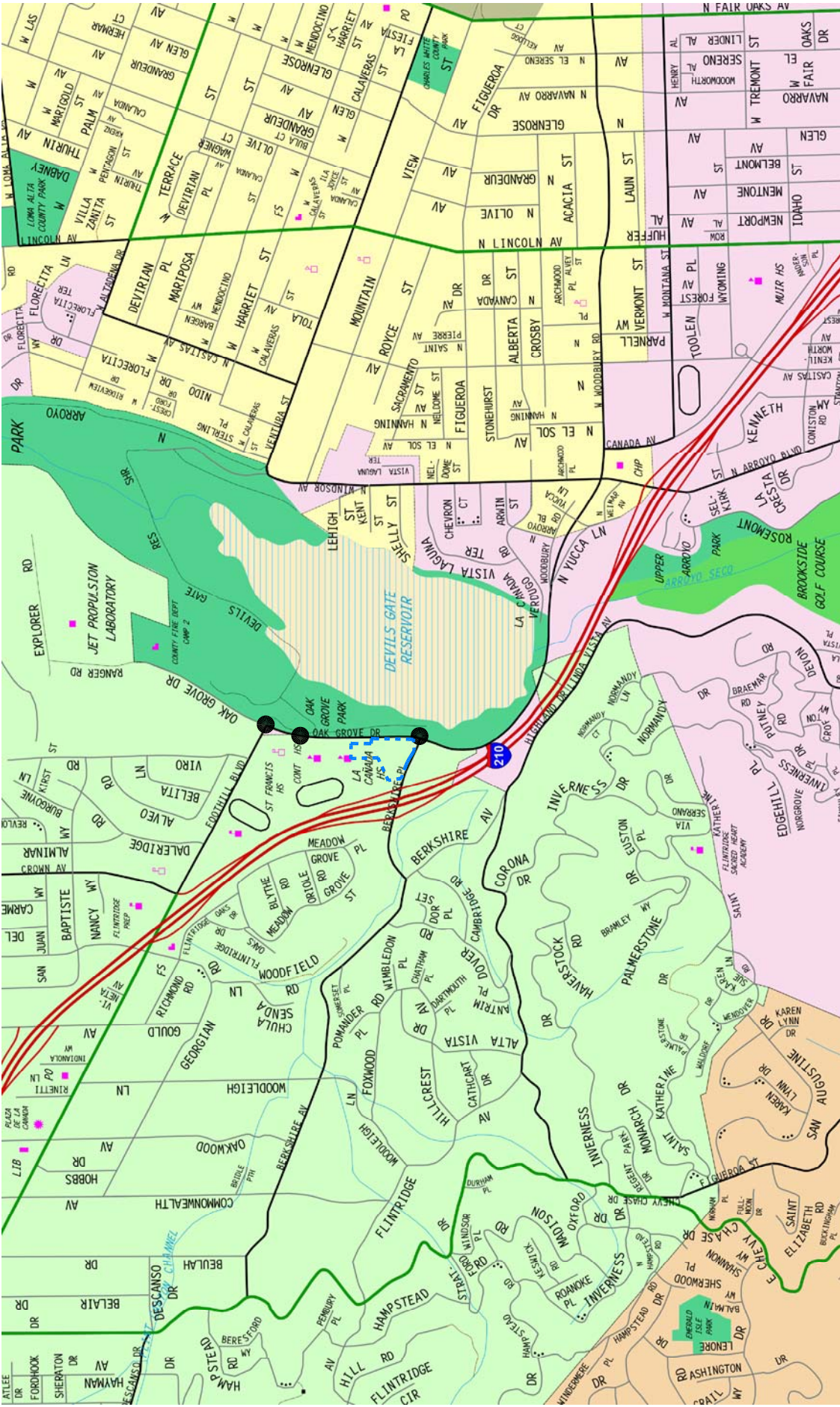
The transportation assessment follows City of La Cañada Flintridge traffic study procedures. This transportation assessment evaluates potential construction-related (i.e., referred to herein as the “Project”) transportation impacts at three key intersections in the vicinity of the project site. The Intersection Capacity Utilization method was used to determine Volume-to-Capacity ratios and corresponding Levels of Service for the study intersections.

This study (i) presents existing traffic volumes, (ii) forecasts existing-plus-construction (project) traffic volumes, (iii) determines proposed construction (project)-related impacts, and (iv) identifies mitigation measures, where necessary.

1.1 Study Area

The general location of the project in relation to the study locations and surrounding street system is presented in *Figure 1-1*. The transportation assessment study area is comprised of those locations which have the greatest potential to experience significant traffic impacts due to the proposed construction activities associated with the project. In the traffic engineering practice, the study area generally includes those intersections that are:

- a. Immediately adjacent or in close proximity to the project site;
- b. In the vicinity of the project site that are documented to have current or projected future adverse operational issues; and
- c. In the vicinity of the project site that are forecast to experience a relatively greater percentage of project-related vehicular turning movements.



MAP SOURCE: RAND McNALLY & COMPANY



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SOUTH CAMPUS IMPROVEMENT AREA



STUDY INTERSECTION

FIGURE 1-1 VICINITY MAP

LA CAÑADA HIGH SCHOOL POOL FACILITY AND SOUTH OF CAMPUS IMPROVEMENT PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

The locations selected for analysis were based on the above criteria, forecast peak hour construction trip generation, anticipated distribution of vehicle trips, and existing intersection/corridor operations. Three (3) intersections were selected for analysis as they provide local access to the area, meet the above criteria, and define the extent of the boundaries for this traffic impact investigation. Further discussion of the existing street system and study area is provided in Section 4.0 herein.

1.2 Overview of Senate Bill 743

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743. Under SB 743, the focus of transportation analysis pursuant to CEQA will shift from driver delay, or level of service (LOS), to reduction of vehicle miles traveled (VMT), reduction in greenhouse gas emissions, and creation of multimodal networks and promotion of mixed-use developments. In December 2018, the California Natural Resources Agency certified and adopted amendments to the CEQA Guidelines implementing SB743 with a target implementation date of July 1, 2020. The City of La Cañada Flintridge has not yet adopted guidelines or significance thresholds for VMT analyses. As such, this assessment utilizes existing, long-established protocols in accordance with current City guidelines, which are intended for application to an individual development project's operational traffic as well as traffic associated with long-range planning projects. Application of these guidelines to this short-term construction project is therefore conservative.

1.3 Congestion Management Program Status

The Los Angeles County Congestion Management Program (CMP) was previously a state-mandated program that was enacted by the California State Legislature with the passage of Proposition 111 in 1990 that primarily utilized a LOS performance metric. SB 743 contains amendments to current congestion management law that allows counties to opt out of the LOS standards that would otherwise apply in areas where CMPs are utilized. Pursuant to California Government Code §65088.3, local jurisdictions may opt out of the CMP requirement without penalty if a majority of the local jurisdictions representing a majority of the County's population formally adopt resolutions requesting to opt out of the program. As of November 2019, the majority of local agencies representing the majority of the County's population have adopted resolutions to opt out of the program. Therefore, the CMP is no longer applicable in Los Angeles County.

2.0 PROJECT DESCRIPTION

2.1 Existing Project Site

La Cañada High School (LCHS) is located at 4463 Oak Grove Drive in the City of La Cañada Flintridge. LCHS is generally bounded by Foothill Boulevard to the north; Berkshire Place to the south, Oak Grove Drive to the east; and I-210 Freeway to the west. The LCHS campus encompasses 31.64 acres, of which the proposed project activities would encompass 3.59 acres. The proposed project site is located within the southeastern corner of the existing LCHS campus. The existing LCHS project site is highlighted in an aerial photograph presented in *Figure 2-1*.

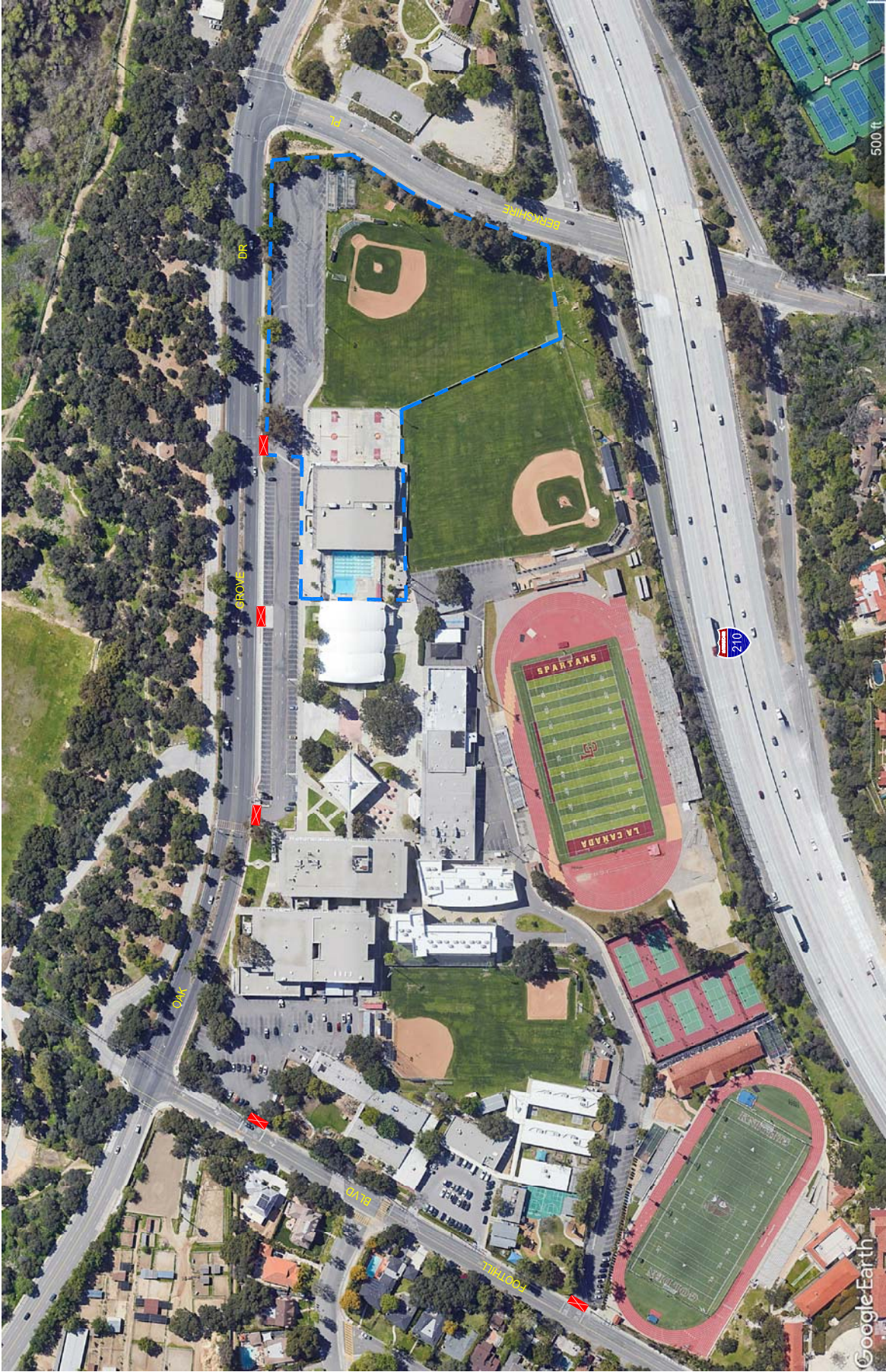
LCHS currently serves students in grades 7-12. There are approximately 369 students enrolled in 7th grade, 324 students in 8th grade, 355 students in 9th grade, 336 students in 10th grade, 339 students in 11th grade, and 345 students in 12th grade for a total of 2,068 students enrolled for the 2018/2019 school year. The existing LCHS operating hours are between 8:00 AM to 3:00 PM Monday through Friday.

2.2 Proposed Project Description

The proposed New Outdoor Pool Facility and South of Campus Improvement project at LCHS would result in the demolition of the existing basketball courts in order to construct a 40-meter pool facility with a 1,218 square-foot pool equipment area, 533 square-foot pool storage area, 264 square-foot girls restroom, 264 square-foot boys restroom, two (2) 230 square-foot locker rooms, a 183 square-foot concrete storage area, a 386 square-foot office, 19 outdoor showers, and five (5) rows of bleacher seating with shade covers to accommodate up to 250 people. The existing on-campus baseball field would be shifted to the west to allow for the expansion of the student parking lot, and the existing 25-meter pool and 750 square-foot pool equipment building would be demolished in order to construct new basketball courts with associated steps/seating and provide extended fire truck access to this area of campus. The South Parking Lot expansion would include converting the existing 45-degree parking spaces to 90-degree spaces, and adding 45 parking spaces, for a total of 155 parking spaces that would continue to serve as student parking. It is important to note that student enrollment and/or staff increases are not proposed as part of the proposed project. The overall site plan for the proposed project is illustrated in *Figure 2-2*.


Construction is anticipated to start in May/June 2021, with a final build-out date of October 2022. The construction scenario assumes that construction activities would occur in three (3) overall development phases, for a total duration of 18-20 months. Construction phasing is as follows:

- Phase 1 (May 2021 – July 2022): Construction of new pool and accompanying facilities
- Phase 2 (June 2022 – July 2022): South parking lot and baseball field improvements
- Phase 3 (May 2022 – October 2022): Filling in of the old pool, construction of new basketball courts and adjacent plaza, and ADA improvements to the existing North Gym locker rooms



MAP SOURCE: GOOGLE EARTH

 SOUTH CAMPUS IMPROVEMENT AREA

 EXISTING DRIVEWAY

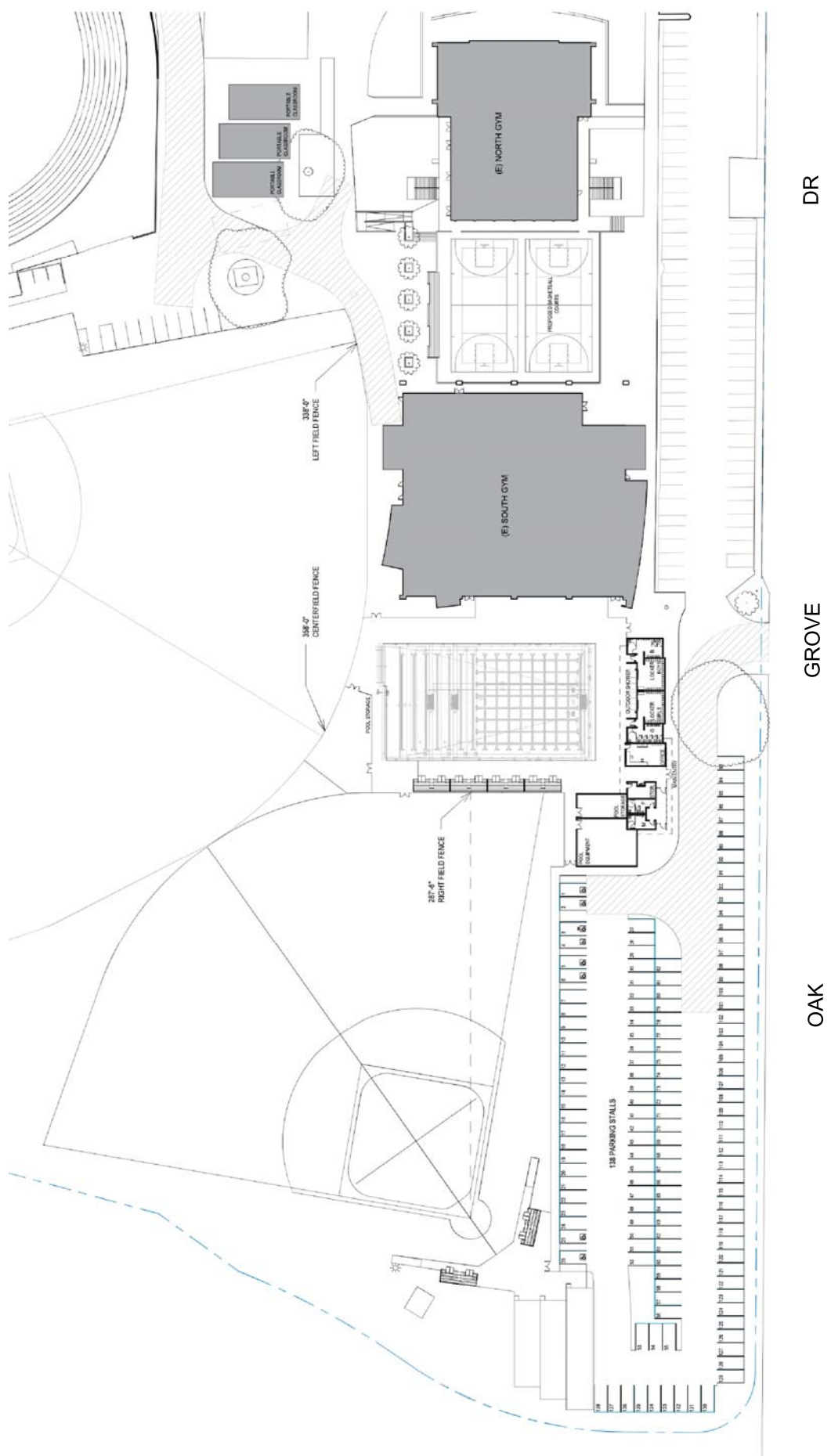


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FIGURE 2-1
AERIAL PHOTOGRAPH OF EXISTING PROJECT SITE

LA CAÑADA HIGH SCHOOL POOL FACILITY AND SOUTH OF CAMPUS IMPROVEMENT PROJECT

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SOURCE: GONZALEZ GOODALE ARCHITECTS

FIGURE 2-2 PROPOSED SITE PLAN

LA CAÑADA HIGH SCHOOL POOL FACILITY AND SOUTH OF CAMPUS IMPROVEMENT PROJECT

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The school is planned to remain in operation during the construction period. Some overlap may occur between the operation of the new pool and the start of Phase 2 construction. The Varsity baseball field is planned to be operational during construction while the Junior Varsity baseball field is planned to be operational during Phase 3 of construction.

Prior to the construction start date of May/June 2021, the South parking lot will be closed during demolition, earthwork, and grading activities. Following completion of the aforementioned work, the South parking lot will be partially open for student use (with approximately 50 percent of the existing spaces available for use) during construction of Phases 1 and 3. During this time, LCHS representatives will reduce the number of student parking permits issued based on the availability of parking spaces at the South parking lot and encourage student carpools. The South parking lot will be closed and restricted from use from approximately June 2022 until July 2022 (i.e., during the summer months) for Phase 2 construction. Full use of the South parking lot is expected starting in August 2022.

3.0 SITE ACCESS AND CIRCULATION

The site access scheme for the LCHS campus is displayed in *Figure 2-1*. Descriptions of the existing site access and circulation scheme is provided in the following subsections.

3.1 Existing Site Access

Vehicular access to the existing project site is presently provided via three (3) driveways on Oak Grove Drive: one (1) northerly driveway (signalized), one (1) middle driveway, and one (1) southerly driveway. The northerly driveway is controlled by traffic signals and currently provides access to the main parking lot. The middle driveway provides access to the existing main parking lot and currently accommodates right-turn ingress and egress movements only. The southerly driveway currently provides access to the main and south parking lots (for students) as well as the pool facility and sports fields. The southerly driveway currently accommodates left-turn ingress and right-turn ingress and egress movements (i.e., left-turn egress movements are prohibited).

3.2 Proposed Project Site Access

Vehicular access to the project site will continue to be provided by the three (3) driveways on Oak Grove Drive. Descriptions of the project site access driveways are provided in the following paragraphs.

- *Oak Grove Drive Northerly Driveway:*

This existing driveway, which is located on the west side of Oak Grove Drive (i.e., along the easterly property frontage) near the northeast corner of the project site, will be retained as part of the proposed project. This driveway will continue to provide access to the main parking lot. The signalized Oak Grove Drive northerly driveway will continue to accommodate full access for the project site (i.e., left-turn and right-turn ingress and egress turning movements).

- *Oak Grove Drive Middle Driveway:*

This existing middle driveway, which is located on the west side of Oak Grove Drive, will be retained as part of the proposed project. This driveway will continue to provide access to the main parking lot. The Oak Grove Drive middle driveway will continue to accommodate right-turn ingress and egress movements only due to the existing raised median along Oak Grove Drive.

- *Oak Grove Drive Southerly Driveway:*

This existing driveway, which is located on the west side of Oak Grove Drive near the southeast corner of the project site, will be retained as part of the proposed project. This driveway will continue to provide access to the main and south parking lots. The Oak Grove Drive southerly driveway will continue to accommodate left-turn ingress and right-turn ingress and egress movements (i.e., left-turn egress movements are prohibited).

3.3 Student Drop-Off and Pick-up Operations

School drop-off and pick-up operations would continue to occur within the main parking lot. For school drop-off operations, vehicles would enter via the existing Oak Grove Drive northerly driveway for the main parking lot and travel southwesterly into the campus in front of the north gym where drop-off operations occur. After student drop-off, vehicles would then exit the parking lot via the Oak Grove Drive middle driveway.

For school pick-up operations, vehicles would again enter via the existing Oak Grove Drive northerly driveway for the main parking lot and travel southwesterly into the campus in front of the north gym where drop-off and pick-up operations occur. In addition, vehicles could also enter via the existing Oak Grove Drive southerly driveway and travel northerly into the campus in front of the north gym where pick-up operations occur. After student pick-up, vehicles would then exit the parking via the Oak Grove Drive middle driveway.

School drop-off and pick-up operations were also observed to occur along the Hahamongna Watershed Park internal roadway that parallels Oak Grove Drive to the east. A pedestrian gate is provided on the east side of Oak Grove Drive for access to and from the Hahamongna Watershed Park. Students are observed to cross Oak Grove Drive via the existing crosswalk at the signalized Oak Grove Drive northerly driveway intersection.

4.0 EXISTING STREET SYSTEM

4.1 Regional Highway System

Regional access to the site is provided via the Interstate 210 (Foothill) Freeway. A brief description of the Interstate 210 Freeway is provided in the following paragraph.

Interstate 210 (Foothill) Freeway is located west of the project site and is a regional east-west limited-access facility between Interstate 5 Freeway in Sylmar to the west and Pasadena and other San Gabriel Valley communities and San Bernardino County to the east. In the City of La Canada Flintridge, I-210 Freeway provides four travel lanes in each direction with interchange ramps at Foothill Boulevard (half-interchange) and Berkshire Place.

4.2 Local Street System

Immediate access to the proposed project site is provided via Oak Grove Drive, Berkshire Place and Foothill Boulevard. The following three (3) study intersections were selected for analysis in order to determine potential traffic impacts related to the proposed project:

1. Oak Grove Drive/Foothill Boulevard
2. Oak Grove Drive/La Cañada High School Driveway
3. Oak Grove Drive/Berkshire Place

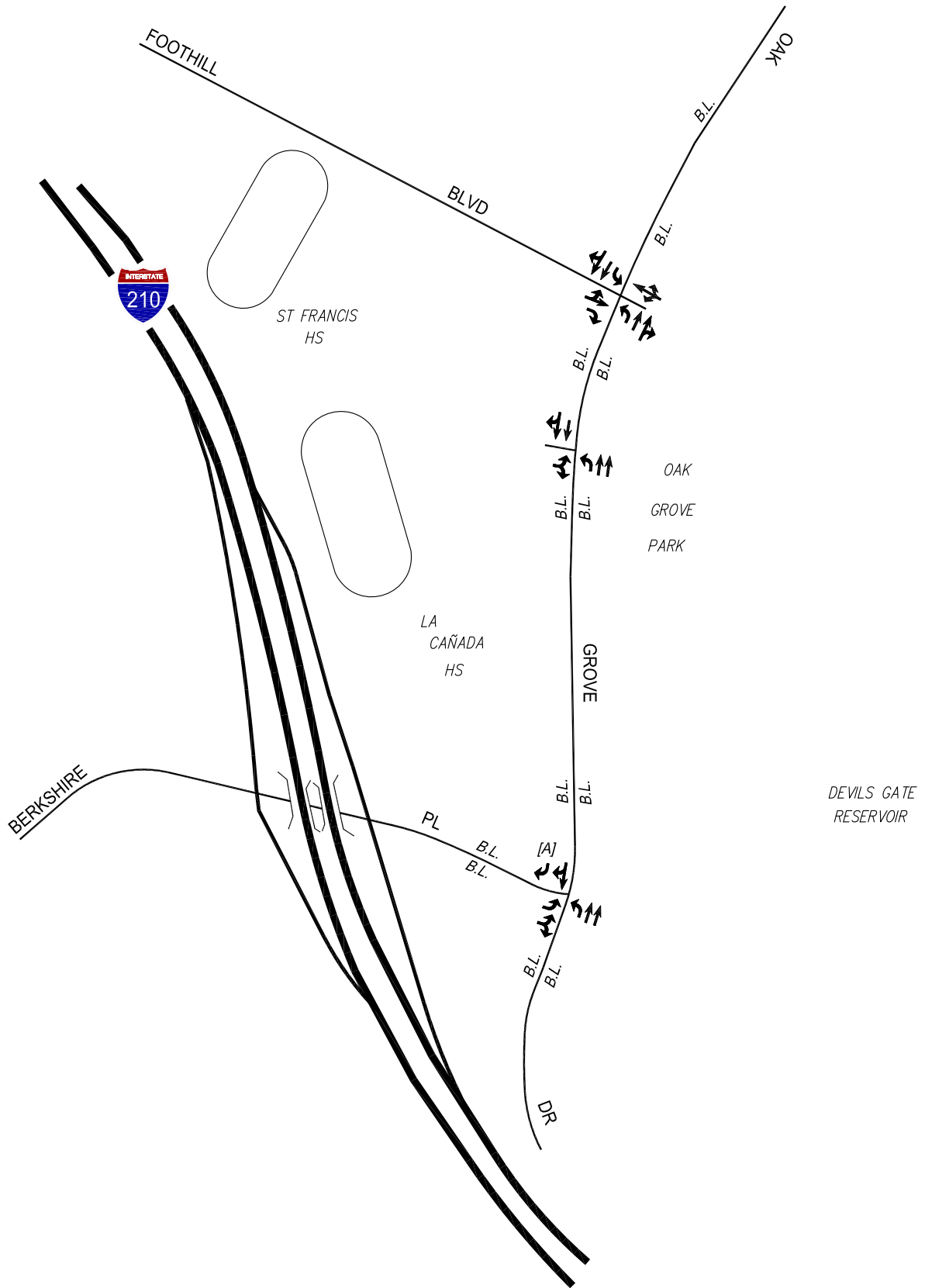
All study intersections selected for analysis are presently controlled by traffic signals. The existing lane configurations at the study intersections are displayed in *Figure 4-1*.

4.3 Roadway Classifications

The City of La Canada Flintridge utilizes similar roadway categories recognized by regional, state and federal transportation agencies. There are four general categories in the roadway hierarchy, ranging from freeways with the highest capacity to two-lane undivided roadways with the lowest capacity. The roadway categories are summarized as follows:

- *Freeways* are limited-access and high-speed travel ways included in the state and federal highway systems. Their purpose is to carry regional through-traffic. Access is provided by interchanges with typical spacing of one mile or greater. No local access is provided to adjacent land uses.
- *Arterial* roadways are major streets that primarily serve through-traffic and provide access to abutting properties as a secondary function. Arterials are generally designed with two to six travel lanes and their major intersections are signalized. This roadway type is divided into two categories: major and minor arterials. Major arterials are typically four-or-more lane roadways and serve both local and regional through-traffic. Minor arterials are typically two-to-four lane streets that service local and commuter traffic.

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-  SIGNALIZED INTERSECTION
- B.L.* BIKE LANE
- [A]* OVERLAP PHASE

FIGURE 4-1

EXISTING LANE CONFIGURATIONS

- *Collector* roadways are streets that provide access and traffic circulation within residential and non-residential (e.g., commercial and industrial) areas. Collector roadways connect local streets to arterials and are typically designed with two through travel lanes (i.e., one through travel lane in each direction) that may accommodate on-street parking. They may also provide access to abutting properties.
- *Local* roadways distribute traffic within a neighborhood, or similar adjacent neighborhoods, and are not intended for use as a through-street or a link between higher capacity facilities such as collector or arterial roadways. Local streets are fronted by residential uses and do not typically serve commercial uses.

4.4 Roadway Descriptions

Brief descriptions of the important roadways in the project site vicinity are provided in the following paragraphs.

Foothill Boulevard is an east-west roadway that borders the project site to the north. Foothill Boulevard is designated as a Special Major Roadway within the study area in the Circulation Element of the City of La Canada Flintridge General Plan. Two through travel lanes are provided in each direction on Foothill Boulevard within the study area. Foothill Boulevard is posted for a speed limit of 30 MPH near the site.

Oak Grove Drive is a north-south roadway that borders the project site to the east. Oak Grove Drive is designated as a Major Roadway within the study area in the Circulation Element of the City of La Canada Flintridge General Plan. Two through travel lanes are provided in each direction on Oak Grove Drive within the study area. Oak Grove Drive is posted for a speed limit of 30 MPH near the site.

Berkshire Place is an east-west roadway located south of the project. Berkshire Place is designated as a Major Roadway within the study area in the Circulation Element of the City of La Canada Flintridge General Plan. Two through travel lanes are provided in each direction on this portion of Berkshire Place within the study area. Berkshire Place is posted for a speed limit of 25 MPH near the site.

4.5 Transit Services¹

Public bus transit service within the project study area is currently provided by the Glendale Beeline Transit, Los Angeles County Metropolitan Transportation Authority (Metro) and City of Pasadena (Pasadena Transit). A summary of the existing transit service, including the transit route, destinations and peak hour headways is presented in *Table 4-1*. The existing public transit routes in the project site vicinity are illustrated in *Figure 4-2*.

¹ Walk Score also calculates a transit score based on the number and proximity of bus and rail routes near the project site. For example, refer to <http://www.walkscore.com/>, which generates a transit score of approximately 22 (Car Dependent) out of 100 for the project site. Walk Score calculates the transit score of an address by locating nearby bus/rail transit routes and stops.

Table 4-1
EXISTING TRANSIT ROUTES [1]

ROUTE	DESTINATIONS	ROADWAY(S) NEAR SITE	NO. OF BUSES DURING PEAK HOUR			
			DIR	AM	PM	SCHOOL [2]
Glendale Beeline Route 3	Glendale to Jet Propulsion Laboratory via La Crescenta, Montrose and La Cañada-Flintridge	Oak Grove Drive, Foothill Boulevard	NB	2	2	0
			SB	2	2	0
Glendale Beeline Route 33 (LCF Shuttle)	Montrose to Jet Propulsion Laboratory via La Cañada-Flintridge	Oak Grove Drive, Foothill Boulevard	EB	1	1	1
			WB	1	1	1
Glendale Beeline Route 34 (LCF Shuttle)	Montrose to Jet Propulsion Laboratory via La Cañada-Flintridge	Oak Grove Drive, La Cañada High School	NB	0	0	1
			SB	0	0	1
Metro 177	La Cañada-Flintridge to Pasadena	Oak Grove Drive, Foothill Boulevard	EB	2	2	2
			WB	2	2	1
Metro 268	El Monte to Altadena via Arcadia, Sierra Madre, Pasadena and La Cañada-Flintridge	Oak Grove Drive, Foothill Boulevard, Berkshire Place	SB	1	2	2
			NB	2	2	1
Pasadena Transit 52	Pasadena to La Cañada-Flintridge	Oak Grove Drive, Foothill Boulevard, Berkshire Place	NB	1	1	0
			SB	0	0	0
TOTAL				14	15	10

[1] Sources: City of Glendale Beeline Transit, Los Angeles County Metropolitan Transportation Authority (Metro) and City of Pasadena (Pasadena Transit) websites, 2020.

[2] School peak hour is from 3:00 PM to 4:00 PM.

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 PROJECT SITE

FIGURE 4-2
EXISTING TRANSIT ROUTES

5.0 TRAFFIC COUNTS

Manual traffic counts of vehicular turning movements were conducted in November 2019 (i.e., when local schools were in session) at each of the three (3) study intersections during the weekday morning (AM) and afternoon (PM) commuter periods as well as the LCHS school PM peak hour to determine the peak hour traffic volumes. The manual counts were conducted by an independent traffic count subconsultant (City Traffic Counters) at the study intersections from 7:00 to 9:00 AM to determine the weekday AM peak commuter hour, from 2:30 PM to 4:00 PM to determine the school PM peak hour, and from 4:00 to 6:00 PM to determine the weekday PM peak commuter hour. In conjunction with the turning movement vehicle counts, a count of bicycle and pedestrian volumes also were collected during the peak periods for informational purposes. The intersection manual traffic count data were adjusted by one percent (1.0%) per year to reflect year 2020 existing conditions.

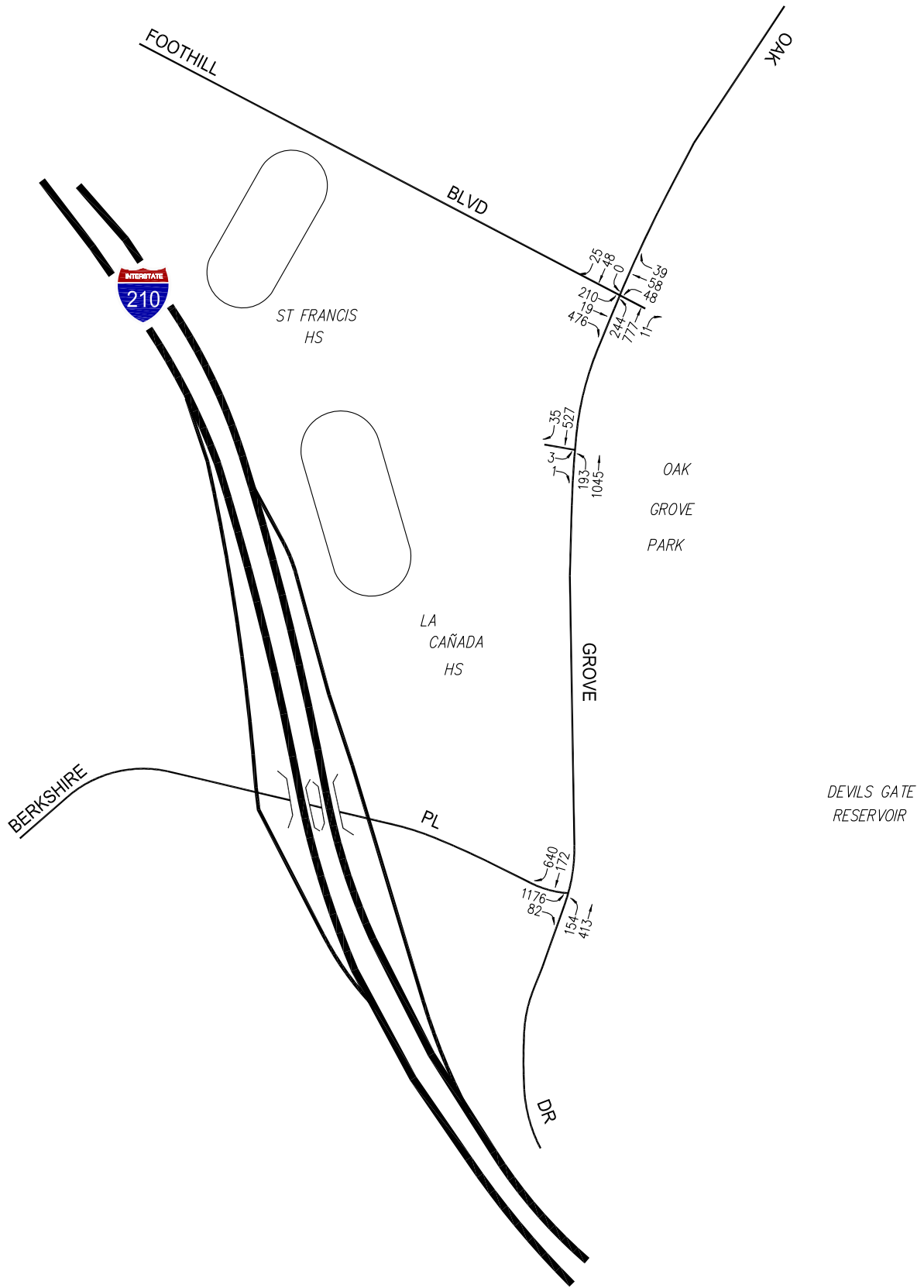
The existing weekday AM peak hour, commuter PM peak hour and school PM peak hour manual counts of turning vehicles at the study intersections are summarized in **Table 5-1**. The existing traffic volumes at the study intersections during the weekday AM peak hour, commuter PM peak hour and school PM peak hour are shown in **Figures 5-1, 5-2 and 5-3**, respectively. Summary data worksheets of the manual traffic counts at the study intersections are contained in **Appendix A**.

Table 5-1
EXISTING TRAFFIC VOLUMES [1]
WEEKDAY AM AND PM PEAK HOURS

NO.	INTERSECTION	DATE	DIR	AM PEAK HOUR		PM PEAK HOUR		SCHOOL PEAK HOUR	
				BEGAN	VOLUME	BEGAN	VOLUME	BEGAN	VOLUME
1	Oak Grove Drive / Foothill Boulevard	11/13/2019	NB	7:30 AM	1,032	4:30 PM	3:00 PM	239	
			SB		73		562		
			EB		705		431		
			WB		145		132		
2	Oak Grove Drive / La Cañada High School	11/13/2019	NB	7:30 AM	1,238	4:45 PM	3:00 PM	330	
			SB		562		783		
			EB		4		1		
			WB		0		0		
3	Oak Grove Drive / Berkshire Place	11/13/2019	NB	7:30 AM	567	4:30 PM	3:00 PM	256	
			SB		812		1,022		
			EB		1,258		422		
			WB		0		0		

[1] Counts conducted by City Traffic Counters

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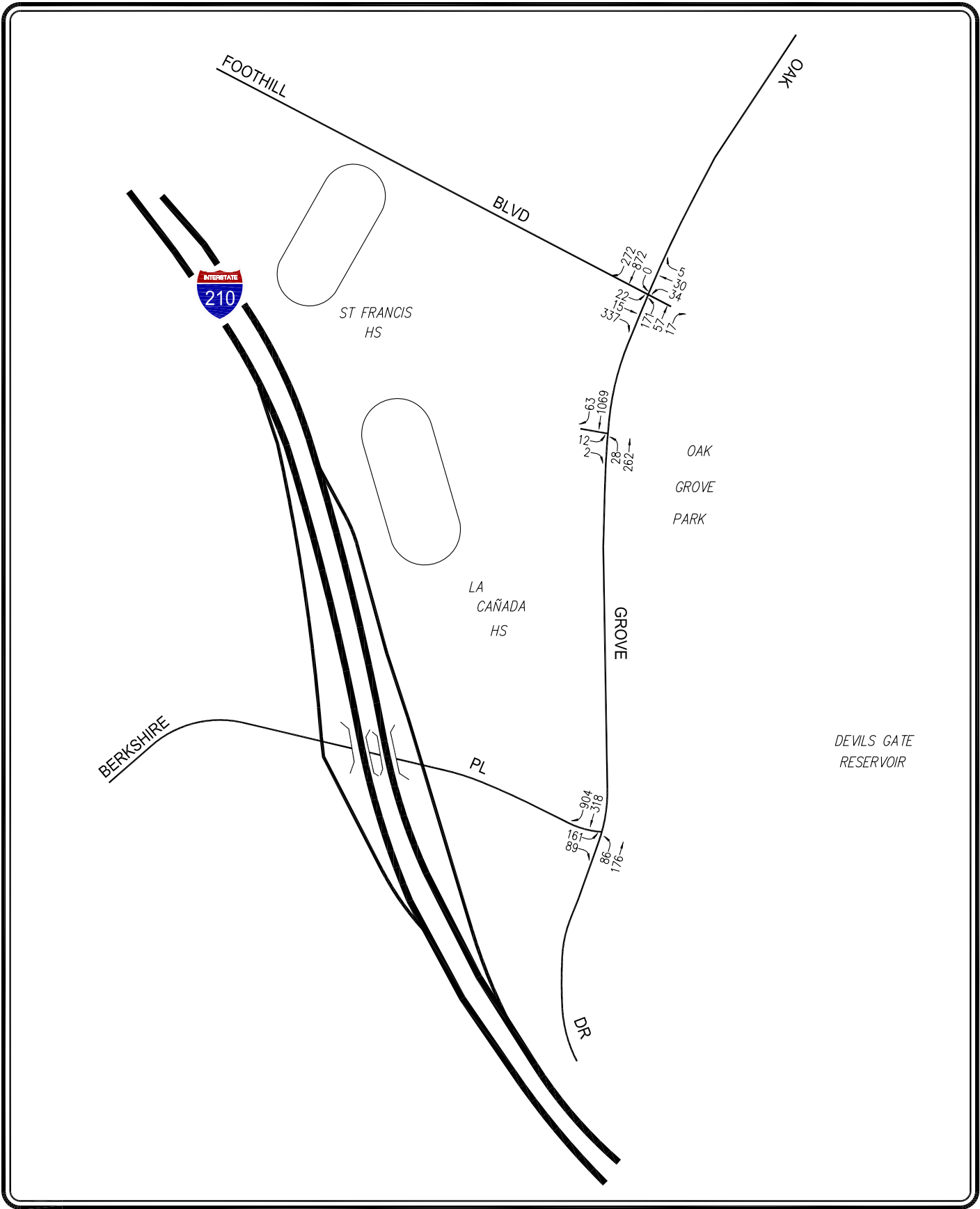
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FIGURE 5-1
EXISTING TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR

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LA CAÑADA HS POOL FACILITY & SOUTH OF CAMPUS IMPROVEMENT PROJECT

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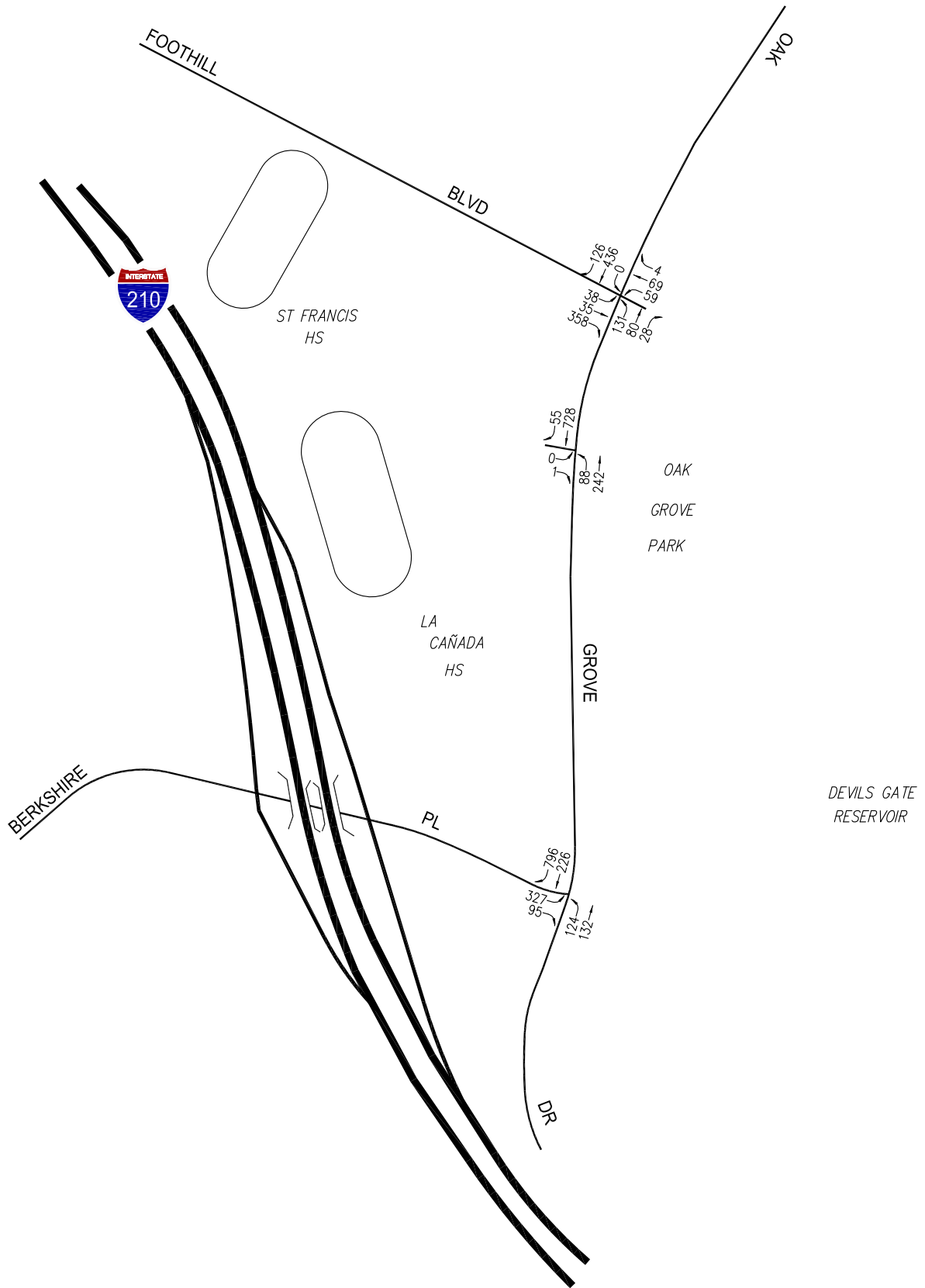
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FIGURE 5-2
EXISTING TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR

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LA CAÑADA HS POOL FACILITY & SOUTH OF CAMPUS IMPROVEMENT PROJECT

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FIGURE 5-3
EXISTING TRAFFIC VOLUMES
SCHOOL PEAK HOUR (3:00-4:00 PM)

LINSCOTT, LAW & GREENSPAN, engineers

LA CAÑADA HS POOL FACILITY & SOUTH OF CAMPUS IMPROVEMENT PROJECT

6.0 PROJECT CONSTRUCTION

Project construction would generate traffic from construction worker travel, the arrival and departure of trucks delivering construction materials to the site, and the removal of debris generated by on-site demolition and excavation/site grading activities. Both the number of construction workers and trucks would vary throughout the construction process.

As previously described in Section 2.2, construction is anticipated to start in May/June 2021, with a final build-out date of October 2022. Phase 1 would be completed in approximately 13 months and includes construction of the new pool and accompanying facilities. Phase 2 would be completed in approximately two months and includes the South parking lot and baseball field improvements. Phase 3 would be completed in approximately five months and includes the filling in of the old pool, construction of new basketball courts and adjacent plaza, and ADA improvements to existing North Gym locker rooms.

- Phase 1 (May 2021 – July 2022): Construction of new pool and accompanying facilities
- Phase 2 (June 2022 – July 2022): South parking lot and baseball field improvements
- Phase 3 (May 2022 – October 2022): Filling in of the old pool, construction of new basketball courts and adjacent plaza, and ADA improvements to the existing North Gym locker rooms

The first phase is expected to begin in May 2021 and be completed in July 2022. The second phase is expected to begin in June 2022 and be completed in July 2022. The third phase is expected to begin in May 2022 and be completed in July 2022. The construction consists of the following general activities within each phase: I) Demolition, II) Site Preparation, III) Grading, IV) Building Construction, V) Paving, and VI) Architectural Coating. LLG was provided with the base CalEEMod modeling data which is based on daily figures for each of the construction phases for each development phase, in order to derive the forecast of peak weekday AM, school PM and PM peak hour construction traffic trip generation.

Based on the review of the modeling information provided by the environmental team, it has been determined that the most intensive period of overall construction activity and construction traffic generation during the weekday AM and school PM peak hour is expected to occur during Phase 3 (i.e., when grading activities occur). It has been determined that the most intensive period of overall construction activity and construction traffic generation during the weekday PM peak hour is expected to occur during Phase 2, however, at a different point in construction (i.e., when the building construction activities are expected to occur). Other activities such as architectural coatings are expected to be less intensive in terms of overall construction traffic generation. At this time, it is not known if any temporary lane closures will be necessary throughout the course of the project construction. Any such lane closures are expected to occur outside of the weekday AM, school PM, and PM commute peak hours, however, so as to maintain roadway capacity when the street system is typically most heavily constrained.

6.1 Construction Assumptions

It is assumed that LCHS will remain in operation during the construction period, with portions of the property closed off with fencing surrounding the construction activity areas (including staging). Portions of the JV baseball field and the South Parking Lot would be used as construction staging areas. It is assumed that the equipment staging area and construction worker parking would occur on the project site. It is anticipated that delivery trucks/construction equipment would be brought onto the project site and be stored within the perimeter fence of the construction site, thus, no staging is expected to occur on the perimeter public streets. Flagmen, however, would be used to control traffic movement during the ingress or egress of trucks and heavy equipment to/from the construction site as discussed further in Section 9.0.

The City of LCF's Noise Ordinance² currently limits construction hours Monday through Friday to no earlier than 7:00 AM and no later than 6:00 PM (7:00 AM to 7:00 PM during Daylight Saving Time). Project construction is planned to occur from 7:00 AM to 4:00 PM. On Saturdays, construction hours are limited to no earlier than 9:00 AM and no later than 5:00 PM, while no Saturday construction is assumed in this analysis so as to provide a conservative analysis. No work will be conducted on Sundays or any recognized federal, state, or local holidays.

6.2 Construction Traffic Trip Generation

6.2.1 AM and School Peak Hour Trip Generation

It has been determined that the most intensive period of overall construction activity and construction traffic generation during the weekday AM and school PM peak hour is expected to occur during Phase 3 (i.e., when grading activities occur). Heavy construction equipment would be located on-site during construction and would not travel to and from the project site on a daily basis. However, as stated above, truck trips would be generated so as to remove material from the site as well as to deliver material to the site. Based on information provided by the applicant project team, during the peak construction activity, a maximum of 78 trucks per day are anticipated to be generated to/from the project site during peak construction hauling activities. Therefore, the anticipated peak truck trip generation would total 156 truck trips per day (78 inbound trucks and 78 outbound trucks). Assuming a hauling period of 9 hours per day (beginning at 7:00 AM, with the last exiting truck to occur prior to 4:00 PM), this corresponds to a total of roughly 9 haul trucks per hour. When a passenger car equivalency (PCE) factor of 2.5 is applied to the haul trucks, a total of 46 PCE-adjusted truck trips per hour is forecast (i.e., 23 PCE-adjusted inbound trips and 23 PCE-adjusted outbound trips).

6.2.2 PM Peak Hour Trip Generation

It has been determined that the most intensive period of overall construction activity and construction traffic generation during the weekday PM peak hour is expected to occur during Phase 2 (i.e., when the building construction activities are expected to occur). Based on information

² La Cañada Flintridge, California. Accessed September 27, 2019. La Cañada Flintridge Municipal Code. Chapter 5.02, Regulation of Community Noise. Available at: <http://qcode.us/codes/lacanadaflintridge/>

provided by the project applicant team, a total of 13 construction workers can be expected during the peak days and these workers are expected to be able to park their trucks/vehicles on-site. It is also anticipated that construction workers would primarily remain on-site throughout the day. Therefore, it is estimated that approximately 26 vehicle trips (13 inbound trips and 13 outbound trips) on a daily basis would be generated to/from the site by the construction workers during this peak phase. As noted above, construction workers are expected to arrive to the project site before 7:00 AM. Assuming the typical work day ends at 4:00 PM, twenty-five percent (25%) of the workers are assumed to leave the site between 4:00 PM and 4:30 PM, twenty-five percent (25%) between 4:30 PM and 5:00 PM, twenty-five percent (25%) between 5:00 PM and 5:30 PM and the remaining twenty-five percent (25%) after 5:30 PM (including supervisors). Thus, fifty percent (50%) of the work force (i.e., roughly 7 workers) has been assumed to overlap with the weekday commute PM peak hour (i.e., between 5:00 PM and 6:00 PM) in order to provide a conservative forecast of construction traffic generation.

It is anticipated that construction workers would primarily remain on-site throughout the day. Therefore, it is estimated that approximately 26 vehicle trips (13 inbound trips and 13 outbound trips) on a daily basis would be generated to/from the site by the construction workers during this peak building construction phase (13 workers x 2 trips [inbound and outbound] = 26 daily construction worker trips). With 50% of the workers conservatively assumed to overlap with the weekday PM peak hour, this would result in a maximum of 7 outbound construction worker vehicle trips (i.e., 13 x 50% = 7 outbound vehicle trips) during the 5:00 PM - 6:00 PM peak hour.

In general, it is anticipated that construction-related traffic would be largely freeway-oriented. Construction workers would likely arrive and depart via nearby on- and off-ramps serving the I-210 Freeway. The most commonly used freeway ramps would be nearest the project site, including the I-210 Freeway ramps at Berkshire Place and Foothill Boulevard. The construction work force would be generated from all parts of the greater Los Angeles region and would arrive from all directions (i.e., the I-210 Freeway and local streets).

In addition to construction worker vehicles, additional trips may be generated by miscellaneous trucks traveling to and from the project site. These trucks may consist of trucks delivering equipment and/or construction materials to the project site. In addition, smaller pick-up trucks or four-wheel drive vehicles used by construction supervisors and/or City inspectors are expected to be generated to and from the site. During the Phase 2 peak building construction phase, it is estimated that up to 5 vendor trucks per day (i.e., 5 inbound truck trips and 5 outbound truck trips) would be generated to and from the site based on the provided modeling. To conservatively estimate the equivalent number of vehicles associated with the trucks, a PCE factor of 2.0 was utilized based on standard traffic engineering practice. Therefore, assuming 5 daily trucks per day, it is estimated that the trucks would generate approximately 20 daily truck PCE vehicle trips (i.e., 5 trucks x 2.0 PCE = 10 inbound truck PCE trips and 10 outbound truck PCE trips). It is also estimated that no more than 4 PCE-adjusted vehicle trips (2 PCE-adjusted inbound trips and 2 PCE-adjusted outbound trips) would occur during each of the weekday AM, school PM and PM peak hours, assuming a nine hour construction workday. It is noted that vendor trips are not anticipated during Phase 3 under the

grading/excavation phase, thus these vendor trips are not considered in the analysis for the weekday AM and school PM peak hours. Taken together, the construction worker vehicles and miscellaneous trucks during the peak phase of building construction during Phase 2 are forecast to generate up to 11 weekday PM peak hour vehicle trips (i.e., 2 inbound trips and 9 outbound trips).

6.2.3 Peak Construction Traffic Generation Summary

During peak construction activities at the site, construction trucks are forecast to generate 156 truck trips per day (78 inbound trucks and 78 outbound trucks). Assuming a construction period of roughly 9 hours per day (beginning no earlier than 7:00 AM with the last truck exiting the site prior to 3:30 PM prior to the commuter PM peak hour) and a PCE factor of 2.5, this corresponds to a total of roughly 46 PCE-adjusted truck trips per hour is forecast (i.e., 23 PCE-adjusted inbound trips and 23 PCE-adjusted outbound trips). The number of construction workers during this period totals 13 workers, which is forecast to result in an increase of seven outbound worker vehicle trips during the weekday PM peak hour. The workers are expected to arrive to the site prior to the AM peak hour.

A full summary of the traffic generation associated with peak construction activities for the three (3) traffic analysis time periods is provided below:

- **AM Peak Hour** - The highest level of overall construction traffic impact during the AM peak hour is expected to occur between 8:00 and 9:00 AM, when excavation/haul/other truck trips are forecast to result in 23 PCE-adjusted inbound truck trips and 23 PCE-adjusted outbound truck trips. Construction workers arrive to the site prior to 7:00 AM and thus do not impact the AM peak hour. Thus, the total AM peak hour peak traffic generation during construction is forecast to total 46 PCE-adjusted vehicle trips (i.e., 23 PCE-adjusted inbound trips and 23 PCE-adjusted outbound trips) which coincide with hauling activities.
- **Commuter PM Peak Hour** - The highest level of overall construction traffic impact during the commuter PM peak hour is expected to occur generally between 4:00 and 5:00 PM, when the peak construction workforce is forecast to result in 7 outbound vehicle trips. It is also estimated that 4 PCE-adjusted vendor truck trips (2 PCE-adjusted inbound trips and 2 PCE-adjusted outbound trips). Thus, the total commuter PM peak hour traffic generation during construction is forecast to total 11 vehicle trips (2 inbound trips and 9 outbound trips).
- **School PM Peak Hour** – The highest level of overall construction traffic impact during the school PM peak hour is expected to occur generally between 2:30 and 3:30 PM, when excavation/haul truck trips are also expected to result in 23 PCE-adjusted inbound truck trips and 23 PCE-adjusted outbound truck trips. As stated above, the construction would occur from 7:00 AM to 4:00 PM and the peak construction workforce trips would occur after the School PM peak hour. Thus, the total construction traffic generation during the school PM peak hour is expected to total 46 PCE-adjusted vehicle trips (i.e., 23 PCE-adjusted inbound trips and 23 PCE-adjusted outbound trips).

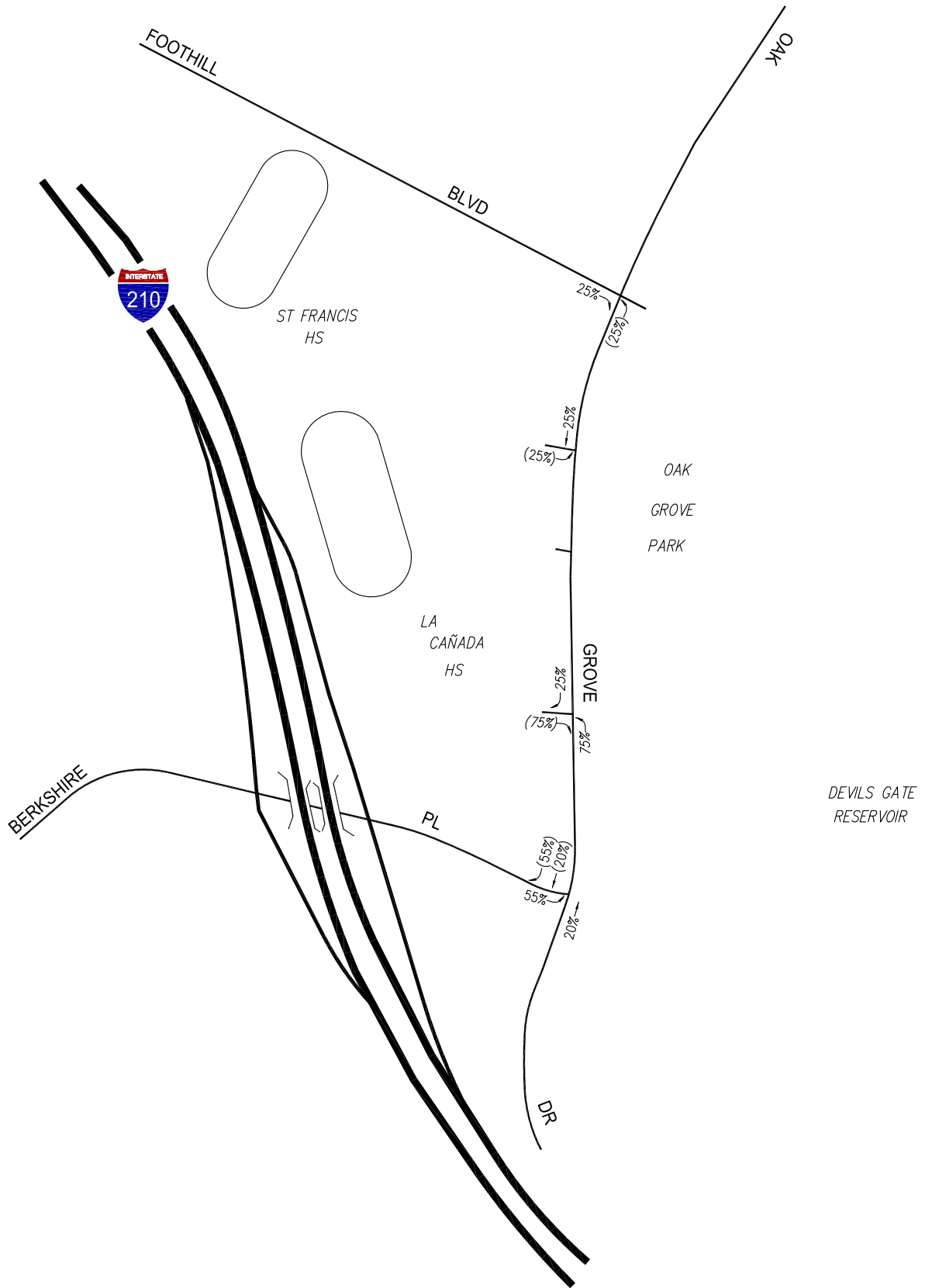
Over a 24-hour period, the construction of the proposed project is expected to generate 436 daily trip ends during the peak construction activities. A summary of the traffic generation associated with peak construction activities for the three (3) traffic analysis time periods is provided in **Table 6-1**. The project traffic volume distribution percentages during weekday AM, PM and school PM peak hours at the study intersections are illustrated in **Figure 6-1**.

**Table 6-1
CONSTRUCTION PEAK HOUR TRIP GENERATION [1]**

GENERATOR TYPE	DAILY	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]			SCHOOL PEAK HOUR VOLUMES [2]		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Workers [3]	26	--	--	--	0	7	7	--	--	--
Haul Truck Trips [4]	156	9	9	18	--	--	--	9	9	18
PCE-Adjusted Haul Truck Trips [5]	390	23	23	46	--	--	--	23	23	46
Miscellaneous Truck Trips [6]	10	--	--	--	1	1	2	--	--	--
PCE-Adjusted Misc. Truck Trips [7]	20	--	--	--	2	2	4	--	--	--
TOTAL PCE ADJUSTED TRIPS	436	23	23	46	2	9	11	23	23	46

- [1] Project construction information provided by First Carbon Solutions and LCUSD representatives.
- [2] Trips are one-way traffic movements, entering or leaving. The peak construction traffic for the AM peak hour occurs during the Grading activities for Phase 3 while for the PM peak hour the peak construction traffic occurs during the Building Construction activities for Phase 2.
- [3] A total of 13 workers is anticipated at the project site during the building construction phase for Phase 2. Workers are expected to arrive before the 7:00 AM shift start time (outside of the AM peak hour). During the PM peak hour, it is assumed that fifty percent (50%) of the workers will depart the site, therefore a total of 7 outbound trips are anticipated to occur (13 workers x 50% = 7 outbound trips).
- [4] Daily, AM and School peak hour haul truck trips were derived based on the following:
 Daily Truck Trips = 312 total trips/2 days = 156 round-trip truck trips per day
 Peak hour truck trips = 156 round-trips per day/9 hours = 18 round-trips per hour
- [5] A passenger car equivalency (PCE) factor of 2.5 was employed for analysis purposes. This accounts for the assumption that a haul truck has the same overall effect on intersection traffic operations as 2.5 passenger cars.
- [6] A total of 5 miscellaneous trucks per day is anticipated during Phase 2. Based on a nine-hour workday, one miscellaneous truck per hour is anticipated.
- [7] A PCE factor of 2.0 was employed for analysis purposes. This accounts for the assumption that a miscellaneous truck has the same overall effect on intersection traffic operations as 2.0 passenger cars.

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XX = INBOUND PERCENTAGE
(XX) = OUTBOUND PERCENTAGE

CONSTRUCTION PROJECT TRIP DISTRIBUTION

FIGURE 6-1

7.0 TRAFFIC IMPACT ANALYSIS METHODOLOGY

The study intersections were evaluated using the Intersection Capacity Utilization (ICU) method of analysis which determines Volume-to-Capacity (v/c) ratios and corresponding Levels of Service (LOS). The ICU method is intended for signalized intersection analysis and determines the v/c ratios on a critical lane basis (i.e., based on the individual v/c ratios for key conflicting traffic movements). The overall intersection v/c ratio is subsequently assigned a LOS value to describe intersection operations. Level of Service varies from LOS A (free flow) to LOS F (jammed condition). A description of the ICU method and corresponding Level of Service is provided in *Appendix B*.

The ICU calculations use a lane capacity of 1,600 vehicles per hour (vph) for left-turn, through, and right-turn lanes, and a dual turn-lane capacity of 2,880 vph. A clearance interval of 0.10 also is included in the ICU calculations.

7.1 Impact Criteria and Thresholds

The relative impact of the added traffic volumes expected to be generated during construction of the proposed project during the weekday AM, school and PM peak hours was evaluated based on analysis of existing operating conditions at the study intersections, without and with the project's peak construction traffic. The previously discussed capacity analysis procedures were utilized to evaluate the future v/c or *delay* relationships and service level characteristics at each study intersection.

The significance of the potential impacts of project construction-generated traffic at each study intersection was identified using guidelines provided by the City of La Canada Flintridge. According to the City of La Canada Flintridge's methodology for calculating the level of impact due to traffic generated by a proposed project, a significant transportation impact is determined based on the following:

- A significant impact occurs if traffic generated by the project causes an intersection to worsen from LOS D or better to LOS E or worse, or
- For an intersection operating at LOS E or LOS F conditions, the addition of project traffic increases the v/c by 0.02 or greater.

The City's method requires mitigation whenever the traffic generated by a project (i.e., in this case, by the peak construction activities associated with the proposed project) exceeds the criteria above.

7.2 Traffic Impact Analysis Scenarios

Traffic impacts at the study intersections were analyzed for the following conditions:

- (a) Existing Conditions.
- (b) Existing With Construction Traffic ("Project") Conditions.

- (c) Existing With Construction Traffic (“Project”) and Mitigation Conditions, if necessary.

The traffic volumes for each condition were added to the volumes in the prior condition to determine the change in capacity utilization at the study intersections.

8.0 TRAFFIC ANALYSIS

Summaries of the *v/c* ratios and LOS values for the study intersections evaluated during the AM, PM, and school peak hours are shown in *Table 8-1*. The ICU data worksheets for the analyzed intersections are contained in *Appendix B*.

8.1 Existing Conditions

As indicated in *Table 8-1*, all of the study intersections are presently operating at LOS D or better during the weekday AM, PM, and school PM peak hours under existing conditions. As previously mentioned, the existing traffic volumes at the study intersections during the weekday AM, PM, and school PM peak hours are displayed in *Figures 5-1, 5-2 and 5-3*, respectively.

8.2 Existing With Construction Traffic Conditions

In order to determine the operating conditions of the street system under existing with project construction activities, traffic expected to be generated during peak construction activities was added to the existing traffic conditions for the study intersections. As shown in *Table 8-1*, application of the City's significance criteria to the existing plus construction activity scenario indicates that none of the study intersections are expected to be significantly impacted by the peak construction activities of the proposed project during any of the analyzed time periods. Therefore, no formal, permanent traffic mitigation measures are required or recommended.

The existing with construction traffic volumes (existing traffic volumes plus construction traffic volumes) at the study intersections during the weekday AM, PM, and school PM peak hours are shown in *Figures 8-1, 8-2 and 8-3*, respectively.

**Table 8-1
SUMMARY OF VOLUME TO CAPACITY RATIOS
AND LEVELS OF SERVICE
WEEKDAY AM, PM AND SCHOOL PEAK HOURS**

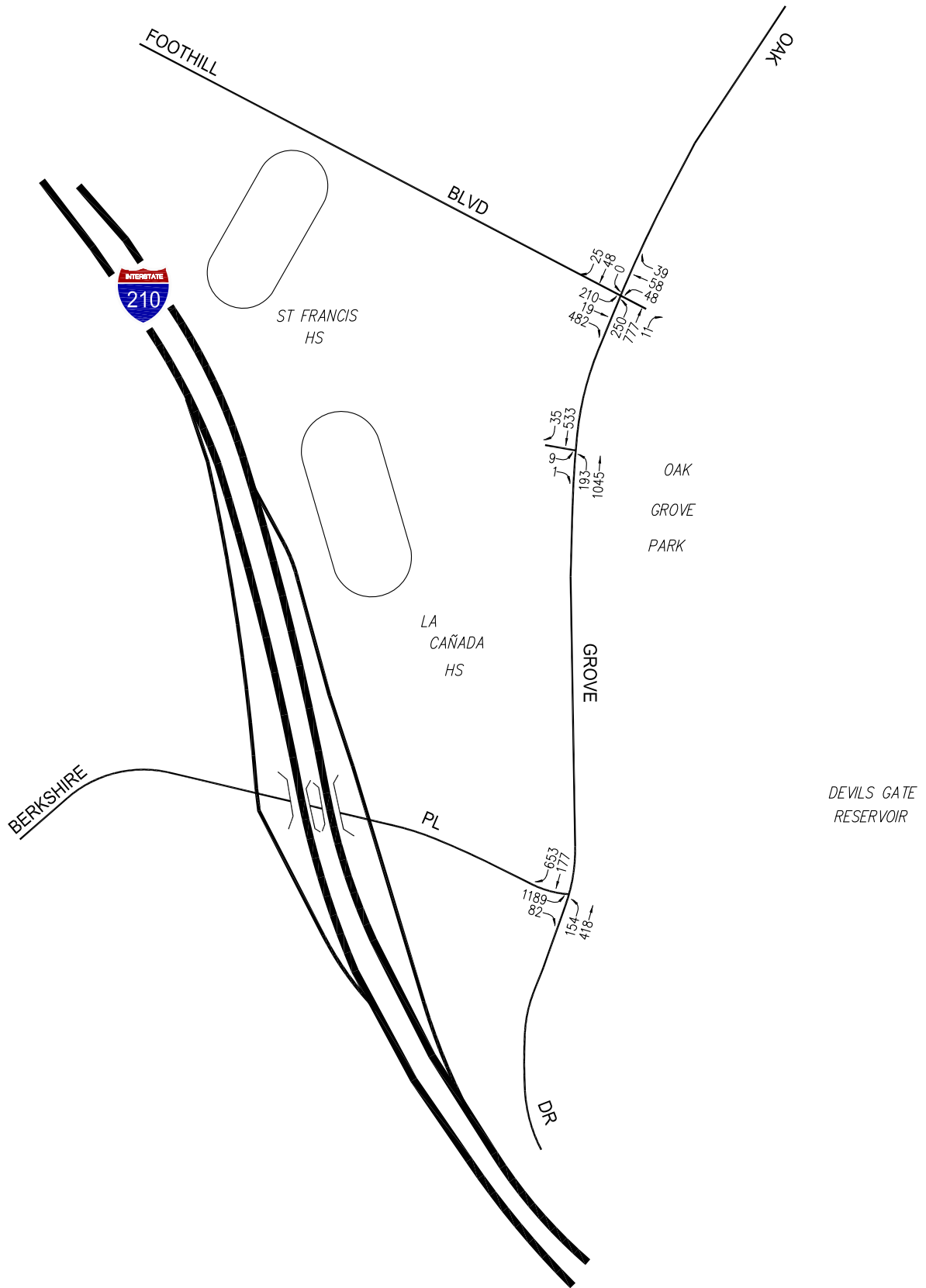
NO.	INTERSECTION	PEAK HOUR	EXISTING		EXISTING W/ PROJECT		CHANGE V/C or DELAY [(2)-(1)]	SIGNIF. IMPACT [b]
			V/C or DELAY	LOS [a]	V/C or Delay	LOS [a]		
1	Oak Grove Drive / Foothill Boulevard	AM	0.674	B	0.678	B	0.004	No
		PM	0.796	C	0.798	C	0.002	No
		School	0.618	B	0.626	B	0.008	No
2	Oak Grove Drive / La Canada High School	AM	0.429	A	0.433	A	0.004	No
		PM	0.480	A	0.482	A	0.002	No
		School	0.400	A	0.406	A	0.006	No
3	Oak Grove Drive / Berkshire Place	AM	0.843	D	0.853	D	0.010	No
		PM	0.614	B	0.616	B	0.002	No
		School	0.629	B	0.638	B	0.009	No

[a] Level of Service (LOS) is based on the reported ICU value for signalized intersections.

[b] According to the City of La Canada - Flintridge thresholds of significance, a transportation impact at a signalized intersection shall be deemed significant in accordance with the following:

- Addition of project trips causes the peak hour level of service of the intersection to change from LOS D or better to LOS E or F.
- Addition of project trips causes an increase in the volume/capacity ratio of 0.02 or greater at LOS E or F.

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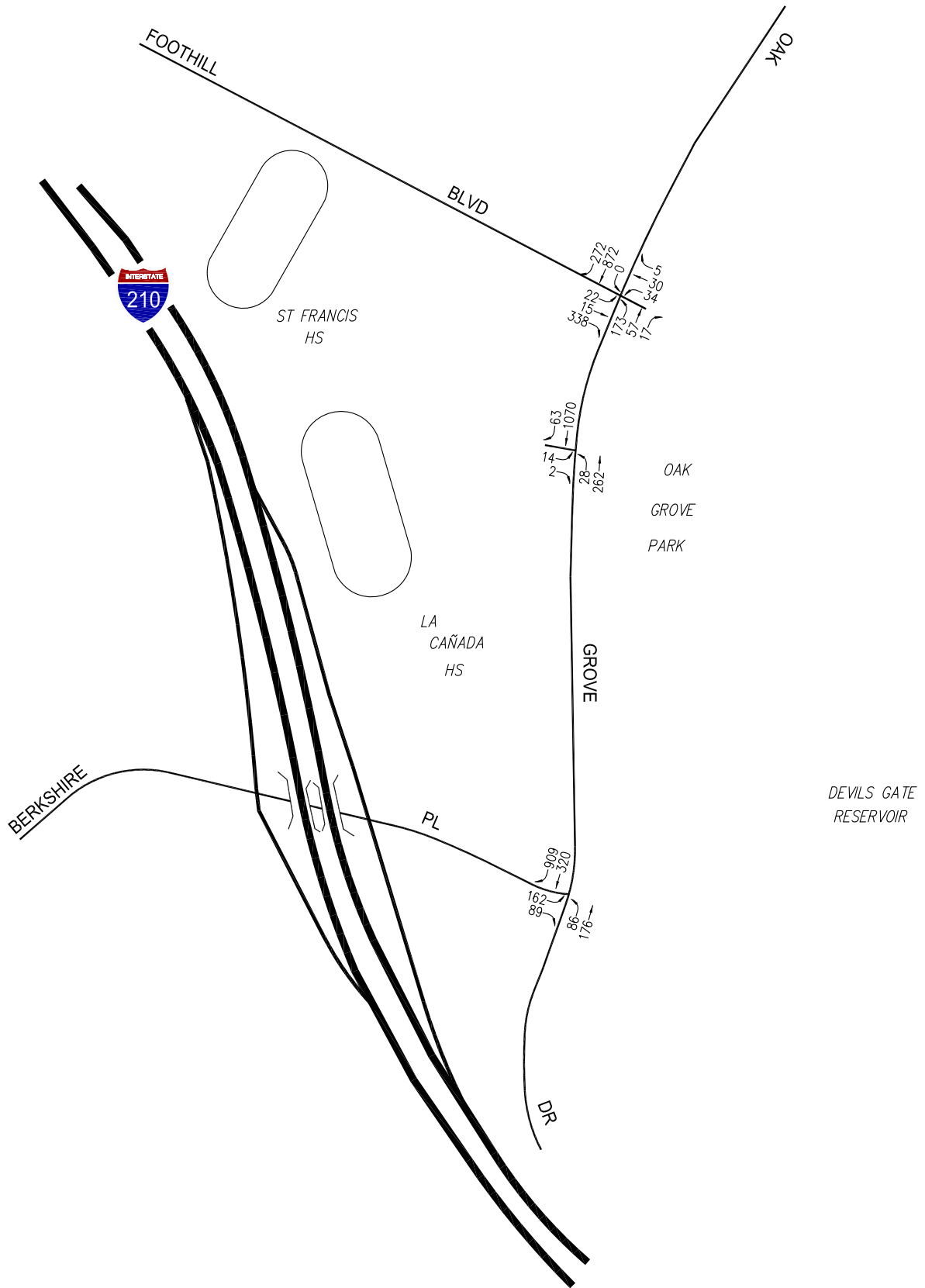
FIGURE 8-1 EXISTING WITH CONSTRUCTION PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

LINSCOTT, LAW & GREENSPAN, engineers

LA CAÑADA HS POOL FACILITY & SOUTH OF CAMPUS IMPROVEMENT PROJECT

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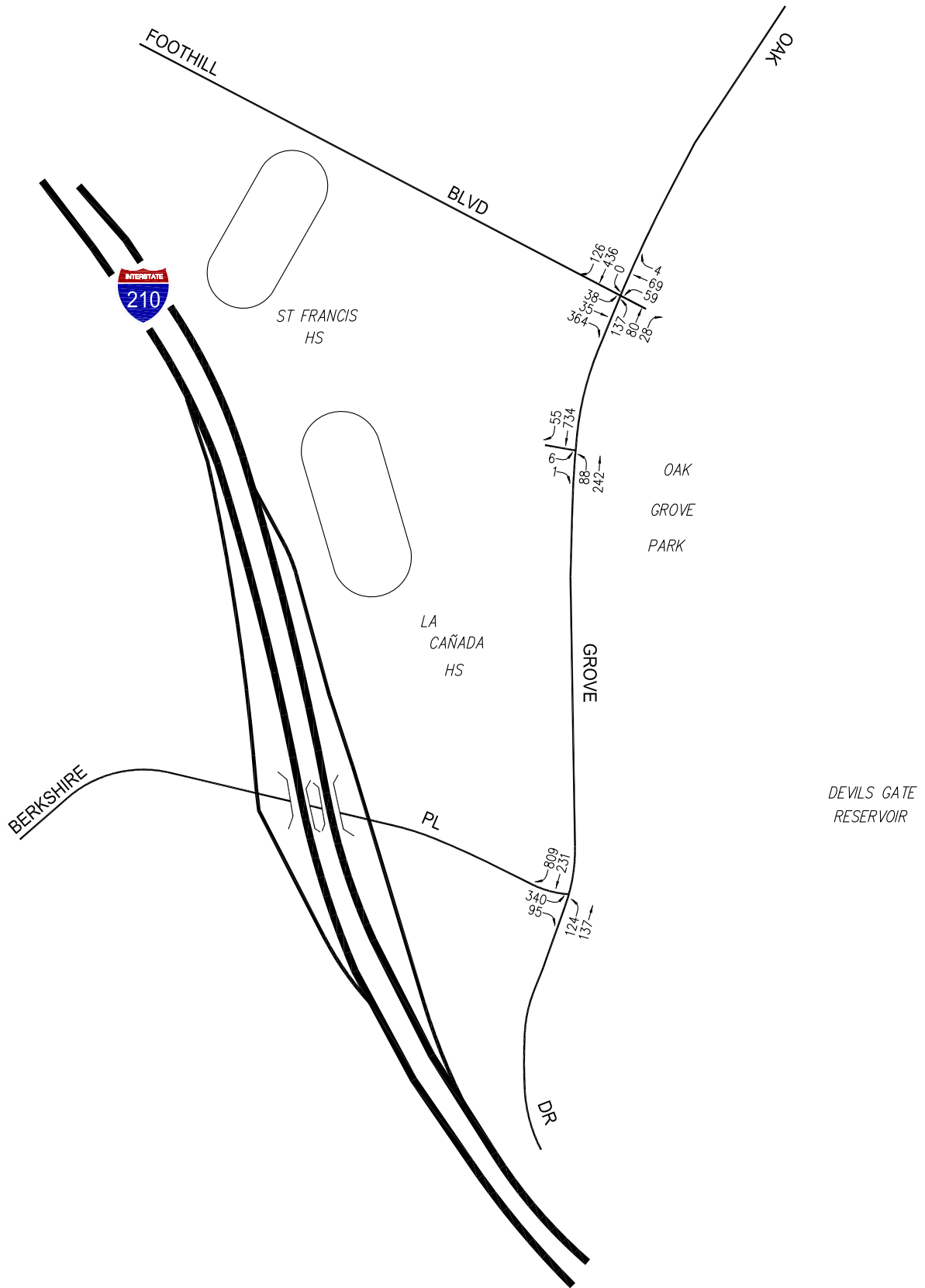
FIGURE 8-2 EXISTING WITH CONSTRUCTION PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

LINSCOTT, LAW & GREENSPAN, engineers

LA CAÑADA HS POOL FACILITY & SOUTH OF CAMPUS IMPROVEMENT PROJECT

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FIGURE 8-3
EXISTING WITH CONSTRUCTION
PROJECT TRAFFIC VOLUMES
SCHOOL PEAK HOUR

LINSCOTT, LAW & GREENSPAN, engineers

LA CAÑADA HS POOL FACILITY & SOUTH OF CAMPUS IMPROVEMENT PROJECT

9.0 CONSTRUCTION TRAFFIC MANAGEMENT PLAN

While traffic impacts from construction activities have been concluded to be less than significant at study intersections during the AM, PM and school PM peak hours, it is recommended that a Construction Staging and Traffic Management Plan (CSTMP) be prepared by the Applicant such that details with respect to hours of construction, haul route/s, potential lane closures, contact person for construction questions, construction worker parking, etc. can be reviewed and approved. If any formal travel lane closures are required, a detailed traffic control (detour) striping plan may also need to be provided. Additionally, any impacts would be short-term in nature and could be further reduced with the implementation of the following project design features and traffic controls:

- Provide advanced notification to adjacent property owners and occupants, as well as nearby schools, of upcoming construction activities, including durations and daily hours of construction, to the extent feasible. Provide a posted sign on the site with hotline information for adjacent property owners to call and address specific issues or activities that may potentially cause problems at on-and-off-site locations;
- Coordinate with the City and emergency service providers to ensure adequate access is maintained to the site and neighbors;
- Coordinate with public transit agencies to provide advanced notifications of any temporary stop relocations and durations and follow all safety required procedures required by the concerned agency, if applicable;
- Limit any potential roadway lane closure/s to off-peak travel periods, to the extent feasible;
- Provide traffic control for any potential roadway lane closure, detour, or other disruption to traffic circulation;
- To the extent feasible, store any construction equipment within the perimeter fence of the construction site. Should temporary storage of a large piece of equipment be necessary outside of the perimeter fence (e.g., within a designated area) and within the public right-of-way, that area must comply with City-approved detour/traffic control plans;
- Provide safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers;
- Identify the routes that construction vehicles would utilize for the delivery of construction materials (i.e., lumber, tiles, piping, windows, etc.), to access the site, traffic controls and detours, and proposed construction phasing plan for the project;
- Require the Contractor to keep all haul routes adjacent to the site clean and free of debris including, but not limited to, gravel and dirt as a result of its operations;

- Schedule delivery of construction materials and hauling/transport of oversize loads to non-peak travel periods, to the extent possible. No hauling or transport shall be allowed during nighttime hours, Sundays, or federal holidays unless required by the California Department of Transportation (Caltrans) or the City;
- Obtain a Caltrans transportation permit for use of oversized transport vehicles on Caltrans facilities, if needed;
- Haul trucks entering or exiting public streets shall at all times yield to public traffic;
- Construction-related parking and staging of vehicles shall occur on-site to the extent possible;
- Coordinate deliveries to reduce the potential of trucks waiting to unload for protracted periods of times;
- Prohibit parking by construction workers on adjacent streets and direct construction workers to available/designated parking areas within the site; and
- The CSTMP shall summarize the above items. If any formal travel lane closures are required, a detailed traffic control (detour) striping plan may also need to be provided and shall meet the standards established in the current *California Manual on Uniform Traffic Control Devices (MUTCD)* as well as City of La Cañada Flintridge requirements. Further, the traffic control (detour) striping plan would identify all traffic control measures, signs, and delineators to be implemented by the construction contractor through the duration of said lane closure.

The City of La Cañada Flintridge will review and be responsible for approval of the CSTMP as well as a traffic control (detour) striping plan, if required. Based on the above, construction-related transportation impacts due to the construction of the project would be less than significant.

10.0 CONCLUSIONS

- **Project Description** – The proposed project at LCHS would demolish the existing basketball courts to construct a 40-meter pool facility with a 1,218 square-foot pool equipment area, 533 square-foot pool storage area, 264 square-foot girls restroom, 264 square-foot boys restroom, two (2) 230 square-foot locker rooms, a 183 square-foot concrete storage area, a 386 square-foot office, and 19 outdoor showers. The existing on-campus baseball field would be shifted west in order to expand the student parking lot, and the existing 25-meter pool and 750 square-foot pool equipment building would be demolished in order to construct new basketball courts with associated steps/seating and provide extended fire truck access to this area of campus.
- **Study Scope** - Three (3) intersections were selected for analysis in order to determine potential impacts related to the project construction activities.
- **Construction Trip Generation** - The construction of the proposed project is expected to generate 46 PCE-adjusted vehicle trips (23 PCE-adjusted inbound trips and 23 PCE-adjusted outbound trips) during the AM and school PM peak hour, 11 PCE-adjusted vehicle trips (2 PCE-adjusted inbound trips and 9 PCE-adjusted outbound trips) during the PM peak hour. Over a 24-hour period, the construction of the proposed project is expected to generate 436 daily trip ends during the peak construction activities.
- **Transportation Impact Assessment** – It is concluded that the construction of the project is not expected to result in significant traffic impacts at any of the study intersections. Incremental, but less than significant impacts are noted at the study intersections. Therefore, no formal, permanent traffic mitigation measures are required or recommended.

APPENDIX A
TRAFFIC COUNT DATA

CITY TRAFFIC COUNTERS
WWW.CTCOUNTERS.COM

File Name : OakGrove_Foothill
 Site Code : 00000000
 Start Date : 11/13/2019
 Page No : 1

Groups Printed- Vehicles

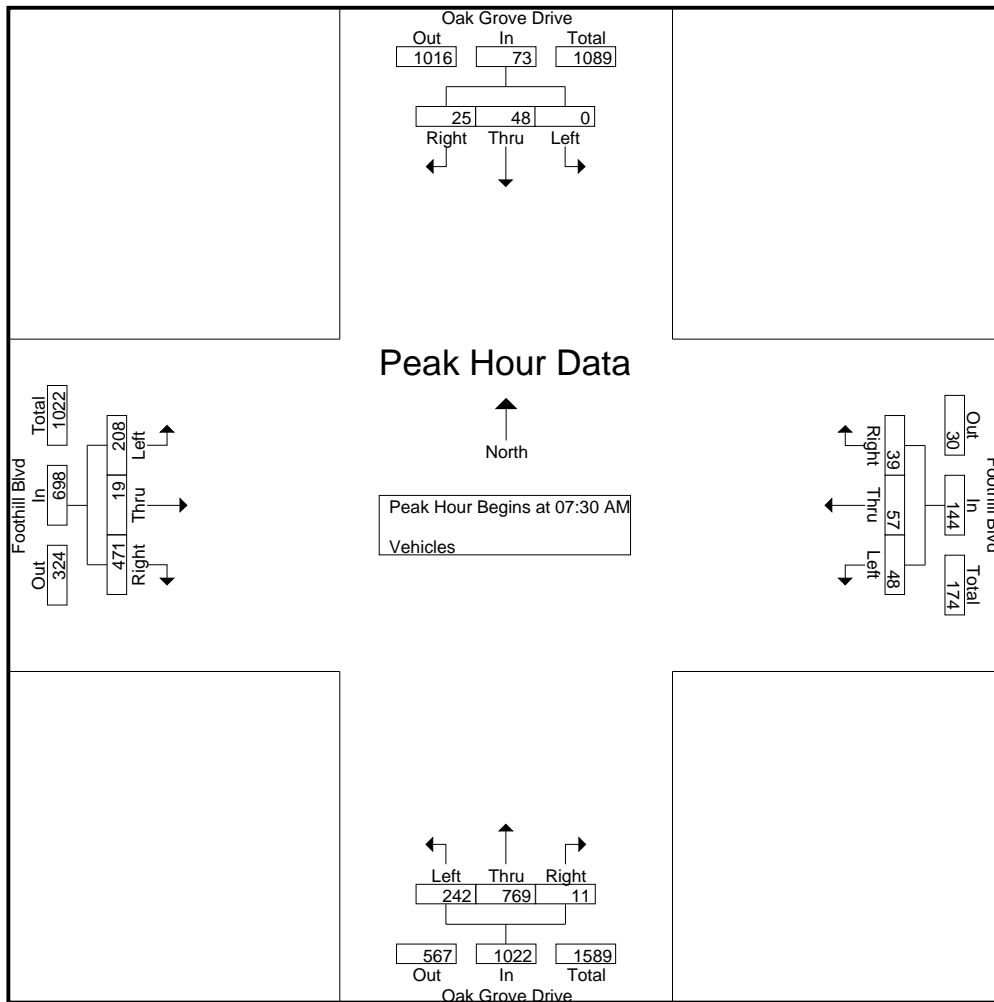
Start Time	Oak Grove Drive Southbound			Foothill Blvd Westbound			Oak Grove Drive Northbound			Foothill Blvd Eastbound			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	10	4	2	3	1	17	175	4	41	4	29	290
07:15 AM	1	10	7	2	2	0	39	234	1	48	2	65	411
07:30 AM	0	13	4	1	6	4	50	190	1	41	3	59	372
07:45 AM	0	10	7	2	3	3	106	202	0	32	3	69	437
Total	1	43	22	7	14	8	212	801	6	162	12	222	1510
08:00 AM	0	11	10	18	11	10	51	202	4	69	10	148	544
08:15 AM	0	14	4	27	37	22	35	175	6	66	3	195	584
08:30 AM	0	16	6	5	4	1	28	184	3	44	0	43	334
08:45 AM	1	16	8	6	1	3	27	155	1	31	4	35	288
Total	1	57	28	56	53	36	141	716	14	210	17	421	1750
02:30 PM	0	75	23	4	3	0	41	23	4	9	7	40	229
02:45 PM	2	45	19	6	1	1	28	28	4	7	6	86	233
Total	2	120	42	10	4	1	69	51	8	16	13	126	462
03:00 PM	1	80	19	6	3	1	33	13	8	20	13	70	267
03:15 PM	1	68	30	36	49	2	38	15	7	7	11	119	383
03:30 PM	0	150	41	13	15	0	28	26	6	6	7	82	374
03:45 PM	0	132	35	3	1	1	31	25	7	5	4	83	327
Total	2	430	125	58	68	4	130	79	28	38	35	354	1351
04:00 PM	0	183	47	8	4	0	37	15	4	2	5	51	356
04:15 PM	0	177	44	8	4	1	32	15	6	5	4	64	360
04:30 PM	0	222	56	4	9	0	27	17	7	3	5	74	424
04:45 PM	0	197	67	3	2	3	47	15	3	7	6	74	424
Total	0	779	214	23	19	4	143	62	20	17	20	263	1564
05:00 PM	0	219	63	19	8	0	45	10	4	8	2	98	476
05:15 PM	0	225	83	8	11	2	50	14	3	4	2	88	490
05:30 PM	0	183	65	5	11	1	62	19	4	2	2	58	412
05:45 PM	0	167	27	4	1	0	34	25	0	6	0	50	314
Total	0	794	238	36	31	3	191	68	11	20	6	294	1692
Grand Total	6	2223	669	190	189	56	886	1777	87	463	103	1680	8329
Apprch %	0.2	76.7	23.1	43.7	43.4	12.9	32.2	64.6	3.2	20.6	4.6	74.8	
Total %	0.1	26.7	8	2.3	2.3	0.7	10.6	21.3	1	5.6	1.2	20.2	

CITY TRAFFIC COUNTERS
WWW.CTCOUNTERS.COM

File Name : OakGrove_Foothill
 Site Code : 00000000
 Start Date : 11/13/2019
 Page No : 2

Start Time	Oak Grove Drive Southbound				Foothill Blvd Westbound				Oak Grove Drive Northbound				Foothill Blvd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	13	4	17	1	6	4	11	50	190	1	241	41	3	59	103	372
07:45 AM	0	10	7	17	2	3	3	8	106	202	0	308	32	3	69	104	437
08:00 AM	0	11	10	21	18	11	10	39	51	202	4	257	69	10	148	227	544
08:15 AM	0	14	4	18	27	37	22	86	35	175	6	216	66	3	195	264	584
Total Volume	0	48	25	73	48	57	39	144	242	769	11	1022	208	19	471	698	1937
% App. Total	0	65.8	34.2		33.3	39.6	27.1		23.7	75.2	1.1		29.8	2.7	67.5		
PHF	.000	.857	.625	.869	.444	.385	.443	.419	.571	.952	.458	.830	.754	.475	.604	.661	.829

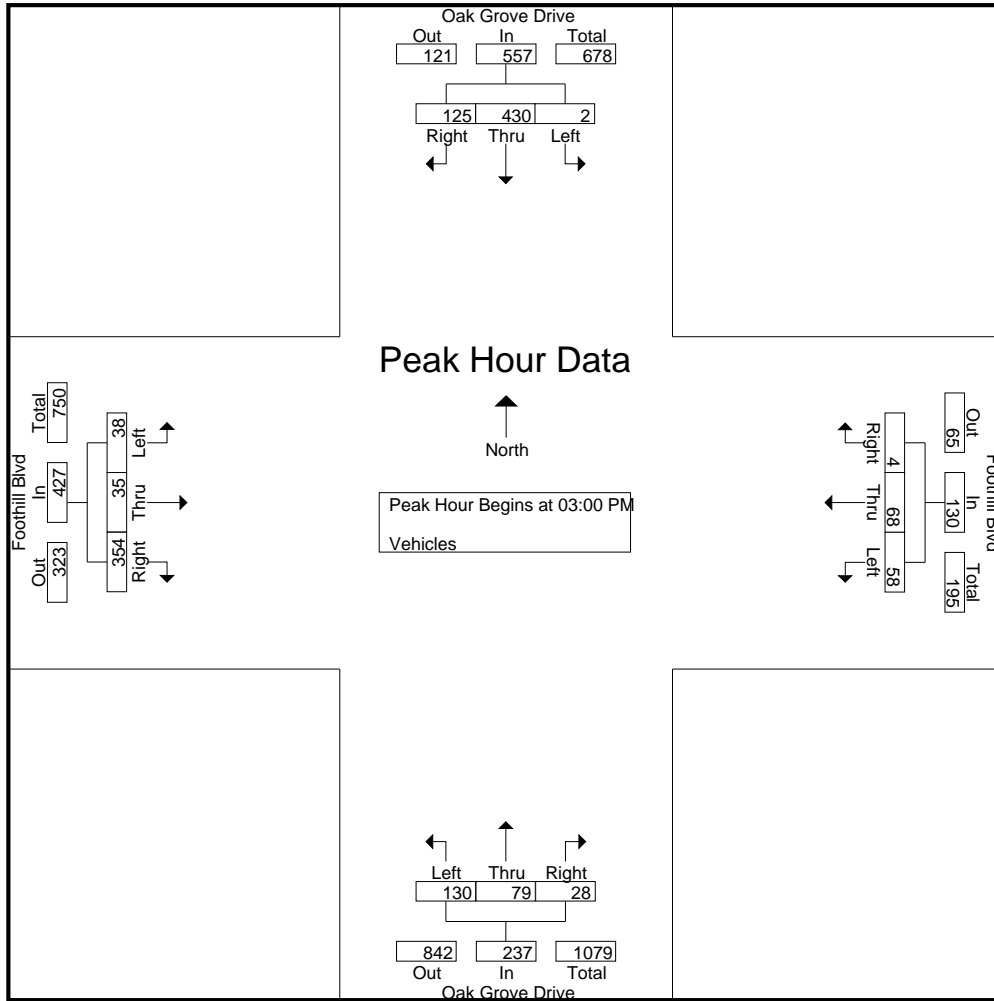
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM



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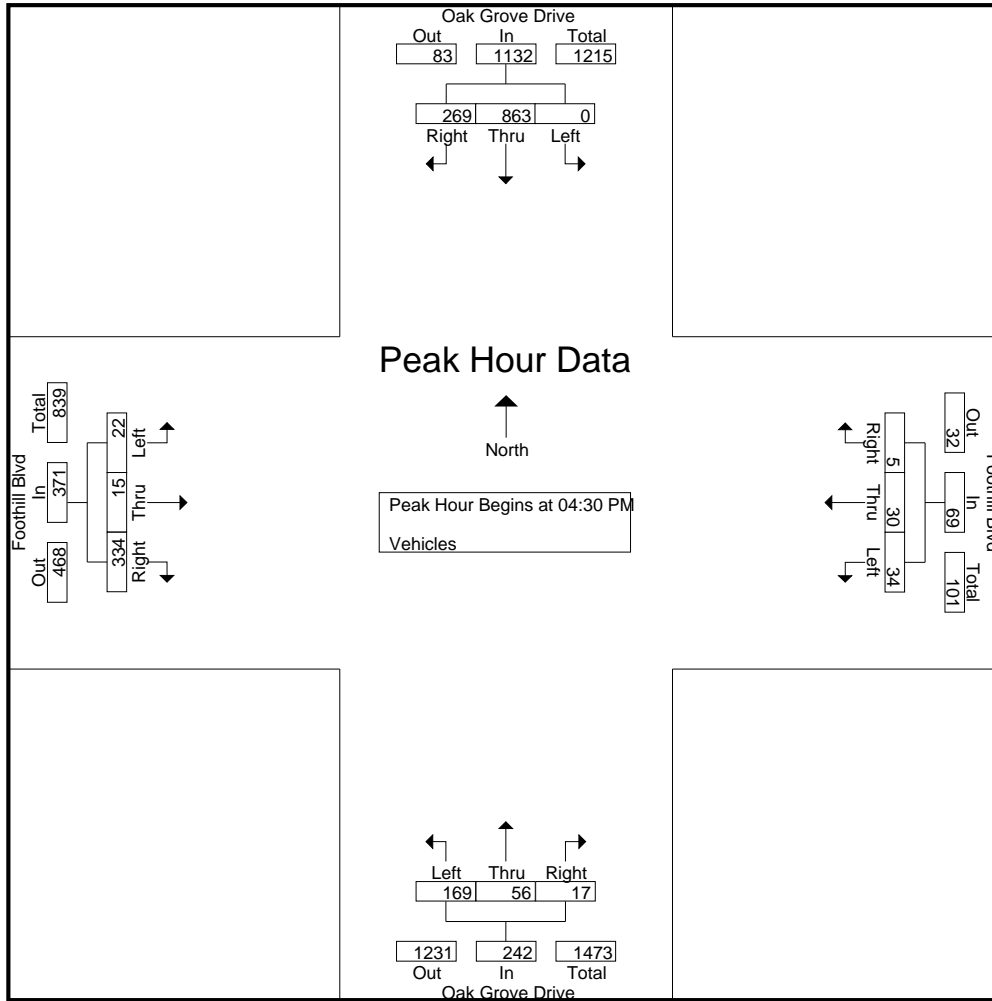
Start Time	Oak Grove Drive Southbound				Foothill Blvd Westbound				Oak Grove Drive Northbound				Foothill Blvd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:30 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	1	80	19	100	6	3	1	10	33	13	8	54	20	13	70	103	267
03:15 PM	1	68	30	99	36	49	2	87	38	15	7	60	7	11	119	137	383
03:30 PM	0	150	41	191	13	15	0	28	28	26	6	60	6	7	82	95	374
03:45 PM	0	132	35	167	3	1	1	5	31	25	7	63	5	4	83	92	327
Total Volume	2	430	125	557	58	68	4	130	130	79	28	237	38	35	354	427	1351
% App. Total	0.4	77.2	22.4		44.6	52.3	3.1		54.9	33.3	11.8		8.9	8.2	82.9		
PHF	.500	.717	.762	.729	.403	.347	.500	.374	.855	.760	.875	.940	.475	.673	.744	.779	.882



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Start Time	Oak Grove Drive Southbound				Foothill Blvd Westbound				Oak Grove Drive Northbound				Foothill Blvd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	222	56	278	4	9	0	13	27	17	7	51	3	5	74	82	424
04:45 PM	0	197	67	264	3	2	3	8	47	15	3	65	7	6	74	87	424
05:00 PM	0	219	63	282	19	8	0	27	45	10	4	59	8	2	98	108	476
05:15 PM	0	225	83	308	8	11	2	21	50	14	3	67	4	2	88	94	490
Total Volume	0	863	269	1132	34	30	5	69	169	56	17	242	22	15	334	371	1814
% App. Total	0	76.2	23.8		49.3	43.5	7.2		69.8	23.1	7		5.9	4	90		
PHF	.000	.959	.810	.919	.447	.682	.417	.639	.845	.824	.607	.903	.688	.625	.852	.859	.926



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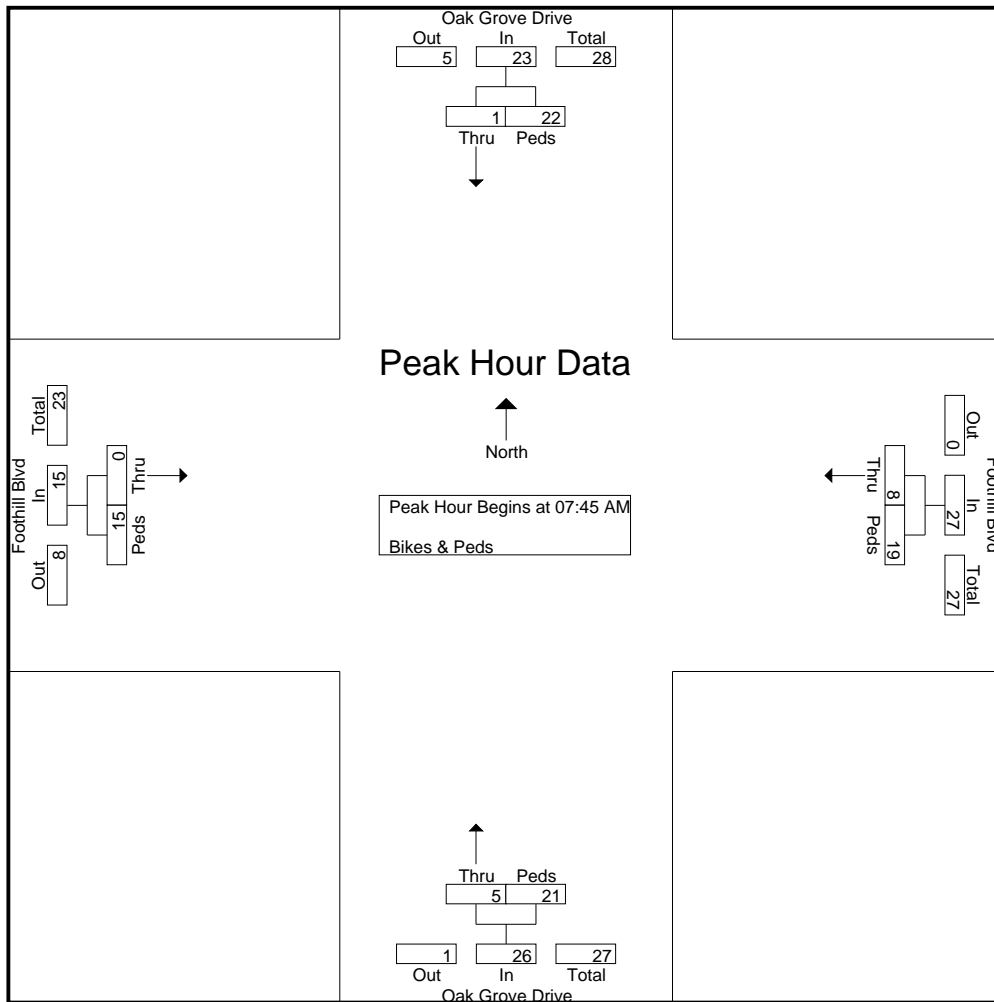
Groups Printed- Bikes & Peds

Start Time	Oak Grove Drive Southbound		Foothill Blvd Westbound		Oak Grove Drive Northbound		Foothill Blvd Eastbound		Int. Total
	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	
07:00 AM	0	2	0	0	0	0	0	0	2
07:15 AM	0	5	2	4	0	3	0	1	15
07:30 AM	0	0	0	2	0	2	0	0	4
07:45 AM	0	2	1	2	2	1	0	1	9
Total	0	9	3	8	2	6	0	2	30
08:00 AM	0	12	2	10	0	15	0	11	50
08:15 AM	1	5	3	5	1	4	0	3	22
08:30 AM	0	3	2	2	2	1	0	0	10
08:45 AM	0	1	0	0	0	1	0	0	2
Total	1	21	7	17	3	21	0	14	84
02:30 PM	0	1	0	4	0	4	0	0	9
02:45 PM	0	0	0	1	0	1	0	5	7
Total	0	1	0	5	0	5	0	5	16
03:00 PM	0	1	0	0	0	4	0	11	16
03:15 PM	0	11	0	6	0	5	1	58	81
03:30 PM	4	2	0	0	0	0	1	11	18
03:45 PM	0	0	0	0	0	1	1	2	4
Total	4	14	0	6	0	10	3	82	119
04:00 PM	2	0	0	0	0	2	0	5	9
04:15 PM	0	2	0	0	0	0	0	2	4
04:30 PM	2	0	1	0	0	2	1	0	6
04:45 PM	0	6	0	0	0	0	2	5	13
Total	4	8	1	0	0	4	3	12	32
05:00 PM	0	2	0	0	0	0	1	2	5
05:15 PM	0	0	0	1	0	1	3	2	7
05:30 PM	0	0	0	0	0	0	2	0	2
05:45 PM	0	2	1	0	0	1	0	0	4
Total	0	4	1	1	0	2	6	4	18
Grand Total	9	57	12	37	5	48	12	119	299
Apprch %	13.6	86.4	24.5	75.5	9.4	90.6	9.2	90.8	
Total %	3	19.1	4	12.4	1.7	16.1	4	39.8	

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Start Time	Oak Grove Drive Southbound			Foothill Blvd Westbound			Oak Grove Drive Northbound			Foothill Blvd Eastbound			Int. Total
	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:45 AM													
07:45 AM	0	2	2	1	2	3	2	1	3	0	1	1	9
08:00 AM	0	12	12	2	10	12	0	15	15	0	11	11	50
08:15 AM	1	5	6	3	5	8	1	4	5	0	3	3	22
08:30 AM	0	3	3	2	2	4	2	1	3	0	0	0	10
Total Volume	1	22	23	8	19	27	5	21	26	0	15	15	91
% App. Total	4.3	95.7		29.6	70.4		19.2	80.8		0	100		
PHF	.250	.458	.479	.667	.475	.563	.625	.350	.433	.000	.341	.341	.455

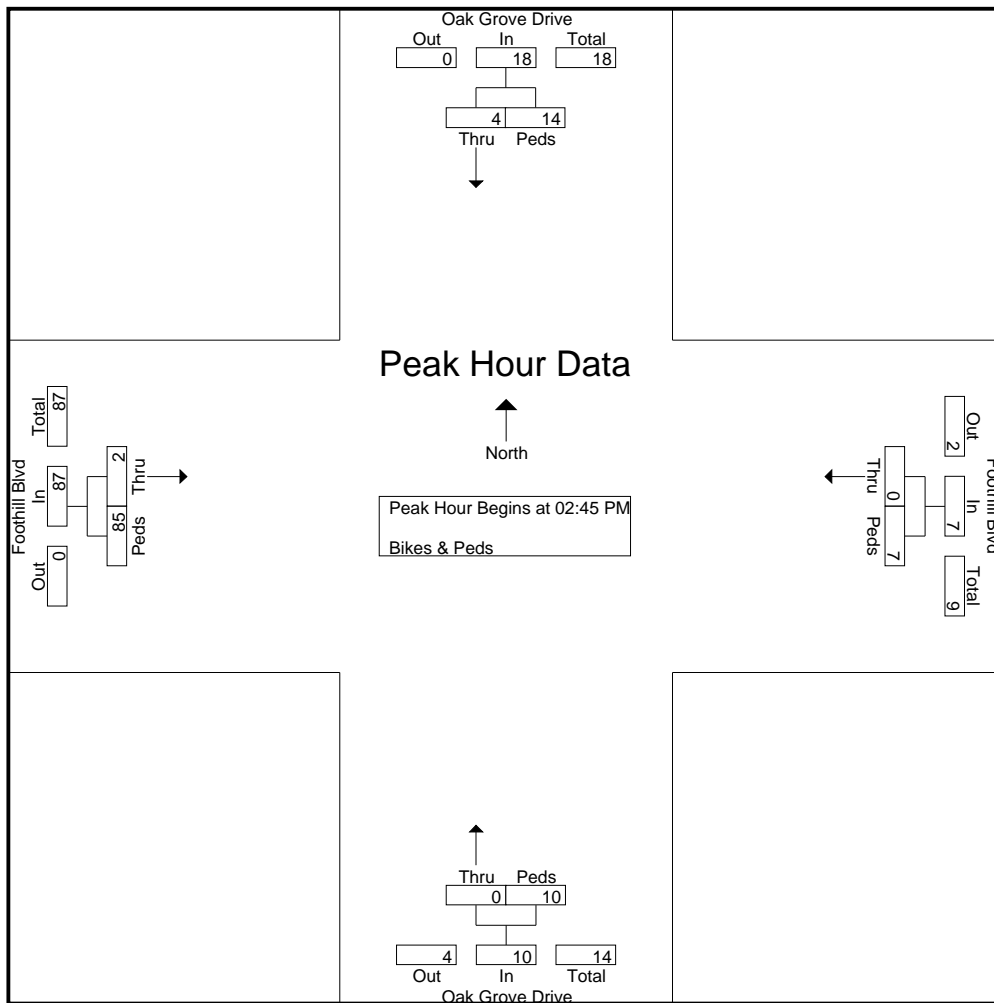


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Start Time	Oak Grove Drive Southbound			Foothill Blvd Westbound			Oak Grove Drive Northbound			Foothill Blvd Eastbound			Int. Total
	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	
02:45 PM	0	0	0	0	1	1	0	1	1	0	5	5	7
03:00 PM	0	1	1	0	0	0	0	4	4	0	11	11	16
03:15 PM	0	11	11	0	6	6	0	5	5	1	58	59	81
03:30 PM	4	2	6	0	0	0	0	0	0	1	11	12	18
Total Volume	4	14	18	0	7	7	0	10	10	2	85	87	122
% App. Total	22.2	77.8		0	100		0	100		2.3	97.7		
PHF	.250	.318	.409	.000	.292	.292	.000	.500	.500	.500	.366	.369	.377

Peak Hour Analysis From 02:30 PM to 03:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 02:45 PM

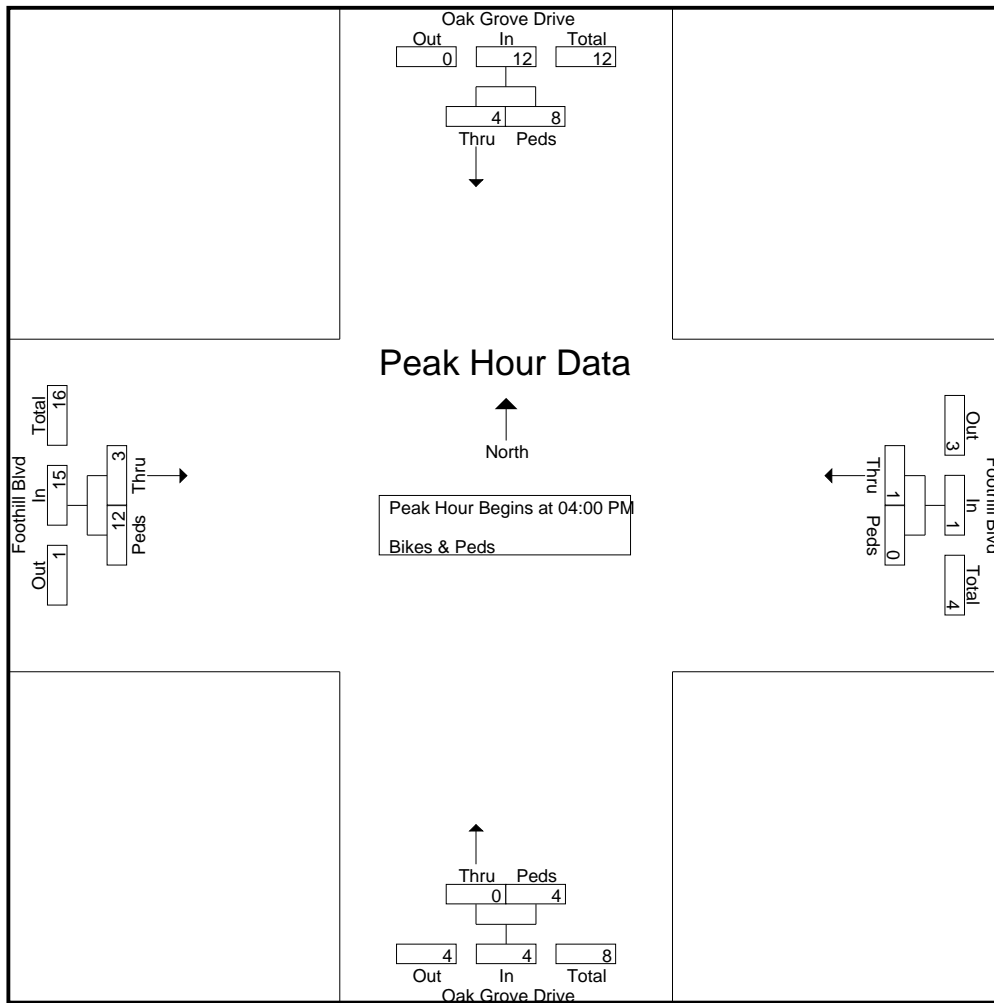


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Start Time	Oak Grove Drive Southbound			Foothill Blvd Westbound			Oak Grove Drive Northbound			Foothill Blvd Eastbound			Int. Total
	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	
04:00 PM	2	0	2	0	0	0	0	2	2	0	5	5	9
04:15 PM	0	2	2	0	0	0	0	0	0	0	2	2	4
04:30 PM	2	0	2	1	0	1	0	2	2	1	0	1	6
04:45 PM	0	6	6	0	0	0	0	0	0	2	5	7	13
Total Volume	4	8	12	1	0	1	0	4	4	3	12	15	32
% App. Total	33.3	66.7		100	0		0	100		20	80		
PHF	.500	.333	.500	.250	.000	.250	.000	.500	.500	.375	.600	.536	.615

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM



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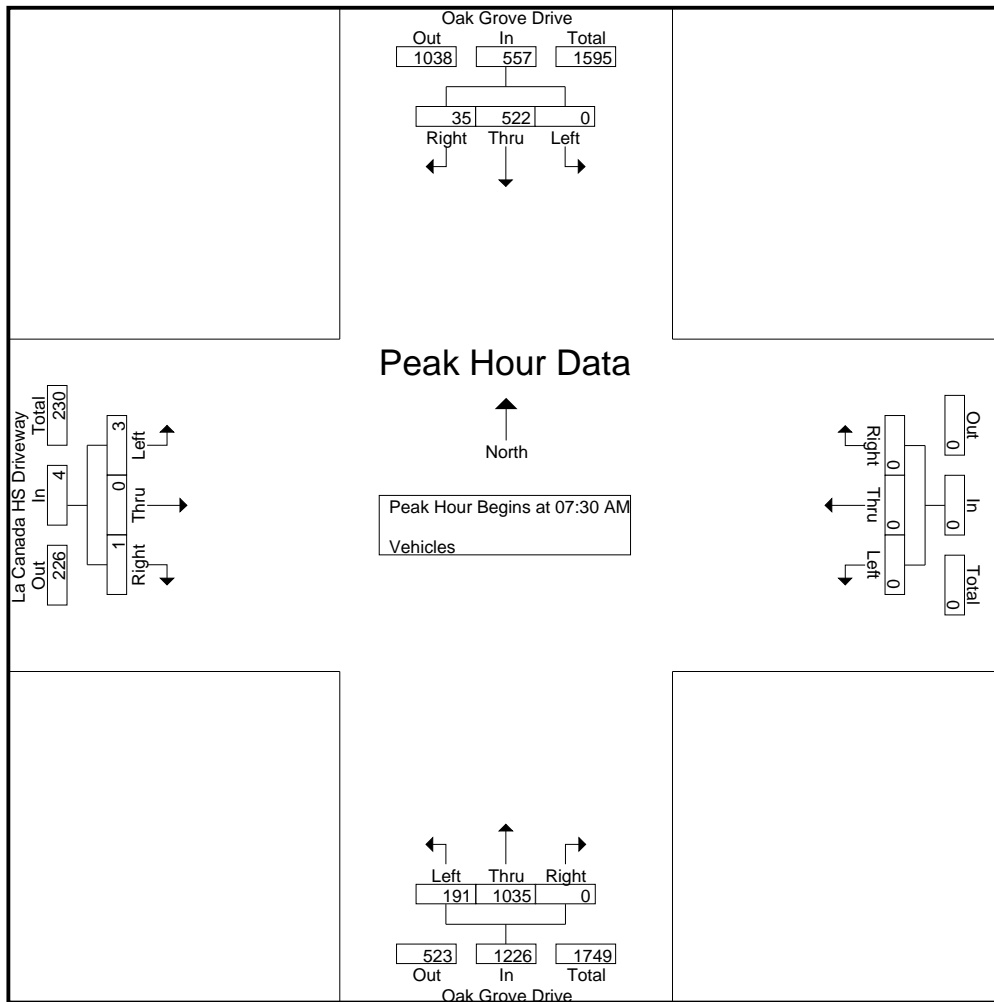
Groups Printed- Vehicles

Start Time	Oak Grove Drive Southbound			Westbound			Oak Grove Drive Northbound			La Canada HS Driveway Eastbound			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	24	14	0	0	0	7	191	0	1	0	0	237
07:15 AM	0	42	35	0	0	0	16	265	0	11	0	1	370
07:30 AM	0	61	14	0	0	0	19	238	0	1	0	1	334
07:45 AM	0	81	6	0	0	0	18	317	0	1	0	0	423
Total	0	208	69	0	0	0	60	1011	0	14	0	2	1364
08:00 AM	0	153	11	0	0	0	55	254	0	1	0	0	474
08:15 AM	0	227	4	0	0	0	99	226	0	0	0	0	556
08:30 AM	0	60	7	0	0	0	11	201	0	2	0	1	282
08:45 AM	0	55	1	0	0	0	2	185	0	0	0	1	244
Total	0	495	23	0	0	0	167	866	0	3	0	2	1556
02:30 PM	0	113	7	0	0	0	3	63	0	0	0	1	187
02:45 PM	0	113	12	0	0	0	7	54	0	1	0	0	187
Total	0	226	19	0	0	0	10	117	0	1	0	1	374
03:00 PM	0	104	9	0	0	0	13	62	0	0	0	1	189
03:15 PM	0	196	14	0	0	0	34	54	0	0	0	0	298
03:30 PM	0	225	17	0	0	0	23	63	0	0	0	0	328
03:45 PM	0	196	14	0	0	0	17	61	0	0	0	0	288
Total	0	721	54	0	0	0	87	240	0	0	0	1	1103
04:00 PM	0	215	9	0	0	0	7	54	0	3	0	0	288
04:15 PM	0	216	18	0	0	0	6	50	0	3	0	0	293
04:30 PM	0	249	14	0	0	0	11	44	0	4	0	1	323
04:45 PM	0	238	17	0	0	0	11	62	0	3	0	0	331
Total	0	918	58	0	0	0	35	210	0	13	0	1	1235
05:00 PM	0	293	22	0	0	0	5	56	0	5	0	2	383
05:15 PM	0	282	14	0	0	0	4	65	0	1	0	0	366
05:30 PM	0	245	9	0	0	0	8	76	0	3	0	0	341
05:45 PM	0	225	10	0	0	0	3	65	0	6	0	1	310
Total	0	1045	55	0	0	0	20	262	0	15	0	3	1400
Grand Total	0	3613	278	0	0	0	379	2706	0	46	0	10	7032
Apprch %	0	92.9	7.1	0	0	0	12.3	87.7	0	82.1	0	17.9	
Total %	0	51.4	4	0	0	0	5.4	38.5	0	0.7	0	0.1	

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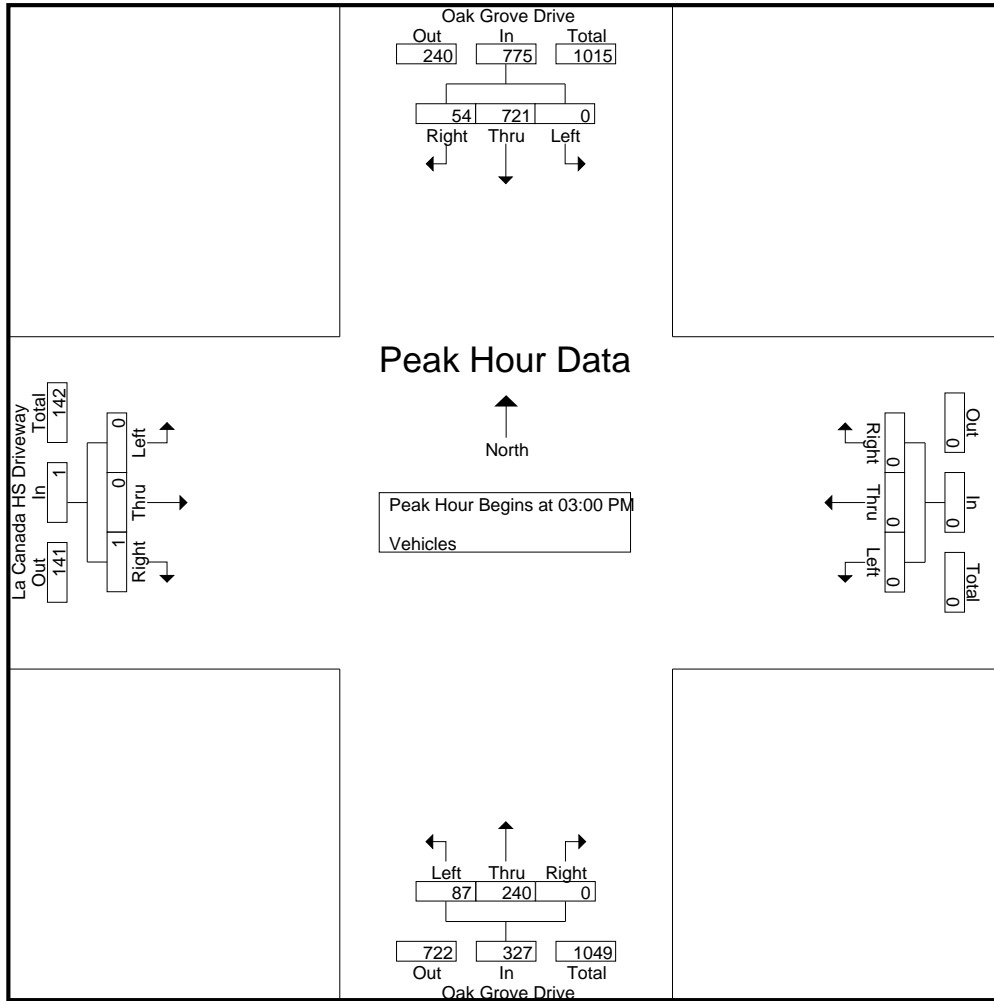
Start Time	Oak Grove Drive Southbound				Westbound				Oak Grove Drive Northbound				La Canada HS Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	61	14	75	0	0	0	0	19	238	0	257	1	0	1	2	334
07:45 AM	0	81	6	87	0	0	0	0	18	317	0	335	1	0	0	1	423
08:00 AM	0	153	11	164	0	0	0	0	55	254	0	309	1	0	0	1	474
08:15 AM	0	227	4	231	0	0	0	0	99	226	0	325	0	0	0	0	556
Total Volume	0	522	35	557	0	0	0	0	191	1035	0	1226	3	0	1	4	1787
% App. Total	0	93.7	6.3		0	0	0		15.6	84.4	0		75	0	25		
PHF	.000	.575	.625	.603	.000	.000	.000	.000	.482	.816	.000	.915	.750	.000	.250	.500	.804



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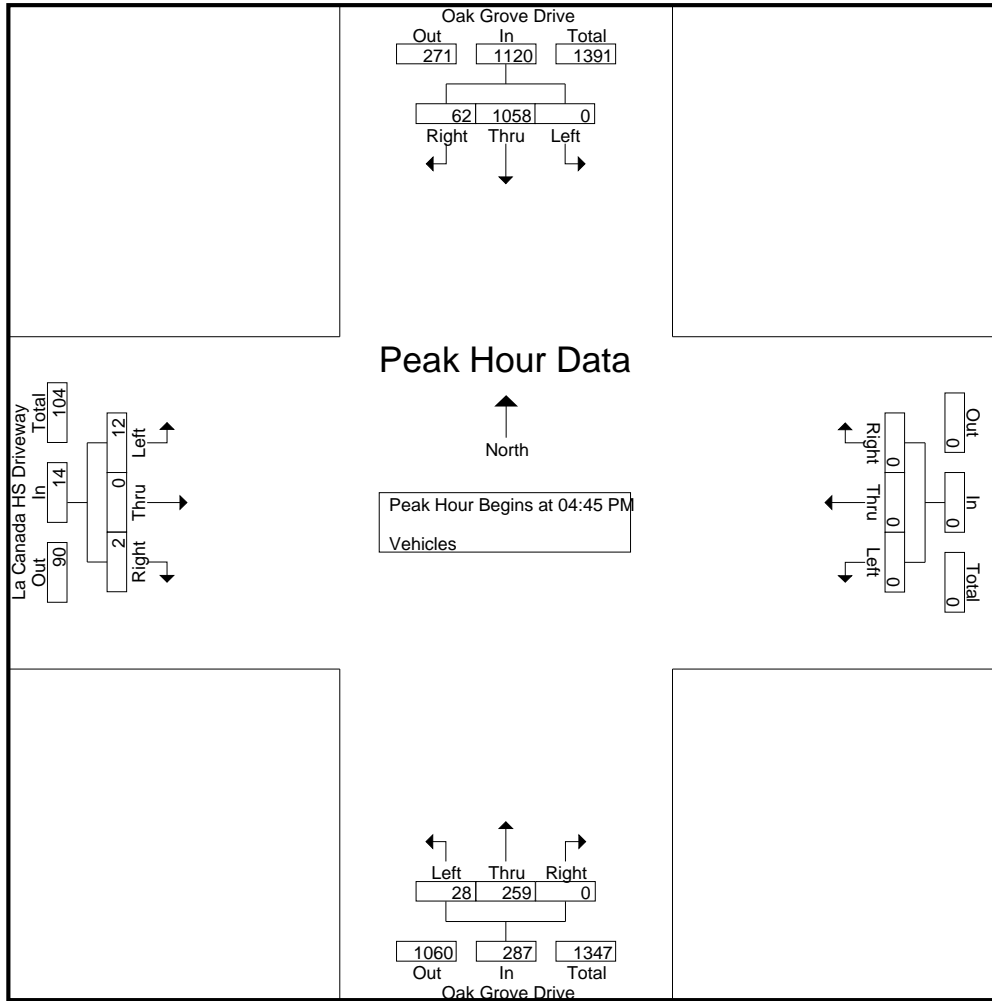
Start Time	Oak Grove Drive Southbound				Westbound				Oak Grove Drive Northbound				La Canada HS Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:30 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	104	9	113	0	0	0	0	13	62	0	75	0	0	1	1	189
03:15 PM	0	196	14	210	0	0	0	0	34	54	0	88	0	0	0	0	298
03:30 PM	0	225	17	242	0	0	0	0	23	63	0	86	0	0	0	0	328
03:45 PM	0	196	14	210	0	0	0	0	17	61	0	78	0	0	0	0	288
Total Volume	0	721	54	775	0	0	0	0	87	240	0	327	0	0	1	1	1103
% App. Total	0	93	7		0	0	0		26.6	73.4	0		0	0	100		
PHF	.000	.801	.794	.801	.000	.000	.000	.000	.640	.952	.000	.929	.000	.000	.250	.250	.841



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Start Time	Oak Grove Drive Southbound				Westbound				Oak Grove Drive Northbound				La Canada HS Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	238	17	255	0	0	0	0	11	62	0	73	3	0	0	3	331
05:00 PM	0	293	22	315	0	0	0	0	5	56	0	61	5	0	2	7	383
05:15 PM	0	282	14	296	0	0	0	0	4	65	0	69	1	0	0	1	366
05:30 PM	0	245	9	254	0	0	0	0	8	76	0	84	3	0	0	3	341
Total Volume	0	1058	62	1120	0	0	0	0	28	259	0	287	12	0	2	14	1421
% App. Total	0	94.5	5.5		0	0	0		9.8	90.2	0		85.7	0	14.3		
PHF	.000	.903	.705	.889	.000	.000	.000	.000	.636	.852	.000	.854	.600	.000	.250	.500	.928



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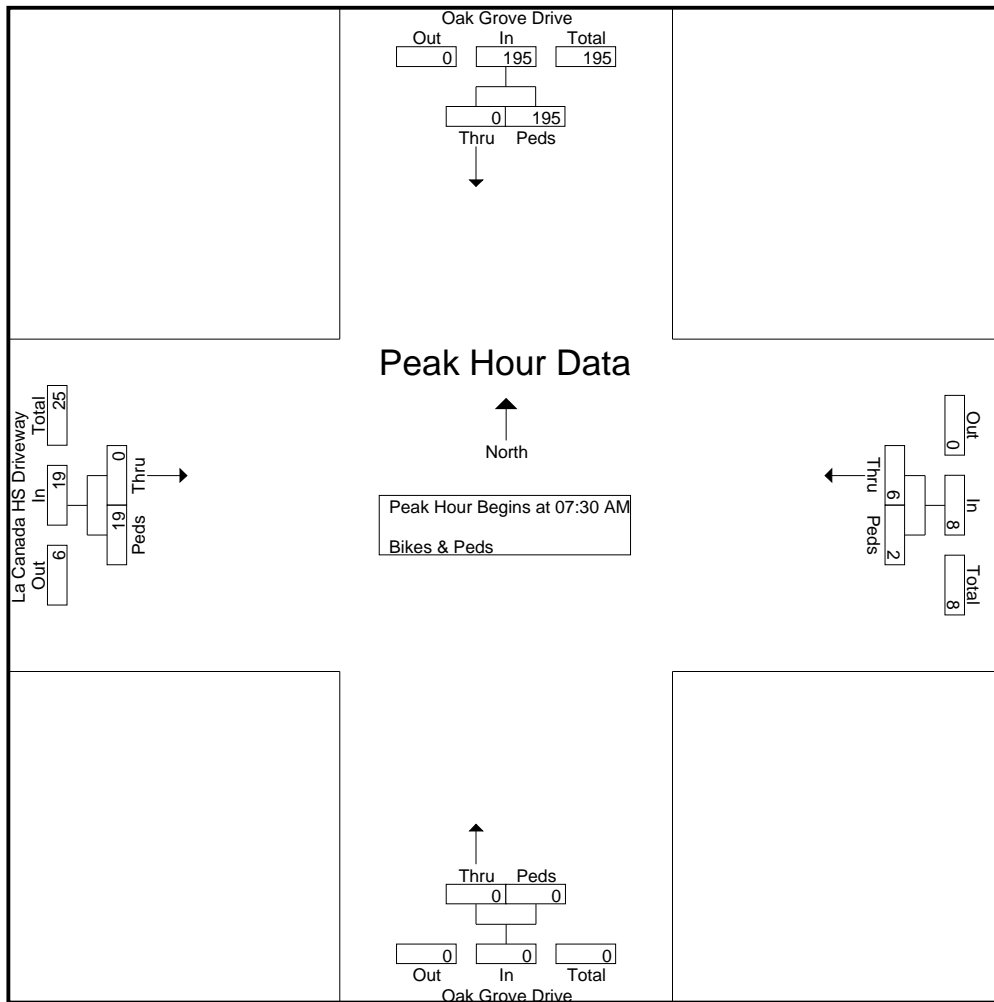
Groups Printed- Bikes & Peds

Start Time	Oak Grove Drive Southbound		Westbound		Oak Grove Drive Northbound		La Canada HS Driveway Eastbound		Int. Total
	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	
07:00 AM	0	1	0	0	0	0	0	0	1
07:15 AM	0	1	3	1	0	0	0	2	7
07:30 AM	0	9	0	2	0	0	0	0	11
07:45 AM	0	14	0	0	0	0	0	0	14
Total	0	25	3	3	0	0	0	2	33
08:00 AM	0	49	3	0	0	0	0	13	65
08:15 AM	0	123	3	0	0	0	0	6	132
08:30 AM	0	2	0	0	0	0	1	0	3
08:45 AM	0	0	0	0	0	0	1	0	1
Total	0	174	6	0	0	0	2	19	201
02:30 PM	0	0	0	1	0	0	0	0	1
02:45 PM	0	2	0	0	0	0	1	1	4
Total	0	2	0	1	0	0	1	1	5
03:00 PM	0	1	0	0	0	0	0	12	13
03:15 PM	0	99	0	0	0	0	1	16	116
03:30 PM	0	9	1	0	0	0	0	3	13
03:45 PM	0	2	0	0	0	0	3	8	13
Total	0	111	1	0	0	0	4	39	155
04:00 PM	2	4	0	0	0	0	0	1	7
04:15 PM	1	0	0	0	0	0	0	0	1
04:30 PM	0	0	1	0	0	0	1	1	3
04:45 PM	0	1	0	0	0	0	2	1	4
Total	3	5	1	0	0	0	3	3	15
05:00 PM	0	0	0	0	0	0	2	0	2
05:15 PM	0	0	0	0	0	0	3	2	5
05:30 PM	0	0	0	0	0	0	6	4	10
05:45 PM	0	1	0	0	0	0	0	1	2
Total	0	1	0	0	0	0	11	7	19
Grand Total	3	318	11	4	0	0	21	71	428
Apprch %	0.9	99.1	73.3	26.7	0	0	22.8	77.2	
Total %	0.7	74.3	2.6	0.9	0	0	4.9	16.6	

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Start Time	Oak Grove Drive Southbound			Westbound			Oak Grove Drive Northbound			La Canada HS Driveway Eastbound			Int. Total
	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:30 AM													
07:30 AM	0	9	9	0	2	2	0	0	0	0	0	0	11
07:45 AM	0	14	14	0	0	0	0	0	0	0	0	0	14
08:00 AM	0	49	49	3	0	3	0	0	0	0	13	13	65
08:15 AM	0	123	123	3	0	3	0	0	0	0	6	6	132
Total Volume	0	195	195	6	2	8	0	0	0	0	19	19	222
% App. Total	0	100		75	25		0	0		0	100		
PHF	.000	.396	.396	.500	.250	.667	.000	.000	.000	.000	.365	.365	.420

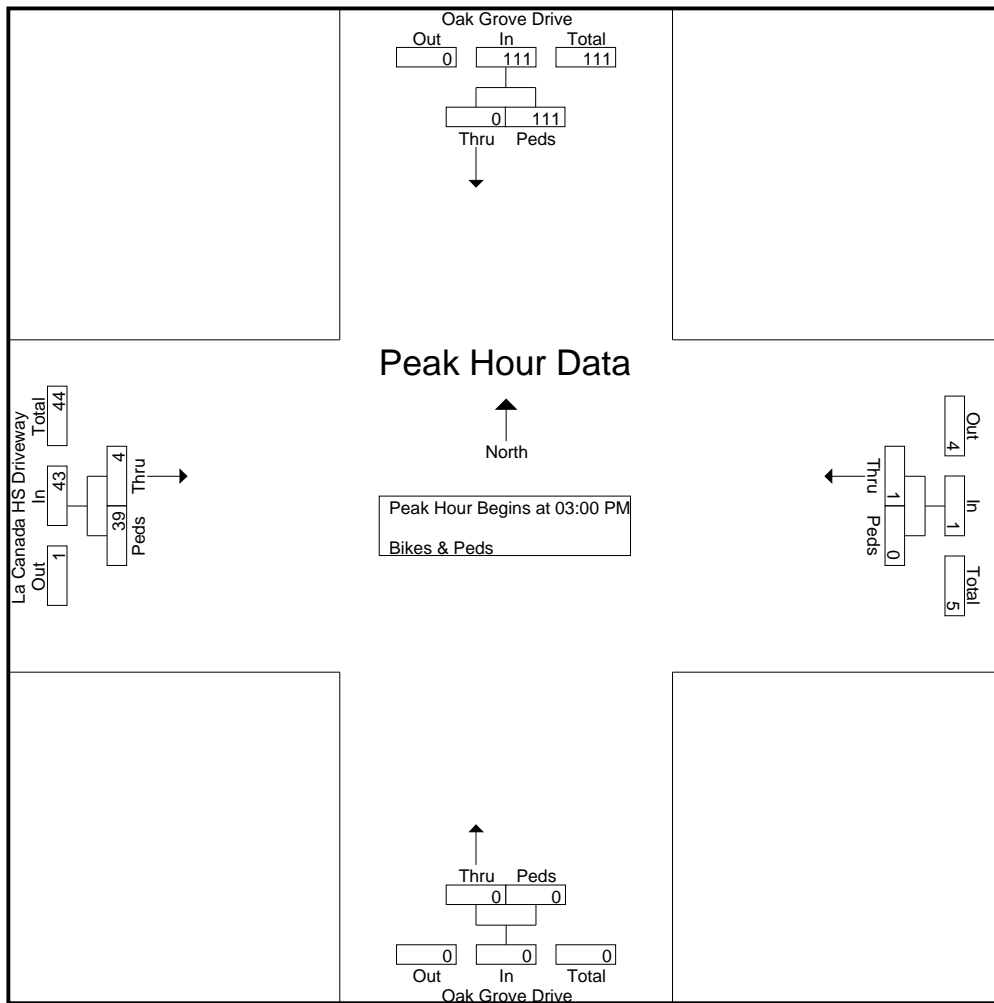


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Start Time	Oak Grove Drive Southbound			Westbound			Oak Grove Drive Northbound			La Canada HS Driveway Eastbound			Int. Total
	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	
03:00 PM	0	1	1	0	0	0	0	0	0	0	12	12	13
03:15 PM	0	99	99	0	0	0	0	0	0	1	16	17	116
03:30 PM	0	9	9	1	0	1	0	0	0	0	3	3	13
03:45 PM	0	2	2	0	0	0	0	0	0	3	8	11	13
Total Volume	0	111	111	1	0	1	0	0	0	4	39	43	155
% App. Total	0	100		100	0		0	0		9.3	90.7		
PHF	.000	.280	.280	.250	.000	.250	.000	.000	.000	.333	.609	.632	.334

Peak Hour Analysis From 02:30 PM to 03:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 03:00 PM

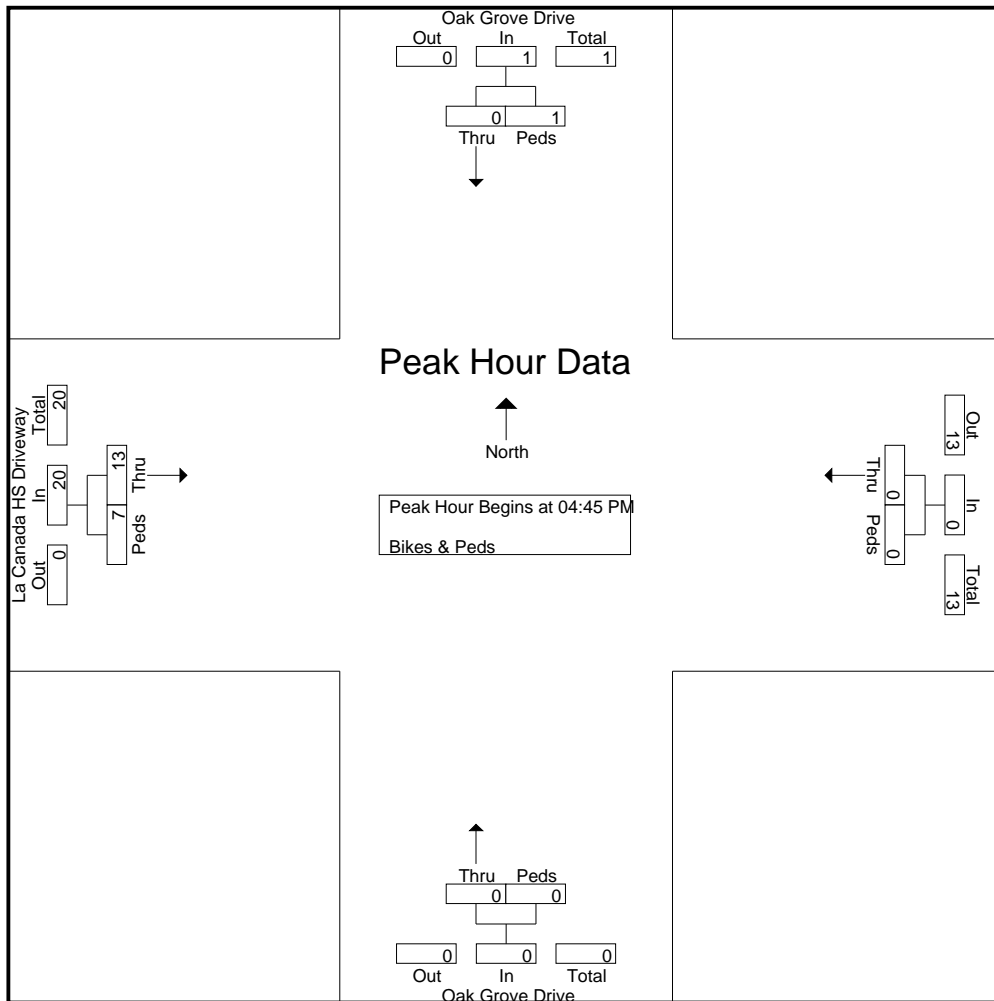


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File Name : OakGrove_LaCanadaHSDriveway_BP
 Site Code : 00000000
 Start Date : 11/13/2019
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Start Time	Oak Grove Drive Southbound			Westbound			Oak Grove Drive Northbound			La Canada HS Driveway Eastbound			Int. Total
	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	
04:45 PM	0	1	1	0	0	0	0	0	0	2	1	3	4
05:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
05:15 PM	0	0	0	0	0	0	0	0	0	3	2	5	5
05:30 PM	0	0	0	0	0	0	0	0	0	6	4	10	10
Total Volume	0	1	1	0	0	0	0	0	0	13	7	20	21
% App. Total	0	100		0	0		0	0		65	35		
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000	.542	.438	.500	.525

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:45 PM



CITY TRAFFIC COUNTERS
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File Name : OakGrove_Berkshire
 Site Code : 00000000
 Start Date : 11/13/2019
 Page No : 1

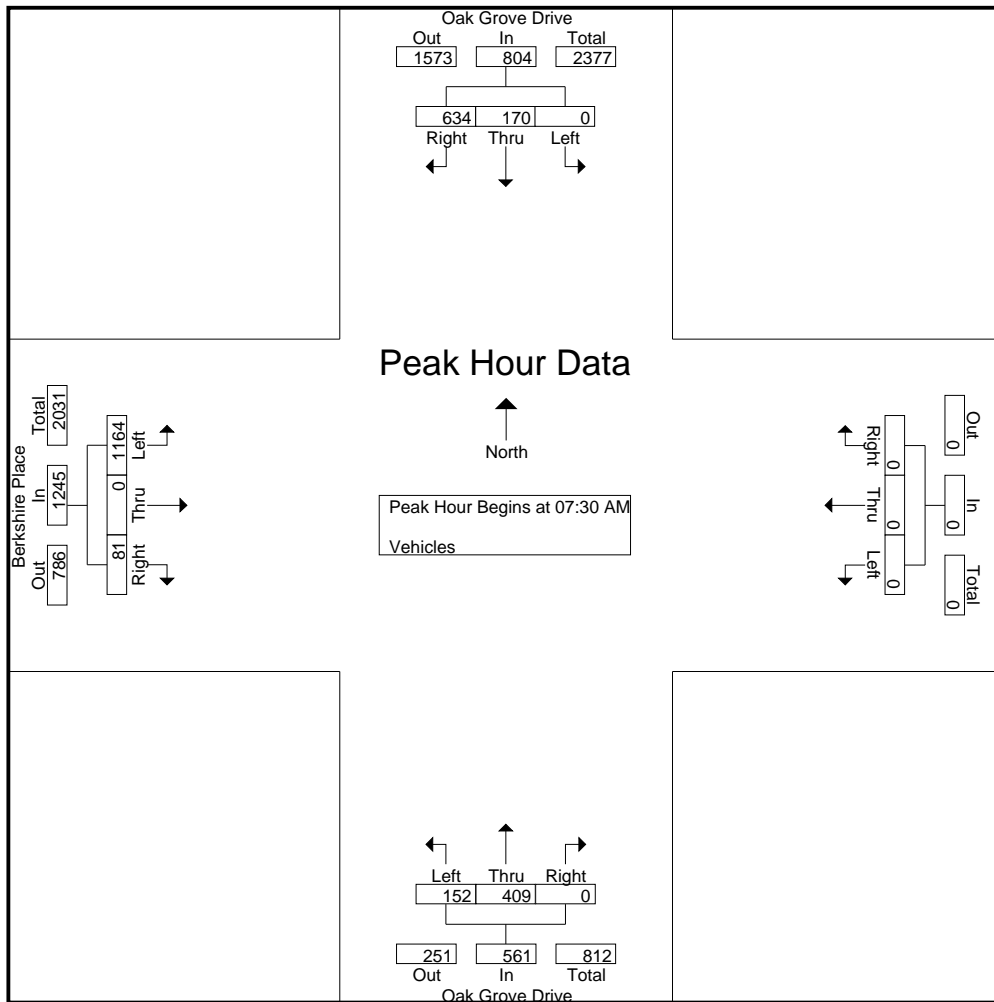
Groups Printed- Vehicles

Start Time	Oak Grove Drive Southbound			Westbound			Oak Grove Drive Northbound			Berkshire Place Eastbound			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	16	37	0	0	0	13	43	0	245	0	13	367
07:15 AM	0	31	98	0	0	0	19	72	0	262	0	10	492
07:30 AM	0	27	75	0	0	0	37	78	0	224	0	16	457
07:45 AM	0	41	84	0	0	0	44	116	0	292	0	32	609
Total	0	115	294	0	0	0	113	309	0	1023	0	71	1925
08:00 AM	0	46	202	0	0	0	39	113	0	340	0	15	755
08:15 AM	0	56	273	0	0	0	32	102	0	308	0	18	789
08:30 AM	0	26	40	0	0	0	28	38	0	144	0	22	298
08:45 AM	0	27	18	0	0	0	17	29	0	113	0	14	218
Total	0	155	533	0	0	0	116	282	0	905	0	69	2060
02:30 PM	0	33	76	0	0	0	21	32	0	37	0	18	217
02:45 PM	0	48	76	0	0	0	13	37	0	61	0	18	253
Total	0	81	152	0	0	0	34	69	0	98	0	36	470
03:00 PM	0	24	110	0	0	0	35	32	0	114	0	21	336
03:15 PM	0	57	269	0	0	0	20	28	0	95	0	32	501
03:30 PM	0	72	245	0	0	0	35	36	0	73	0	20	481
03:45 PM	0	71	164	0	0	0	33	35	0	42	0	21	366
Total	0	224	788	0	0	0	123	131	0	324	0	94	1684
04:00 PM	0	55	194	0	0	0	16	39	0	35	0	29	368
04:15 PM	0	50	199	0	0	0	27	29	0	40	0	20	365
04:30 PM	0	66	213	0	0	0	18	38	0	40	0	20	395
04:45 PM	0	65	210	0	0	0	14	42	0	40	0	27	398
Total	0	236	816	0	0	0	75	148	0	155	0	96	1526
05:00 PM	0	92	244	0	0	0	30	45	0	31	0	20	462
05:15 PM	0	92	228	0	0	0	23	49	0	48	0	21	461
05:30 PM	0	69	176	0	0	0	33	52	0	35	0	25	390
05:45 PM	0	57	177	0	0	0	22	34	0	51	0	15	356
Total	0	310	825	0	0	0	108	180	0	165	0	81	1669
Grand Total	0	1121	3408	0	0	0	569	1119	0	2670	0	447	9334
Apprch %	0	24.8	75.2	0	0	0	33.7	66.3	0	85.7	0	14.3	
Total %	0	12	36.5	0	0	0	6.1	12	0	28.6	0	4.8	

CITY TRAFFIC COUNTERS
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 Site Code : 00000000
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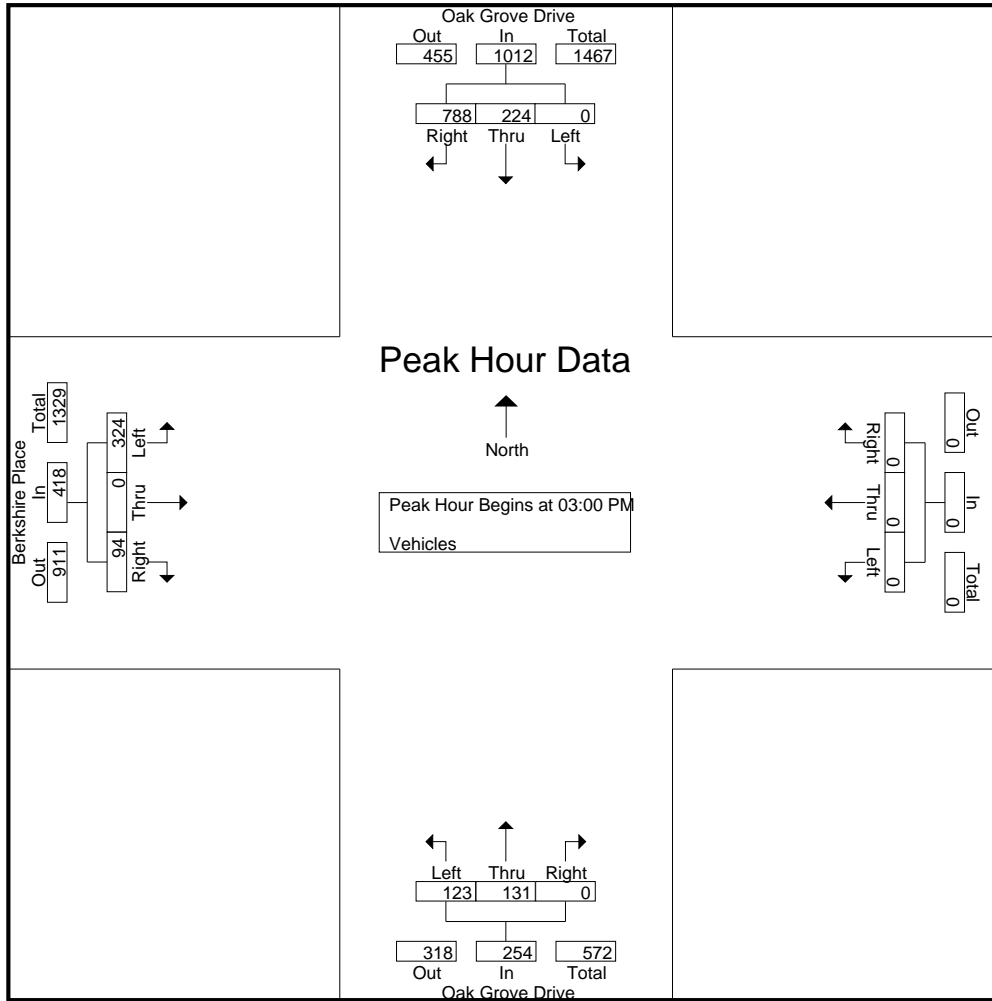
Start Time	Oak Grove Drive Southbound				Westbound				Oak Grove Drive Northbound				Berkshire Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	27	75	102	0	0	0	0	37	78	0	115	224	0	16	240	457
07:45 AM	0	41	84	125	0	0	0	0	44	116	0	160	292	0	32	324	609
08:00 AM	0	46	202	248	0	0	0	0	39	113	0	152	340	0	15	355	755
08:15 AM	0	56	273	329	0	0	0	0	32	102	0	134	308	0	18	326	789
Total Volume	0	170	634	804	0	0	0	0	152	409	0	561	1164	0	81	1245	2610
% App. Total	0	21.1	78.9		0	0	0		27.1	72.9	0		93.5	0	6.5		
PHF	.000	.759	.581	.611	.000	.000	.000	.000	.864	.881	.000	.877	.856	.000	.633	.877	.827



CITY TRAFFIC COUNTERS
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 Site Code : 00000000
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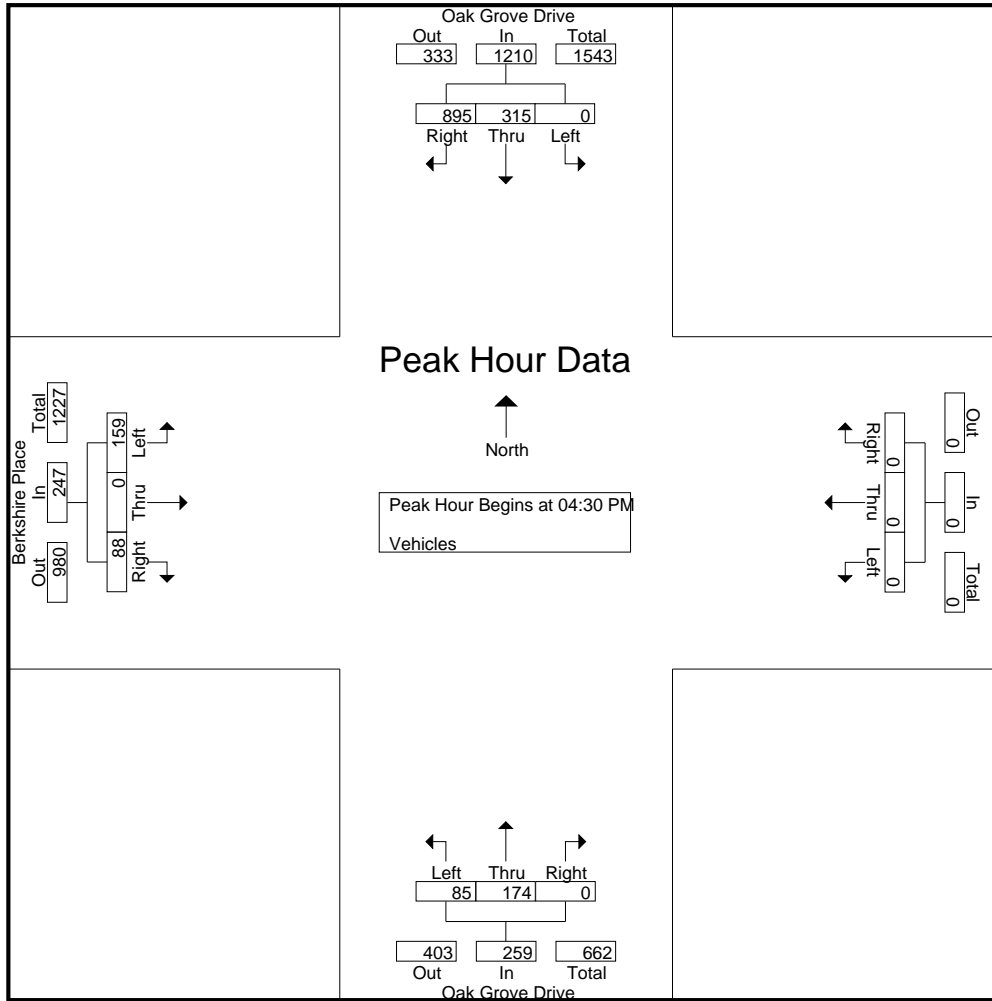
Start Time	Oak Grove Drive Southbound				Westbound				Oak Grove Drive Northbound				Berkshire Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:30 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	24	110	134	0	0	0	0	35	32	0	67	114	0	21	135	336
03:15 PM	0	57	269	326	0	0	0	0	20	28	0	48	95	0	32	127	501
03:30 PM	0	72	245	317	0	0	0	0	35	36	0	71	73	0	20	93	481
03:45 PM	0	71	164	235	0	0	0	0	33	35	0	68	42	0	21	63	366
Total Volume	0	224	788	1012	0	0	0	0	123	131	0	254	324	0	94	418	1684
% App. Total	0	22.1	77.9		0	0	0		48.4	51.6	0		77.5	0	22.5		
PHF	.000	.778	.732	.776	.000	.000	.000	.000	.879	.910	.000	.894	.711	.000	.734	.774	.840



CITY TRAFFIC COUNTERS
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File Name : OakGrove_Berkshire
 Site Code : 00000000
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Start Time	Oak Grove Drive Southbound				Westbound				Oak Grove Drive Northbound				Berkshire Place Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	66	213	279	0	0	0	0	18	38	0	56	40	0	20	60	395
04:45 PM	0	65	210	275	0	0	0	0	14	42	0	56	40	0	27	67	398
05:00 PM	0	92	244	336	0	0	0	0	30	45	0	75	31	0	20	51	462
05:15 PM	0	92	228	320	0	0	0	0	23	49	0	72	48	0	21	69	461
Total Volume	0	315	895	1210	0	0	0	0	85	174	0	259	159	0	88	247	1716
% App. Total	0	26	74		0	0	0		32.8	67.2	0		64.4	0	35.6		
PHF	.000	.856	.917	.900	.000	.000	.000	.000	.708	.888	.000	.863	.828	.000	.815	.895	.929



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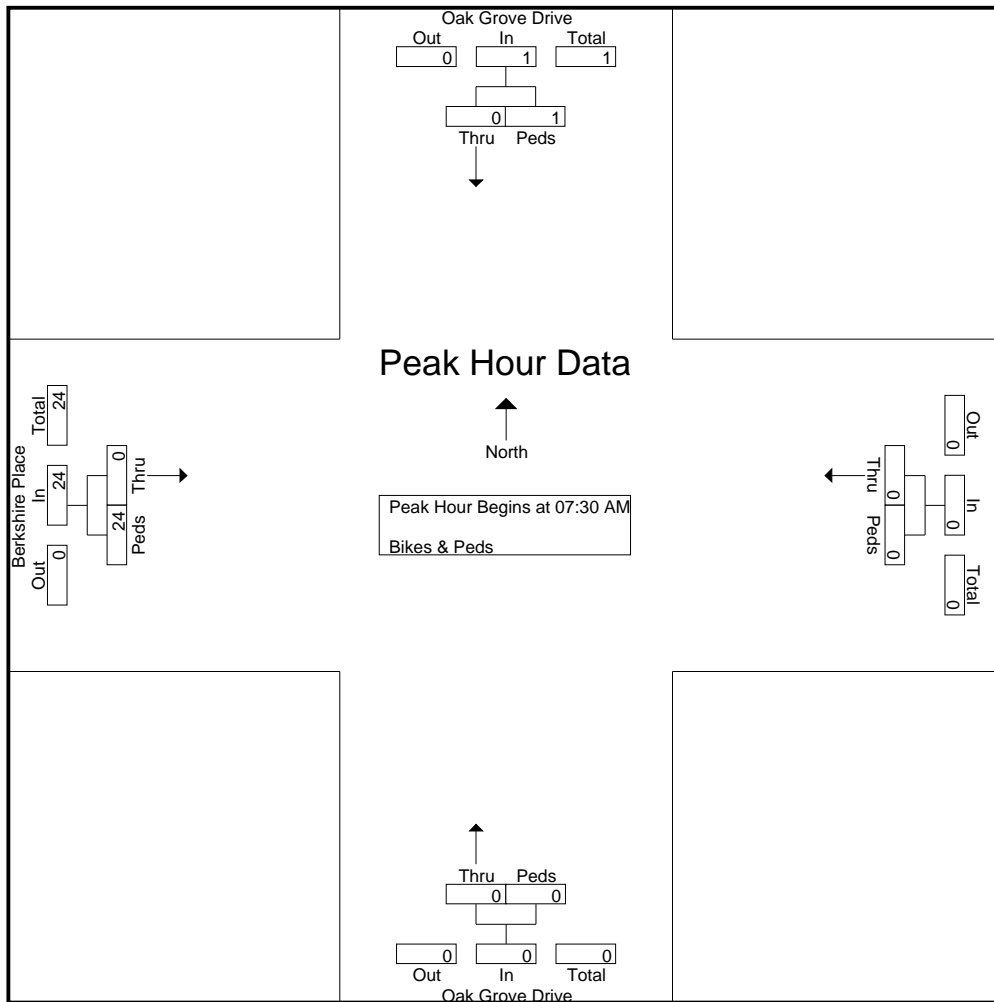
Groups Printed- Bikes & Peds

Start Time	Oak Grove Drive Southbound		Westbound		Oak Grove Drive Northbound		Berkshire Place Eastbound		Int. Total
	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	
07:00 AM	0	1	0	0	0	0	1	1	3
07:15 AM	0	0	0	0	0	0	0	4	4
07:30 AM	0	0	0	0	0	0	0	2	2
07:45 AM	0	0	0	0	0	0	0	3	3
Total	0	1	0	0	0	0	1	10	12
08:00 AM	0	1	0	0	0	0	0	10	11
08:15 AM	0	0	0	0	0	0	0	9	9
08:30 AM	0	0	0	0	0	1	1	0	2
08:45 AM	0	0	0	0	0	0	1	0	1
Total	0	1	0	0	0	1	2	19	23
02:30 PM	0	0	0	0	0	0	0	7	7
02:45 PM	0	0	0	0	0	0	1	2	3
Total	0	0	0	0	0	0	1	9	10
03:00 PM	0	0	0	0	0	1	0	19	20
03:15 PM	0	0	0	0	0	0	1	53	54
03:30 PM	1	0	0	0	1	0	1	6	9
03:45 PM	0	0	0	0	0	0	3	5	8
Total	1	0	0	0	1	1	5	83	91
04:00 PM	0	1	0	0	0	0	0	6	7
04:15 PM	0	0	0	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	6	0	2	8
04:45 PM	0	0	0	0	0	0	2	0	2
Total	0	1	0	0	0	6	2	10	19
05:00 PM	0	0	0	0	1	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	2	0	2
Total	0	0	0	0	1	0	2	1	4
Grand Total	1	3	0	0	2	8	13	132	159
Apprch %	25	75	0	0	20	80	9	91	
Total %	0.6	1.9	0	0	1.3	5	8.2	83	

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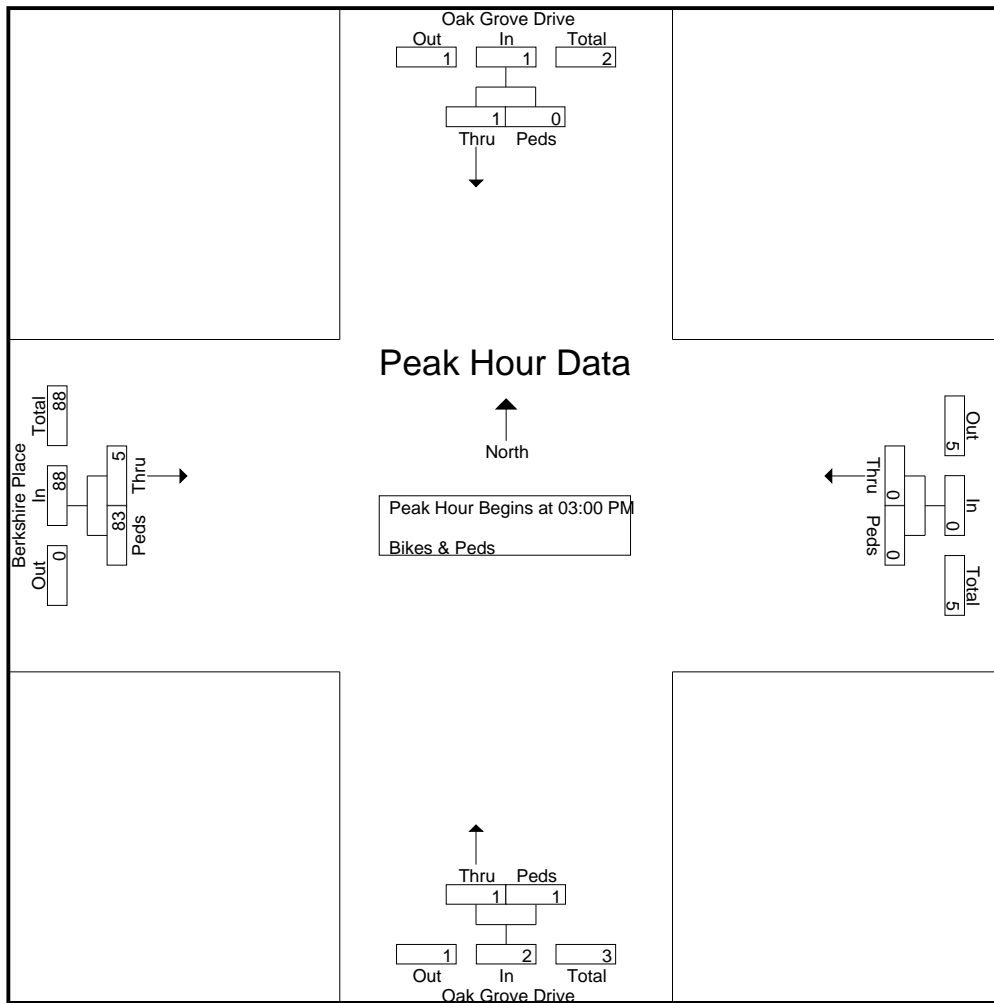
Start Time	Oak Grove Drive Southbound			Westbound			Oak Grove Drive Northbound			Berkshire Place Eastbound			Int. Total
	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:30 AM													
07:30 AM	0	0	0	0	0	0	0	0	0	0	2	2	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	3	3	3
08:00 AM	0	1	1	0	0	0	0	0	0	0	10	10	11
08:15 AM	0	0	0	0	0	0	0	0	0	0	9	9	9
Total Volume	0	1	1	0	0	0	0	0	0	0	24	24	25
% App. Total	0	100		0	0		0	0		0	100		
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.600	.600	.568



CITY TRAFFIC COUNTERS
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File Name : OakGrove_Berkshire_BP
 Site Code : 00000000
 Start Date : 11/13/2019
 Page No : 3

Start Time	Oak Grove Drive Southbound			Westbound			Oak Grove Drive Northbound			Berkshire Place Eastbound			Int. Total
	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	
Peak Hour Analysis From 02:30 PM to 03:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:00 PM													
03:00 PM	0	0	0	0	0	0	0	1	1	0	19	19	20
03:15 PM	0	0	0	0	0	0	0	0	0	1	53	54	54
03:30 PM	1	0	1	0	0	0	1	0	1	1	6	7	9
03:45 PM	0	0	0	0	0	0	0	0	0	3	5	8	8
Total Volume	1	0	1	0	0	0	1	1	2	5	83	88	91
% App. Total	100	0		0	0		50	50		5.7	94.3		
PHF	.250	.000	.250	.000	.000	.000	.250	.250	.500	.417	.392	.407	.421

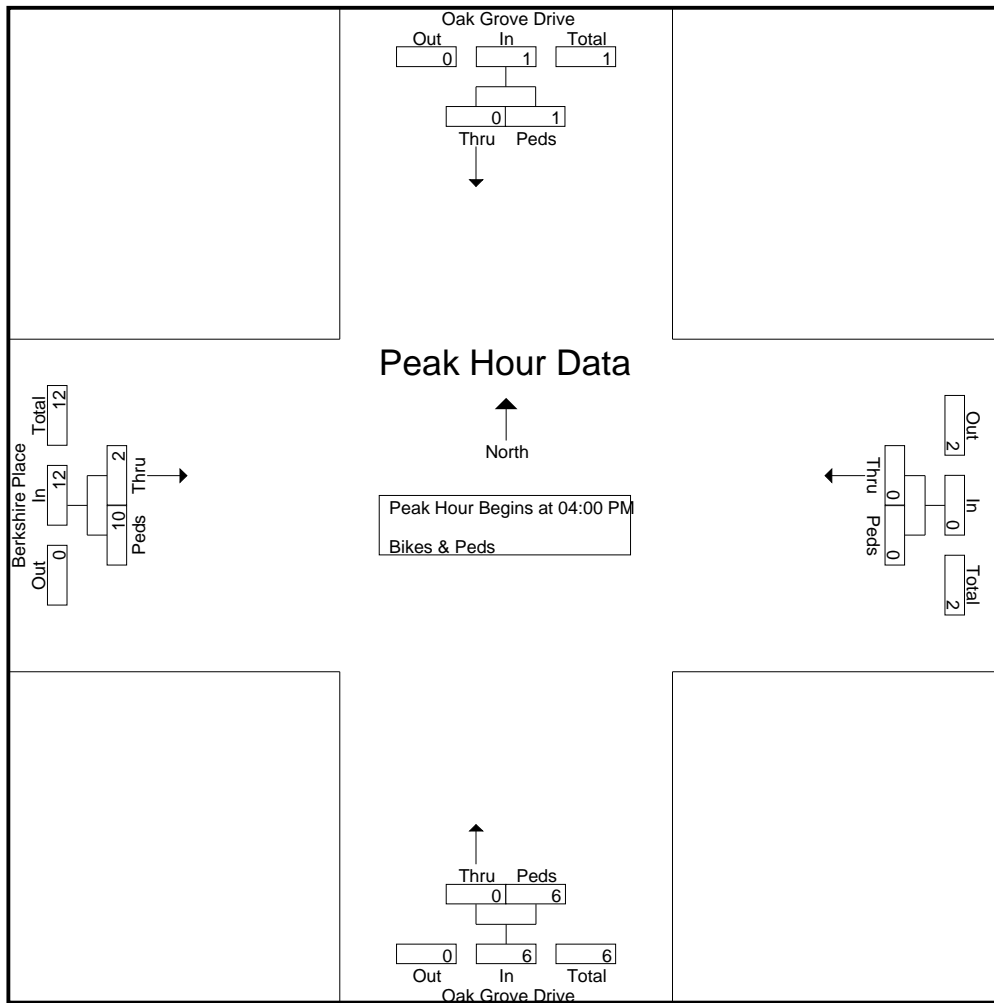


CITY TRAFFIC COUNTERS
WWW.CTCOUNTERS.COM

File Name : OakGrove_Berkshire_BP
 Site Code : 00000000
 Start Date : 11/13/2019
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Start Time	Oak Grove Drive Southbound			Westbound			Oak Grove Drive Northbound			Berkshire Place Eastbound			Int. Total
	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	
04:00 PM	0	1	1	0	0	0	0	0	0	0	6	6	7
04:15 PM	0	0	0	0	0	0	0	0	0	0	2	2	2
04:30 PM	0	0	0	0	0	0	0	6	6	0	2	2	8
04:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	0	1	1	0	0	0	0	6	6	2	10	12	19
% App. Total	0	100		0	0		0	100		16.7	83.3		
PHF	.000	.250	.250	.000	.000	.000	.000	.250	.250	.250	.417	.500	.594

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM



APPENDIX B

ICU AND LEVELS OF SERVICE EXPLANATION ICU DATA WORKSHEETS – WEEKDAY AM, PM AND SCHOOL PEAK HOURS

INTERSECTION CAPACITY UTILIZATION (ICU) DESCRIPTION

Level of Service is a term used to describe prevailing conditions and their effect on traffic. Broadly interpreted, the Levels of Service concept denotes any one of a number of differing combinations of operating conditions which may occur as a roadway is accommodating various traffic volumes. Level of Service is a qualitative measure of the effect of such factors as travel speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience.

Six Levels of Service, A through F, have been defined in the 1965 *Highway Capacity Manual*, published by the Transportation Research Board. Level of Service A describes a condition of free flow, with low traffic volumes and relatively high speeds, while Level of Service F describes forced traffic flow at low speeds with jammed conditions and queues which cannot clear during the green phases.

The Intersection Capacity Utilization (ICU) method of intersection capacity analysis has been used in our studies. It directly relates traffic demand and available capacity for key intersection movements, regardless of present signal timing. The capacity per hour of green time for each approach is calculated based on the methods of the *Highway Capacity Manual*. The proportion of total signal time needed by each key movement is determined and compared to the total time available (100 percent of the hour). The result of summing the requirements of the conflicting key movements plus an allowance for clearance times is expressed as a decimal fraction. Conflicting key traffic movements are those opposing movements whose combined green time requirements are greatest.

The resulting ICU represents the proportion of the total hour required to accommodate intersection demand volumes if the key conflicting traffic movements are operating at capacity. Other movements may be operating near capacity, or may be operating at significantly better levels. The ICU may be translated to a Level of Service as tabulated below.

The Levels of Service (abbreviated from the *Highway Capacity Manual*) are listed here with their corresponding ICU and Load Factor equivalents. Load Factor is that proportion of the signal cycles during the peak hour which are fully loaded; i.e. when all of the vehicles waiting at the beginning of green are not able to clear on that green phase.

Intersection Capacity Utilization Characteristics		
Level of Service	Load Factor	Equivalent ICU
A	0.0	0.00 - 0.60
B	0.0 - 0.1	0.61 - 0.70
C	0.1 - 0.3	0.71 - 0.80
D	0.3 - 0.7	0.81 - 0.90
E	0.7 - 1.0	0.91 - 1.00
F	Not Applicable	Not Applicable

SERVICE LEVEL A

There are no loaded cycles and few are even close to loaded at this service level. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.

SERVICE LEVEL B

This level represents stable operation where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.

SERVICE LEVEL C

At this level stable operation continues. Loading is still intermittent but more frequent than at Level B. Occasionally drivers may have to wait through more than one red signal indication and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.

SERVICE LEVEL D

This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak hour, but enough cycles with lower demand occur to permit periodic clearance of queues, thus preventing excessive backups. Drivers frequently have to wait through more than one red signal. This level is the lower limit of acceptable operation to most drivers.

SERVICE LEVEL E

This represents near capacity and capacity operation. At capacity (ICU = 1.0) it represents the most vehicles that the particular intersection can accommodate. However, full utilization of every signal cycle is seldom attained no matter how great the demand. At this level all drivers wait through more than one red signal, and frequently through several.

SERVICE LEVEL F

Jammed conditions. Traffic backed up from a downstream location on one of the street restricts or prevents movement of traffic through the intersection under consideration.

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INTERSECTION CAPACITY UTILIZATION
 Oak Grove Drive @ Foothill Boulevard
 Peak hr: AM

N-S St: Oak Grove Drive
 E-W St: Foothill Boulevard
 Project: La Cañada High School Pool Facility and South of Campus Improvement Project/1-194362-1
 File: ICU1

Date: 4/6/2020
 Existing Year: 2020

2020 EXISTING TRAFFIC				2020 EXISTING + CONSTRUCTION PROJ.			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	244	1600	0.153	6	250	1600	0.156
NB Thru	777	3200	0.246 *	0	777	3200	0.246 *
NB Right	11	0	0.000	0	11	0	0.000
SB Left	0	1600	0.000 *	0	0	1600	0.000 *
SB Thru	48	3200	0.023	0	48	3200	0.023
SB Right	25	0	0.000	0	25	0	0.000
EB Left	210	0	0.131	0	210	0	0.131
EB Thru	19	1600	0.143	0	19	1600	0.143
EB Right	476	1600	0.298 *	6	482	1600	0.301 *
WB Left	48	0	0.030 *	0	48	0	0.030 *
WB Thru	58	1600	0.091	0	58	1600	0.091
WB Right	39	0	0.000	0	39	0	0.000
Yellow Allowance			0.100 *				0.100 *
ICU			0.674				0.678
LOS			B				B

* Key conflicting movement as a part of ICU
 1 Counts conducted by: City Traffic Counters
 2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION
 Oak Grove Drive @ Foothill Boulevard
 Peak hr: PM

N-S St: Oak Grove Drive
 E-W St: Foothill Boulevard
 Project: La Cañada High School Pool Facility and South of Campus Improvement Project/1-194362-1
 File: ICU1

Date: 4/6/2020
 Existing Year: 2020

2020 EXISTING TRAFFIC				2020 EXISTING + CONSTRUCTION PROJ.			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	171	1600	0.107 *	2	173	1600	0.108 *
NB Thru	57	3200	0.023	0	57	3200	0.023
NB Right	17	0	0.000	0	17	0	0.000
SB Left	0	1600	0.000	0	0	1600	0.000
SB Thru	872	3200	0.358 *	0	872	3200	0.358 *
SB Right	272	0	0.000	0	272	0	0.000
EB Left	22	0	0.014	0	22	0	0.014
EB Thru	15	1600	0.023	0	15	1600	0.023
EB Right	337	1600	0.211 *	1	338	1600	0.211 *
WB Left	34	0	0.021 *	0	34	0	0.021 *
WB Thru	30	1600	0.043	0	30	1600	0.043
WB Right	5	0	0.000	0	5	0	0.000
Yellow Allowance			0.100 *				0.100 *
ICU			0.796				0.798
LOS			C				C

* Key conflicting movement as a part of ICU
 1 Counts conducted by: City Traffic Counters
 2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Oak Grove Drive @ Foothill Boulevard
 Peak hr: School Peak

N-S St: Oak Grove Drive
 E-W St: Foothill Boulevard
 Project: La Cañada High School Pool Facility and South of Campus Improvement Project/1-194362-1
 File: ICU1

Date: 4/6/2020
 Existing Year: 2020

2020 EXISTING TRAFFIC				2020 EXISTING + CONSTRUCTION PROJ.			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	131	1600	0.082 *	6	137	1600	0.086 *
NB Thru	80	3200	0.034	0	80	3200	0.034
NB Right	28	0	0.000	0	28	0	0.000
SB Left	0	1600	0.000	0	0	1600	0.000
SB Thru	436	3200	0.176 *	0	436	3200	0.176 *
SB Right	126	0	0.000	0	126	0	0.000
EB Left	38	0	0.024	0	38	0	0.024
EB Thru	35	1600	0.046	0	35	1600	0.046
EB Right	358	1600	0.224 *	6	364	1600	0.228 *
WB Left	59	0	0.037 *	0	59	0	0.037 *
WB Thru	69	1600	0.083	0	69	1600	0.083
WB Right	4	0	0.000	0	4	0	0.000
Yellow Allowance			0.100 *				0.100 *
ICU			0.618				0.626
LOS			B				B

* Key conflicting movement as a part of ICU
 1 Counts conducted by: City Traffic Counters
 2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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 (626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION
 Oak Grove Drive @ La Cañada High School
 Peak hr: AM

N-S St: Oak Grove Drive
 E-W St: La Cañada High School
 Project: La Cañada High School Pool Facility and South of Campus Improvement Project/1-194362-1
 File: ICU2

Date: 4/6/2020
 Existing Year: 2020

2020 EXISTING TRAFFIC				2020 EXISTING + CONSTRUCTION PROJ.			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	193	1600	0.121	0	193	1600	0.121
NB Thru	1045	3200	0.327 *	0	1045	3200	0.327 *
NB Right	0	0	0.000	0	0	0	0.000
SB Left	0	0	0.000 *	0	0	0	0.000 *
SB Thru	527	3200	0.176	6	533	3200	0.178
SB Right	35	0	0.000	0	35	0	0.000
EB Left	3	0	0.002	6	9	0	0.006
EB Thru	0	1600	0.003 *	0	0	1600	0.006 *
EB Right	1	0	0.000	0	1	0	0.000
WB Left	0	0	0.000 *	0	0	0	0.000 *
WB Thru	0	0	0.000	0	0	0	0.000
WB Right	0	0	0.000	0	0	0	0.000
Yellow Allowance			0.100 *				0.100 *
ICU			0.429				0.433
LOS			A				A

* Key conflicting movement as a part of ICU
 1 Counts conducted by: City Traffic Counters
 2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION
 Oak Grove Drive @ La Cañada High School
 Peak hr: PM

N-S St: Oak Grove Drive
 E-W St: La Cañada High School
 Project: La Cañada High School Pool Facility and South of Campus Improvement Project/1-194362-1
 File: ICU2

Date: 4/6/2020
 Existing Year: 2020

2020 EXISTING TRAFFIC				2020 EXISTING + CONSTRUCTION PROJ.			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	28	1600	0.018 *	0	28	1600	0.018 *
NB Thru	262	3200	0.082	0	262	3200	0.082
NB Right	0	0	0.000	0	0	0	0.000
SB Left	0	0	0.000	0	0	0	0.000
SB Thru	1069	3200	0.354 *	1	1070	3200	0.354 *
SB Right	63	0	0.000	0	63	0	0.000
EB Left	12	0	0.008	2	14	0	0.009
EB Thru	0	1600	0.009 *	0	0	1600	0.010 *
EB Right	2	0	0.000	0	2	0	0.000
WB Left	0	0	0.000 *	0	0	0	0.000 *
WB Thru	0	0	0.000	0	0	0	0.000
WB Right	0	0	0.000	0	0	0	0.000
Yellow Allowance			0.100 *				0.100 *
ICU			0.480				0.482
LOS			A				A

* Key conflicting movement as a part of ICU
 1 Counts conducted by: City Traffic Counters
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INTERSECTION CAPACITY UTILIZATION
 Oak Grove Drive @ La Cañada High School
 Peak hr: School Peak

N-S St: Oak Grove Drive
 E-W St: La Cañada High School
 Project: La Cañada High School Pool Facility and South of Campus Improvement Project/1-194362-1
 File: ICU2

Date: 4/6/2020
 Existing Year: 2020

2020 EXISTING TRAFFIC				2020 EXISTING + CONSTRUCTION PROJ.			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	88	1600	0.055 *	0	88	1600	0.055 *
NB Thru	242	3200	0.076	0	242	3200	0.076
NB Right	0	0	0.000	0	0	0	0.000
SB Left	0	0	0.000	0	0	0	0.000
SB Thru	728	3200	0.245 *	6	734	3200	0.247 *
SB Right	55	0	0.000	0	55	0	0.000
EB Left	0	0	0.000	6	6	0	0.004
EB Thru	0	1600	0.001 *	0	0	1600	0.004 *
EB Right	1	0	0.000	0	1	0	0.000
WB Left	0	0	0.000 *	0	0	0	0.000 *
WB Thru	0	0	0.000	0	0	0	0.000
WB Right	0	0	0.000	0	0	0	0.000
Yellow Allowance			0.100 *				0.100 *
ICU			0.400				0.406
LOS			A				A

* Key conflicting movement as a part of ICU
 1 Counts conducted by: City Traffic Counters
 2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION
 Oak Grove Drive @ Berkshire Place
 Peak hr: AM

N-S St: Oak Grove Drive
 E-W St: Berkshire Place
 Project: La Cañada High School Pool Facility and South of Campus Improvement Project/1-194362-1
 File: ICU3

Date: 4/6/2020
 Existing Year: 2020

2020 EXISTING TRAFFIC				2020 EXISTING + CONSTRUCTION PROJ.			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	154	1600	0.096 *	0	154	1600	0.096 *
NB Thru	413	3200	0.129	5	418	3200	0.131
NB Right	0	0	0.000	0	0	0	0.000
SB Left	0	0	0.000	0	0	0	0.000
SB Thru	172	3200	0.254 *	5	177	3200	0.259 *
SB Right [3]	640	0	0.000	13	653	0	0.000
EB Left	1176	0	0.368	13	1189	0	0.372
EB Thru	0	3200	0.393 *	0	0	3200	0.397 *
EB Right	82	0	0.000	0	82	0	0.000
WB Left	0	0	0.000 *	0	0	0	0.000 *
WB Thru	0	0	0.000	0	0	0	0.000
WB Right	0	0	0.000	0	0	0	0.000
Yellow Allowance			0.100 *				0.100 *
ICU			0.843				0.853
LOS			D				D

- * Key conflicting movement as a part of ICU
- 1 Counts conducted by: City Traffic Counters
- 2 Capacity expressed in veh/hour of green
- 3 The southbound right-turn lane has an overlapping phase with the eastbound left-turn phase.

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INTERSECTION CAPACITY UTILIZATION
 Oak Grove Drive @ Berkshire Place
 Peak hr: PM

N-S St: Oak Grove Drive
 E-W St: Berkshire Place
 Project: La Cañada High School Pool Facility and South of Campus Improvement Project/1-194362-1
 File: ICU3

Date: 4/6/2020
 Existing Year: 2020

2020 EXISTING TRAFFIC				2020 EXISTING + CONSTRUCTION PROJ.			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	86	1600	0.054 *	0	86	1600	0.054 *
NB Thru	176	3200	0.055	0	176	3200	0.055
NB Right	0	0	0.000	0	0	0	0.000
SB Left	0	0	0.000	0	0	0	0.000
SB Thru	318	3200	0.382 *	2	320	3200	0.384 *
SB Right [3]	904	0	0.000	5	909	0	0.000
EB Left	161	0	0.050	1	162	0	0.051
EB Thru	0	3200	0.078 *	0	0	3200	0.078 *
EB Right	89	0	0.000	0	89	0	0.000
WB Left	0	0	0.000 *	0	0	0	0.000 *
WB Thru	0	0	0.000	0	0	0	0.000
WB Right	0	0	0.000	0	0	0	0.000
Yellow Allowance			0.100 *				0.100 *
ICU			0.614				0.616
LOS			B				B

- * Key conflicting movement as a part of ICU
- 1 Counts conducted by: City Traffic Counters
- 2 Capacity expressed in veh/hour of green
- 3 The southbound right-turn lane has an overlapping phase with the eastbound left-turn phase.

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INTERSECTION CAPACITY UTILIZATION

Oak Grove Drive @ Berkshire Place
 Peak hr: School Peak

Date: 4/6/2020
 Existing Year: 2020

N-S St: Oak Grove Drive
 E-W St: Berkshire Place
 Project: La Cañada High School Pool Facility and South of Campus Improvement Project/1-194362-1
 File: ICU3

2020 EXISTING TRAFFIC				2020 EXISTING + CONSTRUCTION PROJ.			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	124	1600	0.078 *	0	124	1600	0.078 *
NB Thru	132	3200	0.041	5	137	3200	0.043
NB Right	0	0	0.000	0	0	0	0.000
SB Left	0	0	0.000	0	0	0	0.000
SB Thru	226	3200	0.319 *	5	231	3200	0.325 *
SB Right [3]	796	0	0.000	13	809	0	0.000
EB Left	327	0	0.102	13	340	0	0.106
EB Thru	0	3200	0.132 *	0	0	3200	0.136 *
EB Right	95	0	0.000	0	95	0	0.000
WB Left	0	0	0.000 *	0	0	0	0.000 *
WB Thru	0	0	0.000	0	0	0	0.000
WB Right	0	0	0.000	0	0	0	0.000
Yellow Allowance			0.100 *				0.100 *
ICU			0.629				0.638
LOS			B				B

* Key conflicting movement as a part of ICU

1 Counts conducted by: City Traffic Counters

2 Capacity expressed in veh/hour of green

3 The southbound right-turn lane has an overlapping phase with the eastbound left-turn phase.

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