

**Appendix D1      Revised Traffic Impact Analysis Report**

REVISED TRAFFIC IMPACT ANALYSIS REPORT  
**125 BAKER STREET APARTMENTS**  
Costa Mesa, California  
July 18, 2013 (original dated May 14, 2013)

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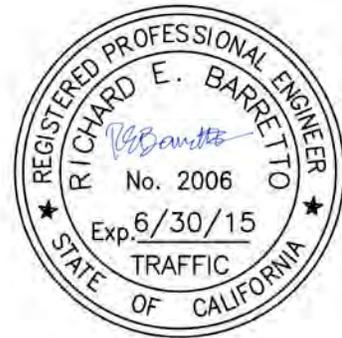
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# TABLE OF CONTENTS

SECTION	PAGE
<b>1.0 Introduction.....</b>	<b>1</b>
1.1 Study Area .....	2
<b>2.0 Project Description .....</b>	<b>3</b>
2.1 Site Access .....	3
<b>3.0 Existing Conditions.....</b>	<b>5</b>
3.1 Existing Street System .....	5
3.2 Existing Traffic Volumes.....	5
3.3 Existing Intersection Conditions.....	6
3.3.1 Intersection Capacity Utilization (ICU) Method of Analysis .....	6
3.3.2 Highway Capacity Manual (HCM) Method of Analysis (Unsignalized Intersections) .....	8
3.4 Existing Level of Service Results .....	8
<b>4.0 Traffic Forecasting Methodology .....</b>	<b>11</b>
<b>5.0 Project Traffic Characteristics .....</b>	<b>12</b>
5.1 Project Traffic Generation .....	12
5.2 Project Traffic Distribution and Assignment .....	14
5.3 Existing Plus Project Traffic Conditions .....	14
<b>6.0 Future Traffic Conditions .....</b>	<b>15</b>
6.1 Ambient Traffic Growth .....	15
6.2 Related Projects Traffic Characteristics.....	15
6.3 General Plan Buildout Traffic Conditions .....	15
6.4 Year 2016 and General Plan Buildout Traffic Volumes.....	15
6.4.1 Year 2016 Traffic Volumes .....	15
6.4.2 General Plan Buildout Traffic Volumes .....	15
<b>7.0 Traffic Impact Analysis Methodology .....</b>	<b>16</b>
7.1 Impact Criteria and Thresholds.....	16
7.2 Traffic Impact Analysis Scenarios.....	16
<b>8.0 Peak Hour Intersection Capacity Analysis.....</b>	<b>17</b>
8.1 Existing Plus Project Analysis .....	17
8.1.1 Existing Plus Project Traffic Conditions .....	17
8.2 Year 2016 Traffic Conditions .....	19
8.2.1 Year 2016 Cumulative Traffic Conditions .....	19
8.2.2 Year 2016 Cumulative Plus Project Conditions .....	19

## TABLE OF CONTENTS (CONTINUED)

SECTION	PAGE
8.3 General Plan Buildout Traffic Conditions .....	21
8.3.1 General Plan Buildout Traffic Conditions .....	21
8.3.2 General Plan Buildout Plus Project Traffic Conditions .....	21
8.4 Traffic Signal Warrant Analysis .....	23
8.4.1 Traffic Signal Warrant Analysis Results and Conclusions .....	23
<b>9.0 Site Access Evaluation .....</b>	<b>25</b>
9.1 Level of Service Analysis For Project Access .....	25
9.2 Sight Distance Evaluation .....	25
<b>10.0 Recommended Improvements .....</b>	<b>28</b>
10.1 Planned Improvements .....	28
10.2 Project-Specific Mitigation Measures .....	28
10.3 Traffic Impact Fees .....	29
10.4 Project Specific Improvements .....	29
<b>11.0 Parking Analysis .....</b>	<b>31</b>
11.1 City Code Parking Requirements .....	31
<b>12.0 Congestion Management Program (CMP) Compliance Assessment .....</b>	<b>33</b>
<b>13.0 State Of California (Caltrans) Methodology .....</b>	<b>34</b>
13.1 Highway Capacity Manual (HCM) Method of Analysis (Signalized Intersections) .....	34
13.2 Existing Plus Project Traffic Conditions .....	36
13.2.1 Existing Traffic Conditions .....	36
13.2.2 Existing Plus Project Traffic Conditions .....	36
13.3 Year 2016 Traffic Conditions .....	36
13.3.1 Year 2016 Cumulative Traffic Conditions .....	36
13.3.2 Year 2016 Cumulative Plus Project Traffic Conditions .....	39
13.4 General Plan Buildout Traffic Conditions .....	39
13.4.1 General Plan Buildout Cumulative Traffic Conditions .....	39
13.4.2 General Plan Buildout Plus Project Traffic Conditions .....	39
<b>14.0 Summary Of Findings And Conclusions .....</b>	<b>41</b>

## APPENDICES

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### APPENDIX

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- A. Traffic Study Scope of Work
- B. Existing Traffic Count Data
- C. Intersection Level of Service Calculation Worksheets
- D. General Plan Buildout Worksheets
- E. Traffic Signal Warrant Worksheets
- F. Driveway Level of Service Calculation Worksheets
- G. Intersection Level of Service Calculation Worksheets - Caltrans

## LIST OF FIGURES

SECTION—FIGURE #	FOLLOWING PAGE
1-1 Vicinity Map.....	2
2-1 Existing Aerial Site Photograph.....	3
2-2 Proposed Site Plan.....	3
3-1 Existing Roadway Conditions and Intersection Controls.....	6
3-2 Existing AM Peak Hour Traffic Volumes.....	6
3-3 Existing PM Peak Hour and Daily Traffic Volumes.....	6
5-1 Existing Office Distribution Pattern.....	14
5-2 Project Distribution Pattern.....	14
5-3 AM Peak Hour Project Traffic Volumes.....	14
5-4 PM Peak Hour Project Traffic Volumes.....	14
5-5 Existing Plus Project AM Peak Hour Traffic Volumes.....	14
5-6 Existing Plus Project PM Peak Hour Traffic Volumes.....	14
6-1 Year 2016 AM Peak Hour Cumulative Traffic Volumes.....	15
6-2 Year 2016 PM Peak Hour Cumulative Traffic Volumes.....	15
6-3 Year 2016 AM Peak Hour Cumulative Traffic Volumes with Project.....	15
6-4 Year 2016 PM Peak Hour Cumulative Traffic Volumes with Project.....	15
6-5 General Plan Buildout AM Peak Hour Cumulative Traffic Volumes.....	15
6-6 General Plan Buildout PM Peak Hour Cumulative Traffic Volumes.....	15
6-7 General Plan Buildout AM Peak Hour Cumulative Traffic Volumes with Project.....	15
6-8 General Plan Buildout PM Peak Hour Cumulative Traffic Volumes with Project.....	15
9-1 Stopping Sight Line Analysis Southbound Approach on Pullman Street.....	27
9-2 Stopping Sight Line Analysis Northbound Approach on Pullman Street.....	27
10-1 Recommended Improvements.....	29

## LIST OF TABLES

SECTION—TABLE #	PAGE
2-1	Project Development Summary .....4
3-1	Level of Service Criteria For Signalized Intersections .....7
3-2	Level of Service Criteria For Unsignalized Intersections .....9
3-3	Existing Peak Hour Intersection Capacity Analysis.....10
5-1	Project Traffic Generation Forecast.....13
8-1	Existing Plus Project Peak Hour Intersection Capacity Analysis .....18
8-2	Year 2016 Peak Hour Intersection Capacity Analysis .....20
8-3	General Plan Buildout Peak Hour Intersection Capacity Analysis .....22
8-4	Traffic Signal Warrant Analysis Summary .....24
9-1	Project Driveway Peak Hour Intersection Capacity Analysis .....27
10-1	Traffic Impact Fee.....30
11-1	City Code Parking Requirements .....32
13-1	Level of Service Criteria For Signalized Intersections (HCM Methodology) .....35
13-2	Existing Plus Project Peak Hour Intersection Capacity Analysis - Caltrans .....37
13-3	Year 2016 Peak Hour Intersection Capacity Analysis - Caltrans .....38
13-4	General Plan Buildout Peak Hour Intersection Capacity Analysis - Caltrans .....40

TRAFFIC IMPACT ANALYSIS REPORT  
**125 BAKER STREET APARTMENTS**

Costa Mesa, California  
July 18, 2013

## 1.0 INTRODUCTION

This traffic impact analysis addresses the potential traffic impacts associated with the proposed 125 Baker Street Apartment Project (hereinafter referred to as Project) in the City of Costa Mesa, California. The proposed Project includes the demolition of the existing 62,000 SF office building and the development of a 240 unit apartment complex, consisting of 119 one-bedroom units, 85 two-bedroom units, 12 three-bedroom units and 24 studio units with a multi-level parking structure in place of the existing office building. Parking will be provided on-site via a six-level parking structure with 547 spaces.

This report documents the findings and recommendations of a traffic impact analysis conducted by Linscott, Law & Greenspan, Engineers (LLG) to determine the potential impacts associated with the proposed Project. The traffic analysis evaluates the existing operating conditions at six (6) key study intersections within the project vicinity, estimates the trip generation potential of the Project, and forecasts future operating conditions without and with the proposed Project. Where necessary, intersection improvements/mitigation measures are identified.

This traffic report satisfies the *City of Costa Mesa Traffic Impact Analysis Methodology*, dated February 2009 and is consistent with the requirements and procedures outlined in the most current *Congestion Management Program (CMP) for Orange County*. The Scope of Work for this traffic study, which is included in **Appendix A**, was developed in conjunction with City of Costa Mesa Public Works Department staff.

The project site has been visited and an inventory of adjacent area roadways and intersections was performed. Existing peak hour traffic information has been collected at six (6) key study intersections for use in the preparation of level of service calculations. Information concerning cumulative projects (planned and/or approved) in the vicinity of the project has been researched at the City of Costa Mesa and City of Irvine. Based on our research, there are no related projects located within close proximity to the site.

This traffic report analyzes existing and future weekday AM peak hour and PM peak hour traffic conditions for a near-term (Year 2016) and long-term buildout traffic setting upon completion of the proposed Project. Near-term (Year 2016) cumulative peak hour traffic forecasts were projected by incorporating a one percent (1.0%) annual growth rate. Long-term buildout peak hour traffic forecasts were projected based on modeled traffic projections from the Costa Mesa Traffic Model dated August 2003.

## 1.1 Study Area

The six (6) key study intersections selected for evaluation in this report provide both regional and local access to the study area. They consist of the following:

### Study Intersections

1. SR-55 Southbound Ramps at Baker Street (Signalized)
2. SR-55 Northbound Ramps at Baker Street (Signalized)
3. Pullman Street at Baker Street (Unsignalized)
4. Red Hill Avenue at Baker Street (Signalized)
5. Pullman Street at Briggs Avenue (Unsignalized)
6. Red Hill Avenue at Briggs Avenue (Unsignalized)

**Figure 1-1** presents a Vicinity Map, which illustrates the general location of the proposed Project and depicts the study locations and surrounding street system. The Level of Service (LOS) investigations at these key locations were used to evaluate the potential traffic-related impacts associated with area growth, cumulative projects and the proposed Project. When necessary, this report recommends intersection improvements that may be required to accommodate future traffic volumes and restore/maintain an acceptable Level of Service and/or mitigate the impact of the project.

Included in this Traffic Impact Analysis are:

- Existing traffic counts,
- Estimated project traffic generation/distribution/assignment,
- AM and PM peak hour capacity analyses for existing conditions,
- AM and PM peak hour capacity analyses for existing plus project conditions,
- AM and PM peak hour capacity analyses for future near-term (Year 2016) traffic conditions without and with the proposed Project,
- AM and PM peak hour capacity analyses for future long-term buildout traffic conditions without and with the proposed Project,
- Site Access Evaluation,
- Parking Evaluation,
- Congestion Management Program Compliance Assessment and
- Caltrans Evaluation.



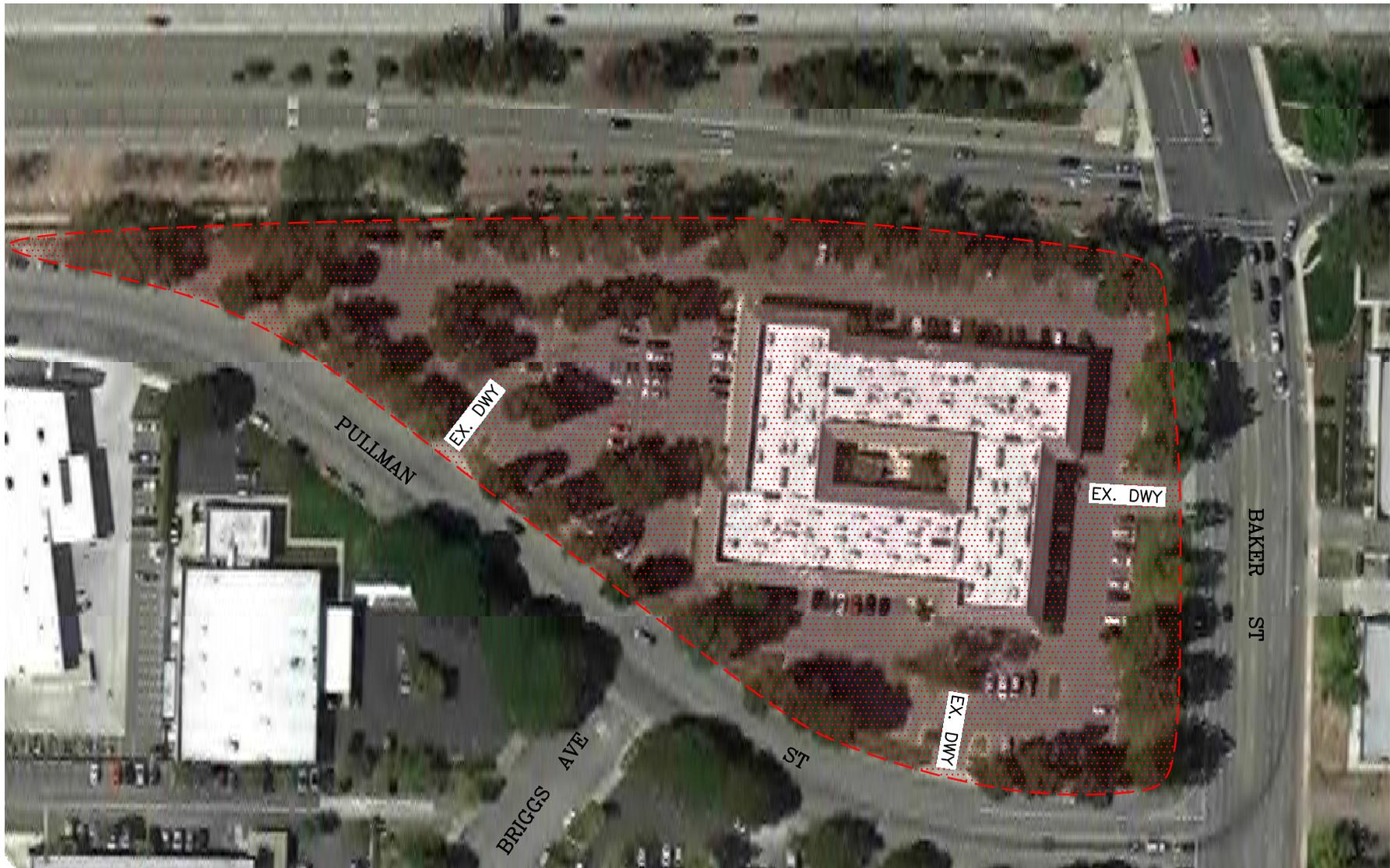
## 2.0 PROJECT DESCRIPTION

The project site is located at 125 Baker Street which is on the south west corner of Baker Street and Pullman Street in the City of Costa Mesa, California. The project site is currently developed with a two-story, 62,000 SF office building and surface parking that is now 74 percent occupied. Access to the Project site is provided via a full access driveway on Baker Street and two full access driveways on Pullman Street. *Figure 2-1* presents an aerial depiction of the existing site.

*Table 2-1* presents the proposed Project totals for the site. Review of the proposed site plan indicates that the proposed Project includes the demolition of the existing 62,000 SF office building and the development of a 240 unit apartment complex, consisting of 119 one-bedroom units, 85 two-bedroom units, 12 three-bedroom units and 24 studio units with a multi-level parking structure in place of the existing office building. Parking will be provided on-site via a 547-space, six-level parking structure. *Figure 2-2* presents the site plan for the proposed Project prepared by Architects Orange.

### 2.1 Site Access

As shown in *Figure 2-2*, primary vehicular access to the project site will be provided via one full access driveway with direct access to the parking structure along Pullman Street; the proposed primary access is located approximately 100 feet north of an existing driveway that now serves the office building. A secondary full access driveway located at the southernmost edge of the property is provided for future tenant access. Access to the three-space parking lot for the Project's leasing office is provided from the primary access. For the purposes of this study all vehicles entering and exiting the site are assumed at the primary driveway.



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engineers



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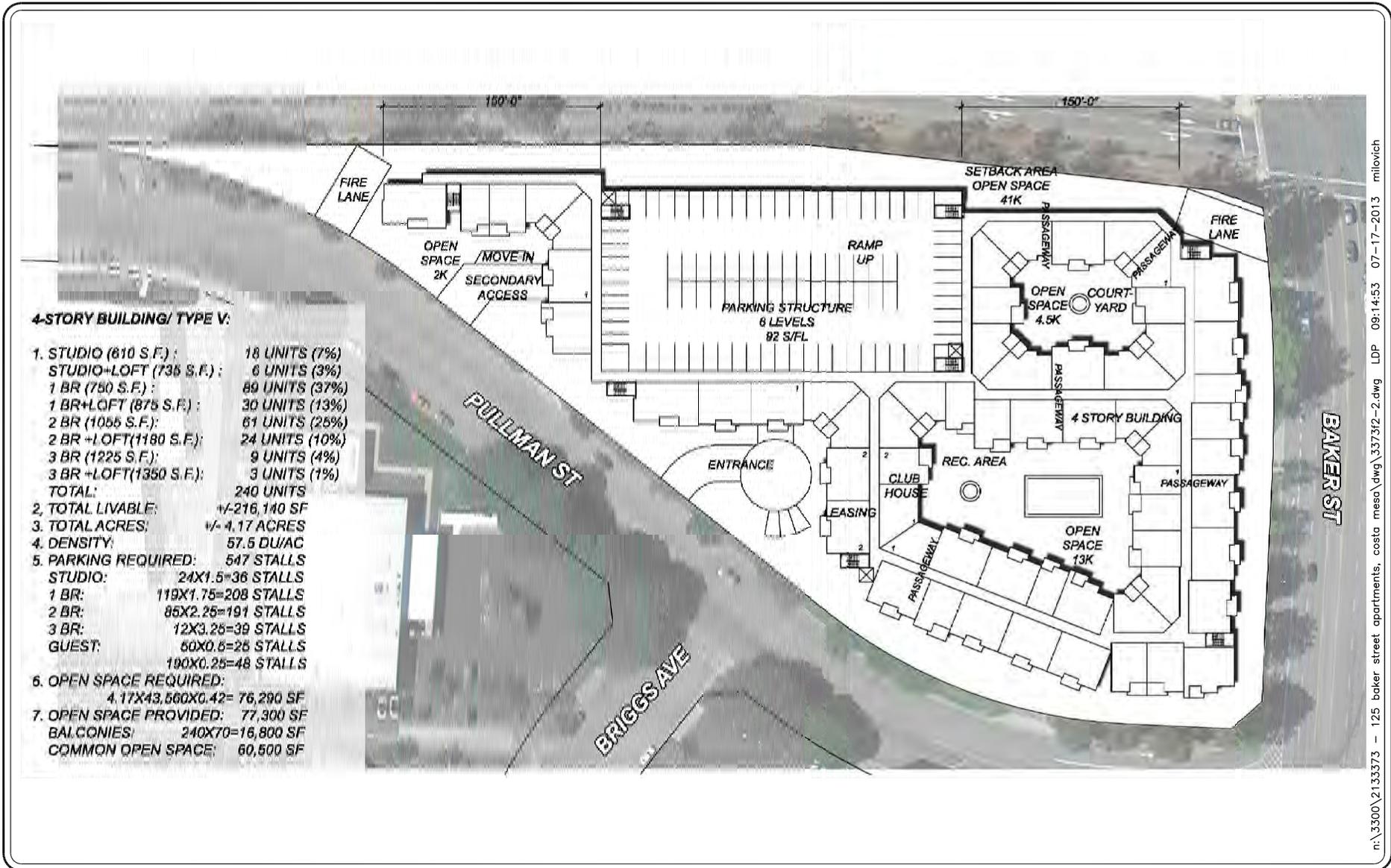
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## FIGURE 2-1

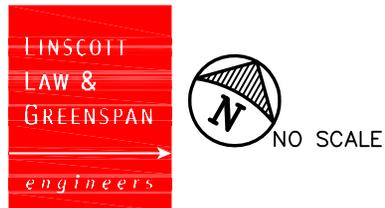
EXISTING AERIAL SITE PHOTOGRAPH  
125 BAKER STREET APARTMENTS, COSTA MESA



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SOURCE: ARCHITECTS ORANGE

## FIGURE 2-2



PROPOSED SITE PLAN  
125 BAKER STREET APARTMENTS, COSTA MESA

TABLE 2-1  
PROJECT DEVELOPMENT SUMMARY<sup>1</sup>

Land Use / Project Description	Proposed Development Totals
<b><u>125 Baker Street Apartments</u></b>	
▪ Studio (610 SF -735 SF)	24 Units
▪ 1 Bedroom Units (750 SF – 875 SF)	119 Units
▪ 2 Bedroom Units (1,055 SF – 1,180 SF)	85 Units
▪ 3 Bedroom Units (1,225 SF – 1,350 SF)	<u>12 Units</u>
<b>Total Units:</b>	<b>240 Units</b>
▪ Parking Supply	547 spaces

<sup>1</sup> Source: Architects Orange.

## 3.0 EXISTING CONDITIONS

### 3.1 Existing Street System

The principal local network of streets serving the project site includes Baker Street, Red Hill Avenue, Pullman Street and Briggs Avenue. The following discussion provides a brief synopsis of these key area streets. The descriptions are based on an inventory of existing roadway conditions.

**Baker Street** is generally a four-lane, divided roadway oriented in the east-west direction. Baker Street borders the project site to the north. The posted speed limit on Baker Street is 40 miles per hour (mph). On-street parking is not permitted along this roadway in the vicinity of the project. Traffic signals control the study intersections of Baker Street at SR-55 SB Ramps, SR-55 NB Ramps, and Red Hill Avenue while a one-way stop controls the study intersection of Baker Street at Pullman Street. Baker Street is classified as a Major Arterial in the City of Costa Mesa Circulation Element.

**Red Hill Avenue** is generally a four-lane, divided roadway, oriented in the north-south direction. The posted speed limit on Red Hill Avenue is 50 mph. On-street parking is not permitted along this roadway in the vicinity of the project. A one-way stop controls the study intersection of Red Hill Avenue at Briggs Avenue. Red Hill Avenue is classified as a Major Arterial in the City of Costa Mesa Circulation Element.

**Pullman Street** is a two-lane, undivided roadway that borders the project site to the east. Pullman Street is oriented in the north-south direction. The posted speed limit on Pullman Street is 40 mph. On-street parking is permitted along this roadway in the vicinity of the project. A one-way stop controls the study intersection of Pullman Street at Briggs Avenue. Pullman Street is classified as a Secondary Roadway in the City of Costa Mesa Circulation Element.

**Briggs Avenue** is a two-lane, undivided roadway, oriented in the east-west direction. On-street parking is permitted along this roadway in the vicinity of the project site. Briggs Avenue is classified as a Secondary Roadway in the City of Costa Mesa Circulation Element.

*Figure 3-1* presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this report. This figure identifies the number of travel lanes for key arterials, as well as intersection configurations and controls for the key area study intersections.

### 3.2 Existing Traffic Volumes

Six (6) key study intersections have been identified as the locations at which to evaluate existing and future traffic operating conditions. Some portion of potential project-related traffic will pass through each of these intersections, and their analysis will reveal the expected relative impacts of the project. These key locations were selected for evaluation based on discussions with City of Costa Mesa staff and in consideration of Orange County CMP requirements.

Existing AM peak hour and PM peak hour traffic volumes for the 6 key study intersections evaluated in this report were obtained from manual turning movement counts conducted by Transportation Studies, Inc in April 2013.

**Figures 3-2** and **3-3** illustrate the existing AM and PM peak hour traffic volumes at the six (6) key study intersections evaluated in this report, respectively. **Appendix B** contains the detailed peak hour and daily traffic count sheets for the key intersections evaluated in this report.

### 3.3 Existing Intersection Conditions

Existing AM and PM peak hour operating conditions for the six (6) key study intersections were evaluated using the *Intersection Capacity Utilization (ICU)* methodology for signalized intersections and the methodology outlined in Chapter 17 of the *Highway Capacity Manual 2000 (HCM2000)* for unsignalized intersections.

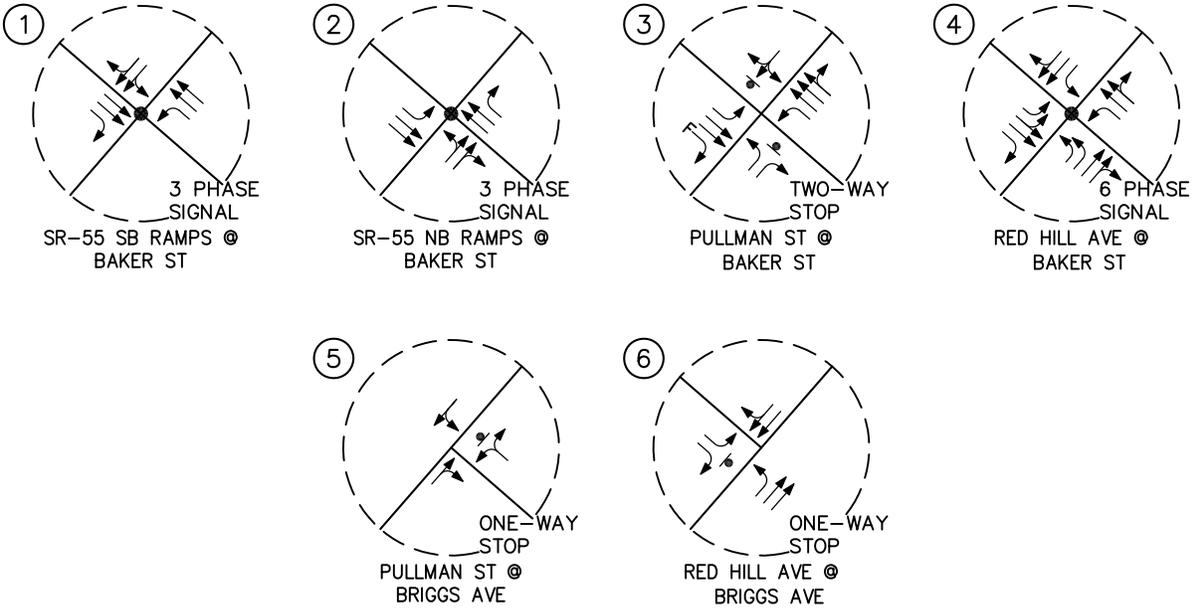
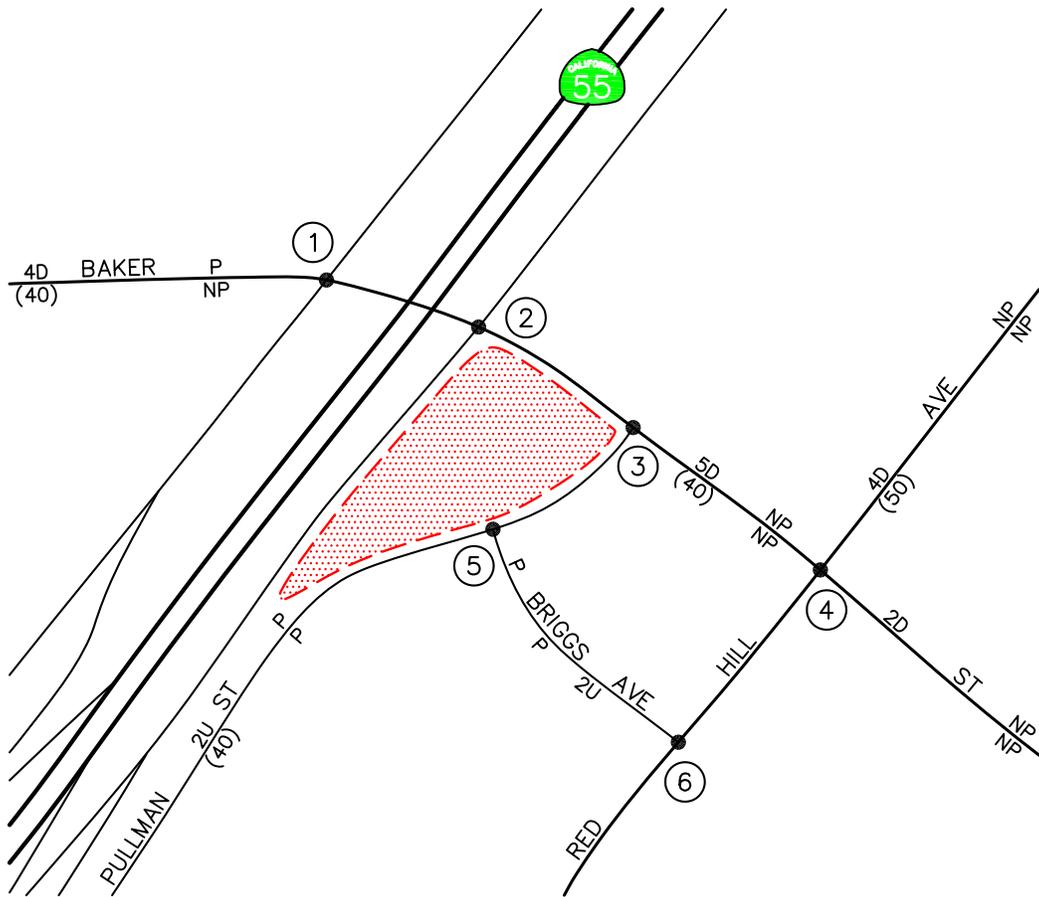
#### 3.3.1 *Intersection Capacity Utilization (ICU) Method of Analysis*

In conformance with City of Costa Mesa and Orange County CMP requirements, existing AM and PM peak hour operating conditions for the key signalized study intersections were evaluated using the Intersection Capacity Utilization (ICU) method. The ICU technique is intended for signalized intersection analysis and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU numerical value represents the percent signal (green) time, and thus capacity, required by existing and/or future traffic. It should be noted that the ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing.

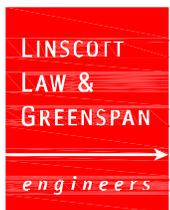
Per City of Costa Mesa requirements, the ICU calculations use a lane capacity of 1,600 vph for left-turn lanes, through lanes and right-turn lanes. No adjustments for clearance intervals are made since the assumed lane capacity reflects the effect of lost time.

The ICU value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements. The six qualitative categories of Level of Service have been defined along with the corresponding ICU value range and are shown in **Table 3-1**

The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements. According to City of Costa Mesa criteria, LOS D (ICU = 0.801 – 0.900) is the minimum acceptable condition that should be maintained during the morning and evening peak commute hours.



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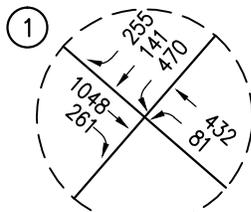
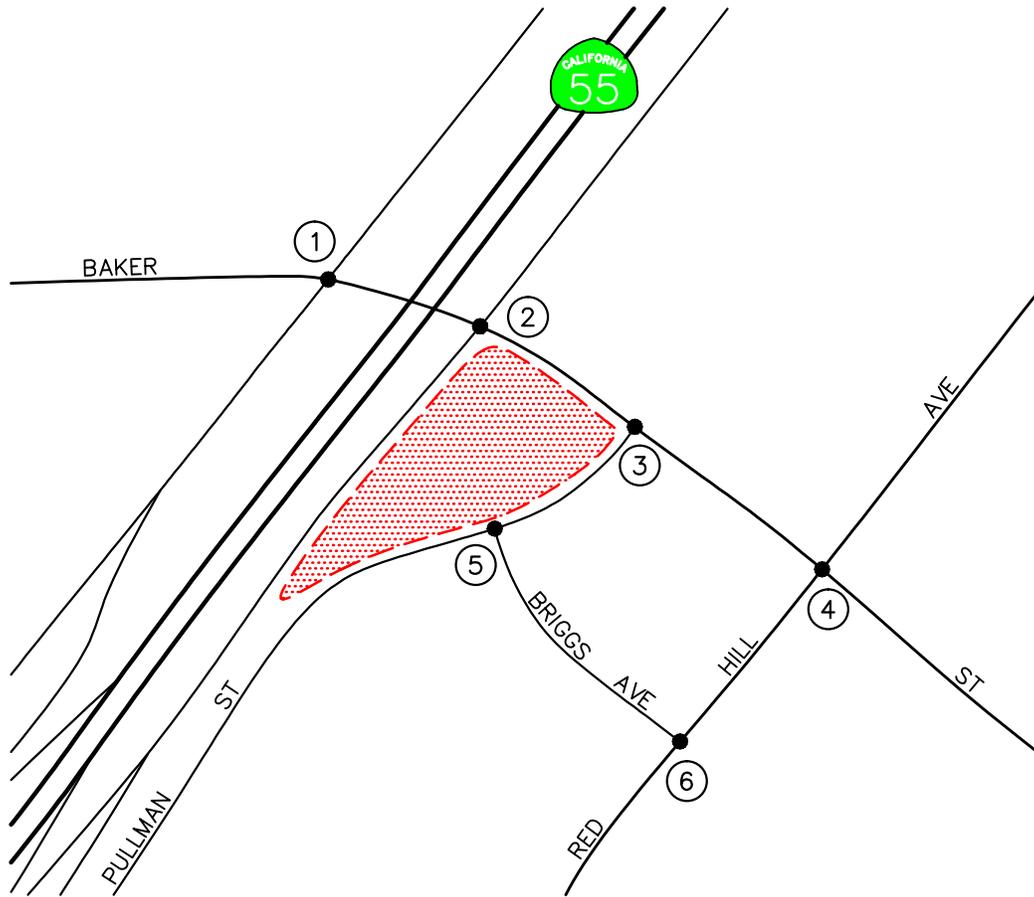


- KEY**
- ← = APPROACH LANE ASSIGNMENT
  - = TRAFFIC SIGNAL, ◻ = STOP SIGN
  - P = PARKING, NP = NO PARKING
  - U = UNDIVIDED, D = DIVIDED
  - 2 = NUMBER OF TRAVEL LANES
  - (XX) = POSTED SPEED LIMIT (MPH)
  - F = FREE RIGHT
  - [Red Hatched Box] = PROJECT SITE

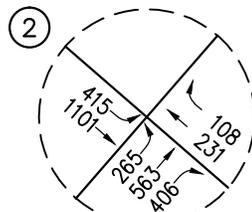
# FIGURE 3-1

## EXISTING ROADWAY CONDITIONS AND INTERSECTION CONTROLS

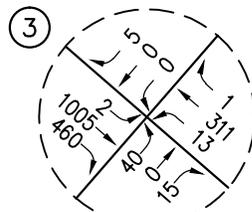
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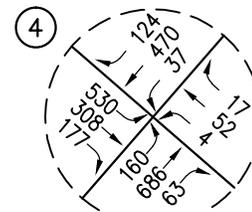
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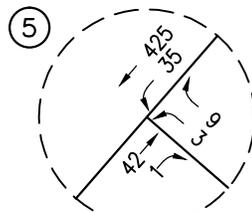
SR-55 NB RAMPs @  
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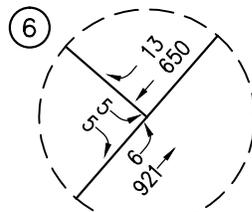
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BAKER ST



RED HILL AVE @  
BAKER ST



PULLMAN ST @  
BRIGGS AVE



RED HILL AVE @  
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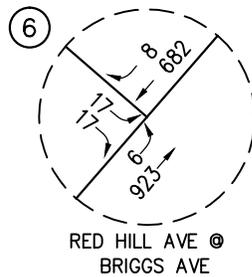
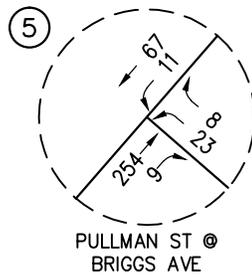
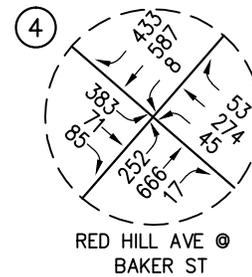
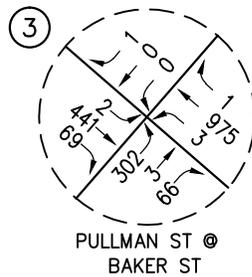
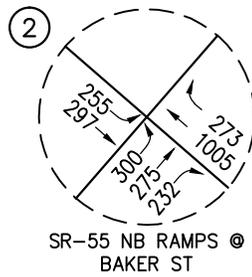
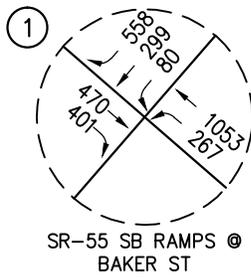
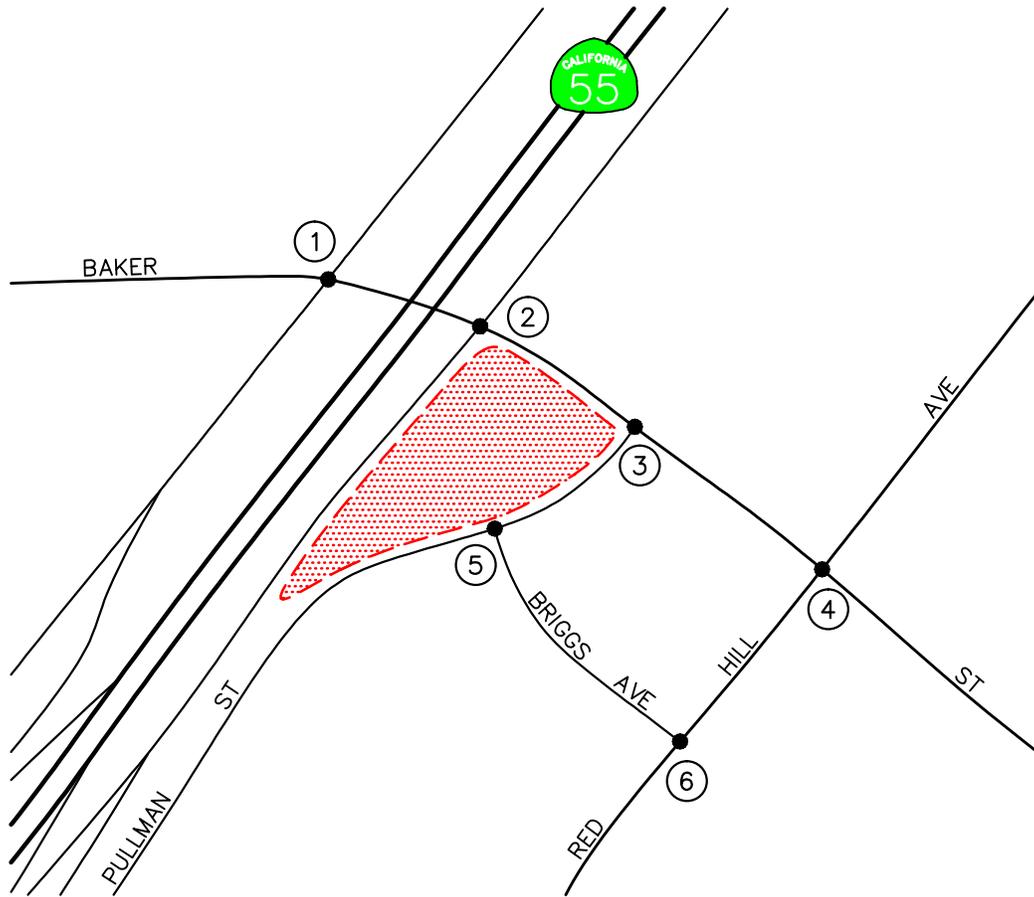
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KEY  
 = PROJECT SITE

# FIGURE 3-2

EXISTING AM PEAK HOUR TRAFFIC VOLUMES  
 125 BAKER STREET APARTMENTS, COSTA MESA



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 = PROJECT SITE

### FIGURE 3-3

EXISTING PM PEAK HOUR TRAFFIC VOLUMES  
 125 BAKER STREET APARTMENTS, COSTA MESA

TABLE 3-1  
LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Level of Service (LOS)	Intersection Capacity Utilization Value (V/C)	Level of Service Description
A	$\leq 0.600$	EXCELLENT. No vehicle waits longer than one red light, and no approach phase is fully used.
B	0.601 – 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 – 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 – 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 – 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	$> 1.000$	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.

### 3.3.2 Highway Capacity Manual (HCM) Method of Analysis (Unsignalized Intersections)

The 2000 HCM unsignalized methodology for stop-controlled intersections was utilized for the analysis of the unsignalized intersections. This methodology estimates the average control delay for each of the subject movements and determines the level of service for each movement. For all-way stop controlled intersections, the overall average control delay measured in seconds per vehicle, and level of service is then calculated for the entire intersection. For one-way and two-way stop-controlled (minor street stop-controlled) intersections, this methodology estimates the worst side street delay, measured in seconds per vehicle and determines the level of service for that approach. The HCM control delay value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The six qualitative categories of Level of Service have been defined along with the corresponding HCM control delay value range, as shown in **Table 3-2**.

### 3.4 Existing Level of Service Results

**Table 3-3** summarizes the existing peak hour service level calculations for the six (6) key study intersections based on existing traffic volumes and current street geometrics. Review of **Table 3-3** indicates that five (5) of the six (6) key study intersections currently operate at acceptable service levels (LOS D or better) during the AM and PM peak hour. One intersection, Pullman Street at Baker Street, currently operates at LOS F during the PM peak hour.

**Appendix C** presents the ICU/LOS and HCM/LOS calculation worksheets for the six (6) key study intersections for the AM peak hour and PM peak hour.

TABLE 3-2  
LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS<sup>2</sup>

Level of Service (LOS)	Highway Capacity Manual Delay Value (sec/veh)	Level of Service Description
A	$\leq 10.0$	Little or no delay
B	$> 10.0$ and $\leq 15.0$	Short traffic delays
C	$> 15.0$ and $\leq 25.0$	Average traffic delays
D	$> 25.0$ and $\leq 35.0$	Long traffic delays
E	$> 35.0$ and $\leq 50.0$	Very long traffic delays
F	$> 50.0$	Severe congestion

<sup>2</sup> Source: *Highway Capacity Manual 2000*, Chapter 17 (Unsignalized Intersections).

**TABLE 3-3**  
**EXISTING PEAK HOUR INTERSECTION CAPACITY ANALYSIS**

<b>Key Intersection</b>	<b>Time Period</b>	<b>Jurisdiction</b>	<b>Control Type</b>	<b>ICU/HCM</b>	<b>LOS</b>
1. SR-55 Southbound Ramps at Baker Street	AM	Costa Mesa/	3 Phase	0.672	B
	PM	Caltrans	Signal	0.678	B
2. SR-55 Northbound Ramps at Baker Street	AM	Costa Mesa/	3 Phase	0.730	C
	PM	Caltrans	Signal	0.726	C
3. Pullman Street at Baker Street	AM	City of	One-Way	33.5 s/v	D
	PM	Costa Mesa	Stop	<b>133.3</b> s/v	<b>F</b>
4. Red Hill Avenue at Baker Street	AM	City of	6 Phase	0.453	A
	PM	Costa Mesa	Signal	0.619	B
5. Pullman Street at Briggs Avenue	AM	City of	One-Way	9.6 s/v	A
	PM	Costa Mesa	Stop	10.7 s/v	B
6. Red Hill Avenue at Briggs Avenue	AM	City of	One-Way	17.9 s/v	C
	PM	Costa Mesa	Stop	19.4 s/v	C

## 4.0 TRAFFIC FORECASTING METHODOLOGY

In order to estimate the traffic impact characteristics of the proposed Project, a multi-step process has been utilized. The first step is traffic generation, which estimates the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the project development tabulation.

The second step of the forecasting process is traffic distribution, which identifies the origins and destinations of inbound and outbound project traffic. These origins and destinations are typically based on demographics and existing/expected future travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and project traffic assignments developed, the impact of the proposed project is isolated by comparing operational (LOS) conditions at selected key intersections using expected future traffic volumes with and without forecast project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated and the significance of the project's impacts identified.

## 5.0 PROJECT TRAFFIC CHARACTERISTICS

### 5.1 Project Traffic Generation

The trip generation potential of the proposed Project has been estimated using the average rates for ITE Land Use 220: Apartments published in the *Trip Generation, 9th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012)*. Since the existing office building is currently 74% occupied, the AM peak hour PM peak hour trip generation was based on traffic counts conducted at the subject property's three existing driveways in April 2013, while the average daily trip rate for ITE Land Use 710: General Office Building was utilized to estimate the daily trips.

While the upper half of *Table 5-1* summarizes the trip generation rates used in forecasting the vehicular trips generated by the proposed Project Land Use, the lower half provides a summary of the Project's daily, AM and PM peak hour trip generation potential in comparison to that of the existing office building's trip generation at 74% occupancy.

A review of the lower portion of *Table 5-1* shows the trip generation forecast for the Project. As shown, the proposed Project is forecast to generation 1,596 daily trips, with 122 trips (24 inbound, 98 outbound) produced in the AM peak hour and 149 trips (96 inbound, 53 outbound) produced in the PM peak hour. The existing land use at 74% occupancy, generates approximately 506 daily trips, with 57 trips (53 inbound, 4 outbound) produced in the AM peak hour and 57 trips (22 inbound, 35 outbound) produced in the PM peak hour. The existing trip generation is based on the peak hour for the site utilizing the traffic counts which were conducted at the three (3) existing driveways during the AM and PM peak periods.

When the proposed Project is compared to the existing "occupied floor area", the Project is forecast to result in 1,090 additional daily trips, 65 net AM peak hour trips and 92 net PM peak hour. The potential impact of these added trips are assessed in this report.

*Appendix B* contains the project driveways turning movement counts worksheet, detailing the traffic volumes which were used for the existing trip generation in this report.

TABLE 5-1  
PROJECT TRAFFIC GENERATION FORECAST<sup>3</sup>

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<b>Generation Rates:</b>							
▪ 220: Apartments (TE/DU)	6.65	0.10	0.41	0.51	0.40	0.22	0.62
<b>Generation Forecasts:</b>							
<u>Proposed Project</u>							
▪ 125 Baker Street Apartments (240 DU)	1,596	24	98	122	96	53	149
<u>Existing Occupied Floor Area</u>							
▪ General Office Building (62,000 SF @ 74% occupancy) <sup>4</sup>	<u>-506</u>	<u>-53</u>	<u>-4</u>	<u>-57</u>	<u>-22</u>	<u>-35</u>	<u>-57</u>
<b>Total “Net Occupied ” Project Trip Generation: Proposed Project Minus Existing Occupied Office Floor Area</b>	<b>1,090</b>	<b>-29</b>	<b>94</b>	<b>65</b>	<b>74</b>	<b>18</b>	<b>92</b>

Notes:

TE/DU = Trip end per dwelling unit

<sup>3</sup> Source: *Trip Generation, 9th Edition*, Institute of Transportation Engineers, (ITE) [Washington, D.C. (2012)].

<sup>4</sup> AM and PM peak hour trips are based on existing driveway counts conducted April 11, 2013. Daily trips are estimated using the ITE Land Use 710: General Office Building rate of 11.03.

## 5.2 Project Traffic Distribution and Assignment

*Figures 5-1* and *5-2* present the traffic distribution patterns for the existing office building and proposed Project, respectively. Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

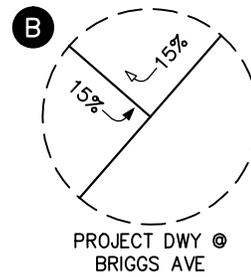
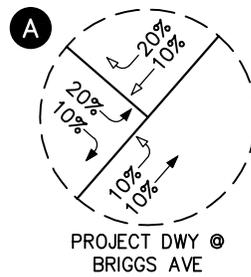
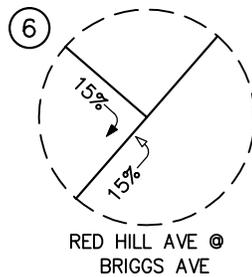
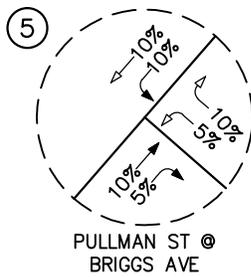
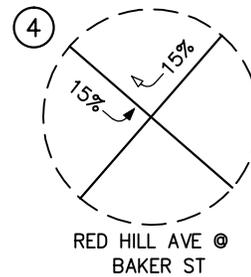
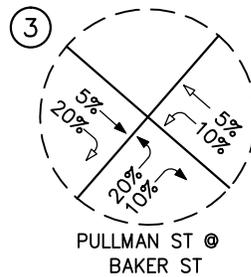
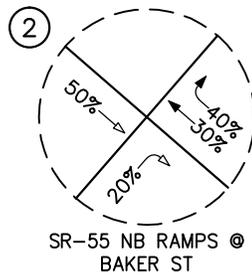
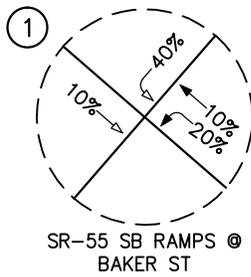
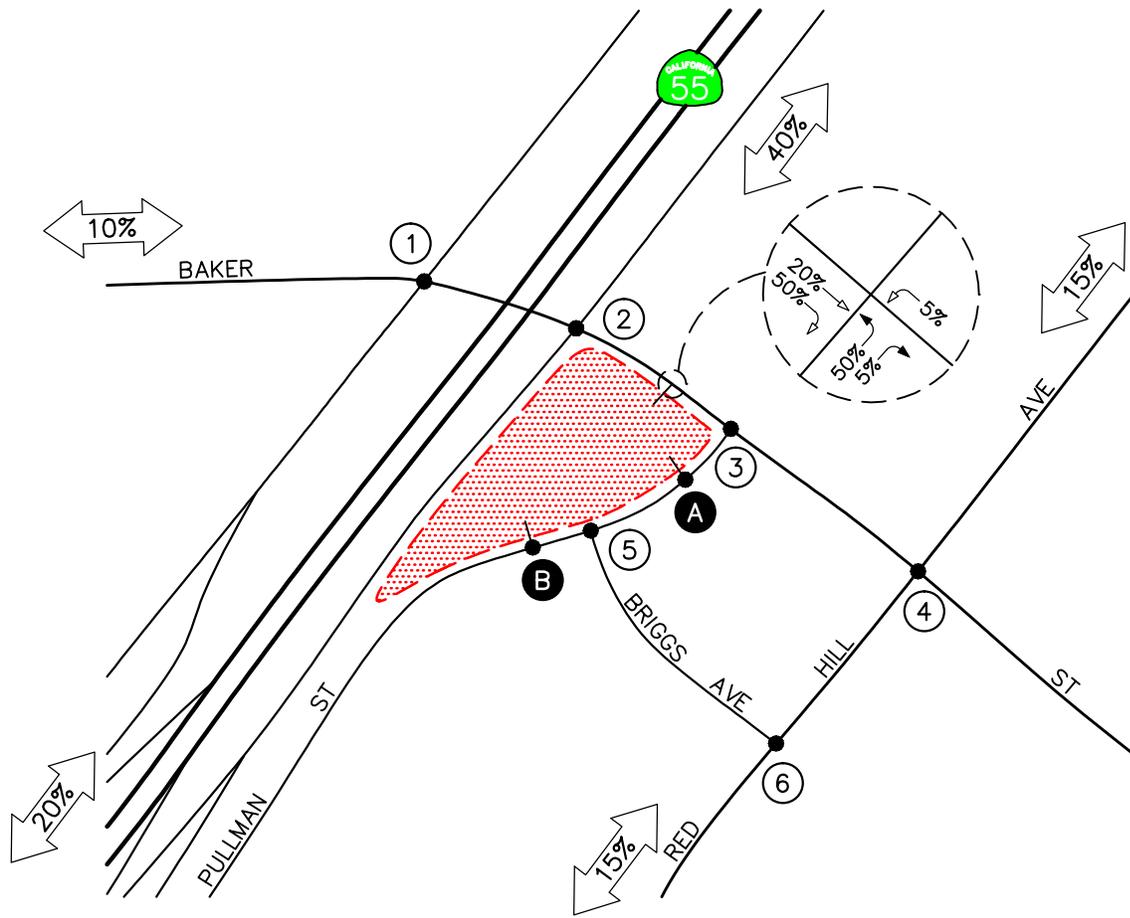
- the site's proximity to major traffic carriers (i.e. Bake Street, Red Hill Avenue, etc),
- expected localized traffic flow patterns based on adjacent street channelization and presence of traffic signals,
- existing intersection traffic volumes, and
- ingress/egress availability at the project site.

The anticipated AM and PM peak hour traffic volumes associated with the proposed Project are presented in *Figures 5-3* and *5-4*, respectively. The traffic volume assignments presented in *Figures 5-3* and *5-4* reflect the traffic distribution characteristics shown in *Figure 5-2* and the traffic generation forecast presented in *Table 5-1*. It should be noted that *Figure 5-1* was utilized to forecast the trip assignment of the existing office building at the key study intersections.

## 5.3 Existing Plus Project Traffic Conditions

The existing plus project traffic conditions have been generated based upon existing conditions and the estimated project traffic. These forecast traffic conditions have been prepared pursuant to the California Environmental Quality Act (CEQA) guidelines, which require that the potential impacts of a Project be evaluated upon the circulation system as it currently exists. This traffic volume scenario and the related intersection capacity analyses will identify the roadway improvements necessary to mitigate the direct traffic impacts of the Project, if any.

*Figures 5-5* and *5-6* present projected AM and PM peak hour traffic volumes at the six (6) key study intersections with the “net” addition of the trips generated by the proposed Project to existing traffic volumes, respectively (i.e. Existing Traffic minus Existing Office Traffic plus Project Traffic).



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GREENSPAN  
engineers



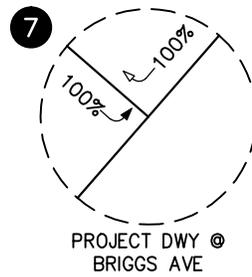
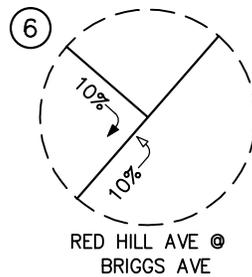
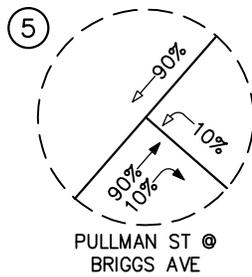
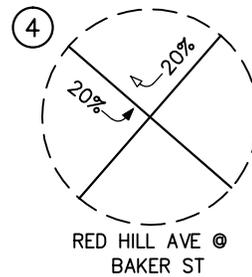
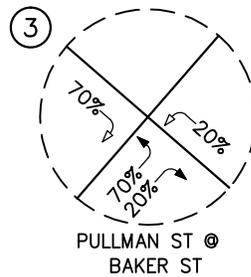
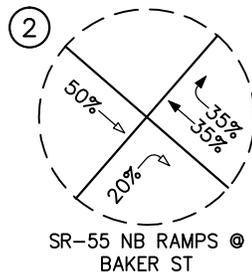
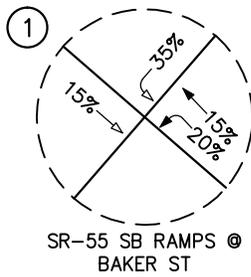
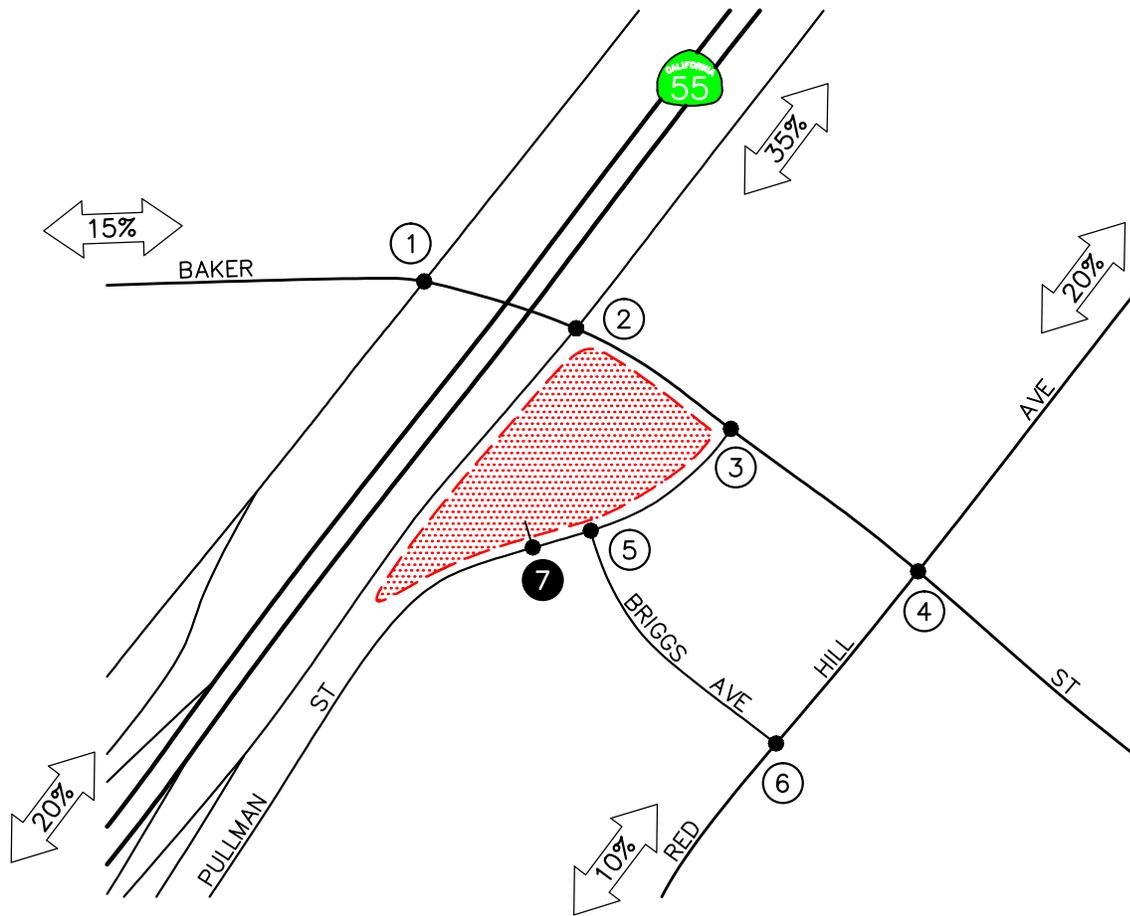
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KEY

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FIGURE 5-1

EXISTING OFFICE DISTRIBUTION PATTERN  
125 BAKER STREET APARTMENTS, COSTA MESA



KEY

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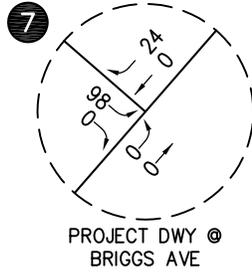
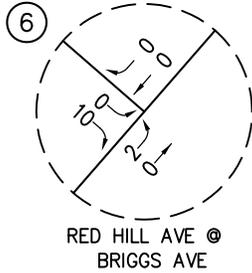
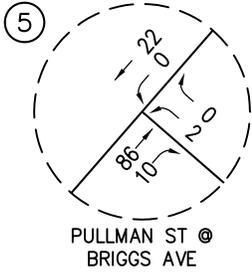
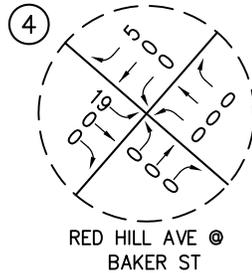
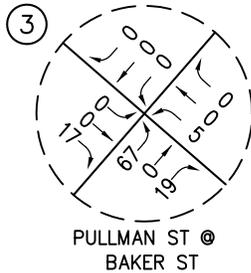
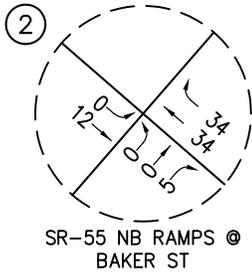
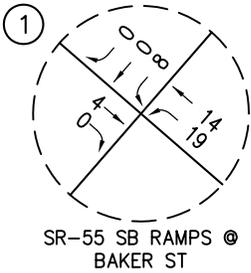
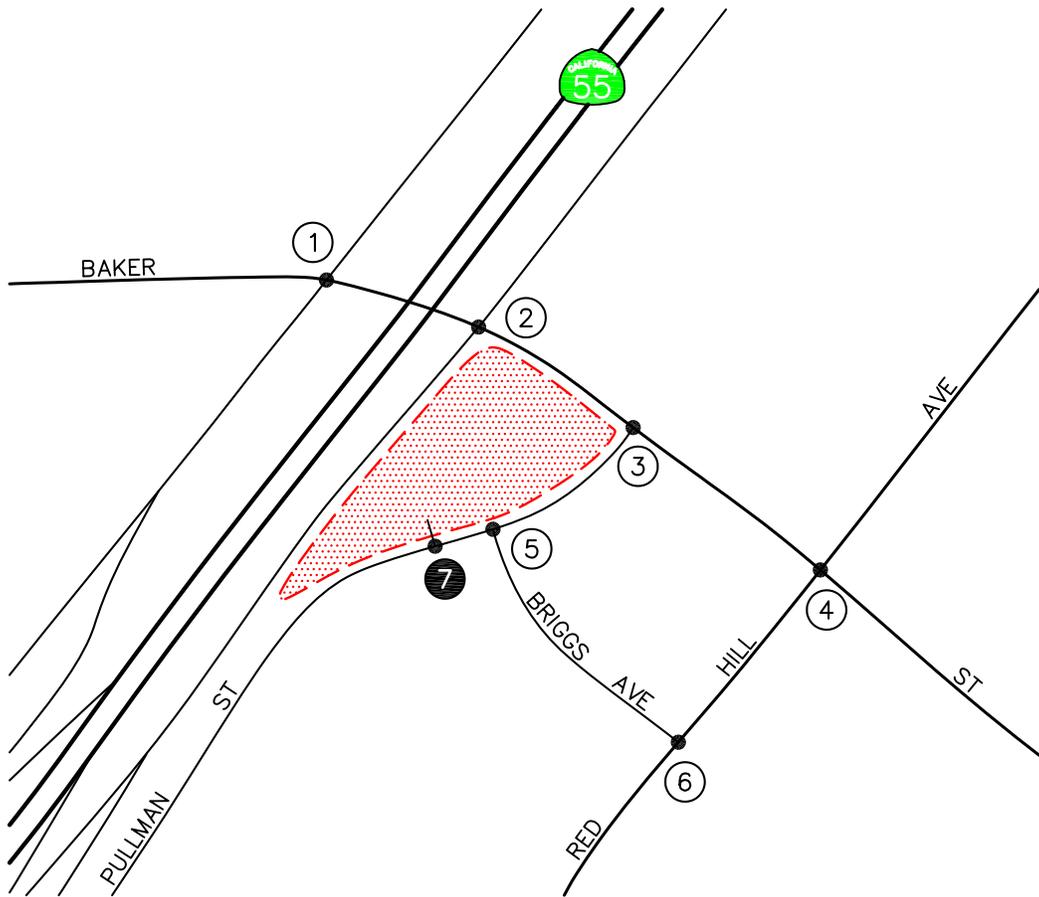
FIGURE 5-2

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PROJECT DISTRIBUTION PATTERN  
125 BAKER STREET APARTMENTS, COSTA MESA



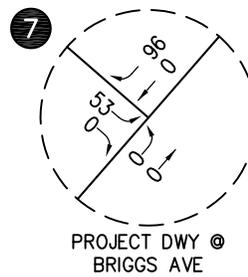
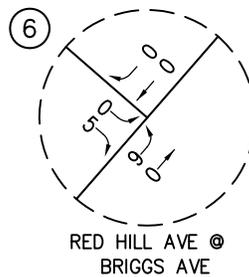
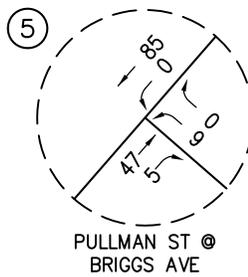
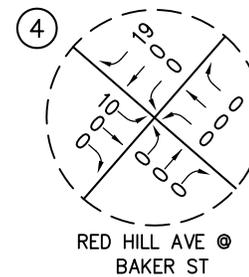
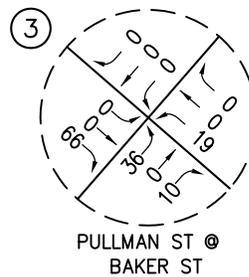
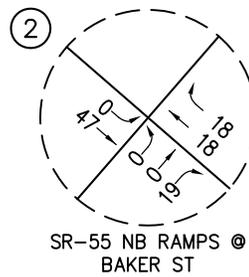
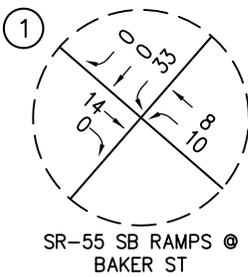
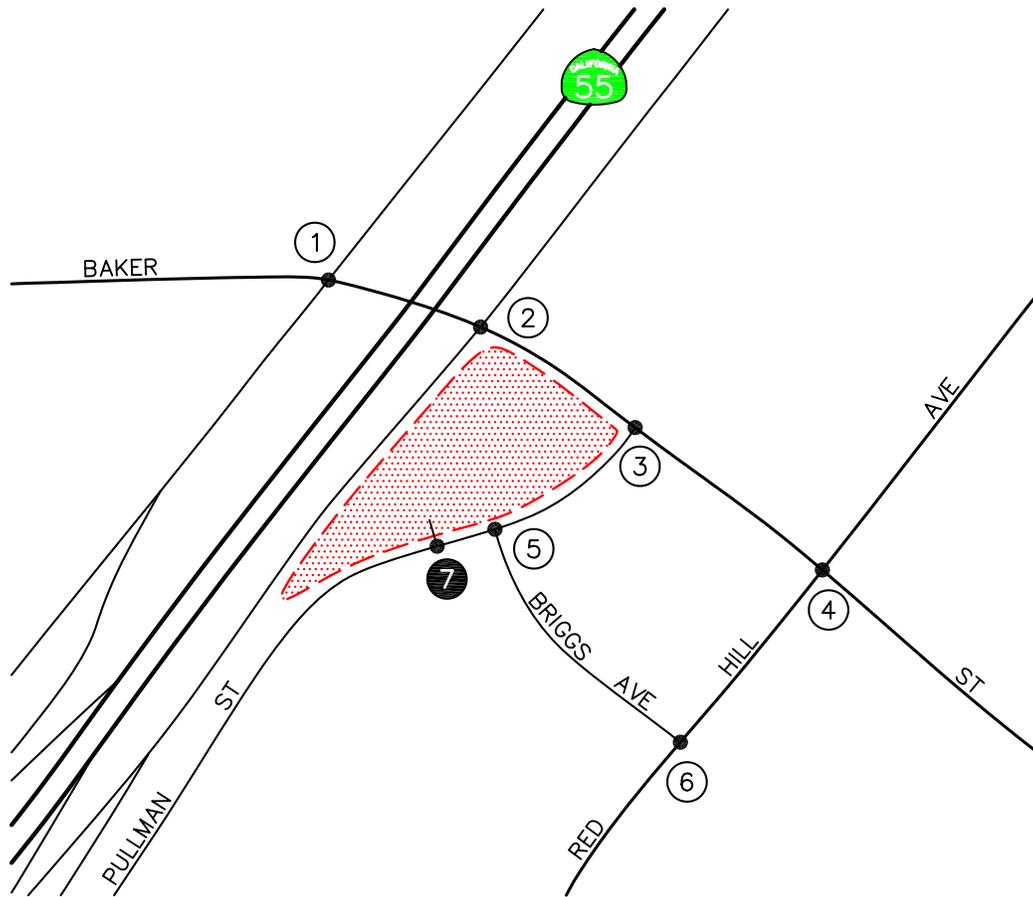
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# FIGURE 5-3

AM PEAK HOUR  
 PROJECT TRAFFIC VOLUMES  
 125 BAKER STREET APARTMENTS, COSTA MESA



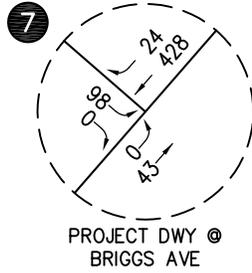
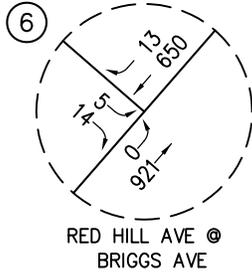
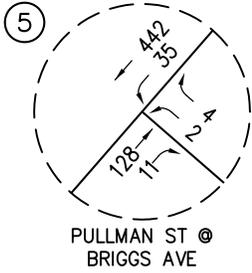
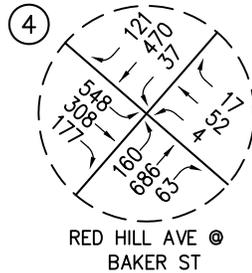
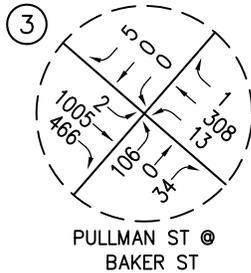
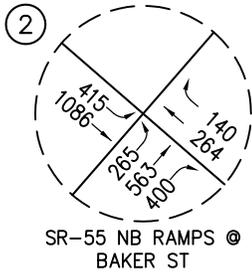
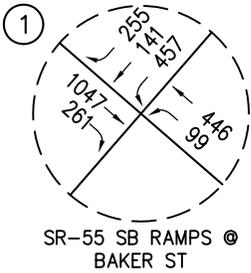
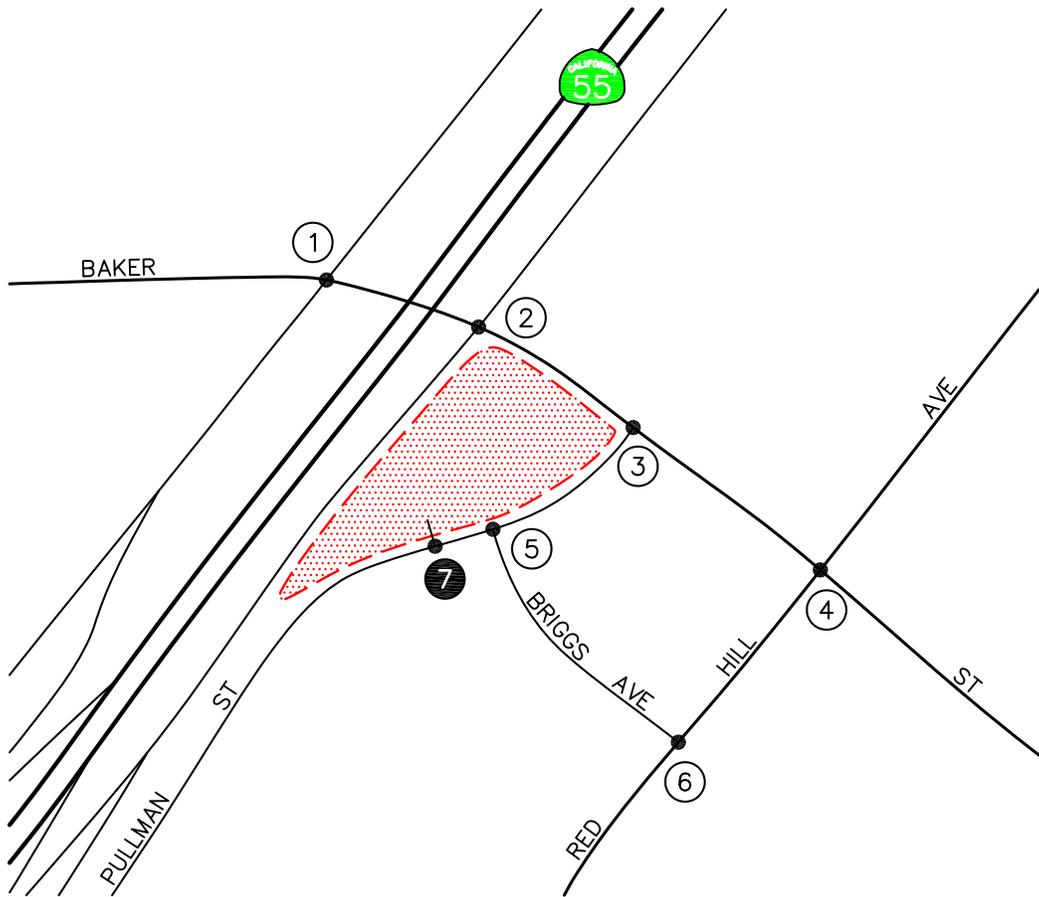
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# FIGURE 5-4

PM PEAK HOUR  
PROJECT TRAFFIC VOLUMES  
125 BAKER STREET APARTMENTS, COSTA MESA



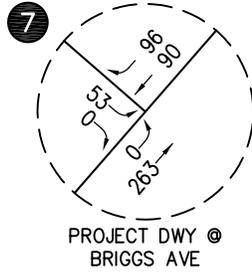
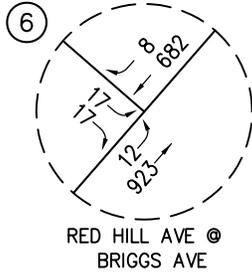
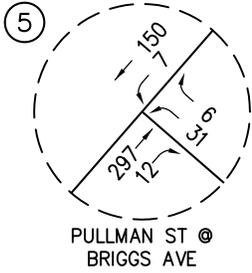
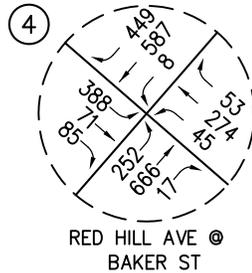
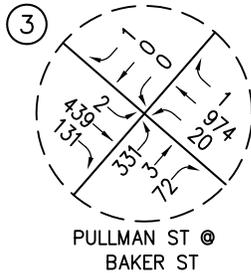
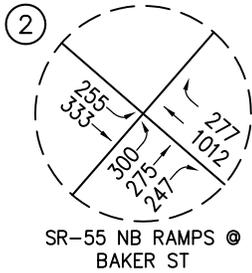
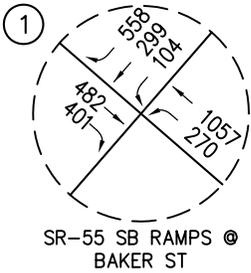
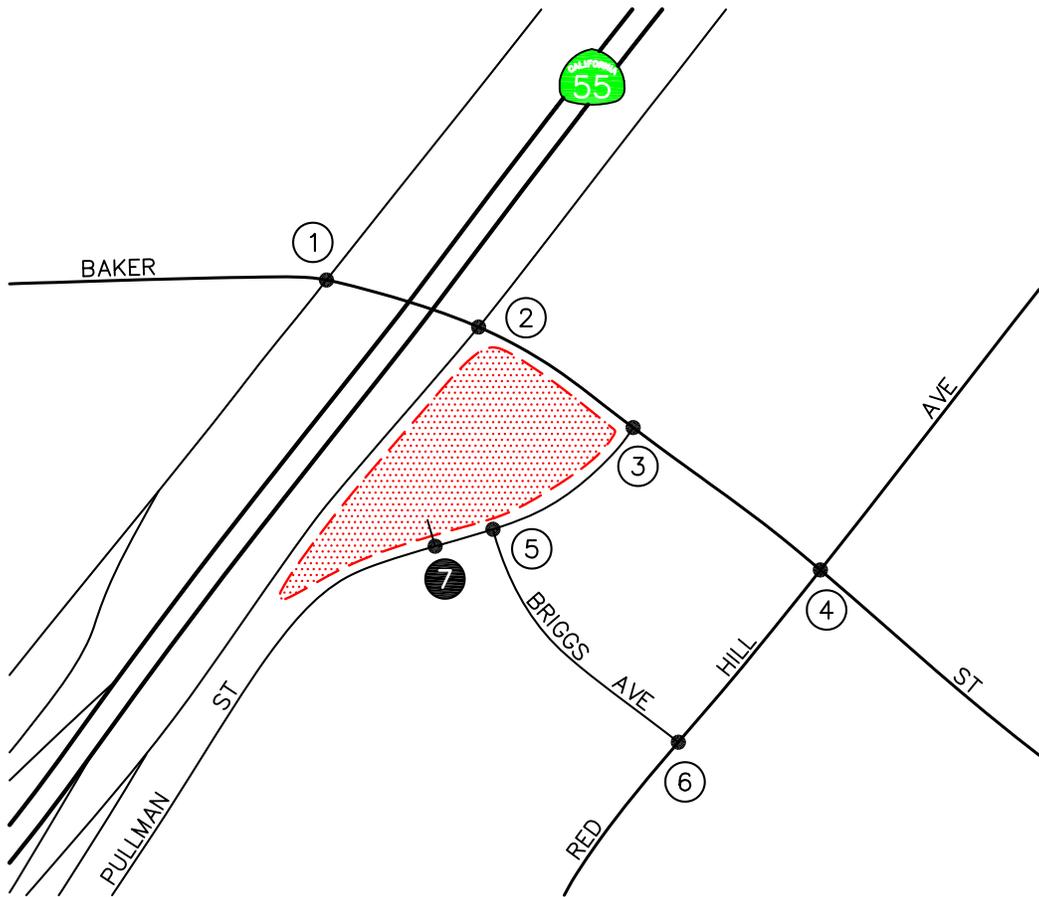
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# FIGURE 5-5

EXISTING PLUS PROJECT  
 AM PEAK HOUR TRAFFIC VOLUMES  
 125 BAKER STREET APARTMENTS, COSTA MESA



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# FIGURE 5-6

EXISTING PLUS PROJECT  
 PM PEAK HOUR TRAFFIC VOLUMES  
 125 BAKER STREET APARTMENTS, COSTA MESA

## 6.0 FUTURE TRAFFIC CONDITIONS

### 6.1 Ambient Traffic Growth

Horizon year, background traffic growth estimates have been calculated using an ambient traffic growth factor. The ambient traffic growth factor is intended to include unknown and future related projects in the study area, as well as account for regular growth in traffic volumes due to the development of projects outside the study area. The future growth in traffic volumes has been calculated at one percent (1.0%) per year. Applied to the Year 2013 existing traffic volumes, this factor results in a 3.0% growth in existing volumes to the near-term horizon Year 2016.

### 6.2 Related Projects Traffic Characteristics

In order to make a realistic estimate of future on-street conditions prior to implementation of the proposed Project, the status of other known development projects (related projects) within a two-mile radius of the proposed project has been researched at the City of Costa Mesa and City of Irvine in April 2013. With this information, the potential impact of the proposed Project can be evaluated within the context of the cumulative impact of all ongoing development.

Based on our research, there are no related projects in the City of Costa Mesa or City of Irvine, within the vicinity of the Project that have either been built, but not yet fully occupied, or are being processed for approval.

### 6.3 General Plan Buildout Traffic Conditions

The General Plan Buildout background traffic volume forecasts were obtained through utilization of the Costa Mesa Traffic Model (CMTM) dated August 2003. For the three (3) key study intersections where modeled data was not provided a growth factor was applied to near term through volumes along Baker Street and Red Hill Avenue. Copies of the General Plan Buildout worksheets and growth factor development calculations are presented in *Appendix D*.

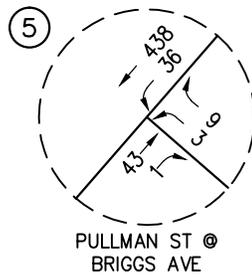
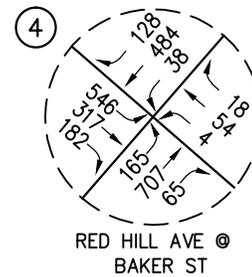
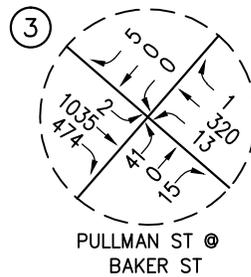
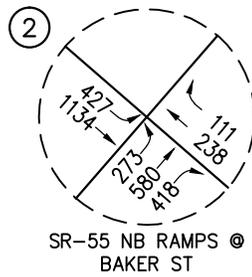
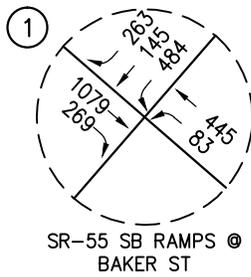
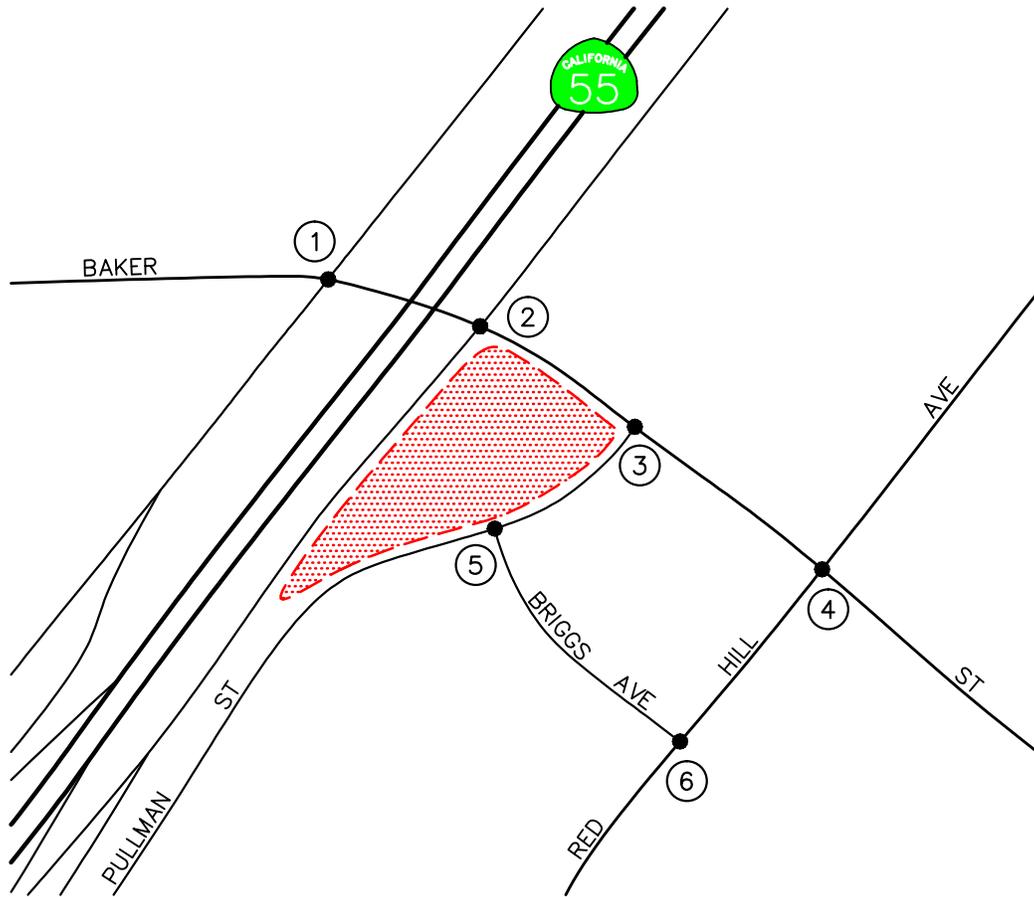
### 6.4 Year 2016 and General Plan Buildout Traffic Volumes

#### 6.4.1 Year 2016 Traffic Volumes

**Figures 6-1** and **6-2** present the AM and PM peak hour cumulative traffic volumes (existing traffic + ambient growth + related projects) at the six (6) key study intersections for the Year 2016, respectively. **Figures 6-3** and **6-4** illustrate the Year 2016 forecast AM and PM peak hour traffic volumes, with the inclusion of the “net” trips generated by the proposed Project, respectively.

#### 6.4.2 General Plan Buildout Traffic Volumes

**Figures 6-5** and **6-6** present the General Plan Buildout AM and PM peak hour cumulative traffic volumes at the six (6) key study intersections, respectively. **Figures 6-7** and **6-8** illustrate the General Plan Buildout forecast AM and PM peak hour traffic volumes, with the inclusion of the “net” trips generated by the proposed Project, respectively.



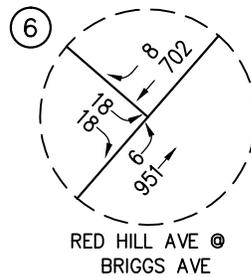
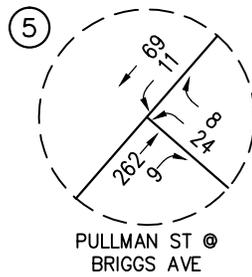
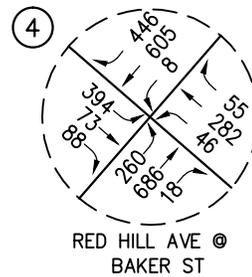
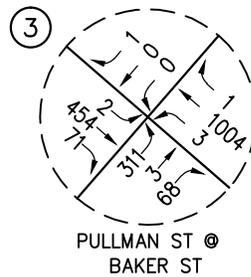
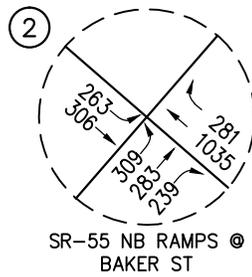
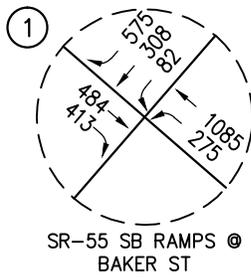
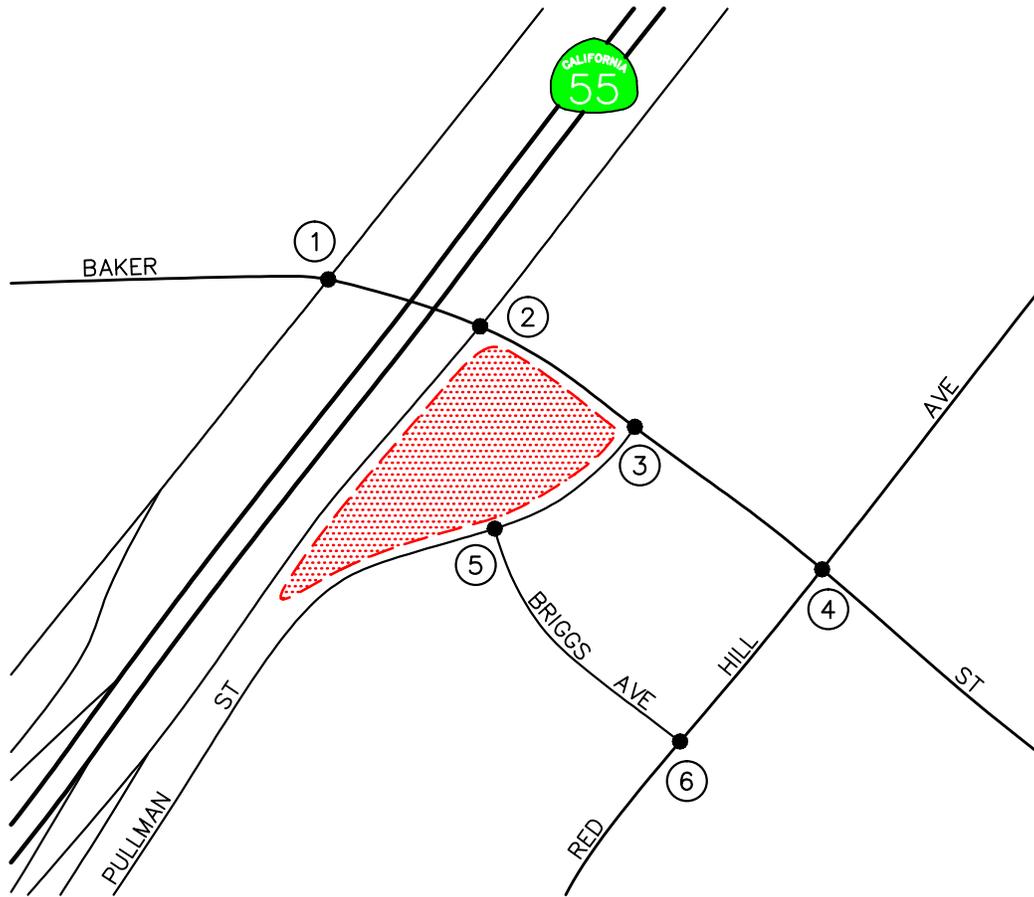
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KEY  
 = PROJECT SITE

# FIGURE 6-1

YEAR 2016 AM PEAK HOUR  
 CUMULATIVE TRAFFIC VOLUMES  
 125 BAKER STREET APARTMENTS, COSTA MESA



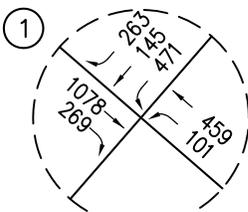
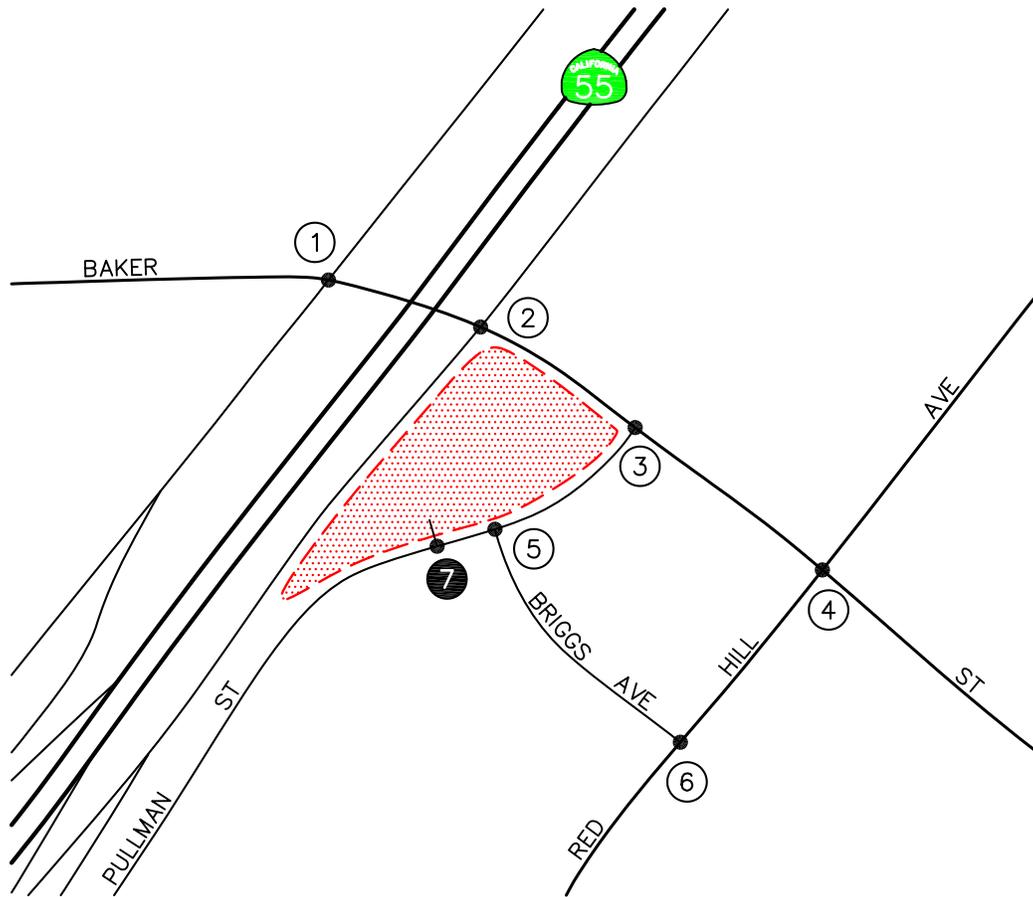
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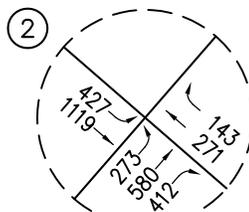
KEY  
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# FIGURE 6-2

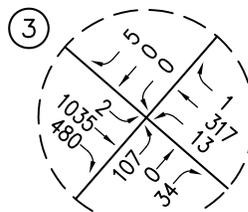
YEAR 2016 PM PEAK HOUR  
 CUMULATIVE TRAFFIC VOLUMES  
 125 BAKER STREET APARTMENTS, COSTA MESA



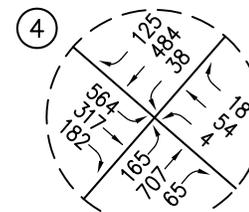
1 SR-55 SB RAMPs @ BAKER ST



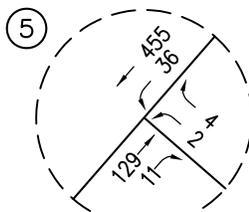
2 SR-55 NB RAMPs @ BAKER ST



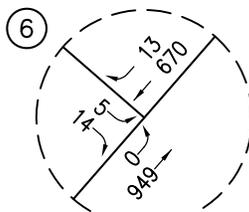
3 PULLMAN ST @ BAKER ST



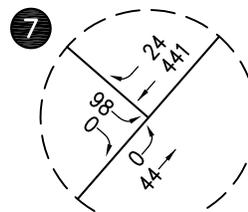
4 RED HILL AVE @ BAKER ST



5 PULLMAN ST @ BRIGGS AVE

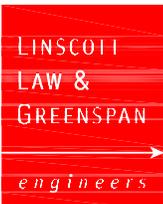


6 RED HILL AVE @ BRIGGS AVE



7 PROJECT DWY @ BRIGGS AVE

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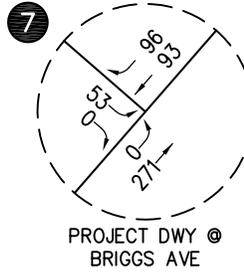
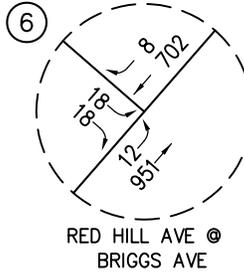
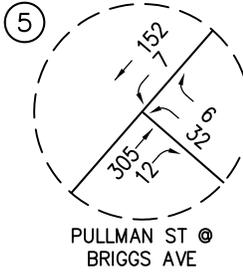
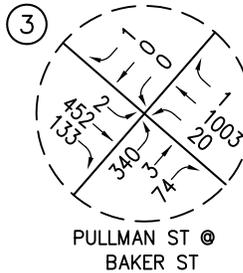
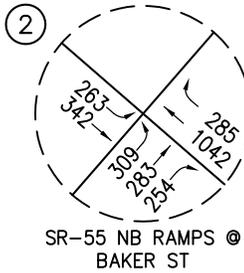
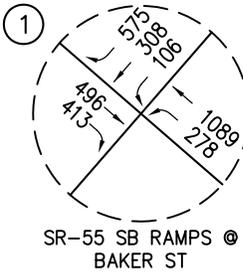
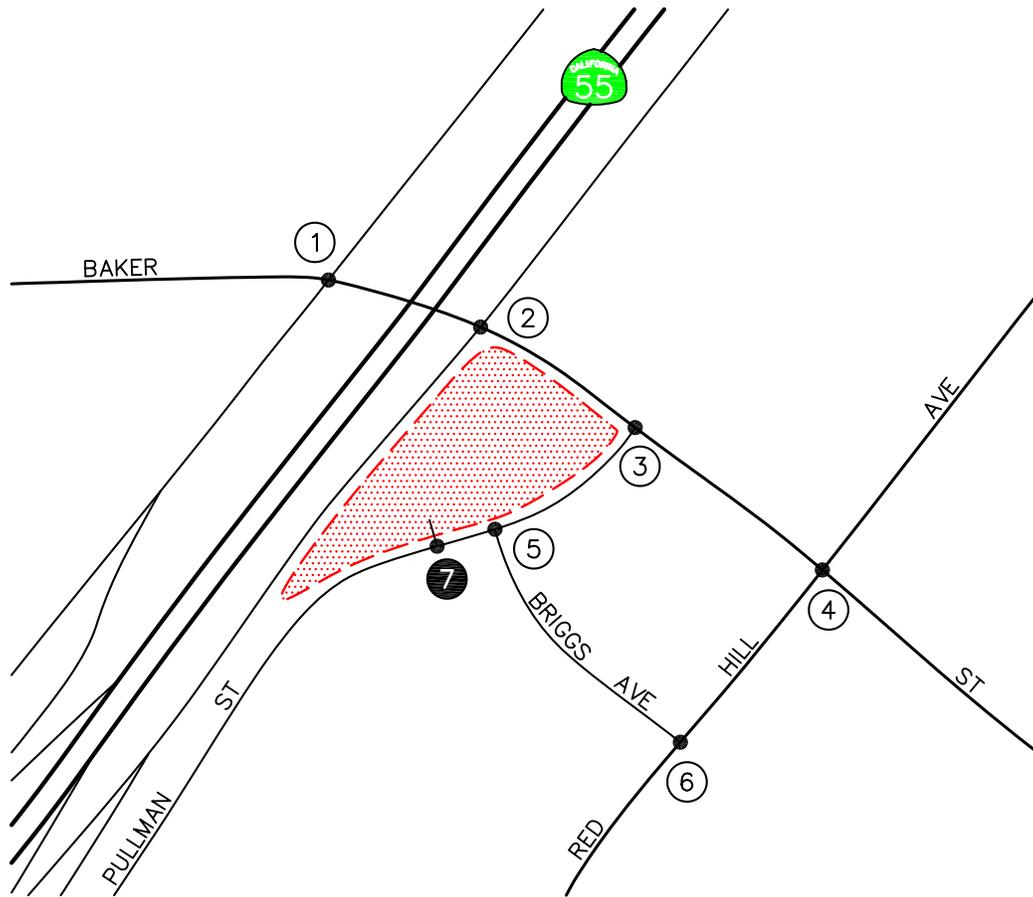


KEY

= PROJECT SITE

### FIGURE 6-3

YEAR 2016 AM PEAK HOUR  
CUMULATIVE TRAFFIC VOLUMES WITH PROJECT  
125 BAKER STREET APARTMENTS, COSTA MESA



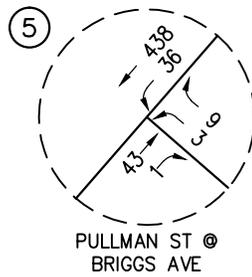
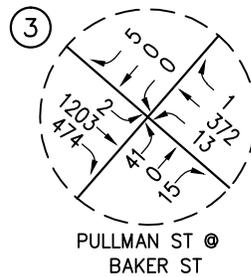
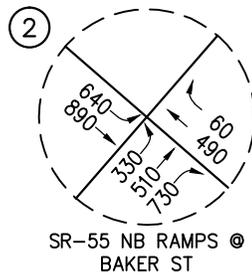
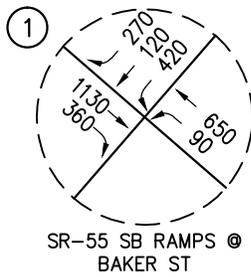
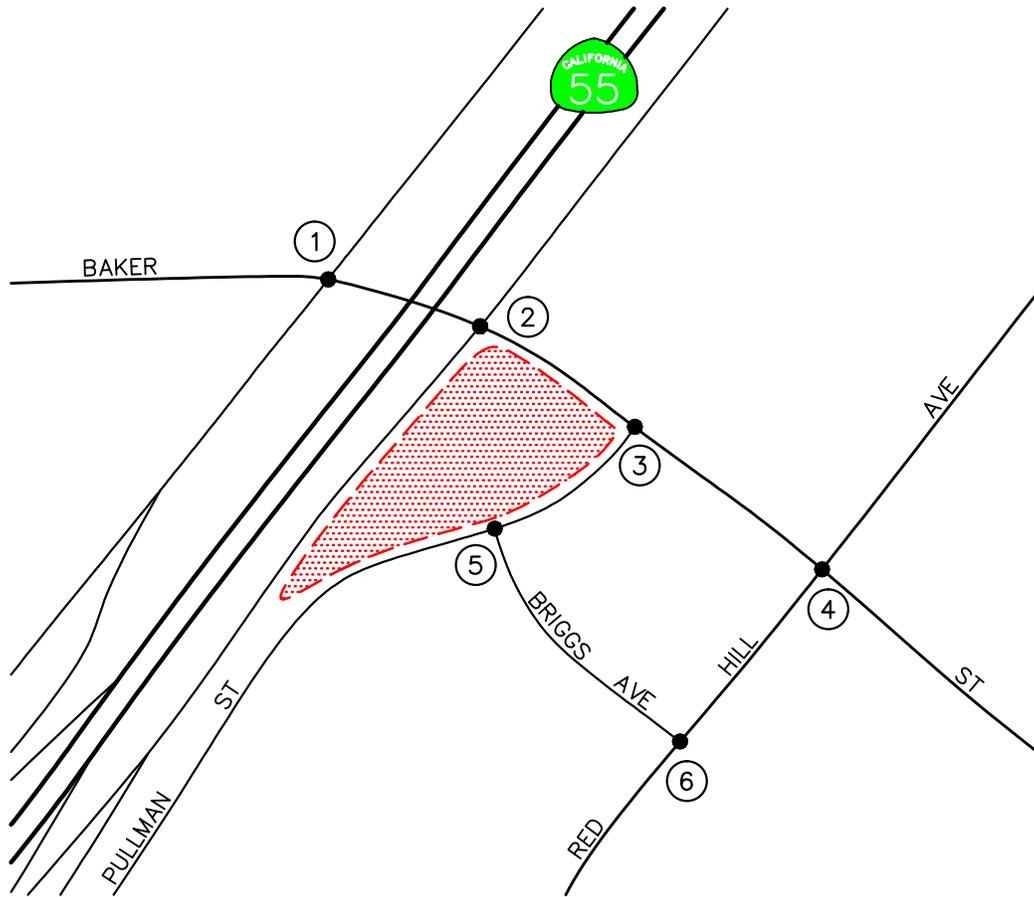
n:\3300\2133373 - 125 baker street apartments, costa mesa\dwg\337316-4.dwg LDP 18:48:22 07-16-2013 milovich



KEY  
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# FIGURE 6-4

YEAR 2016 PM PEAK HOUR  
 CUMULATIVE TRAFFIC VOLUMES WITH PROJECT  
 125 BAKER STREET APARTMENTS, COSTA MESA



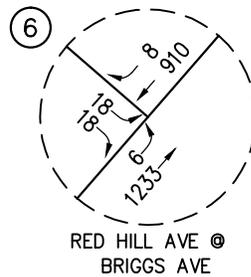
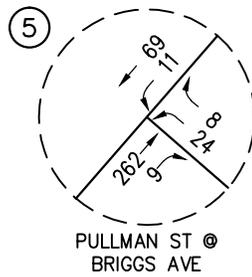
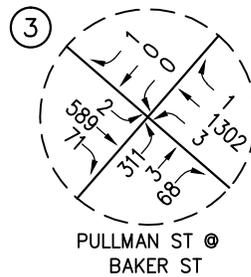
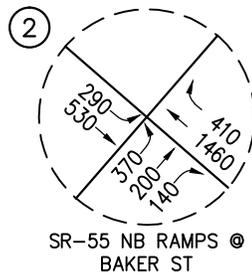
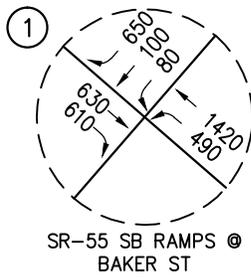
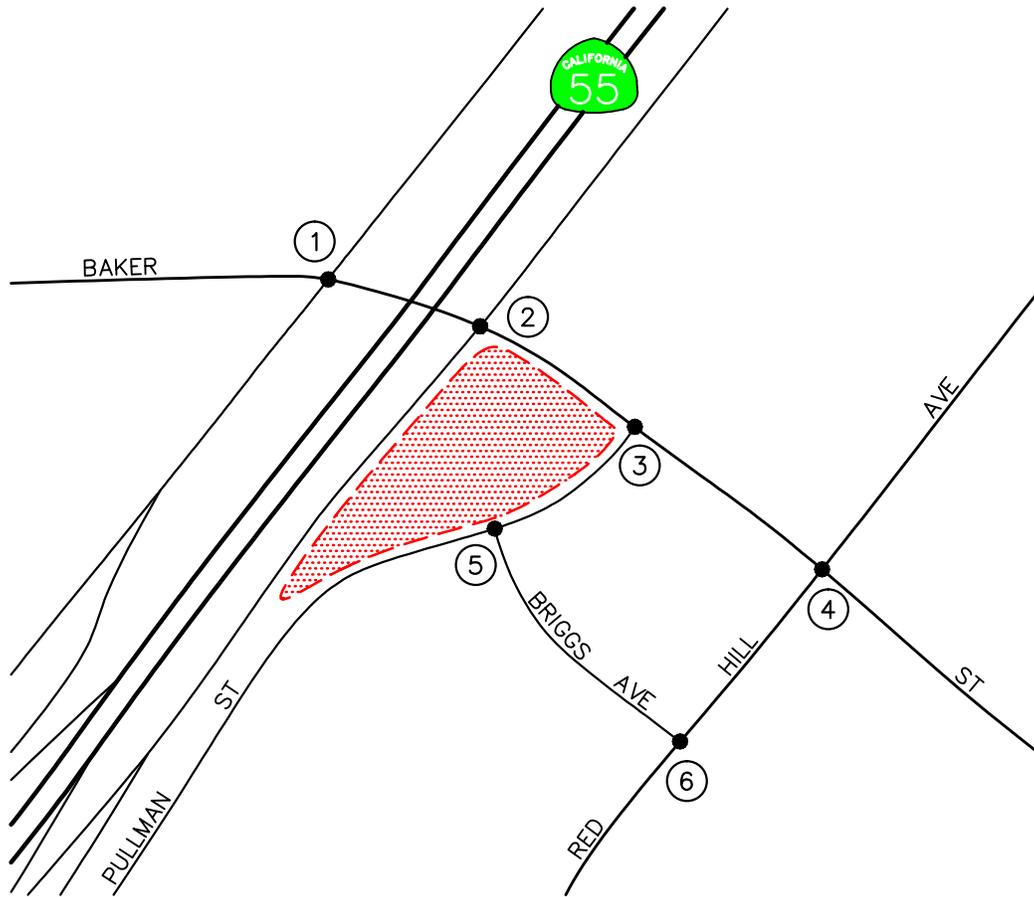
n:\3300\2133373 - 125 baker street apartments, costa mesa\dwg\3373prn.dwg LDP 08:31:55 05-07-2013 mathur



KEY  
 = PROJECT SITE

# FIGURE 6-5

GENERAL PLAN BUILDOUT  
 AM PEAK HOUR CUMULATIVE TRAFFIC VOLUMES  
 125 BAKER STREET APARTMENTS, COSTA MESA



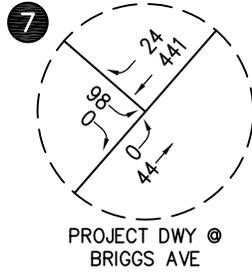
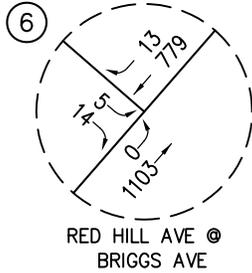
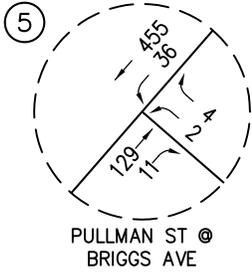
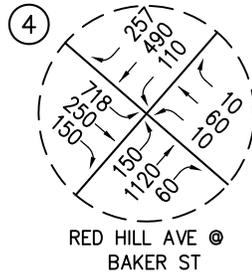
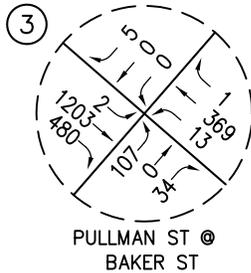
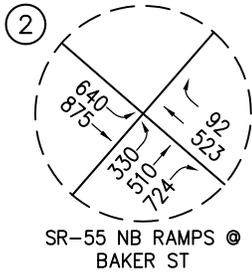
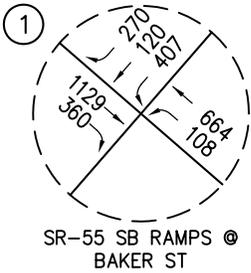
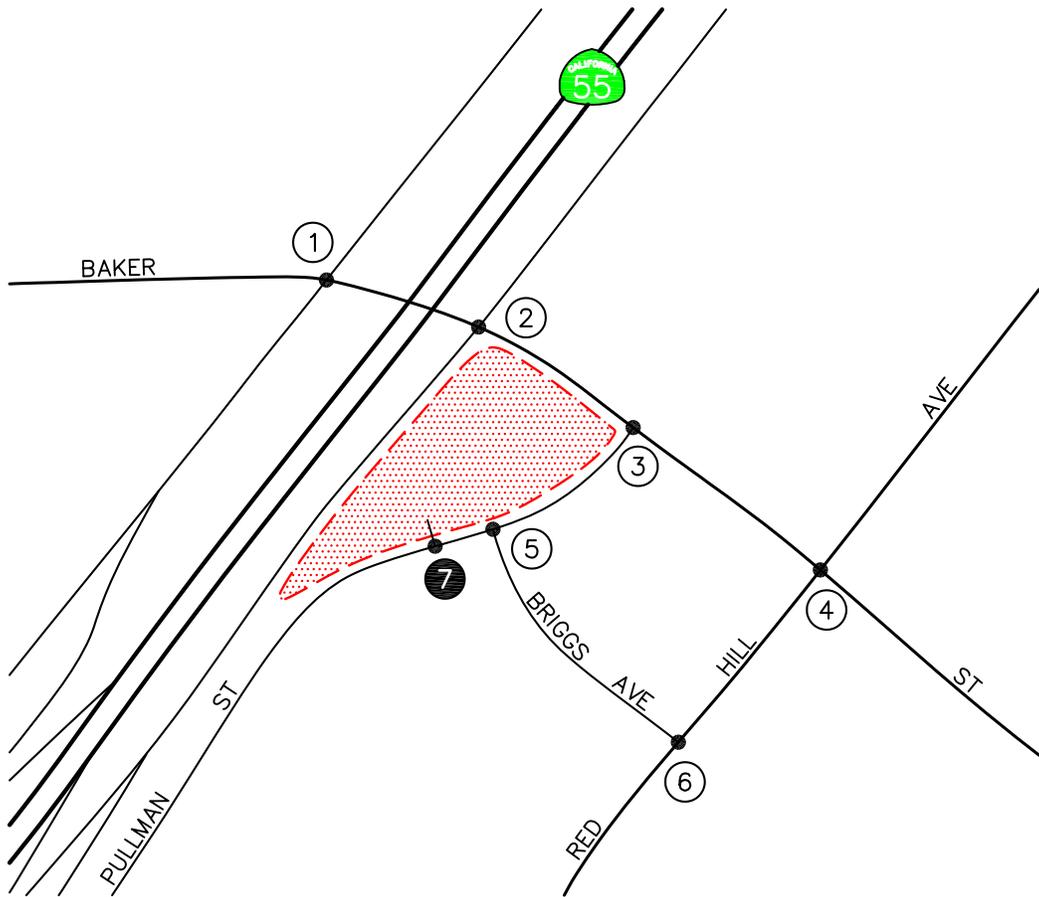
n:\3300\2133373 - 125 baker street apartments, costa mesa\dwg\3373prn.dwg LDP 08:31:55 05-07-2013 mathur



KEY  
 = PROJECT SITE

# FIGURE 6-6

GENERAL PLAN BUILDOUT  
 PM PEAK HOUR CUMULATIVE TRAFFIC VOLUMES  
 125 BAKER STREET APARTMENTS, COSTA MESA



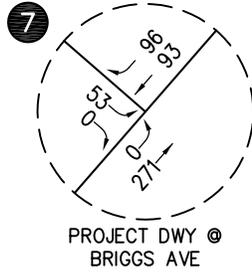
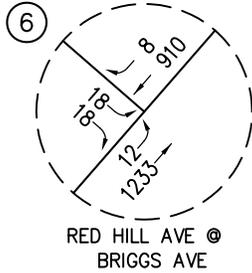
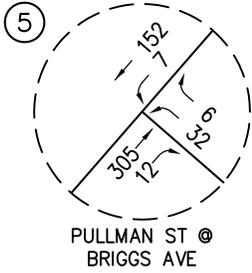
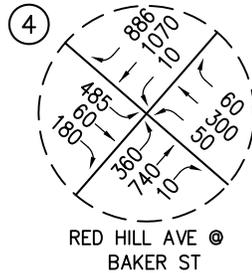
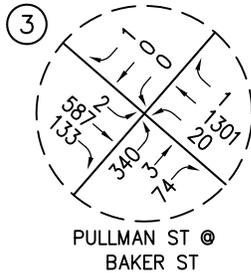
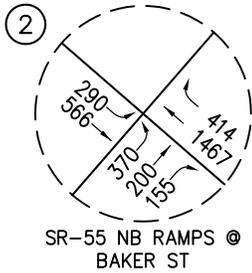
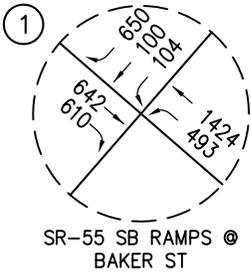
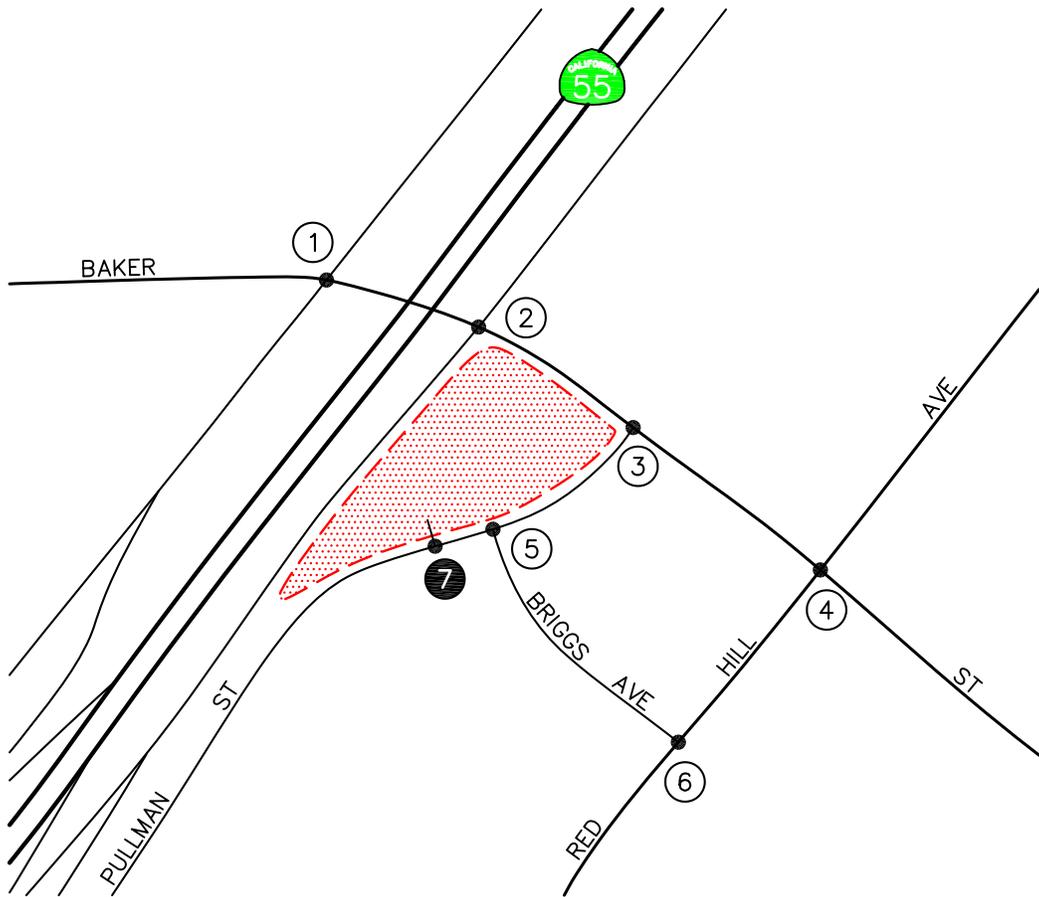
n:\3300\2133373 - 125 baker street apartments, costa mesa.dwg\337316-7.dwg LDP 18:48:09 07-16-2013 milovich



KEY  
 = PROJECT SITE

# FIGURE 6-7

GENERAL PLAN BUILDOUT AM PEAK HOUR  
 CUMULATIVE TRAFFIC VOLUMES WITH PROJECT  
 125 BAKER STREET APARTMENTS, COSTA MESA



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KEY  
 = PROJECT SITE

# FIGURE 6-8

GENERAL PLAN BUILDOUT PM PEAK HOUR  
 CUMULATIVE TRAFFIC VOLUMES WITH PROJECT  
 125 BAKER STREET APARTMENTS, COSTA MESA

## 7.0 TRAFFIC IMPACT ANALYSIS METHODOLOGY

The relative impact of the proposed Project during the AM peak hour and PM peak hour was evaluated based on analysis of future operating conditions at the six (6) key study intersections, without, then with, the proposed Project. The previously discussed capacity analysis procedures were utilized to investigate the future volume-to-capacity relationships and service level characteristics at each study intersection. The significance of the potential impacts of the Project at each key intersection was then evaluated using the following traffic impact criteria.

### 7.1 Impact Criteria and Thresholds

Per the City of Costa Mesa guidelines, LOS D is the minimum acceptable level of service that should be maintained during the weekday AM peak hour and weekday PM peak hour. Per the City's criteria, the Project is considered to have a significant impact if the following criteria are met:

#### **For Signalized Intersections:**

- the ICU value under "with Project" conditions is 0.91 or greater (LOS E or F),  
and
- the ICU increase attributable to the Project is 0.01 or greater.

### 7.2 Traffic Impact Analysis Scenarios

The following scenarios are those for which volume/capacity calculations have been performed at the six (6) key intersections for existing plus project, near-term (Year 2016) and long-term (General Plan Buildout) traffic conditions:

- A. Existing Traffic Conditions;
- B. Existing Plus Project Traffic Conditions;
- C. Scenario (B) with Improvements, if necessary;
- D. Near-Term (Year 2016) Cumulative Traffic Conditions,
- E. Near-Term (Year 2016) Cumulative plus Project Traffic Conditions;
- F. Scenario (E) with Improvements, if necessary;
- G. Long-Term (General Plan Buildout) Future Traffic Conditions;
- H. Long-Term (General Plan Buildout) Future Traffic Conditions plus Project Traffic; and
- I. Scenario (H) with Improvements, if necessary.

## 8.0 PEAK HOUR INTERSECTION CAPACITY ANALYSIS

### 8.1 Existing Plus Project Analysis

*Table 8-1* summarizes the peak hour Level of Service results at the six (6) key study intersections for existing plus project traffic conditions. The first column (1) of ICU/LOS values and HCM/LOS values in *Table 8-1* presents a summary of existing AM and PM peak hour traffic conditions (which were also presented in *Table 3-3*). The second column (2) lists existing plus project traffic conditions. The third column (3) shows the increase in ICU value and/or HCM value due to the added peak hour Project trips and indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards and significant impact criteria defined in this report. The fourth column (4) of *Table 8-1* indicates the anticipated operating conditions with implementation of improvements planned and/or recommended to mitigate Project traffic and/or achieve an acceptable Level of Service.

#### 8.1.1 Existing Plus Project Traffic Conditions

Review of Columns 2 and 3 of *Table 8-1* indicates that traffic associated with the proposed Project will significantly impact one (1) of the six (6) key study intersections, when compared to the LOS standards and significant impact criteria specified in this report. Pullman Street at Baker Street is forecast to operate at LOS F during the AM and PM peak hour.

However, the project impact at this location is offset through the installation of a traffic signal on Baker Street at Pullman Street. As shown, this location is forecast to operate at LOS A during the AM peak hour and PM peak hour assuming signalization (see *Section 8.4 Traffic Signal Warrant Analysis* for details).

The remaining five (5) key study intersections currently operate and are forecast to continue to operate at an acceptable service level during the AM and PM peak hours with the addition of Project generated traffic to existing traffic.

*Appendix C* presents the existing plus project ICU/LOS and HCM/LOS calculations for the six (6) key study intersections.

**TABLE 8-1**  
**EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS**

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project Traffic Conditions		(3) Significant Impact		(4) Existing Plus Project Plus Mitigation	
		ICU/ HCM	LOS	ICU/ HCM	LOS	Increase	Yes/ No	ICU/ HCM	LOS
1. SR-55 SB Ramps at Baker Street	AM	0.672	B	0.675	B	0.003	No	--	--
	PM	0.678	B	0.679	B	0.001	No	--	--
2. SR-55 NB Ramps at Baker Street	AM	0.730	C	0.731	C	0.001	No	--	--
	PM	0.726	C	0.733	C	0.007	No	--	--
3. Pullman Street at Baker Street	AM	33.5 s/v	D	<b>71.8 s/v</b>	<b>F</b>	<b>38.3 s/v</b>	<b>Yes</b>	0.409 <sup>7</sup>	A
	PM	<b>133.3 s/v</b>	<b>F</b>	<b>201.0 s/v</b>	<b>F</b>	<b>67.7 s/v</b>	<b>Yes</b>	0.433	A
4. Red Hill Avenue at Baker Street	AM	0.453	A	0.457	A	0.004	No	--	--
	PM	0.619	B	0.626	B	0.007	No	--	--
5. Pullman Street at Briggs Avenue	AM	9.6 s/v	A	10.6 s/v	B	1.0 s/v	No	--	--
	PM	10.7 s/v	B	11.9 s/v	B	1.2 s/v	No	--	--
6. Red Hill Avenue at Briggs Avenue	AM	17.9 s/v	C	14.4 s/v	B	-3.5 s/v	No	--	--
	PM	19.4 s/v	C	19.7 s/v	C	0.3 s/v	No	--	--

Notes:

- **Bold ICU/LOS or HCM/LOS** values indicate adverse service levels based on the City's LOS standards.
- s/v = seconds per vehicle

<sup>7</sup> Recommended improvements consist of the installation of a traffic signal.

## 8.2 Year 2016 Traffic Conditions

**Table 8-2** summarizes the peak hour Level of Service results at the six (6) key study intersections for the Year 2016 horizon year. The first column (1) of ICU/LOS and HCM/LOS values in *Table 8-2* presents a summary of existing AM and PM peak hour traffic conditions. The second column (2) lists projected cumulative traffic conditions (existing plus ambient plus related projects traffic) based on existing intersection geometry, but without any traffic generated from the proposed Project. The third column (3) presents forecast Year 2016 near-term traffic conditions with the addition of Project traffic. The fourth column (4) shows the increase in ICU value and/or HCM value due to the added peak hour Project trips and indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards and significant impact criteria defined in this report. The fifth column (5) of *Table 8-2* indicates the anticipated operating conditions with implementation of improvements planned and/or recommended to mitigate Project traffic and/or achieve an acceptable Level of Service.

### 8.2.1 Year 2016 Cumulative Traffic Conditions

An analysis of future (Year 2016) cumulative traffic conditions indicates that the addition of ambient traffic growth and related projects traffic will adversely impact one (1) of the six (6) key study intersections. Pullman Street at Baker Street is forecast to operate at LOS F during the AM and PM peak hour. The remaining five (5) key study intersections currently operate and are forecast to continue to operate at an acceptable service level during the AM and PM peak hours with the addition of Project generated traffic to existing traffic.

### 8.2.2 Year 2016 Cumulative Plus Project Conditions

Review of Columns 3 and 4 of *Table 8-2* indicates that traffic associated with the proposed Project will significantly impact one (1) of the six (6) key study intersections. Pullman Street at Baker Street is forecast to operate at LOS F during the AM and PM peak hour. As noted earlier, the installation of a traffic signal on Baker Street at Pullman Street will result in acceptable service levels at this location (see *Section 8.4 Traffic Signal Warrant Analysis* for details).

The remaining five (5) key study intersections currently operate and are forecast to continue to operate at an acceptable service level during the AM and PM peak hours with the addition of Project generated traffic to existing traffic.

*Appendix C* presents the near-term ICU/LOS and HCM/LOS calculations for the six (6) key study intersections.

TABLE 8-2  
YEAR 2016 PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Year 2016 Cumulative Traffic Conditions		(3) Year 2016 Cumulative Plus Project Traffic Conditions		(4) Significant Impact		(5) Year 2016 Cumulative Plus Project Plus Mitigation	
		ICU/ HCM	LOS	ICU/ HCM	LOS	ICU/ HCM	LOS	Increase	Yes/ No	ICU/ HCM	LOS
1. SR-55 SB Ramps at Baker Street	AM	0.672	B	0.692	B	0.694	B	0.002	No	--	--
	PM	0.678	B	0.698	B	0.700	B	0.002	No	--	--
2. SR-55 NB Ramps at Baker Street	AM	0.730	C	0.752	C	0.752	C	0.000	No	--	--
	PM	0.726	C	0.748	C	0.754	C	0.006	No	--	--
3. Pullman Street at Baker Street	AM	33.5 s/v	D	<b>36.3 s/v</b>	<b>E</b>	<b>83.7 s/v</b>	<b>F</b>	<b>47.4 s/v</b>	<b>Yes</b>	0.419 <sup>8</sup>	A
	PM	<b>133.3 s/v</b>	<b>F</b>	<b>161.2 s/v</b>	<b>F</b>	<b>235.3 s/v</b>	<b>F</b>	<b>74.1 s/v</b>	<b>Yes</b>	0.445	A
4. Red Hill Avenue at Baker Street	AM	0.453	A	0.467	A	0.471	A	0.004	No	--	--
	PM	0.619	B	0.638	B	0.645	B	0.007	No	--	--
5. Pullman Street at Briggs Avenue	AM	9.6 s/v	A	9.6 s/v	A	10.7 s/v	B	1.1 s/v	No	--	--
	PM	10.7 s/v	B	10.8 s/v	B	12.0 s/v	B	1.2 s/v	No	--	--
6. Red Hill Avenue at Briggs Avenue	AM	17.9 s/v	C	18.5 s/v	C	14.7 s/v	B	-3.8 s/v	No	--	--
	PM	19.4 s/v	C	20.3 s/v	C	20.6 s/v	C	0.3 s/v	No	--	--

Notes:

- **Bold ICU/LOS or HCM/LOS** values indicate adverse service levels based on the City's LOS standards.
- s/v = seconds per vehicle

<sup>8</sup> Recommended improvements consist of the installation of a traffic signal.

### 8.3 General Plan Buildout Traffic Conditions

**Table 8-3** summarizes the peak hour Level of Service results at the six (6) key study intersections for the General Plan Buildout traffic condition. The structure of this table is similar to the near-term (Year 2016) capacity analysis summary presented in *Table 8-2*.

#### 8.3.1 General Plan Buildout Traffic Conditions

Review of column 2 of *Table 8-3* shows that projected long-term (General Plan Buildout) without project traffic will adversely impact two (2) of the six (6) key study intersections. The remaining four (4) key study intersections are forecast to operate at an acceptable LOS for long-term (General Plan Buildout) traffic conditions. The locations projected to operate at an adverse LOS are as follows:

<u>Key Intersection</u>	<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
	<u>ICU/HCM</u>	<u>LOS</u>	<u>ICU/HCM</u>	<u>LOS</u>
3. Pullman Street at Baker Street	56.2	F	408.9	F
4. Red Hill Avenue at Baker Street	--	--	0.981	E

#### 8.3.2 General Plan Buildout Plus Project Traffic Conditions

Review of Columns 3 and 4 of *Table 8-3* indicates that traffic associated with the proposed Project will significantly impact one (1) of the six (6) key study intersections, Baker Street at Pullman Street, when compared to the LOS standards and significant impact criteria specified in this report. Although the intersection of Red Hill Avenue/Baker Street is forecast to operate at LOS E during the PM peak hours with the addition of project traffic, the proposed Project is expected to add less than 0.010 to the ICU value and thus the impact of the Project at this location is considered insignificant. The remaining key study intersections are forecast to operate at an acceptable LOS during the AM and PM peak hours.

However, the implementation of recommended improvements at Baker Street and Pullman Street as well as Baker Street and Red Hill Avenue will result in acceptable service levels at both these locations (see Column 5 of *Table 8-3*).

The remaining four (4) key study intersections are forecast to operate at an acceptable LOS during the AM and PM peak hours for long-term (General Plan Buildout) with the proposed Project.

*Appendix C* presents the long-term ICU/LOS and HCM/LOS calculations for the six (6) key study intersections.

**TABLE 8-3**  
**GENERAL PLAN BUILDOUT PEAK HOUR INTERSECTION CAPACITY ANALYSIS**

Key Intersection	Time Period	(1)		(2)		(3)		(4)		(5)	
		Existing Traffic Conditions		General Plan Buildout Traffic Conditions		General Plan Buildout Plus Project Traffic Conditions		Significant Impact		General Plan Buildout Plus Project Plus Mitigation	
		ICU/ HCM	LOS	ICU/ HCM	LOS	ICU/ HCM	LOS	Increase	Yes/ No	ICU/ HCM	LOS
1. SR-55 SB Ramps at Baker Street	AM	0.672	B	0.672 <sup>9</sup>	B	0.675	B	0.003	No	--	--
	PM	0.678	B	0.621	B	0.634	B	0.013	No	--	--
2. SR-55 NB Ramps at Baker Street	AM	0.730	C	0.809 <sup>9</sup>	D	0.816	D	0.007	No	--	--
	PM	0.726	C	0.695	B	0.700	C	0.005	No	--	--
3. Pullman Street at Baker Street	AM	33.5 s/v	D	<b>56.2 s/v</b>	<b>F</b>	<b>181.3 s/v</b>	<b>F</b>	<b>125.1 s/v</b>	<b>Yes</b>	0.475 <sup>10</sup>	A
	PM	<b>133.3 s/v</b>	<b>F</b>	<b>408.9 s/v</b>	<b>F</b>	<b>531.6 s/v</b>	<b>F</b>	<b>122.7 s/v</b>	<b>Yes</b>	0.511	A
4. Red Hill Avenue at Baker Street	AM	0.453	A	0.678	B	0.684	B	0.006	No	0.684 <sup>11</sup>	B
	PM	0.619	B	<b>0.981</b>	<b>E</b>	<b>0.988</b>	<b>E</b>	0.007	No	0.784	C
5. Pullman Street at Briggs Avenue	AM	9.6 s/v	A	9.6 s/v	A	10.7 s/v	B	1.1 s/v	No	--	--
	PM	10.7 s/v	B	10.8 s/v	B	12.0 s/v	B	1.2 s/v	No	--	--
6. Red Hill Avenue at Briggs Avenue	AM	17.9 s/v	C	22.6 s/v	C	17.1 s/v	C	-5.5 s/v	No	--	--
	PM	19.4 s/v	C	32.2 s/v	D	32.9 s/v	D	0.7 s/v	No	--	--

Notes:

- **Bold ICU/LOS or HCM/LOS** values indicate adverse service levels based on the City's LOS standards.
- s/v = seconds per vehicle

<sup>9</sup> Lane geometrics are consistent with programmed improvements identified in the CMTM ICU worksheets for buildout conditions.

<sup>10</sup> Recommended improvements consist of the installation of a traffic signal.

<sup>11</sup> Recommended improvements consist adding a southbound right-turn lane.

## 8.4 Traffic Signal Warrant Analysis

Per the City's direction, the level of service analysis at the unsignalized intersection of Pullman Street at Baker Street was supplemented with an assessment of the need for signalization of the intersection. This assessment is made based on the warrants set forth in Part 4 (Highway Traffic Signals) of the *CA MUTCD*. The above-referenced manual lists nine parameters, which help to determine the necessity of a traffic signal at an intersection. The following traffic signal warrants were applied to the intersection of Pullman Street at Baker Street using the existing traffic count data collected in April 2013:

- Warrant No. 1: Eight Hour Volume Warrant
- Warrant No. 2: Four Hour Volume Warrant
- Warrant No. 3: Peak Hour Traffic Volumes Warrant

### 8.4.1 Traffic Signal Warrant Analysis Results and Conclusions

The results of the traffic signal warrant analysis for Existing Traffic Conditions at Baker Street and Pullman Street is summarized on **Table 8-4**. As shown, based on the existing traffic volumes and current intersection geometrics, the existing conditions at the study intersection satisfied Signal Warrants 1, 2 and 3. Signal Warrants No. 4, 5, 6, 7, 8 and 9 were either not applicable or there was no information to conduct a warrant.

The decision to install a traffic signal should not be based purely on the warrants alone. Instead, the installation of a signal should be considered and further analysis performed when one or more of the warrants is met. Additionally, engineering judgment is exercised on a case-by-case basis to evaluate the effect a traffic signal will have on certain types of accidents and traffic conditions at the subject intersection as well as at adjacent intersections.

As noted in the prior traffic analyses, the installation of the traffic signal will ensure that acceptable service levels are maintained into the future beyond the completion and opening of the project in Year 2016. **Appendix E** also contains the traffic signal warrant worksheets.

TABLE 8-4  
TRAFFIC SIGNAL WARRANT ANALYSIS SUMMARY

Traffic Signal Warrant	Warrant Satisfied?	
	Yes	No
Warrant 1 - Eight Hour Volume Warrant <i>Minimum Vehicular Volume</i> <i>100% Satisfied</i> <i>80% Satisfied</i>	X X	
<i>Interruption of Continuous Traffic</i> <i>100% Satisfied</i> <i>80% Satisfied</i>	X X	
Warrant 2 - Four Hour Volume	X	
Warrant 3 - Peak Hour Volume Warrant	X	
Warrant 4 - Pedestrian Volume Warrant	No Data Available	
Warrant 5 - School Crossing Warrant	Not Applicable	
Warrant 6 - Coordinated Signal System Warrant	Not Applicable	
Warrant 7 - Crash Experience Warrant	No Data Available	
Warrant 8 - Roadway Network	Not Applicable	
Warrant 9 - Intersection Near at Grade Crossing	Not Applicable	
<b>TRAFFIC SIGNAL MET WARRANT? Yes</b>		

Note:

Source: California *Manual on Uniform Traffic Control Devices* (MUTCD).

## 9.0 SITE ACCESS EVALUATION

### 9.1 Level of Service Analysis For Project Access

Primary vehicular access to the project site will be provided via one full access driveway with direct access to the parking structure along Pullman Street. This driveway is located approximately 100 feet north of an existing driveway that now serves the office building and off-set from the Briggs Avenue/Pullman Street intersection. A secondary full access driveway located at the southernmost edge of the property is provided for future tenant access to the Project parking structure. For the purposes of this study all vehicles entering and exiting the site during the AM peak hour and PM peak hour are assumed to utilize the primary driveway to provide a conservative traffic evaluation.

**Table 9-1** summarizes the intersection operations at the proposed project driveway along Pullman Street under near-term (Year 2016) and long-term (General Plan Buildout) traffic conditions at completion and full occupancy of the proposed Project. The operations analysis for the project driveway is based on the *Highway Capacity Manual 2000* (HCM 2000) methodology. Review of **Table 9-1** shows that the proposed project driveway along Pullman Street is forecast to operate at acceptable LOS B or better during the AM and PM peak hours for near-term (Year 2016) and long-term (General Plan Buildout) traffic conditions. As such, motorists entering and exiting the Project site will be able to do so comfortably, safely, and without undue congestion.

**Appendix F** presents the Existing plus Project, Year 2016 plus Project and General Plan Buildout plus Project level of service calculation worksheets for the proposed project driveway.

### 9.2 Sight Distance Evaluation

At intersections and/or project driveways, a substantially clear line of sight should be maintained between the driver of a vehicle waiting at the crossroad and the driver of an approaching vehicle. Adequate time must be provided for the waiting vehicle to either cross all lanes of through traffic, cross the near lanes and turn left, or turn right, without requiring through traffic to radically alter their speed. The Sight Distance Evaluation prepared for the proposed Project Driveways was based on the criteria and procedures set forth by the California Department of Transportation (Caltrans) in the State's *Highway Design Manual (HDM)* for "Private Road Intersections".

The Caltrans HDM, in Section 405.1(2)(c), page 400-17, indicates that for Private Road Intersections, "The minimum corner sight distance shall be equal to the stopping sight distance as given in Table 201.1...", where stopping sight distance is defined as the distance required by the driver of a vehicle, traveling at a given speed, to bring his vehicle to a stop after an object on the road becomes visible. Stopping sight distance is measured from the driver's eyes, which are assumed to be 3.5 feet above the pavement surface, to an object 0.5-foot high on the roadway.

The speed used in determining stopping sight distance is defined as the "critical speed" or 85th percentile speed which is the speed at which 85% of the vehicles are traveling at or less. The critical speed is the single most important factor in determining stopping sight distance. Table 201.1 in the

HDM is used in determining stopping sight distance based on the critical speed of vehicles on the affected roadway.

For this analysis, a design speed of 40 miles per hour for Pullman Street was utilized. Using Table 201.1, titled *Sight Distance Standards*, in the Caltrans HDM for stopping, a minimum stopping sight distance of 300 feet applies based on the critical speed of 40 mph.

**Figures 9-1** and **9-2** present the results of the sight distance evaluation for the Project driveways on Pullman Street based on the stopping sight distance criteria. Both figures illustrate the limited use areas. As shown, a motorist's sight distance may be obstructed by on-street parking, landscapes and/or hardscapes along Pullman Street. Review of *Figure 9-1* indicates that the stopping sight distance at the primary Project driveway on Pullman Street maybe insufficient. Close inspection of *Figure 9-1* shows that existing and/or proposed landscaping as well as the ability to park curbside on Pullman Street within the "limited use area", combined with the roadway alignment of Pullman Street, could limit the visibility of vehicles exiting the primary Project driveway. However, the sight lines at the Project driveways on Pullman Street as shown *Figure 9-1* and *Figure 9-2* are expected to be adequate if obstructions within the sight triangles are minimized.

Hence, to ensure adequate sight distance is provided at the Project driveways, landscaping and/or hardscape on north side of these driveways should be designed such that a driver's clear line of sight is not obstructed and does not threaten vehicular or pedestrian safety, as determined by the City Traffic Engineer.

It is recommended that all plants and shrubs within the limited use area be of the type that will grow no higher than 30-inches above the curb or a have a canopy no lower than 72 inches above curb, especially in the limited use area to the north of the primary Project driveway. In addition, the maximum tree size and minimum tree spacing in the limited use area should be limited to 24-inch caliper tree trunks (maximum size at maturity) spaced at 40-feet on center.

In addition, subject to review and approval by the City Traffic Engineer, it is recommended that on-street parking is prohibited along the Project's frontage within the "limited use areas". For the primary Project driveway, it is recommended that with the parking restriction, a dedicated southbound right-turn lane with minimum storage of 100-feet be provided, while curb side parking is restricted for a minimum of 200 feet via installation of red curb.

It should be noted that although the proposed Project driveway is located within close proximity to the existing intersection of Briggs Avenue and Pullman Street, the turning conflicts, eastbound left-turns from Briggs Avenue and westbound left-turns out of the project driveway, are expected to be nominal. Exiting volumes at the driveway peak during the AM peak hour which coincides with only two left-turn vehicles at Briggs Avenue. The PM peak hour consists of a heavier inbound movement rather than outbound, however the volumes at Briggs Avenue only consist of 32 left-tuning vehicles. Since sight lines are satisfactory with implementation of above-mentioned recommendations, and conflicting turning volumes are minimal, the proposed Project driveway location relative to the Briggs Avenue/Pullman Street intersection is considered adequate.

TABLE 9-1  
PROJECT DRIVEWAY PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Time Period	(1) Year 2016 Cumulative Plus Project Traffic Conditions		(2) General Plan Buildout Plus Project Traffic Conditions	
		HCM	LOS	HCM	LOS
A. Pullman Street at Project Driveway	AM	13.7 s/v	B	13.7 s/v	B
	PM	11.8 s/v	B	11.8 s/v	B

Notes:

- **Bold HCM/LOS** values indicate adverse service levels based on the City's LOS standards.
- s/v = seconds per vehicle



**STOPPING SIGHT DISTANCE**

DESIGN SPEED LIMIT:	40 MPH
REQUIRED STOPPING SIGHT DISTANCE:	300 FEET

**LEGEND**

 LIMITED USE AREA: TO ENSURE ADEQUATE SIGHT DISTANCE, HARDSCAPE AND/OR LANDSCAPE SHALL NOT BE HIGHER THAN 30 INCHES. NO FENCES OR WALLS IN LIMITED USE AREA.

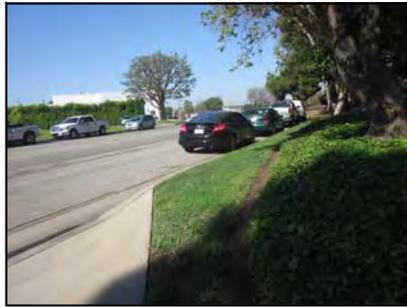
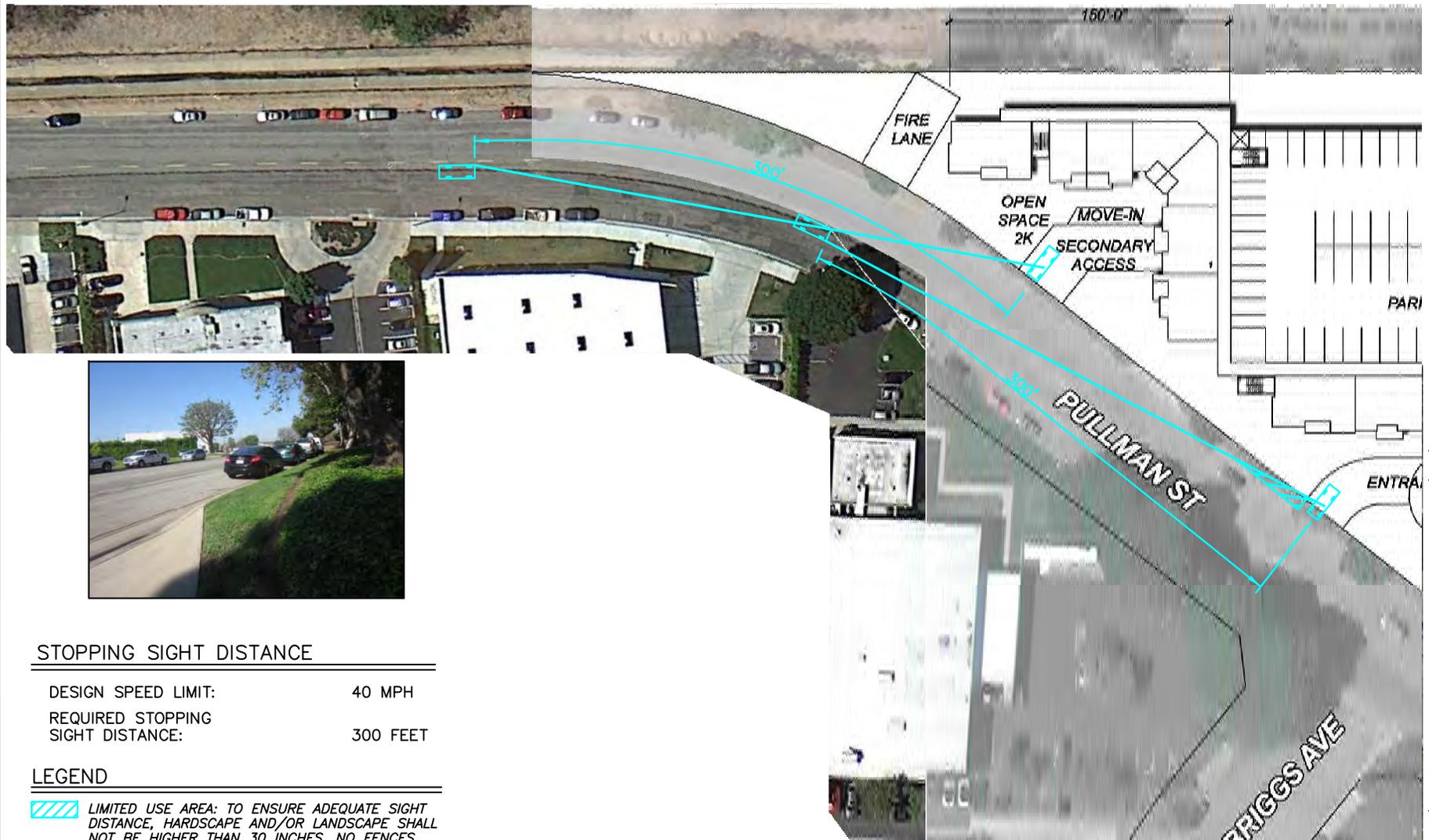
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**LINSCOTT  
LAW &  
GREENSPAN**  
engineers



SCALE 1"=80'

**FIGURE 9-1**  
STOPPING SIGHT DISTANCE ANALYSIS  
SOUTHBOUND APPROACH ON PULLMAN STREET  
125 BAKER STREET APARTMENTS, COSTA MESA



**STOPPING SIGHT DISTANCE**

DESIGN SPEED LIMIT:	40 MPH
REQUIRED STOPPING SIGHT DISTANCE:	300 FEET

**LEGEND**

 LIMITED USE AREA: TO ENSURE ADEQUATE SIGHT DISTANCE, HARDSCAPE AND/OR LANDSCAPE SHALL NOT BE HIGHER THAN 30 INCHES. NO FENCES OR WALLS IN LIMITED USE AREA.

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**LINSCOTT  
LAW &  
GREENSPAN**  
engineers



SCALE 1"=80'

**FIGURE 9-2**

**STOPPING SIGHT DISTANCE ANALYSIS  
NORTHBOUND APPROACH ON PULLMAN STREET  
125 BAKER STREET APARTMENTS, COSTA MESA**

## 10.0 RECOMMENDED IMPROVEMENTS

For those intersections where projected traffic volumes are expected to result in poor operating conditions, this report identifies roadway improvements that change the intersection geometry to increase capacity. These capacity improvements involve roadway widening and/or restriping to reconfigure (add lanes) to specific approaches of a key intersection. The identified improvements are expected to: mitigate the impact of area-wide deficiencies and/or improve Levels of Service to an acceptable range. *Figure 10-1* illustrates the planned and recommended improvements.

### 10.1 Planned Improvements

Based on research at the City of Costa Mesa and input from the City Traffic Engineer, the following planned improvements have been identified and are included in the long-term (General Plan Buildout) cumulative conditions.

- **No. 1 – SR-55 Southbound Ramps at Baker Street:** Widen and/or re-strip to provide an exclusive southbound free right-turn lane. Modify the eastbound approach to provide an exclusive through lane, shared through/right-turn lane and an exclusive right-turn lane. Modify existing traffic signal accordingly to current City of Costa Mesa standards and design requirements.
- **No. 2 – SR-55 Northbound Ramps at Baker Street:** Widen and/or re-strip to provide an exclusive northbound left-turn lane, shared left/through lane and shared through/right-turn lane. Modify the eastbound approach to provide dual left-turn lanes. Modify existing traffic signal accordingly to current City of Costa Mesa standards and design requirements.

### 10.2 Project-Specific Mitigation Measures

As summarized in *Tables 8-1, 8-2 and 8-3* indicates that the proposed Project will have a significant impact at one intersection, Pullman Street at Baker Street, and will contribute to the adverse service level at another intersection, Red Hills Avenue at Baker Street.

The following improvements at the Pullman Street/Baker Street intersection are recommended to mitigate significant impact of the Project.

- **No. 3 – Pullman Street at Baker Street:** Install a traffic signal and associated signing modifications and pavement legends, and incorporate driveway that provides access to the 150 Baker Street property into the design per the City of Costa Mesa Design Guidelines and CA MUTCD. Install signal interconnect between proposed traffic signal and existing traffic signals on Baker at Redhill and/or Baker Street and SR-55 NB Ramps. In conjunction with signalization, restripe Baker Street to provide a dedicated eastbound and westbound left-turn lane. Install crosswalks and ADA compliant ramps as required by the City. Implementation of this improvement will require the approval of the City of Costa Mesa. Per the City's requirements, the installation of the traffic signal will be the sole responsibility of the Project.

The following improvements at the Redhill Avenue/Baker Street intersection are recommended to mitigate contributory impact of the Project under General Plan Buildout traffic conditions..

- **No. 4 – Red Hill Avenue at Baker Street:** Widen and/or re-stripe Red Hill Avenue to provide an exclusive southbound right-turn lane. Modify traffic signal accordingly to current City of Costa Mesa Standards and Design Guidelines. Per the City’s requirements, the Project can be expected to pay a fair-share of the construction costs to implement these mitigation measures.

### 10.3 Traffic Impact Fees

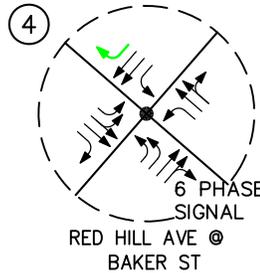
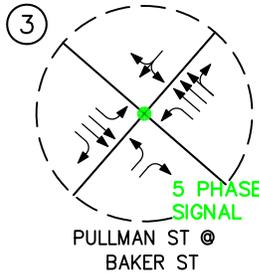
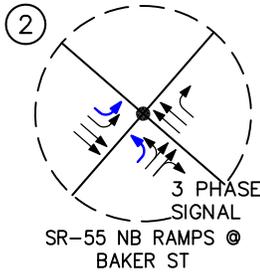
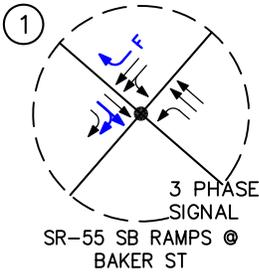
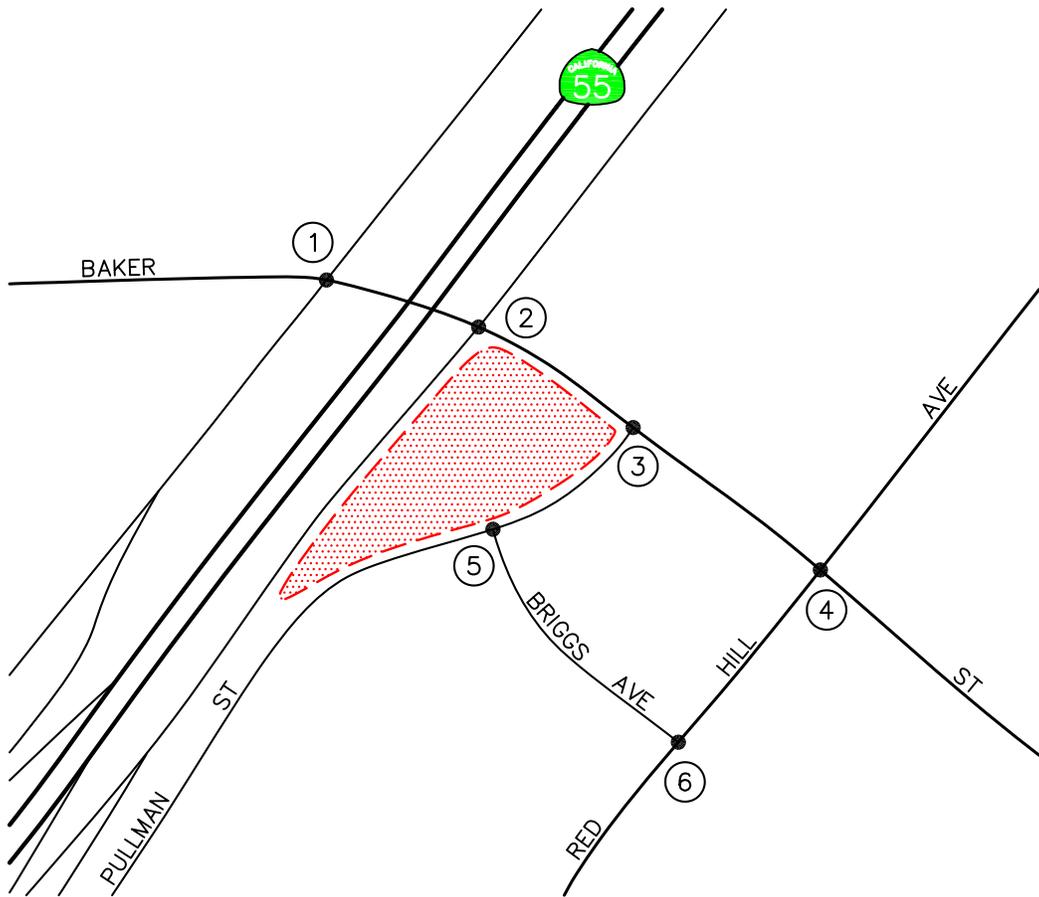
Pursuant to the requirements of the City of Costa Mesa, Traffic Impact Fees will be required of the proposed Project. The purpose of the fee is to fund the necessary transportation/circulation improvements that are related to incremental traffic impacts on the City’s circulation system by new development. The “City-wide” traffic impact fee, based on Average Daily Trips Ends (ADT), for all new development is assessed based on an incremental basis.

Full occupancy of the existing office building would result in 684 daily trips (11.03 trip ends/1000 SF x 62,000 SF = 684 daily trips), when compared to the proposed development with a total of 1,596 daily trips results in a net difference of 912 daily trips. Review of *Table 10-1* indicates that applying the net daily trips to the trip fee would result in a Project contribution of \$165,072, which could “mitigate” the Project’s incremental traffic impact at the intersection of Red Hill Avenue and Baker Street. However, the precise fee will be determined upon issuance of Project building permits.

### 10.4 Project Specific Improvements

Subject to review and approval by the City Traffic Engineer, the following improvements are recommended in conjunction with development of the proposed Project to ensure adequate access and egress to the site is provided: Install “STOP” signs and stop bars at the proposed Project driveways on Pullman Street. Install all appropriate striping, signage and/or pavement legends per City of Costa Mesa standards/requirements.

- Restrict on-street parking along the Project’s frontage on Pullman Street, between the primary Project driveway and secondary Project driveway, via the installation of red curb and the appropriate parking restriction signs.
- Maintain adequate sight distance for the primary Project driveway and secondary Project driveway by minimizing obstructions (i.e. landscaping and/or hardscape) within the “limited use area” on north side of this project driveway. Landscaping and/or hardscapes should be designed such that a driver’s clear line of sight is not obstructed and does not threaten vehicular or pedestrian safety, as determined by the City Traffic Engineer.
- All plants and shrubs within the limited use area should be of the type that will grow no higher than 30-inches above the curb or a have a canopy no lower than 72 inches above curb. The maximum tree size and minimum tree spacing in the limited use area should be limited to 24-inch caliper tree trunks (maximum size at maturity) spaced at 40-feet on center.
- Prohibit on-street parking on the north side of the primary Project driveway for a minimum of 200-feet via installation of red curb. Install a dedicated southbound right-turn lane on Pullman Street at primary Project driveway with a minimum storage of 100-feet.



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- KEY**
- = GENERAL PLAN BUILDOUT PLANNED IMPROVEMENTS
  - = RECOMMENDED IMPROVEMENTS
  - = PROJECT SITE

# FIGURE 10-1

RECOMMENDED IMPROVEMENTS  
125 BAKER STREET APARTMENTS, COSTA MESA

**TABLE 10-1  
TRAFFIC IMPACT FEES**

<b>Average Daily Trip Ends (ADT)</b>	<b>Traffic Impact Fee Rate (\$ per ADT)</b>	<b>Project ADT</b>	<b>Project Traffic Impact Fee</b>
▪ 0 to 25 ADT	\$0 / ADT	0 ADT	\$0.00
▪ 26 to 50 ADT for incremental trips exceeding 25 ADT	\$50 / ADT	0 ADT	\$0.00
▪ 51 to 75 ADT for incremental trips exceeding 50ADT	\$75 / ADT	0 ADT	\$0.00
▪ 75 to 100 ADT for incremental trips exceeding 75 ADT	\$100 / ADT	0 ADT	\$0.00
▪ > 100 ADT for incremental trips exceeding 100 ADT	\$181 / ADT	912 ADT	\$165,072
	<b>TOTALS</b>	<b>912 ADT</b>	<b>\$165,072</b>

**Notes:**

- ADT = Average Daily Traffic

## 11.0 PARKING ANALYSIS

### 11.1 City Code Parking Requirements

The parking requirements for the proposed Project are based on the City of Costa Mesa requirements as outlined in *Section 13-85 and 13-87 Parking required* of the City of Costa Mesa Municipal Code.

The City's Municipal Code specifies the following parking requirements for residential uses:

- studio units – 1 covered space, 0.5 open space and 0.5 guest space
- one bedroom units – 1 covered space, 1.0 open space and 0.5 guest space
- two bedroom units – 1 covered space, 1.5 open space and 0.5 guest space
- three bedroom units – 1 covered space, 2.5 open space and 0.5 guest space

The above-referenced City parking codes were applied to the proposed Project. **Table 11-1** summarizes the parking requirements for the proposed project. As shown, direct application of the City's code to the proposed Project results in a code-parking requirement of 547 spaces. When compared against the proposed parking structure supply of 547 spaces, the Project satisfies the City's parking requirements.

**TABLE 11-1  
CITY CODE PARKING REQUIREMENTS<sup>13</sup>**

Project Description	Size	Code Parking Ratio	Spaces Required	
			Covered	Uncovered
Apartments (236 DU)				
▪ Studio Units	24 Units	1 space covered, 0.5 spaces uncovered per unit	24	12
▪ 1 Bedroom Units	119 Units	1 space covered, 1.0 spaces uncovered per unit	119	119
▪ 2 Bedroom Units	85 Units	1 space covered, 1.5 spaces uncovered per unit	85	127
▪ 3 Bedroom Units	12 Units	1 space covered, 2.5 spaces uncovered per unit	12	30
▪ Guest Parking	240 Units	0.5 spaces per unit for first 50 units, 0.25 spaces beyond 50 units	--	73
▪ Credit for Covered Spaces	216 Units	0.25 spaces per unit	-54	--
<b>Total Code Parking Requirement:</b>				<b>547</b>
<b>Proposed Parking Supply:</b>				<b>547</b>
<b>Parking Surplus/Deficiency (+/-):</b>				<b>+0</b>

<sup>13</sup> Source: City of Costa Mesa Municipal Code Section 13-85 and 13-87 Parking required.

## 12.0 CONGESTION MANAGEMENT PROGRAM (CMP) COMPLIANCE ASSESSMENT

This analysis is consistent with the requirements and procedures outlined in the current *Orange County Congestion Management Program (CMP)*. The CMP requires that a traffic impact analysis be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMP Highway System (HS). Per the CMP guidelines, this number is based on the desire to analyze any impacts that will be 3.0% or more of the existing CMP highway system facilities' capacity.

However, as noted in this traffic study, the proposed Project is expected to generate 1,596 daily trips, and thus does not meet the criteria required for a CMP traffic analysis. Therefore, it is concluded that the proposed Project will not have any significant traffic impacts on the Congestion Management Program Highway System.

## 13.0 STATE OF CALIFORNIA (CALTRANS) METHODOLOGY

In conformance with the current Caltrans *Guide for the Preparation of Traffic Impact Studies*, existing and projected AM and PM peak hour operating conditions at the two (2) state-controlled study intersections within the study area have been evaluated using the *Highway Capacity Manual 2000* operations method of analysis. These state-controlled locations include the following intersections:

1. SR-55 SB Ramps at Baker Street
2. SR-55 NB Ramps at Baker Street

Caltrans “endeavors to maintain a target LOS at the transition between LOS “C” and LOS “D” on State highway facilities”; it does not require that LOS “D” (shall) be maintained. However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. For this analysis, LOS D is the target level of service standard and will be utilized to assess the project impacts at the state-controlled study intersections.

### 13.1 Highway Capacity Manual (HCM) Method of Analysis (Signalized Intersections)

Based on the HCM operations method of analysis, level of service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometries, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during ideal conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of any incidents, and when there are no other vehicles on the road.

In Chapter 16 of the HCM, only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. In contrast, in previous versions of the HCM (1994 and earlier), delay included only stopped delay.

Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle. The six qualitative categories of Level of Service that have been defined along with the corresponding HCM control delay value range for signalized intersections are shown in **Table 13-1**.

**TABLE 13-1**  
**LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS (HCM METHODOLOGY)<sup>14</sup>**

Level of Service (LOS)	Control Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	$\leq 10.0$	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	$> 10.0$ and $\leq 20.0$	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
C	$> 20.0$ and $\leq 35.0$	Average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	$> 35.0$ and $\leq 55.0$	Long traffic delays At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high $v/c$ ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	$> 55.0$ and $\leq 80.0$	Very long traffic delays This level is considered by many agencies (i.e. SANBAG) to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high $v/c$ ratios. Individual cycle failures are frequent occurrences.
F	$\geq 80.0$	Severe congestion This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high $v/c$ ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

<sup>14</sup> Source: *Highway Capacity Manual 2000*, Chapter 16 (Signalized Intersections).

## 13.2 Existing Plus Project Traffic Conditions

**Table 13-2** summarizes the existing plus project peak hour HCM level of service results at the two (2) state-controlled study intersections within the study area. The first column (1) of HCM/LOS values in *Table 13-2* presents a summary of existing traffic conditions. The second column (2) presents existing plus project traffic conditions. The third column (3) indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards defined in this report. The fourth column (4) of *Table 13-2* indicates the anticipated operating conditions with implementation of improvements recommended to mitigate Project traffic and/or achieve an acceptable Level of Service.

### 13.2.1 Existing Traffic Conditions

Review of column one (1) of *Table 13-2* indicates that both state-controlled study intersections currently operate at acceptable LOS D or better during the AM and PM peak hours.

### 13.2.2 Existing Plus Project Traffic Conditions

Review of Column two (2) of *Table 13-2* indicates that traffic associated with the proposed Project ***will not*** significantly impact either of the key state-controlled study intersections, when compared to the LOS standards specified in this report. The two (2) state-controlled study intersections are forecast to continue to operate at LOS D or better with the addition of Project generated traffic to existing traffic.

## 13.3 Year 2016 Traffic Conditions

**Table 13-3** summarizes the Year 2016 peak hour HCM level of service results at the two (2) state-controlled study intersections within the study area. The first column (1) of HCM/LOS values in *Table 13-3* presents a summary of existing traffic conditions. The second column (2) presents Year 2016 cumulative traffic conditions based on existing intersection geometry, but without any project generated traffic. The third column (3) presents future forecast traffic conditions with the addition of Project traffic. Column four (4) indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards defined in this report. The fifth column (5) of *Table 13-3* indicates the anticipated operating conditions with implementation of improvements recommended to mitigate Project traffic and/or achieve an acceptable Level of Service.

### 13.3.1 Year 2016 Cumulative Traffic Conditions

An analysis of future (Year 2016) cumulative traffic conditions indicates that the addition of ambient traffic growth and related projects traffic ***will not*** adversely impact either of the two (2) state-controlled study intersections. The two (2) state-controlled study intersections are forecast to operate at LOS D or better during the AM and PM peak hours with the addition of ambient traffic growth and related projects traffic.

**TABLE 13-2**  
**EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS - CALTRANS**

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project Traffic Conditions		(3) Significant Impact		(4) Existing Plus Project Plus Mitigation	
		HCM (s/v)	LOS	HCM (s/v)	LOS	Increase (s/v)	Yes/ No	HCM (s/v)	LOS
1. SR-55 SB Ramps at Baker Street	AM	28.6	C	28.0	C	-0.6	No	--	--
	PM	31.4	C	31.6	C	0.2	No	--	--
2. SR-55 NB Ramps at Baker Street	AM	31.1	C	31.2	C	0.1	No	--	--
	PM	29.7	C	29.9	C	0.2	No	--	--

Notes:

- **Bold ICU/LOS** or **HCM/LOS** values indicate adverse service levels based on the City's LOS standards.
- s/v = seconds per vehicle

TABLE 13-3  
YEAR 2016 PEAK HOUR INTERSECTION CAPACITY ANALYSIS - CALTRANS

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Year 2016 Cumulative Traffic Conditions		(3) Year 2016 Cumulative Plus Project Traffic Conditions		(4) Significant Impact		(5) Year 2016 Cumulative Plus Project Plus Mitigation	
		HCM (s/v)	LOS	HCM (s/v)	LOS	HCM (s/v)	LOS	Increase (s/v)	Yes/No	HCM (s/v)	LOS
		1. SR-55 SB Ramps at Baker Street	AM	28.6	C	30.0	C	29.3	C	-0.7	No
	PM	31.4	C	33.3	C	33.5	C	0.2	No	--	--
2. SR-55 NB Ramps at Baker Street	AM	31.1	C	33.0	C	33.0	C	0.0	No	--	--
	PM	29.7	C	30.9	C	31.1	C	0.2	No	--	--

Notes:

- **Bold ICU/LOS** or **HCM/LOS** values indicate adverse service levels based on the City's LOS standards.
- s/v = seconds per vehicle

### 13.3.2 Year 2016 Cumulative Plus Project Traffic Conditions

Review of Columns 3 and 4 of *Table 13-3* indicates that traffic associated with the proposed Project ***will not*** significantly impact any of the two (2) state-controlled study intersections, when compared to the LOS standards specified in this report. The two (2) state-controlled study intersections are forecast to continue to operate at LOS D or better with the addition of project generated traffic in the Year 2016.

## 13.4 General Plan Buildout Traffic Conditions

***Table 13-4*** summarizes the peak hour Level of Service results at the two (2) state-controlled study intersections for the General Plan Buildout. The structure of this table is similar to the near-term (Year 2016) capacity analysis summary presented in *Table 13-3*.

### 13.4.1 General Plan Buildout Cumulative Traffic Conditions

Review of column 2 of *Table 13-4* shows that projected long-term (General Plan Buildout) without project traffic will not adversely impact the two state-controlled study intersections. The two (2) state-controlled study intersections are forecast to operate at LOS D or better during the AM and PM peak hours.

### 13.4.2 General Plan Buildout Plus Project Traffic Conditions

Review of Columns 3 and 4 of *Table 13-4* indicates that traffic associated with the proposed Project ***will not*** significantly impact any of the two (2) state-controlled study intersections, when compared to the LOS standards specified in this report. The two (2) state-controlled study intersections are forecast to continue to operate at LOS D or better for long-term (General Plan Buildout) plus project traffic conditions.

***Appendix G*** presents the Caltrans level of service calculation worksheets for the two state-controlled study intersections.

TABLE 13-4  
GENERAL PLAN BUILDOUT PEAK HOUR INTERSECTION CAPACITY ANALYSIS - CALTRANS

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) General Plan Buildout Traffic Conditions		(3) General Plan Buildout Plus Project Traffic Conditions		(4) Significant Impact		(5) General Plan Buildout Plus Project Plus Mitigation	
		HCM (s/v)	LOS	HCM (s/v)	LOS	HCM (s/v)	LOS	Increase (s/v)	Yes/No	HCM (s/v)	LOS
		1. SR-55 SB Ramps at Baker Street	AM	28.6	C	26.1	C	25.4	C	-0.7	No
	PM	31.4	C	24.4	C	24.7	C	0.3	No	--	--
2. SR-55 NB Ramps at Baker Street	AM	31.1	C	34.2	C	35.0	C	0.8	No	--	--
	PM	29.7	C	25.5	C	25.5	C	0.0	No	--	--

Notes:

- **Bold ICU/LOS** or **HCM/LOS** values indicate adverse service levels based on the City's LOS standards.
- s/v = seconds per vehicle

## 14.0 SUMMARY OF FINDINGS AND CONCLUSIONS

- **Project Description** – The project site is located at 125 Baker Street which is on the south west corner of Baker Street and Pullman Street in the City of Costa Mesa, California. The proposed Project includes the demolition of the existing 62,000 SF office building and the development of a 240 unit apartment complex, consisting of 119 one-bedroom units, 85 two-bedroom units, 12 three-bedroom units and 24 studio units with a multi-level parking structure in place of the existing office building. Parking will be provided on-site via a six-level parking structure with 547 spaces. Access the project site will be provided via two full access driveways on Pullman Street.
- **Study Scope** – The following six (6) key study intersections were selected for detailed peak hour level of service analyses under Existing Traffic Conditions, Existing Plus Project Traffic Conditions, Year 2016 Cumulative Traffic Conditions, Year 2016 Cumulative plus Project, General Plan Buildout Cumulative Traffic Conditions, and General Plan Buildout Cumulative plus Project Traffic Conditions.

### Key Study Intersections

1. SR-55 Southbound Ramps at Baker Street
2. SR-55 Northbound Ramps at Baker Street
3. Pullman Street at Baker Street
4. Red Hill Avenue at Baker Street
5. Pullman Street at Briggs Avenue
6. Red Hill Avenue at Briggs Avenue

- **Existing Traffic Conditions** – One (1) of the six (6) key study intersections currently operate at an acceptable service level during the AM and PM peak hours. The Intersection of Pullman Street at Baker Street operates at LOS E during the PM peak hour. The remaining five (5) key study intersections currently operate at acceptable service levels during the AM and PM peak hour. Based on the traffic signal warrant analysis, existing traffic volumes justify the installation of a traffic signal at the intersection of Pullman Street and Baker Street
- **Project Trip Generation** – The proposed Project is forecast to generate approximately 1,596 daily trips, with 122 trips (24 inbound, 98 outbound) produced in the AM peak hour and 149 trips (96 inbound, 53 outbound) produced in the PM peak hour. The existing land use at 74% occupancy, is expected to generate 506 daily trips, with 57 trips (53 inbound, 4 outbound) produced in the AM peak hour and 57 trips (22 inbound, 35 outbound) produced in the PM peak hour.

When the trip generation potential of the proposed Project is compared to that of the existing “occupied floor area” of the office building, the Project is forecast to result in 1,090 additional daily trips, 65 net AM peak hour trips and 92 net PM peak hour.

- **Existing Plus Project Traffic Conditions** – The proposed Project will significantly impact one (1) of the six (6) key study intersections. Pullman Street at Baker Street is forecast to operate at LOS F during the AM and PM peak hour. The remaining five (5) key study intersections currently operate and are forecast to continue to operate at an acceptable service level during the AM and PM peak hours with the addition of Project generated traffic to existing traffic.

- ***Year 2016 Cumulative Traffic Conditions Plus Project*** – The proposed Project will significantly impact one (1) of the six (6) key study intersections. Pullman Street at Baker Street is forecast to operate at LOS F during the AM and PM peak hour. The remaining five (5) key study intersections currently operate and are forecast to continue to operate at an acceptable service level during the AM and PM peak hours with the addition of Project generated traffic to existing traffic.
- ***General Plan Buildout Cumulative Traffic Conditions Plus Project*** – The proposed Project will significantly impact one (1) of the six (6) key study intersections. Pullman Street at Baker Street is forecast to operate at adverse service levels during the AM and PM peak hour. The remaining five (5) key study intersections will not have a project impact during the AM and PM peak hours based on the City’s LOS standards and significant impact criteria defined in this report.
- ***Site Access*** – The proposed project driveways along Pullman Street is forecast to operate at acceptable LOS during the AM peak hour and PM peak hours for near-term (Year 2016) and long-term (General Plan Buildout) traffic conditions. To ensure adequate sight distance is provided at the Project driveways, parking restrictions should be implemented and landscaping and/or hardscape on north side of these project driveway should be designed such that a driver’s clear line of sight is not obstructed and does not threaten vehicular or pedestrian safety
- ***Planned Improvements*** – The following are planned General Plan improvements:
  - ❑ **No. 1 – SR-55 Southbound Ramps at Baker Street:** Widen and/or re-strip to provide an exclusive southbound free right-turn lane. Modify the eastbound approach to provide an exclusive through lane, shared through/right-turn lane and an exclusive right-turn lane. Modify existing traffic signal accordingly to current City of Costa Mesa standards and design requirements.
  - ❑ **No. 2 – SR-55 Northbound Ramps at Baker Street:** Widen and/or re-strip to provide an exclusive northbound left-turn lane, shared left/through lane and shared through/right-turn lane. Modify the eastbound approach to provide dual left-turn lanes. Modify existing traffic signal accordingly to current City of Costa Mesa standards and design requirements.
- ***Recommended Project-Specific Mitigation Measures*** – To mitigate the significant impact of the proposed Project at Pullman Street and Baker Street and off-set the contributory Project impacts at Redhill Avenue and Baker Street, the improvements listed below are recommended.
  - **No. 3 – Pullman Street at Baker Street:** Install a traffic signal and associated signing modifications and pavement legends, and incorporate driveway that provide access to the 150 Baker Street property into the design per the City of Costa Mesa Design Guidelines and CA MUTCD. Install signal interconnect between proposed traffic signal and existing traffic signals on Baker at Redhill and/or Baker Street and SR-55 NB Ramps. In conjunction with signalization, restripe Baker Street to provide a dedicated eastbound and westbound left-turn lane. Install crosswalks and ADA compliant ramps as required by the City. Implementation of this improvement will require the approval of the City of Costa Mesa. As indicated earlier, existing traffic volumes justify the installation of a traffic signal at this location. Per the

City's requirements, the installation of the traffic signal will be the sole responsibility of the Project.

- **No. 4 – Red Hill Avenue at Baker Street:** Widen and/or re-strip to provide an additional through lane in the northbound and southbound direction. Modify existing traffic signal accordingly to current City of Costa Mesa standards and design requirements. Per the City's requirements, the Project can be expected to pay a fair-share of the construction costs to implement these mitigation measures.
- **Project Traffic Impact Fees** - Based on the City's Traffic Impact Fee Program, the proposed Project can be expected to pay a total of \$160,185 in Traffic Impact Fees which could "mitigate" the Project's incremental traffic impact at the intersection of Red Hill Avenue and Baker Street. The precise fees will be determined upon issuance of Project building permits.
- **Project-Specific Improvements:** Subject to review and approval by the City Traffic Engineer, the following improvements are recommended in conjunction with development of the proposed Project to ensure adequate access and egress to the site is provided:
  - Restrict on-street parking along the Project's frontage on Pullman Street, between the primary Project driveway and secondary Project driveway, via the installation of red curb and the appropriate parking restriction signs.
  - Maintain adequate sight distance for the primary Project driveway and secondary Project driveway by minimizing obstructions (i.e. landscaping and/or hardscape) within the "limited use area" on north side of this project driveway. Landscaping and/or hardscapes should be designed such that a driver's clear line of sight is not obstructed and does not threaten vehicular or pedestrian safety, as determined by the City Traffic Engineer.
  - All plants and shrubs within the limited use area should be of the type that will grow no higher than 30-inches above the curb or a have a canopy no lower than 72 inches above curb. The maximum tree size and minimum tree spacing in the limited use area should be limited to 24-inch caliper tree trunks (maximum size at maturity) spaced at 40-feet on center.
  - Prohibit on-street parking on the north side of the primary Project driveway for a minimum of 200-feet via installation of red curb. Install a dedicated southbound right-turn lane on Pullman Street at primary Project driveway with a minimum storage of 100-feet.
- **Parking Analysis** – Direct application of the City's code to the proposed Project results in a code-parking requirement of 547 spaces. When compared against the proposed parking structure -supply of 547 spaces, the proposed Project satisfies the City's requirements.
- **CMP Compliance Assessment** – No significant impacts are expected to occur on the Orange County Congestion Management Program roadway network due to the development and full occupancy of the proposed Project.



## APPENDIX A

### TRAFFIC STUDY SCOPE OF WORK

MEMORANDUM

To: Mr. Raja Sethuraman  
City of Costa Mesa

Date: April 30, 2013

From: Richard E. Barretto, P.E., Principal  
LLG, Engineers

LLG Ref: 2.13.3373.1



Subject: ***Traffic Study Scope of Work for the 125 Baker Street Apartments Project  
Costa Mesa, California***

Engineers & Planners  
Traffic  
Transportation  
Parking

Linscott, Law &  
Greenspan, Engineers

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As a follow-up to our prior discussions, Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit the following Traffic Study Scope of Work for the proposed 125 Baker Street Apartments (herein referred to as Project) in the City of Costa Mesa, California, for your review and approval. The work program provided herein is based on our preliminary telephone conversation of March 14, 2013 along with a follow up telephone conversation on April 29, 2013 and the most current project information provided by the project applicant, Red Oaks Investments.

**Traffic Study Scope of Work**

The Traffic Impact Analysis for the proposed 125 Baker Street Apartments will satisfy the traffic impact requirements of the City of Costa Mesa and be consistent with the requirements and procedures outlined in the current *2009 Congestion Management Program (CMP) for Orange County*.

- A. Project Address/Location:** The Project site is located south of Baker Street, east of SR-55 NB Off-Ramp and west of Pullman Street at 125 Baker Street in the City of Costa Mesa, California. The subject property is currently developed with a two-story, 62,000 square-foot (SF) office building and surface parking that is now 74 percent occupied. Access to the Project site is now provided via a full access driveway on Baker Street and two full access driveways on Pullman Street. See attached **Figure 1-1**, a Vicinity Map that illustrates the general location of the Project and surrounding street system. **Figure 2-1** is an existing aerial photograph of the Project site.
- B. Project Description:** The proposed Project includes the development of a 235 unit apartment complex, consisting of 128 one-bedroom units, 100 two-bedroom units and 7 studio units with a multi-level parking structure in place of the existing office building. As now proposed, primary access to the site will be provided via a full access driveway along the west side Pullman Street, south Briggs Avenue at approximately the same location of the site's existing driveway. Secondary access and fire access will be provided another full access driveway Pullman Street. Subject to confirmation of the project applicant, the proposed Project is expected to be completed by 2015/2016. **Figures 2-2** illustrates the preliminary site plan for the Project prepared by Architects Orange, dated March 15, 2013.

**C. Traffic Study Locations:** Based on our preliminary discussions and review of the project vicinity, the following six (6) key study intersections represent a list of study intersections to be evaluated in the Project's traffic impact study.

Study Intersections

1. SR-55 Southbound Ramps at Baker Street (Signalized)
2. SR-55 Northbound Ramps at Baker Street (Signalized)
3. Pullman Street at Baker Street (Unsignalized)
4. Red Hill Avenue at Baker Street (Signalized)
5. Pullman Street at Briggs Avenue (Unsignalized)
6. Red Hill Avenue at Briggs Avenue (Unsignalized)

For Pullman Street at Baker Street, a traffic signal warrant analysis will be conducted.

**D. Traffic Counts:** AM peak hour and PM peak hour traffic counts for the six (6) key study intersections will be collected during the AM peak period and PM peak period of a typical weekday.

In support of a traffic signal warrant analysis, conduct 24-hour directional traffic counts at the Pullman Street/Baker Street intersection.

The traffic counts were collected April 11, 2013.

**E. Project Trip Generation:** The trip generation potential of the proposed Project will be estimated using the average rates for ITE Land Use 220: Apartments published in the *Trip Generation, 9th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012)*. For the existing office building, the average trips rates for ITE Land Use 710: General Office Building will be utilized for the Daily trips. However, the AM and PM peak hours are based on existing driveway counts conducted April 11, 2013.

While the upper half of **Table 1** summarizes the trip generation rates used in forecasting the vehicular trips generated by the proposed Project Land Use, the lower half provides a summary of the Project's daily, AM and PM peak hour trip generation potential as well as the existing office building's trip generation "budget".

A review of the lower portion of **Table 1** shows the trip generation forecast for the Project. As shown, the proposed Project is forecast to generation 1,562 daily trips, with 120 trips (24 inbound, 96 outbound) produced in the AM peak hour and 146 trips (94 inbound, 52 outbound) produced in the PM peak hour. The existing land use at 74% occupancy, is expected to generate 506 daily trips, with 57 trips (53

inbound, 4 outbound) produced in the AM peak hour and 57 trips (22 inbound, 35 outbound) produced in the PM peak hour.

When the proposed Project is compared to the existing “occupied floor area”, the Project is forecast to result in 1,056 additional daily trips, 63 net AM peak hour trips and 89 net PM peak hour.

**F. Trip Distribution:** See attached *Figure 3* for the Project Trip Distribution Pattern and *Figure 4* for the Existing Office Trip Distribution Pattern, as well as a tabular summary on *Table 2*.

Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- location of site access points in relation to the surrounding street system,
- the site's proximity to major traffic carriers and regional access routes,
- physical characteristics of the circulation system such as lane channelization and presence of traffic signals that affect travel patterns,
- presence of traffic congestion in the surrounding vicinity,
- ingress/egress availability at the project site, and
- input from City staff.

**G. Analysis Methodology and Scenarios:** The LOS calculations will be based on *Intersection Capacity Utilization (ICU)* methodology for signalized intersections and *Highway Capacity Manual (HCM)* methodology for unsignalized intersections. The Project's potential impact will be based on the City of Costa Mesa significant impact criteria. The following scenarios are those for which LOS calculations will be performed using the ICU and HCM methodologies:

- a. Existing Traffic,
- b. Existing Plus Project Traffic less Existing Office Building Traffic, and
- c. Scenario (b) With Mitigation, if necessary,
- d. Near Term Project Buildout without Project Traffic (Existing plus Ambient Growth at 1% per year to 2015/2016 plus Related Projects),
- e. Near Term Project Buildout with “Net” Project Traffic,
- f. Scenario (e) with Mitigation, if necessary,
- g. Long Term as presented in the CMTM dated August 2003,
- h. Long Term as presented in the CMTM dated August 2003 with “Net” Project Traffic,
- i. Scenario (h) with Mitigation, if necessary.

Related projects, planned and/or approved, have been researched at the City of Costa Mesa and Irvine Planning Departments and as a result no related projects are being considered as part of this analysis.



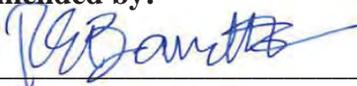
**H. Other Issues:**

- Evaluate site access and internal circulation, especially as it relates to line of sight for the Project driveways on Pullman Street to ensure safe access is maintained for the Project.
- Traffic Signal Warrant Analysis for Pullman Street at Baker Street.
- Conduct LOS calculations at the proposed project driveway(s).
- Confirm adequacy of parking supply based on a comparison with City-code parking ratios.

\* \* \* \* \*

We appreciate the opportunity to provide this scope of work. Should you have any questions, please call me at (949) 825-6175. Thank You.

**Recommended by:**

  
\_\_\_\_\_

Consultant's Representative

April 30, 2013

Date

**Approved by:**

\_\_\_\_\_

City of Costa Mesa

\_\_\_\_\_

Date

cc: File  
Shane Green, P.E., Transportation Engineer III

Attachment

TABLE 1  
PROJECT TRAFFIC GENERATION FORECAST<sup>1</sup>

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<b>Generation Rates:</b>							
▪ 220: Apartments (TE/DU)	6.65	0.10	0.41	0.51	0.40	0.22	0.62
<b>Generation Forecasts:</b>							
<u>Proposed Project</u>							
▪ 125 Baker Street Apartments (235 DU)	1,562	24	96	120	94	52	146
<u>Existing Occupied Floor Area</u>							
▪ General Office Building (62,000 SF @ 74% occupancy) <sup>2</sup>	<u>-506</u>	<u>-53</u>	<u>-4</u>	<u>-57</u>	<u>-22</u>	<u>-35</u>	<u>-57</u>
<b>Total "Net Occupied" Project Trip Generation: Proposed Project Minus Existing Occupied Office Floor Area</b>	<b>1,056</b>	<b>-29</b>	<b>92</b>	<b>63</b>	<b>72</b>	<b>17</b>	<b>89</b>

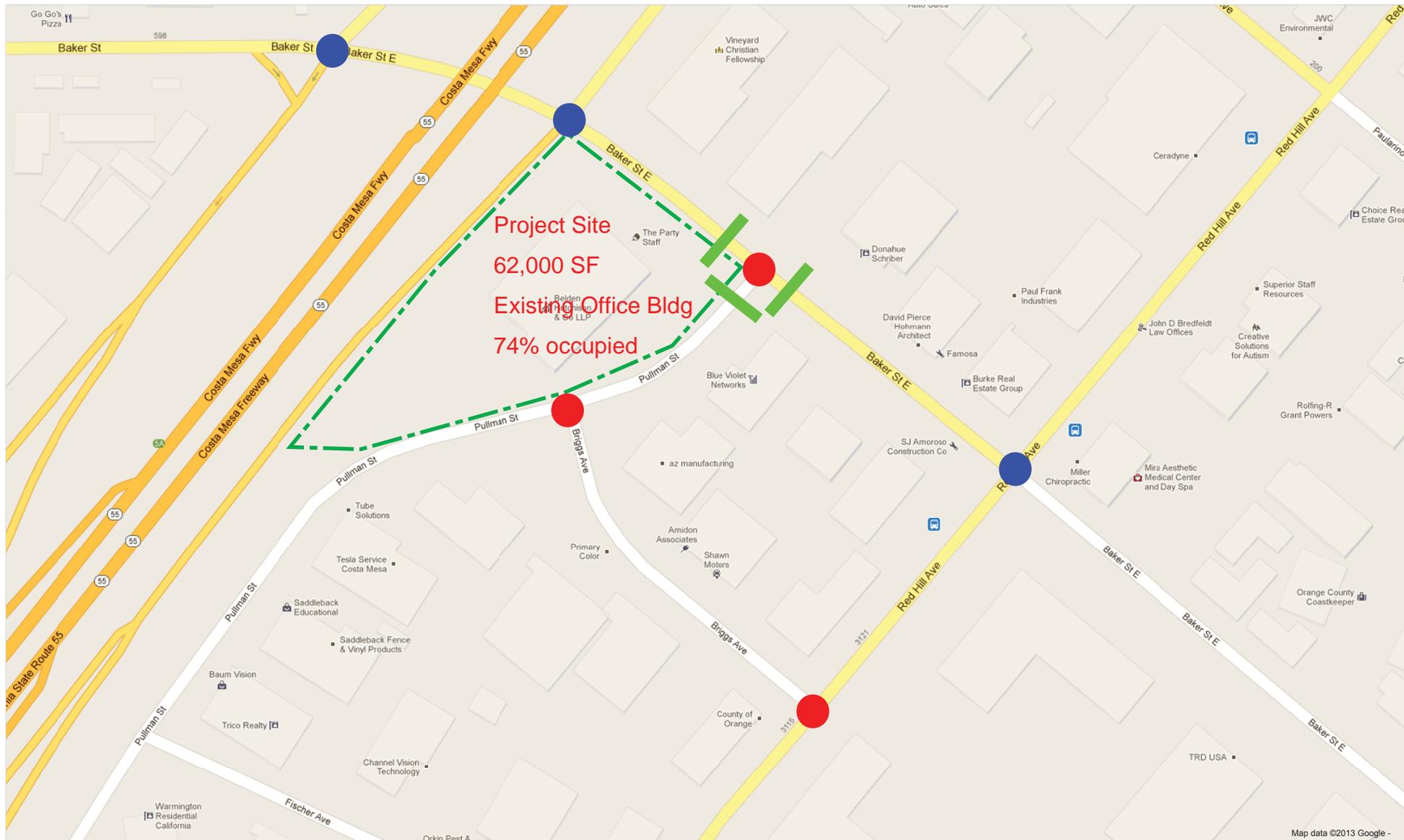
Notes:  
TE/DU = Trip end per dwelling unit

<sup>1</sup> Source: *Trip Generation, 9th Edition*, Institute of Transportation Engineers, (ITE) [Washington, D.C. (2012)].  
<sup>2</sup> AM and PM peak hour trips are based on existing driveway counts conducted April 11, 2013. Daily trips are estimated using the ITE Land Use 710: General Office Building rate of 11.03.

**TABLE 2**  
**PROJECT DIRECTIONAL DISTRIBUTION PATTERN**

<b>Apartment Distribution Percentage</b>	<b>Existing Office Distribution Percentage</b>	<b>Orientation/Direction</b>
35%	40%	To/from the north via SR-55 Freeway
20%	20%	To/from the south via SR-55 Freeway
20%	15%	To/from the north via Red Hill Avenue
10%	15%	To/from the south via Red Hill Avenue
15%	10%	To/from the west via Baker Street
<b>100%</b>	<b>100%</b>	<b>Total</b>

To see all the details that are visible on the screen, use the "Print" link next to the map.

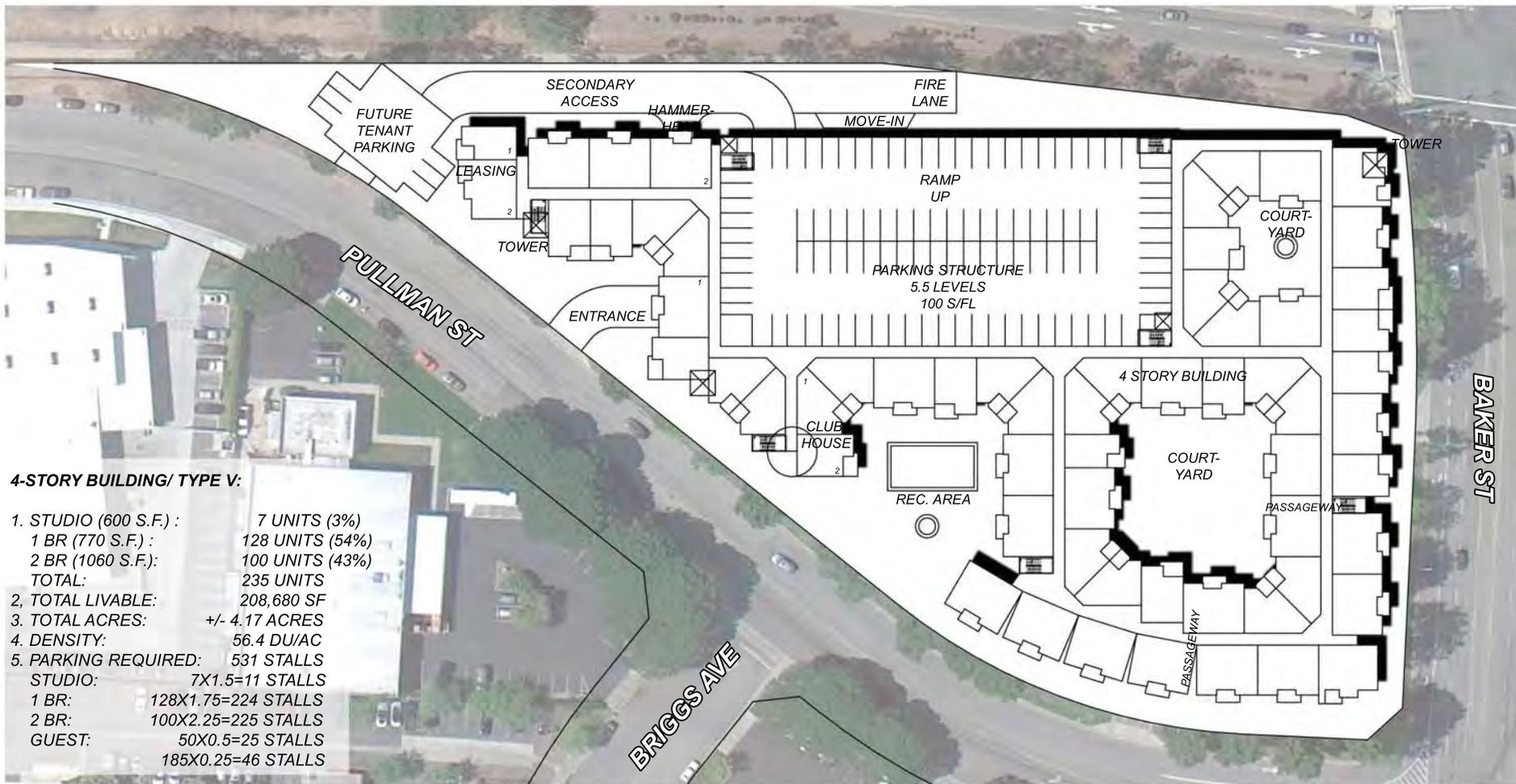


- 3 signalized study intersections
- 3 unsignalized study intersections

| 3 ADT directional counts.

Figure 1-1  
Project Vicinity Map





CONCEPTUAL SITE PLAN

COSTA MESA, CALIFORNIA

BAKER STREET APARTMENTS

RED OAK INVESTMENTS

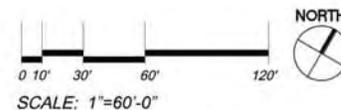


Figure 2-2  
Proposed Site Plan

2012-00X MARCH 15, 2013



**ARCHITECTS ORANGE**

144 NORTH ORANGE ST., ORANGE, CALIFORNIA 92666 (714) 639-9860

©2012 Architects Orange  
This plan is a conceptual proposal and  
not a final plan. It is subject to change  
without notice and is not to be used  
without the permission of Architects Orange.

3 %

To see all the details that are visible on the screen, use the "Print" link next to the map.



Figure 3

Apartment Project Trip Distribution

40%

To see all the details that are visible on the screen, use the "Print" link next to the map.



Figure 4

Existing Office Trip Distribution

**APPENDIX B**  
**EXISTING TRAFFIC COUNT DATA**

*APPENDIX B-1*

**INTERSECTION COUNTS**

City: COSTA MESA  
 N-S Direction: SR-55 SB RAMPS  
 E-W Direction: BAKER STREET

File Name : H1304001  
 Site Code : 00005054  
 Start Date : 4/11/2013  
 Page No : 1

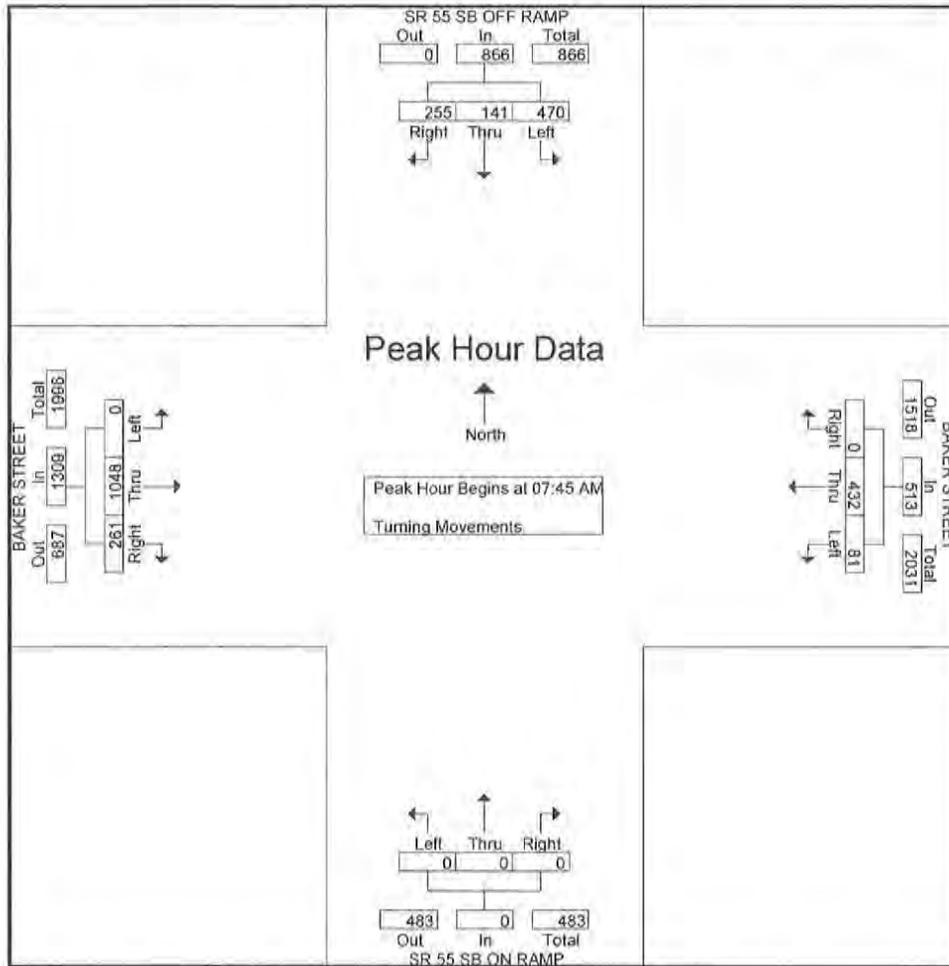
Groups Printed- Turning Movements

Start Time	SR 55 SB OFF RAMP Southbound			BAKER STREET Westbound			SR 55 SB ON RAMP Northbound			BAKER STREET Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	54	35	71	0	34	12	0	0	0	37	189	0	432
07:15 AM	57	21	63	0	54	8	0	0	0	43	219	0	465
07:30 AM	61	41	91	0	79	9	0	0	0	66	219	0	566
07:45 AM	78	43	122	0	103	13	0	0	0	66	256	0	681
Total	250	140	347	0	270	42	0	0	0	212	883	0	2144
08:00 AM	58	34	141	0	109	30	0	0	0	74	248	0	694
08:15 AM	60	33	120	0	103	23	0	0	0	71	272	0	682
08:30 AM	59	31	87	0	117	15	0	0	0	50	272	0	631
08:45 AM	66	35	87	0	128	24	0	0	0	42	225	0	607
Total	243	133	435	0	457	92	0	0	0	237	1017	0	2614
*** BREAK ***													
04:00 PM	81	44	38	0	171	43	0	0	0	71	131	0	579
04:15 PM	128	58	21	0	222	62	0	0	0	77	140	0	708
04:30 PM	136	47	25	0	195	48	0	0	0	57	134	0	642
04:45 PM	136	52	17	0	246	58	0	0	0	88	140	0	737
Total	481	201	101	0	834	211	0	0	0	293	545	0	2666
05:00 PM	134	71	16	0	258	52	0	0	0	90	116	0	737
05:15 PM	152	89	21	0	290	91	0	0	0	104	110	0	857
05:30 PM	136	87	26	0	259	66	0	0	0	119	104	0	797
05:45 PM	110	65	12	0	229	74	0	0	0	94	141	0	725
Total	532	312	75	0	1036	283	0	0	0	407	471	0	3116
Grand Total	1506	786	958	0	2597	628	0	0	0	1149	2916	0	10540
Apprch %	46.3	24.2	29.5	0	80.5	19.5	0	0	0	28.3	71.7	0	
Total %	14.3	7.5	9.1	0	24.6	6	0	0	0	10.9	27.7	0	

City: COSTA MESA  
 N-S Direction: SR-55 SB RAMPS  
 E-W Direction: BAKER STREET

File Name : H1304001  
 Site Code : 00005054  
 Start Date : 4/11/2013  
 Page No : 2

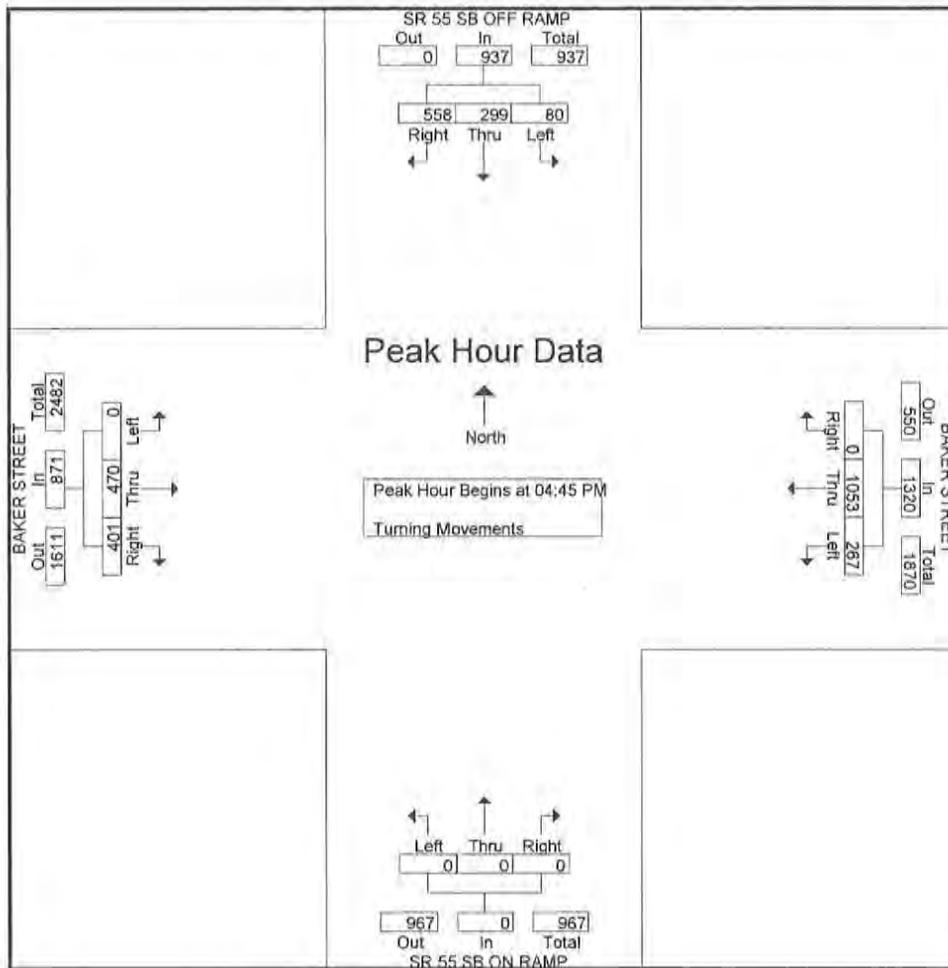
Start Time	SR 55 SB OFF RAMP Southbound				BAKER STREET Westbound				SR 55 SB ON RAMP Northbound				BAKER STREET Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	78	43	122	243	0	103	13	116	0	0	0	0	66	256	0	322	681
08:00 AM	58	34	141	233	0	109	30	139	0	0	0	0	74	248	0	322	694
08:15 AM	60	33	120	213	0	103	23	126	0	0	0	0	71	272	0	343	682
08:30 AM	59	31	87	177	0	117	15	132	0	0	0	0	50	272	0	322	631
Total Volume	255	141	470	866	0	432	81	513	0	0	0	0	261	1048	0	1309	2688
% App. Total	29.4	16.3	54.3		0	84.2	15.8		0	0	0		19.9	80.1	0		
PHF	.817	.820	.833	.891	.000	.923	.675	.923	.000	.000	.000	.000	.882	.963	.000	.954	.968



City: COSTA MESA  
 N-S Direction: SR-55 SB RAMPS  
 E-W Direction: BAKER STREET

File Name : H1304001  
 Site Code : 00005054  
 Start Date : 4/11/2013  
 Page No : 3

Start Time	SR 55 SB OFF RAMP Southbound				BAKER STREET Westbound				SR 55 SB ON RAMP Northbound				BAKER STREET Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	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	136	52	17	205	0	246	58	304	0	0	0	0	88	140	0	228	737
05:00 PM	134	71	16	221	0	258	52	310	0	0	0	0	90	116	0	206	737
05:15 PM	152	89	21	262	0	290	91	381	0	0	0	0	104	110	0	214	857
05:30 PM	136	87	26	249	0	259	66	325	0	0	0	0	119	104	0	223	797
Total Volume	558	299	80	937	0	1053	267	1320	0	0	0	0	401	470	0	871	3128
% App. Total	59.6	31.9	8.5		0	79.8	20.2		0	0	0		46	54	0		
PHF	.918	.840	.769	.894	.000	.908	.734	.866	.000	.000	.000	.000	.842	.839	.000	.955	.912



City: COSTA MESA  
 N-S Direction: SR-55 NB RAMPS  
 E-W Direction: BAKER STREET

File Name : H1304002  
 Site Code : 00005694  
 Start Date : 4/11/2013  
 Page No : 1

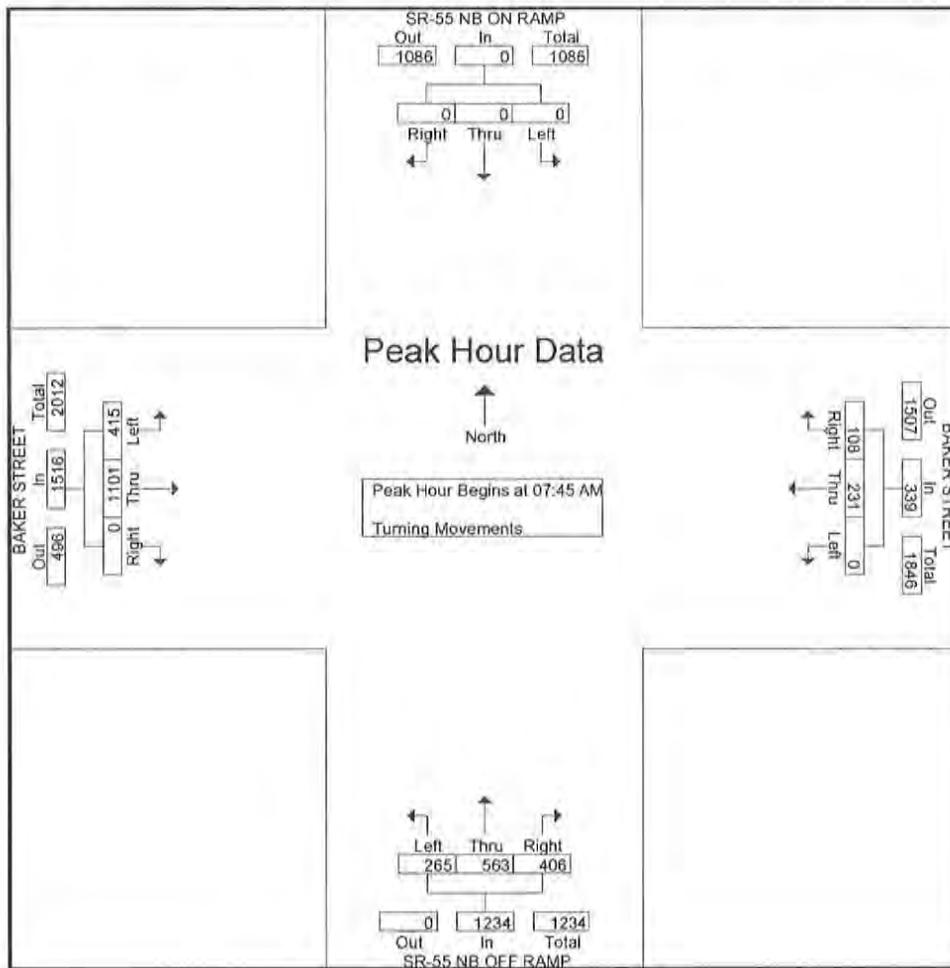
Groups Printed- Turning Movements

Start Time	SR-55 NB ON RAMP Southbound			BAKER STREET Westbound			SR-55 NB OFF RAMP Northbound			BAKER STREET Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	0	0	0	13	20	0	46	21	23	0	174	81	378
07:15 AM	0	0	0	16	31	0	46	32	33	0	187	98	443
07:30 AM	0	0	0	23	37	0	56	61	49	0	195	116	537
07:45 AM	0	0	0	38	51	0	87	152	62	0	255	115	760
Total	0	0	0	90	139	0	235	266	167	0	811	410	2118
08:00 AM	0	0	0	39	72	0	107	156	64	0	276	108	822
08:15 AM	0	0	0	19	61	0	94	121	64	0	320	92	771
08:30 AM	0	0	0	12	47	0	118	134	75	0	250	100	736
08:45 AM	0	0	0	14	67	0	128	122	90	0	196	101	718
Total	0	0	0	84	247	0	447	533	293	0	1042	401	3047
*** BREAK ***													
04:00 PM	0	0	0	60	158	0	47	44	68	0	91	70	538
04:15 PM	0	0	0	56	189	0	51	63	96	0	95	67	617
04:30 PM	0	0	0	73	176	0	53	61	75	0	75	75	588
04:45 PM	0	0	0	52	228	0	69	85	74	0	74	89	671
Total	0	0	0	241	751	0	220	253	313	0	335	301	2414
05:00 PM	0	0	0	67	215	0	49	76	77	0	78	50	612
05:15 PM	0	0	0	98	303	0	61	56	80	0	70	63	731
05:30 PM	0	0	0	56	259	0	53	58	69	0	75	53	623
05:45 PM	0	0	0	49	223	0	58	55	75	0	75	62	597
Total	0	0	0	270	1000	0	221	245	301	0	298	228	2563
Grand Total	0	0	0	685	2137	0	1123	1297	1074	0	2486	1340	10142
Apprch %	0	0	0	24.3	75.7	0	32.1	37.1	30.7	0	65	35	
Total %	0	0	0	6.8	21.1	0	11.1	12.8	10.6	0	24.5	13.2	

City: COSTA MESA  
 N-S Direction: SR-55 NB RAMPS  
 E-W Direction: BAKER STREET

File Name : H1304002  
 Site Code : 00005694  
 Start Date : 4/11/2013  
 Page No : 2

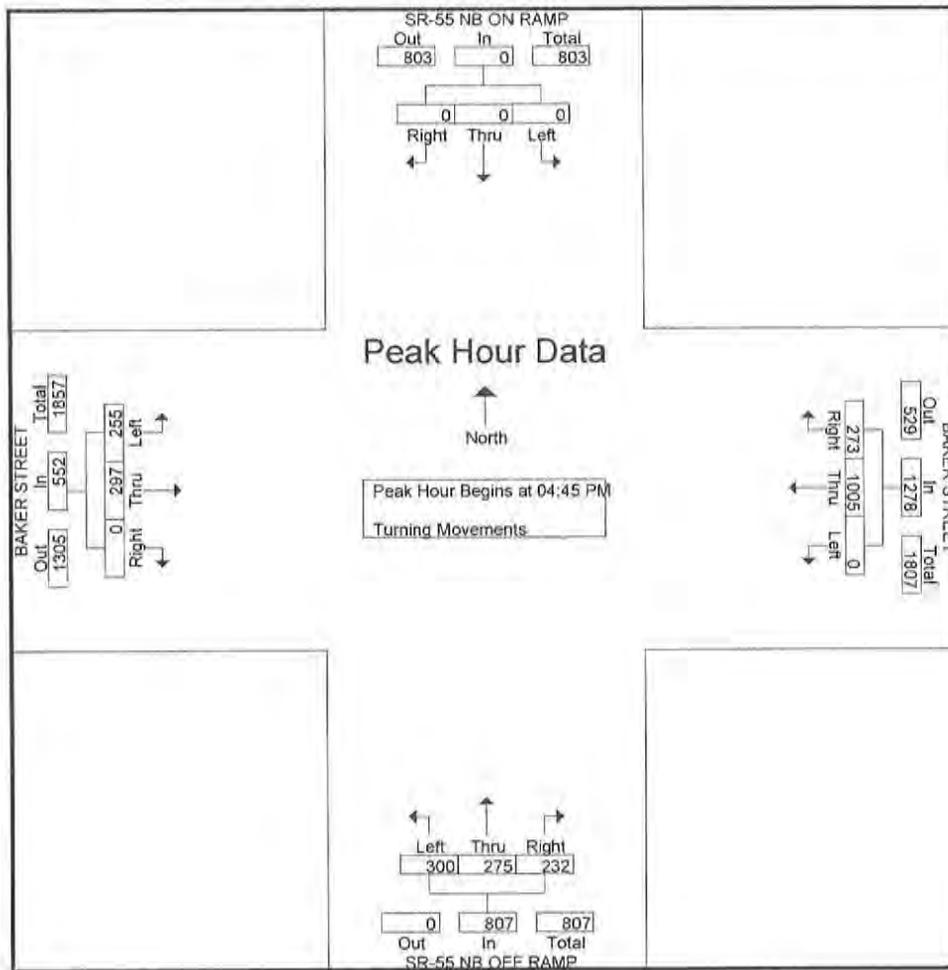
Start Time	SR-55 NB ON RAMP Southbound				BAKER STREET Westbound				SR-55 NB OFF RAMP Northbound				BAKER STREET Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	38	51	0	89	87	152	62	301	0	255	115	370	760
08:00 AM	0	0	0	0	39	72	0	111	107	156	64	327	0	276	108	384	822
08:15 AM	0	0	0	0	19	61	0	80	94	121	64	279	0	320	92	412	771
08:30 AM	0	0	0	0	12	47	0	59	118	134	75	327	0	250	100	350	736
Total Volume	0	0	0	0	108	231	0	339	406	563	265	1234	0	1101	415	1516	3089
% App. Total	0	0	0	0	31.9	68.1	0		32.9	45.6	21.5		0	72.6	27.4		
PHF	.000	.000	.000	.000	.692	.802	.000	.764	.860	.902	.883	.943	.000	.860	.902	.920	.939



City: COSTA MESA  
 N-S Direction: SR-55 NB RAMPS  
 E-W Direction: BAKER STREET

File Name : H1304002  
 Site Code : 00005694  
 Start Date : 4/11/2013  
 Page No : 3

Start Time	SR-55 NB ON RAMP Southbound				BAKER STREET Westbound				SR-55 NB OFF RAMP Northbound				BAKER STREET Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	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	0	0	0	52	228	0	280	69	85	74	228	0	74	89	163	671
05:00 PM	0	0	0	0	67	215	0	282	49	76	77	202	0	78	50	128	612
05:15 PM	0	0	0	0	98	303	0	401	61	56	80	197	0	70	63	133	731
05:30 PM	0	0	0	0	56	259	0	315	53	58	69	180	0	75	53	128	623
Total Volume	0	0	0	0	273	1005	0	1278	232	275	300	807	0	297	255	552	2637
% App. Total	0	0	0	0	21.4	78.6	0		28.7	34.1	37.2		0	53.8	46.2		
PHF	.000	.000	.000	.000	.696	.829	.000	.797	.841	.809	.938	.885	.000	.952	.716	.847	.902



City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: BAKER STREET

File Name : H1304003  
 Site Code : 00000557  
 Start Date : 4/11/2013  
 Page No : 1

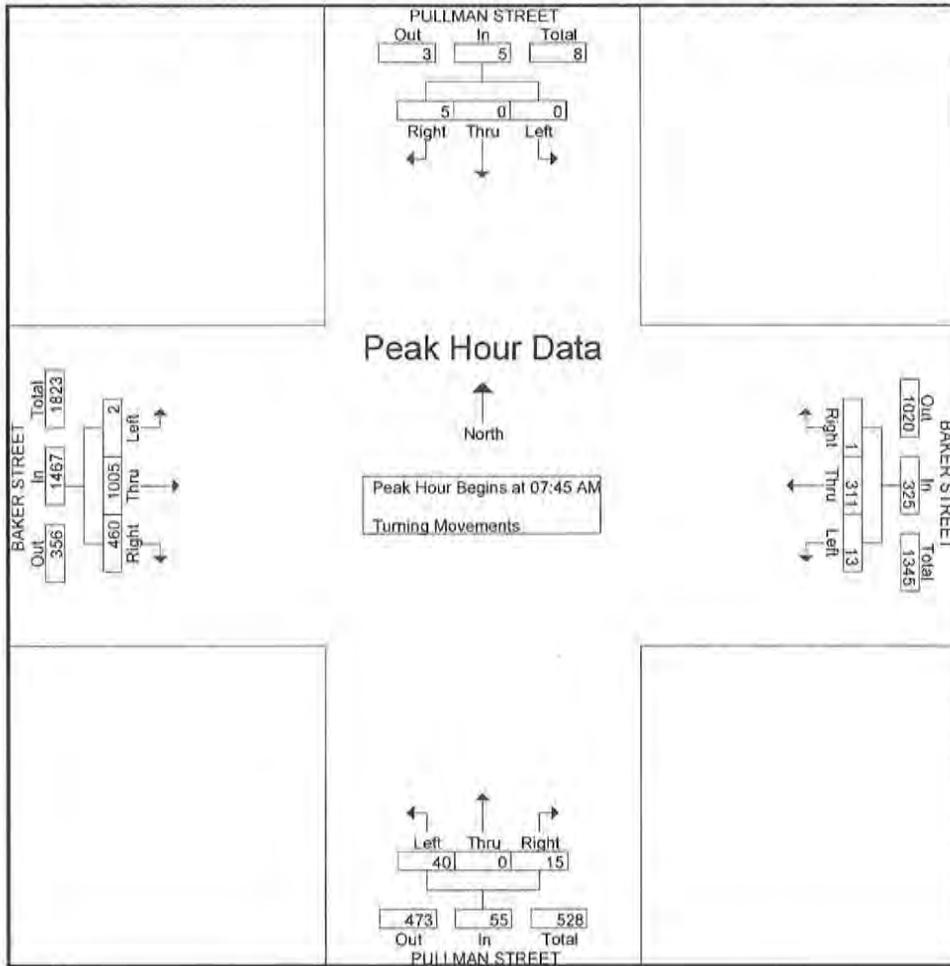
Groups Printed- Turning Movements

Start Time	PULLMAN STREET Southbound			BAKER STREET Westbound			PULLMAN STREET Northbound			BAKER STREET Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	0	0	0	0	23	3	0	0	13	65	151	3	258
07:15 AM	0	0	0	0	31	1	0	0	8	61	142	1	244
07:30 AM	0	0	0	1	41	1	1	0	13	96	201	1	355
07:45 AM	1	0	0	0	88	1	3	0	10	85	239	0	427
Total	1	0	0	1	183	6	4	0	44	307	733	5	1284
08:00 AM	2	0	0	0	84	5	5	0	9	155	269	1	530
08:15 AM	1	0	0	1	71	4	5	0	9	118	257	0	466
08:30 AM	1	0	0	0	68	3	2	0	12	102	240	1	429
08:45 AM	0	0	0	0	60	2	2	0	15	89	254	0	422
Total	4	0	0	1	283	14	14	0	45	464	1020	2	1847
*** BREAK ***													
04:00 PM	2	0	0	0	138	1	9	0	41	20	102	1	314
04:15 PM	0	0	0	2	177	1	6	0	40	24	121	0	371
04:30 PM	0	0	0	0	188	2	13	0	44	18	111	0	376
04:45 PM	0	0	0	0	222	2	12	0	36	19	119	0	410
Total	2	0	0	2	725	6	40	0	161	81	453	1	1471
05:00 PM	0	0	0	0	224	2	26	0	93	21	108	0	474
05:15 PM	0	0	0	1	313	0	19	1	73	21	110	0	538
05:30 PM	0	0	0	0	223	0	15	0	68	14	104	0	424
05:45 PM	1	0	0	0	215	1	6	2	68	13	119	2	427
Total	1	0	0	1	975	3	66	3	302	69	441	2	1863
Grand Total	8	0	0	5	2166	29	124	3	552	921	2647	10	6465
Apprch %	100	0	0	0.2	98.5	1.3	18.3	0.4	81.3	25.7	74	0.3	
Total %	0.1	0	0	0.1	33.5	0.4	1.9	0	8.5	14.2	40.9	0.2	

City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: BAKER STREET

File Name : H1304003  
 Site Code : 00000557  
 Start Date : 4/11/2013  
 Page No : 2

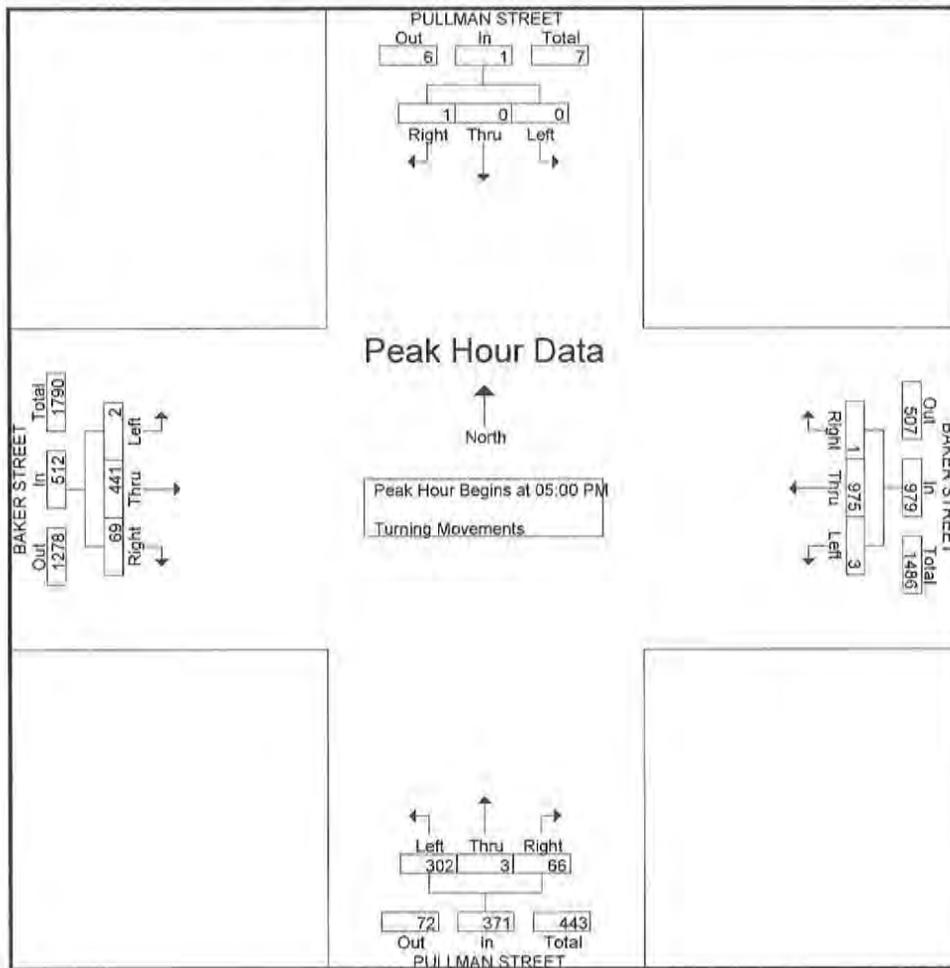
Start Time	PULLMAN STREET Southbound				BAKER STREET Westbound				PULLMAN STREET Northbound				BAKER STREET Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	1	0	0	1	0	88	1	89	3	0	10	13	85	239	0	324	427
08:00 AM	2	0	0	2	0	84	5	89	5	0	9	14	155	269	1	425	530
08:15 AM	1	0	0	1	1	71	4	76	5	0	9	14	118	257	0	375	466
08:30 AM	1	0	0	1	0	68	3	71	2	0	12	14	102	240	1	343	429
Total Volume	5	0	0	5	1	311	13	325	15	0	40	55	460	1005	2	1467	1852
% App. Total	100	0	0		0.3	95.7	4		27.3	0	72.7		31.4	68.5	0.1		
PHF	.625	.000	.000	.625	.250	.884	.650	.913	.750	.000	.833	.982	.742	.934	.500	.863	.874



City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: BAKER STREET

File Name : H1304003  
 Site Code : 00000557  
 Start Date : 4/11/2013  
 Page No : 3

Start Time	PULLMAN STREET Southbound				BAKER STREET Westbound				PULLMAN STREET Northbound				BAKER STREET Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	224	2	226	26	0	93	119	21	108	0	129	474
05:15 PM	0	0	0	0	1	313	0	314	19	1	73	93	21	110	0	131	538
05:30 PM	0	0	0	0	0	223	0	223	15	0	68	83	14	104	0	118	424
05:45 PM	1	0	0	1	0	215	1	216	6	2	68	76	13	119	2	134	427
Total Volume	1	0	0	1	1	975	3	979	66	3	302	371	69	441	2	512	1863
% App. Total	100	0	0		0.1	99.6	0.3		17.8	0.8	81.4		13.5	86.1	0.4		
PHF	.250	.000	.000	.250	.250	.779	.375	.779	.635	.375	.812	.779	.821	.926	.250	.955	.866



City: COSTA MESA  
 N-S Direction: RED HILL AVENUE  
 E-W Direction: BAKER STREET

File Name : h1304004  
 Site Code : 00000553  
 Start Date : 4/11/2013  
 Page No : 1

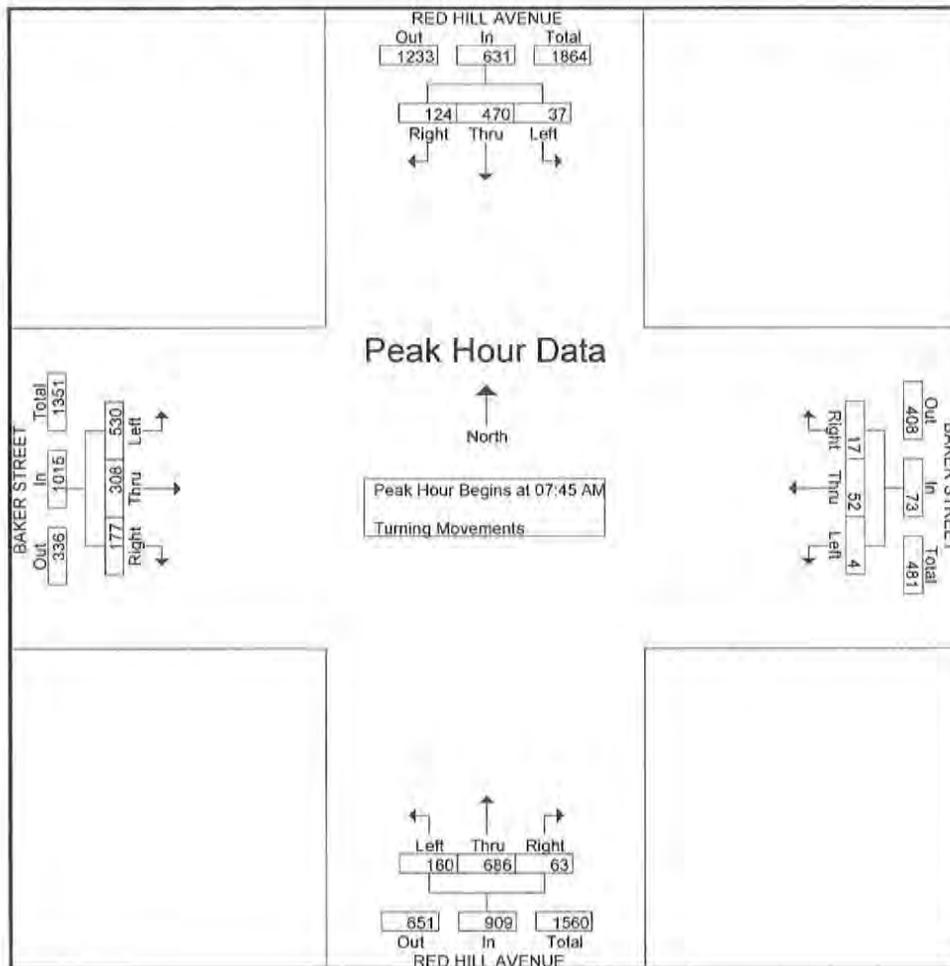
Groups Printed- Turning Movements

Start Time	RED HILL AVENUE Southbound			BAKER STREET Westbound			RED HILL AVENUE Northbound			BAKER STREET Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	10	82	9	3	4	0	5	96	10	30	49	63	361
07:15 AM	24	68	4	0	7	0	4	108	10	31	42	61	359
07:30 AM	20	85	8	7	6	2	9	153	25	44	70	69	498
07:45 AM	40	115	3	1	9	0	12	198	41	42	66	115	642
Total	94	350	24	11	26	2	30	555	86	147	227	308	1860
08:00 AM	32	153	14	4	13	2	21	194	60	54	86	126	759
08:15 AM	19	107	11	6	12	1	16	150	41	51	78	145	637
08:30 AM	33	95	9	6	18	1	14	144	18	30	78	144	590
08:45 AM	33	87	8	3	23	3	14	116	15	46	64	126	538
Total	117	442	42	19	66	7	65	604	134	181	306	541	2524
*** BREAK ***													
04:00 PM	40	95	4	19	71	12	8	126	40	21	20	71	527
04:15 PM	74	91	6	15	55	8	5	116	36	20	20	93	539
04:30 PM	66	116	3	13	87	6	8	183	55	23	21	75	656
04:45 PM	104	139	2	13	48	12	4	155	41	29	17	113	677
Total	284	441	15	60	261	38	25	580	172	93	78	352	2399
05:00 PM	76	113	5	19	93	15	3	178	82	14	16	92	706
05:15 PM	140	197	0	12	75	10	5	170	82	17	18	89	815
05:30 PM	113	138	1	9	58	8	5	163	47	25	20	89	676
05:45 PM	120	131	1	14	57	9	2	155	37	20	9	93	648
Total	449	579	7	54	283	42	15	666	248	76	63	363	2845
Grand Total	944	1812	88	144	636	89	135	2405	640	497	674	1564	9628
Apprch %	33.2	63.7	3.1	16.6	73.2	10.2	4.2	75.6	20.1	18.2	24.6	57.2	
Total %	9.8	18.8	0.9	1.5	6.6	0.9	1.4	25	6.6	5.2	7	16.2	

City: COSTA MESA  
 N-S Direction: RED HILL AVENUE  
 E-W Direction: BAKER STREET

File Name : h1304004  
 Site Code : 00000553  
 Start Date : 4/11/2013  
 Page No : 2

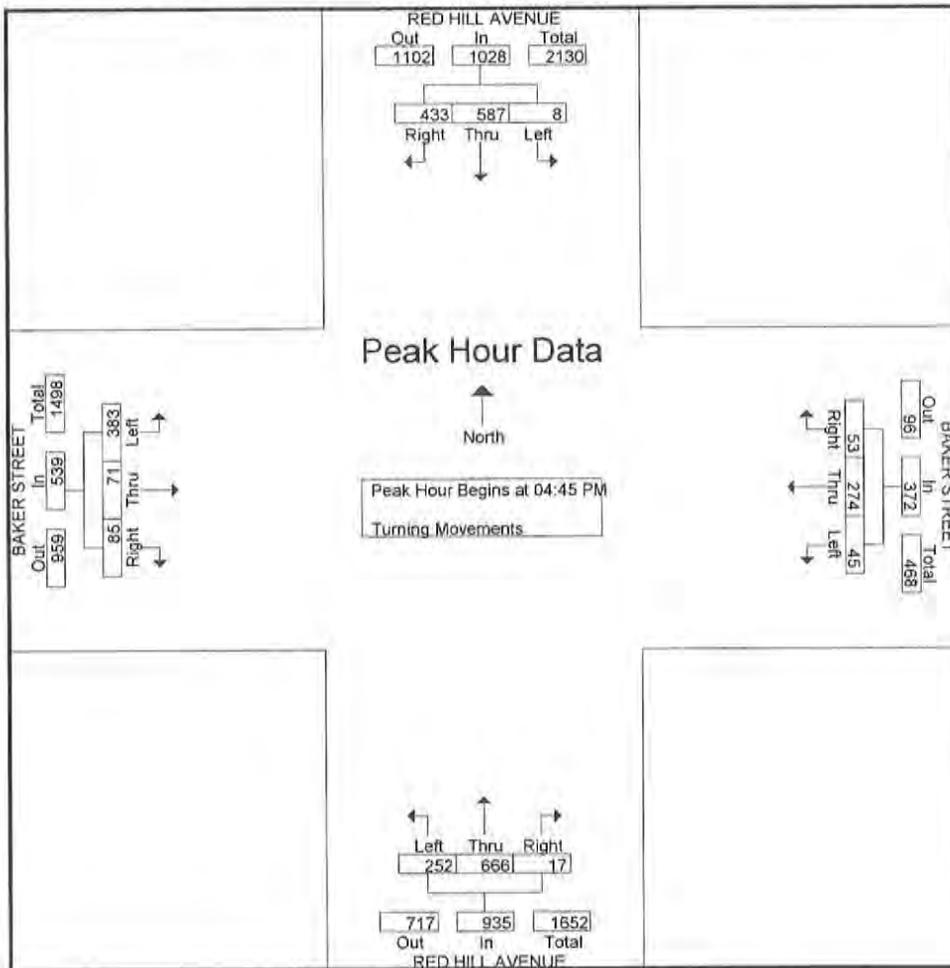
Start Time	RED HILL AVENUE Southbound				BAKER STREET Westbound				RED HILL AVENUE Northbound				BAKER STREET Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	40	115	3	158	1	9	0	10	12	198	41	251	42	66	115	223	642
08:00 AM	32	153	14	199	4	13	2	19	21	194	60	275	54	86	126	266	759
08:15 AM	19	107	11	137	6	12	1	19	16	150	41	207	51	78	145	274	637
08:30 AM	33	95	9	137	6	18	1	25	14	144	18	176	30	78	144	252	590
Total Volume	124	470	37	631	17	52	4	73	63	686	160	909	177	308	530	1015	2628
% App. Total	19.7	74.5	5.9		23.3	71.2	5.5		6.9	75.5	17.6		17.4	30.3	52.2		
PHF	.775	.768	.661	.793	.708	.722	.500	.730	.750	.866	.667	.826	.819	.895	.914	.926	.866



City: COSTA MESA  
 N-S Direction: RED HILL AVENUE  
 E-W Direction: BAKER STREET

File Name : h1304004  
 Site Code : 00000553  
 Start Date : 4/11/2013  
 Page No : 3

Start Time	RED HILL AVENUE Southbound				BAKER STREET Westbound				RED HILL AVENUE Northbound				BAKER STREET Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	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	104	139	2	245	13	48	12	73	4	155	41	200	29	17	113	159	677
05:00 PM	76	113	5	194	19	93	15	127	3	178	82	263	14	16	92	122	706
05:15 PM	140	197	0	337	12	75	10	97	5	170	82	257	17	18	89	124	815
05:30 PM	113	138	1	252	9	58	8	75	5	163	47	215	25	20	89	134	676
Total Volume	433	587	8	1028	53	274	45	372	17	666	252	935	85	71	383	539	2874
% App. Total	42.1	57.1	0.8		14.2	73.7	12.1		1.8	71.2	27		15.8	13.2	71.1		
PHF	.773	.745	.400	.763	.697	.737	.750	.732	.850	.935	.768	.889	.733	.888	.847	.847	.882



City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: BRIGGS AVENUE

File Name : H1304005  
 Site Code : 00000558  
 Start Date : 4/11/2013  
 Page No : 1

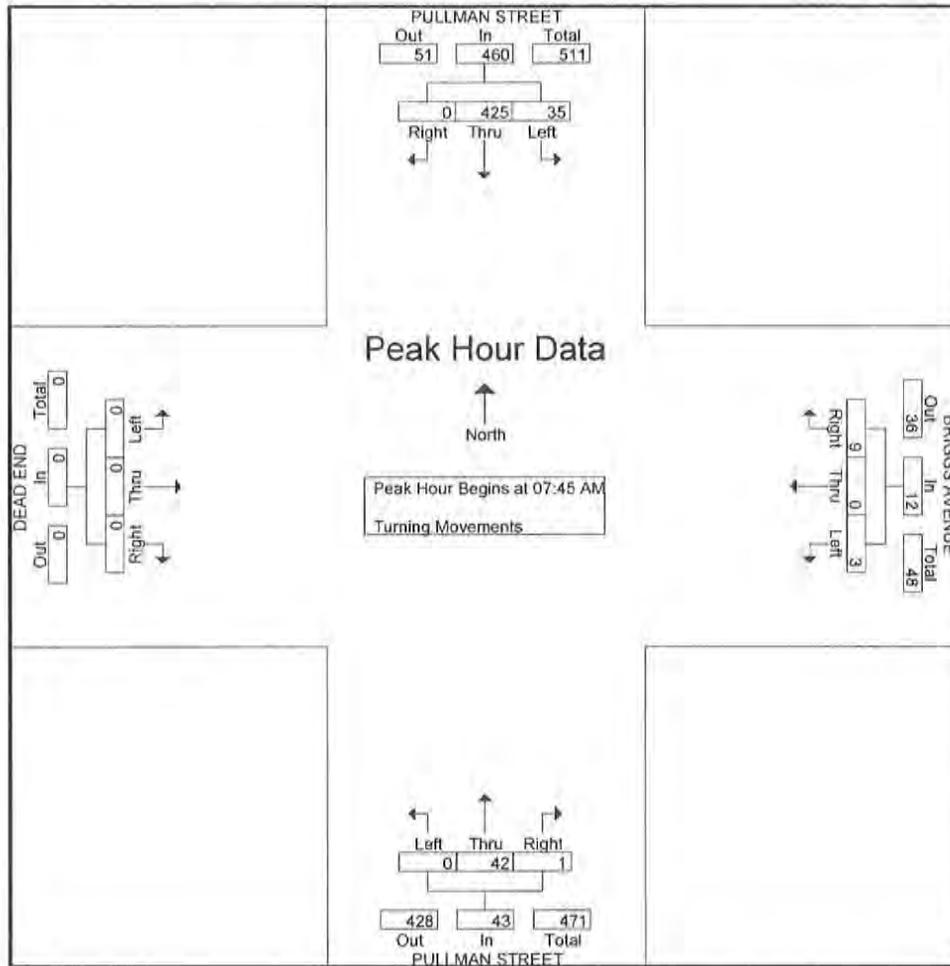
Groups Printed- Turning Movements

Start Time	PULLMAN STREET Southbound			BRIGGS AVENUE Westbound			PULLMAN STREET Northbound			DEAD END Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	0	61	0	1	0	2	2	9	0	0	0	0	75
07:15 AM	0	70	5	0	0	0	0	9	0	0	0	0	84
07:30 AM	0	85	10	2	0	2	0	10	0	0	0	0	109
07:45 AM	0	79	6	1	0	0	1	10	0	0	0	0	97
Total	0	295	21	4	0	4	3	38	0	0	0	0	365
08:00 AM	0	148	14	5	0	1	0	8	0	0	0	0	176
08:15 AM	0	105	7	1	0	0	0	12	0	0	0	0	125
08:30 AM	0	93	8	2	0	2	0	12	0	0	0	0	117
08:45 AM	0	67	6	3	0	0	0	13	0	0	0	0	89
Total	0	413	35	11	0	3	0	45	0	0	0	0	507
*** BREAK ***													
04:00 PM	0	15	2	12	0	1	1	48	0	0	0	0	79
04:15 PM	0	18	4	8	0	0	1	47	0	0	0	0	78
04:30 PM	0	18	2	6	0	0	0	45	0	0	0	0	71
04:45 PM	0	17	3	7	0	1	1	47	0	0	0	0	76
Total	0	68	11	33	0	2	3	187	0	0	0	0	304
05:00 PM	0	17	3	9	0	0	1	79	0	0	0	0	109
05:15 PM	0	16	5	5	0	3	3	71	0	0	0	0	103
05:30 PM	0	17	0	2	0	4	4	57	0	0	0	0	84
05:45 PM	0	11	2	7	0	0	0	48	0	0	0	0	68
Total	0	61	10	23	0	7	8	255	0	0	0	0	364
Grand Total	0	837	77	71	0	16	14	525	0	0	0	0	1540
Apprch %	0	91.6	8.4	81.6	0	18.4	2.6	97.4	0	0	0	0	
Total %	0	54.4	5	4.6	0	1	0.9	34.1	0	0	0	0	

City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: BRIGGS AVENUE

File Name : H1304005  
 Site Code : 00000558  
 Start Date : 4/11/2013  
 Page No : 2

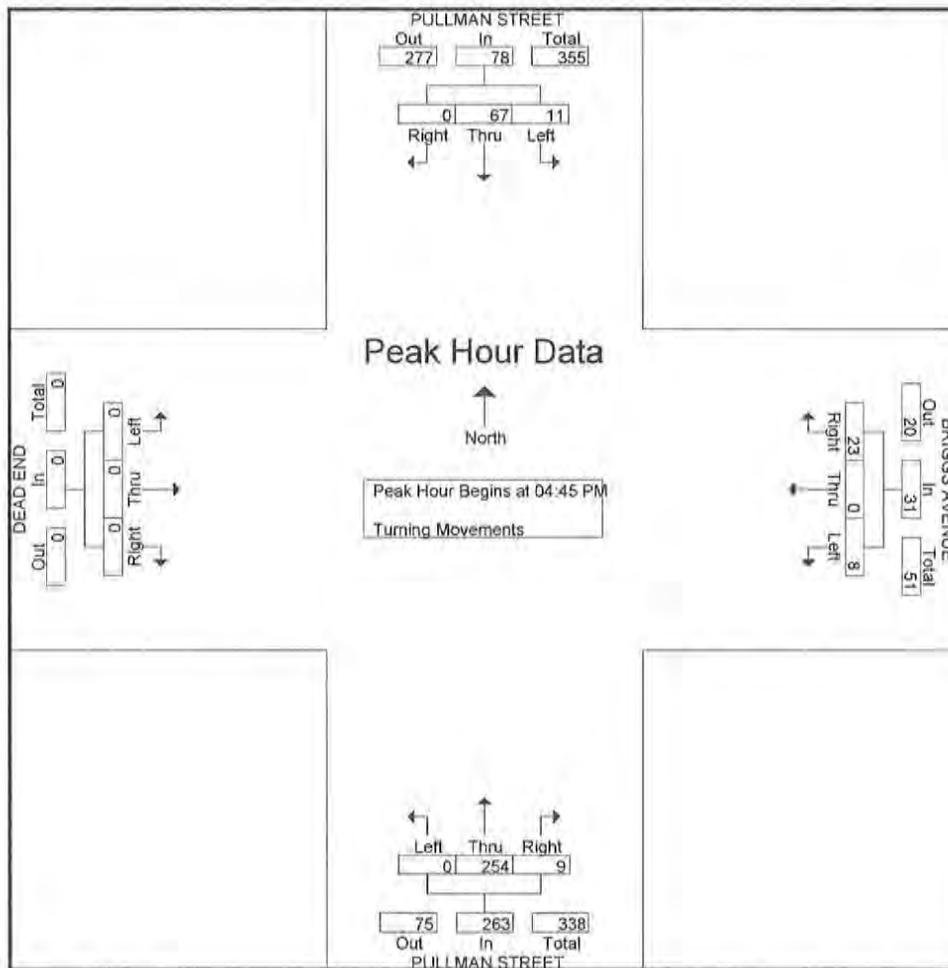
Start Time	PULLMAN STREET Southbound				BRIGGS AVENUE Westbound				PULLMAN STREET Northbound				DEAD END Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	79	6	85	1	0	0	1	1	10	0	11	0	0	0	0	97
08:00 AM	0	148	14	162	5	0	1	6	0	8	0	8	0	0	0	0	176
08:15 AM	0	105	7	112	1	0	0	1	0	12	0	12	0	0	0	0	125
08:30 AM	0	93	8	101	2	0	2	4	0	12	0	12	0	0	0	0	117
Total Volume	0	425	35	460	9	0	3	12	1	42	0	43	0	0	0	0	515
% App. Total	0	92.4	7.6		75	0	25		2.3	97.7	0		0	0	0		
PHF	.000	.718	.625	.710	.450	.000	.375	.500	.250	.875	.000	.896	.000	.000	.000	.000	.732



City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: BRIGGS AVENUE

File Name : H1304005  
 Site Code : 00000558  
 Start Date : 4/11/2013  
 Page No : 3

Start Time	PULLMAN STREET Southbound				BRIGGS AVENUE Westbound				PULLMAN STREET Northbound				DEAD END Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	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	17	3	20	7	0	1	8	1	47	0	48	0	0	0	0	76
05:00 PM	0	17	3	20	9	0	0	9	1	79	0	80	0	0	0	0	109
05:15 PM	0	16	5	21	5	0	3	8	3	71	0	74	0	0	0	0	103
05:30 PM	0	17	0	17	2	0	4	6	4	57	0	61	0	0	0	0	84
Total Volume	0	67	11	78	23	0	8	31	9	254	0	263	0	0	0	0	372
% App. Total	0	85.9	14.1		74.2	0	25.8		3.4	96.6	0		0	0	0		
PHF	.000	.985	.550	.929	.639	.000	.500	.861	.563	.804	.000	.822	.000	.000	.000	.000	.853



City: COSTA MESA  
 N-S Direction: RED HILL AVENUE  
 E-W Direction: BRIGGS AVENUE

File Name : H1304006  
 Site Code : 00005724  
 Start Date : 4/11/2013  
 Page No : 1

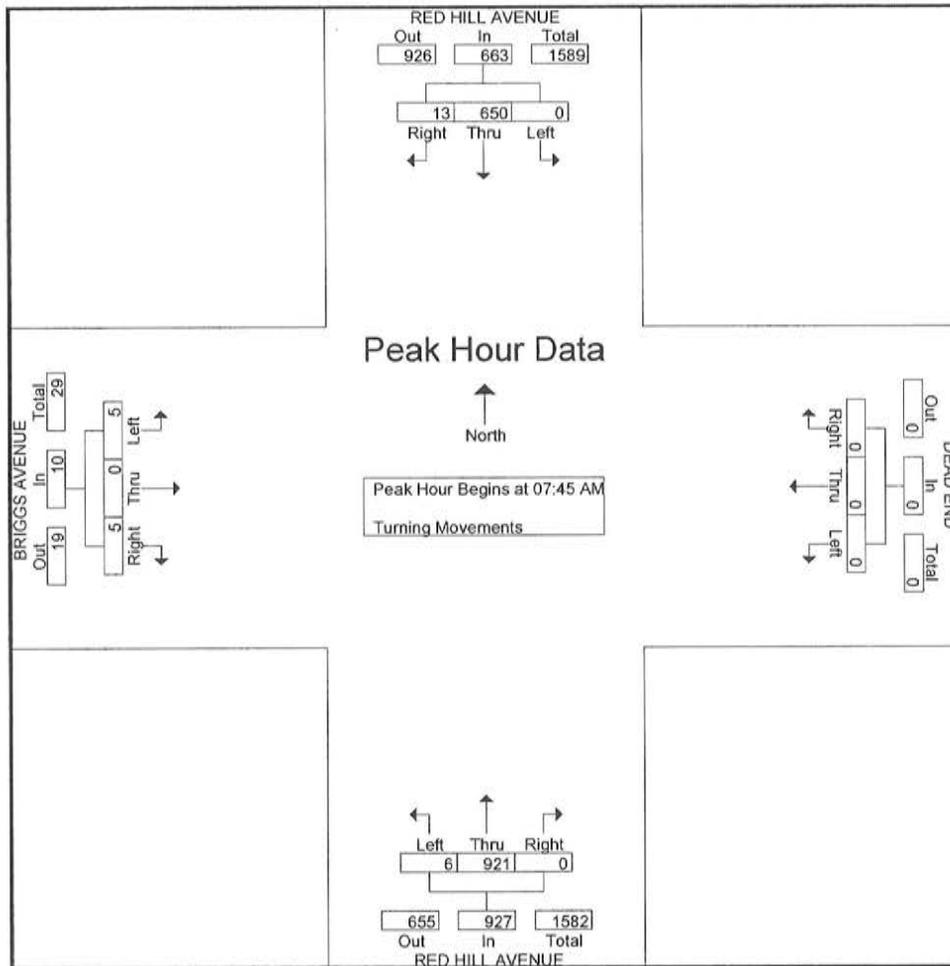
Groups Printed- Turning Movements

Start Time	RED HILL AVENUE Southbound			DEAD END Westbound			RED HILL AVENUE Northbound			BRIGGS AVENUE Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	2	92	0	0	0	0	0	93	0	0	0	0	187
07:15 AM	1	104	0	0	0	0	0	101	1	1	0	0	208
07:30 AM	3	148	0	0	0	0	0	172	2	2	0	0	327
07:45 AM	1	164	0	0	0	0	0	297	2	0	0	1	465
Total	7	508	0	0	0	0	0	663	5	3	0	1	1187
08:00 AM	5	191	0	0	0	0	0	227	2	0	0	1	426
08:15 AM	2	148	0	0	0	0	0	201	1	2	0	3	357
08:30 AM	5	147	0	0	0	0	0	196	1	3	0	0	352
08:45 AM	3	136	0	0	0	0	0	180	1	0	0	1	321
Total	15	622	0	0	0	0	0	804	5	5	0	5	1456
*** BREAK ***													
04:00 PM	4	127	0	0	0	0	0	175	1	3	0	3	313
04:15 PM	1	131	0	0	0	0	0	179	0	3	0	3	317
04:30 PM	0	154	0	0	0	0	0	201	0	1	0	1	357
04:45 PM	3	154	0	0	0	0	0	213	3	4	0	3	380
Total	8	566	0	0	0	0	0	768	4	11	0	10	1367
05:00 PM	0	150	0	0	0	0	0	238	0	7	0	9	404
05:15 PM	2	213	0	0	0	0	0	263	2	4	0	1	485
05:30 PM	3	165	0	0	0	0	0	209	1	2	0	4	384
05:45 PM	0	163	0	0	0	0	0	196	1	1	0	3	364
Total	5	691	0	0	0	0	0	906	4	14	0	17	1637
Grand Total	35	2387	0	0	0	0	0	3141	18	33	0	33	5647
Apprch %	1.4	98.6	0	0	0	0	0	99.4	0.6	50	0	50	
Total %	0.6	42.3	0	0	0	0	0	55.6	0.3	0.6	0	0.6	

City: COSTA MESA  
 N-S Direction: RED HILL AVENUE  
 E-W Direction: BRIGGS AVENUE

File Name : H1304006  
 Site Code : 00005724  
 Start Date : 4/11/2013  
 Page No : 2

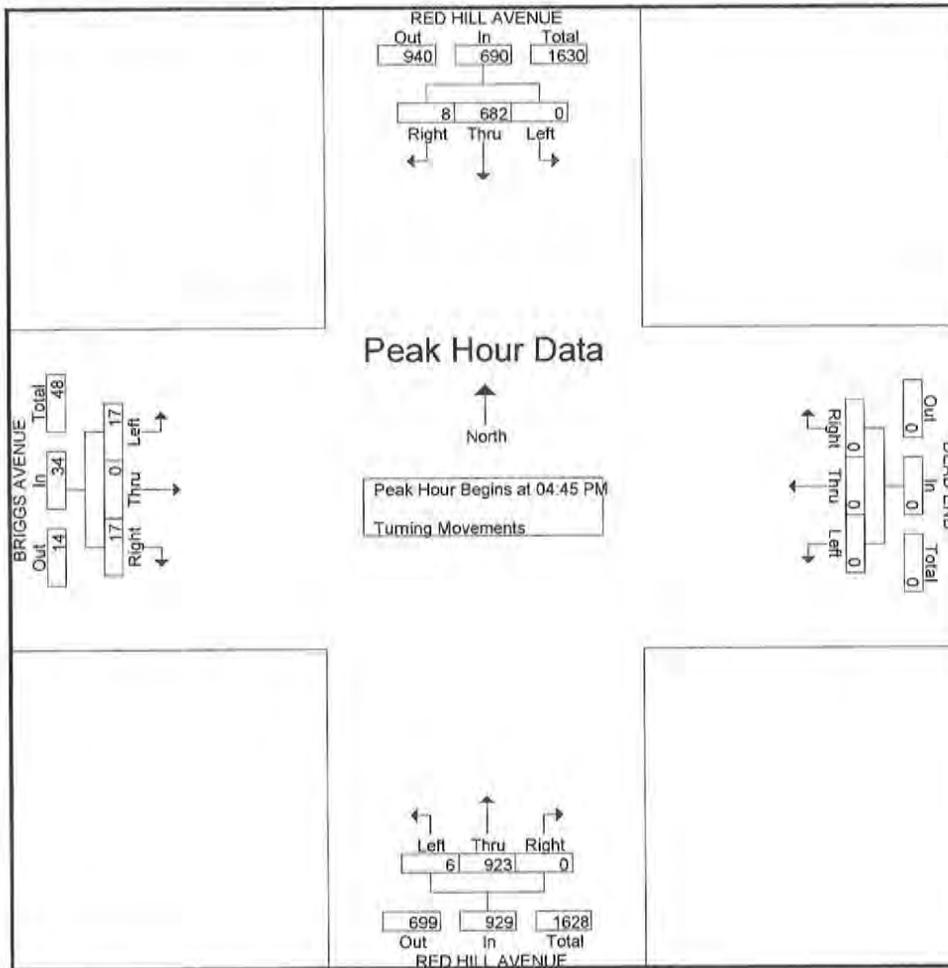
Start Time	RED HILL AVENUE Southbound				DEAD END Westbound				RED HILL AVENUE Northbound				BRIGGS AVENUE Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	1	164	0	165	0	0	0	0	0	297	2	299	0	0	1	1	465
08:00 AM	5	191	0	196	0	0	0	0	0	227	2	229	0	0	1	1	426
08:15 AM	2	148	0	150	0	0	0	0	0	201	1	202	2	0	3	5	357
08:30 AM	5	147	0	152	0	0	0	0	0	196	1	197	3	0	0	3	352
Total Volume	13	650	0	663	0	0	0	0	0	921	6	927	5	0	5	10	1600
% App. Total	2	98	0		0	0	0		0	99.4	0.6		50	0	50		
PHF	.650	.851	.000	.846	.000	.000	.000	.000	.000	.775	.750	.775	.417	.000	.417	.500	.860



City: COSTA MESA  
 N-S Direction: RED HILL AVENUE  
 E-W Direction: BRIGGS AVENUE

File Name : H1304006  
 Site Code : 00005724  
 Start Date : 4/11/2013  
 Page No : 3

Start Time	RED HILL AVENUE Southbound				DEAD END Westbound				RED HILL AVENUE Northbound				BRIGGS AVENUE Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	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	3	154	0	157	0	0	0	0	0	213	3	216	4	0	3	7	380
05:00 PM	0	150	0	150	0	0	0	0	0	238	0	238	7	0	9	16	404
05:15 PM	2	213	0	215	0	0	0	0	0	263	2	265	4	0	1	5	485
05:30 PM	3	165	0	168	0	0	0	0	0	209	1	210	2	0	4	6	384
Total Volume	8	682	0	690	0	0	0	0	0	923	6	929	17	0	17	34	1653
% App. Total	1.2	98.8	0		0	0	0		0	99.4	0.6		50	0	50		
PHF	.667	.800	.000	.802	.000	.000	.000	.000	.000	.877	.500	.876	.607	.000	.472	.531	.852



City: COSTA MESA  
 N-S Direction: DRIVEWAY 1  
 E-W Direction: BAKER STREET

File Name : H1304007  
 Site Code : 00005423  
 Start Date : 4/11/2013  
 Page No : 1

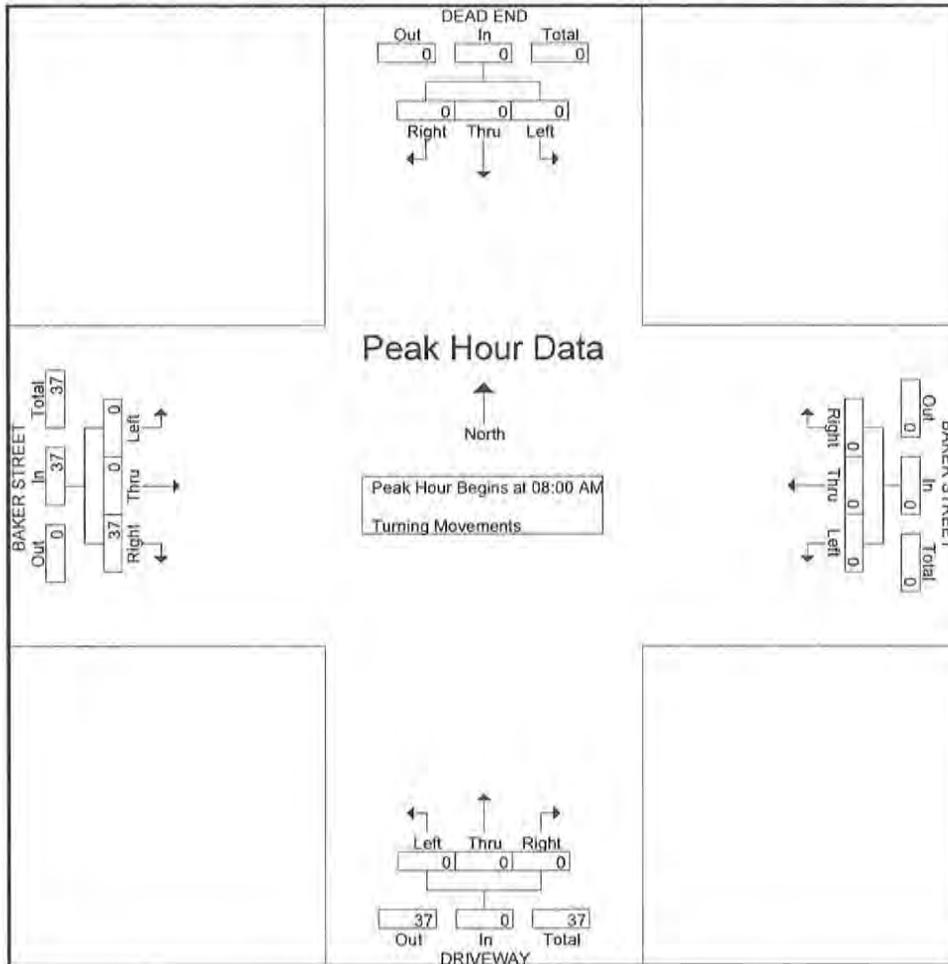
Groups Printed- Turning Movements

Start Time	DEAD END Southbound			BAKER STREET Westbound			DRIVEWAY Northbound			BAKER STREET Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	6	0	0	6
07:45 AM	0	0	0	0	0	0	0	0	1	7	0	0	8
Total	0	0	0	0	0	0	0	0	1	18	0	0	19
08:00 AM	0	0	0	0	0	0	0	0	0	8	0	0	8
08:15 AM	0	0	0	0	0	0	0	0	0	6	0	0	6
08:30 AM	0	0	0	0	0	0	0	0	0	12	0	0	12
08:45 AM	0	0	0	0	0	0	0	0	0	11	0	0	11
Total	0	0	0	0	0	0	0	0	0	37	0	0	37
*** BREAK ***													
04:00 PM	0	0	0	0	0	1	0	0	4	4	0	0	9
04:15 PM	0	0	0	0	0	0	1	0	3	3	0	0	7
04:30 PM	0	0	0	0	0	0	0	0	4	2	0	0	6
04:45 PM	0	0	0	0	0	1	1	0	1	3	0	0	6
Total	0	0	0	0	0	2	2	0	12	12	0	0	28
05:00 PM	0	0	0	0	0	3	0	0	4	1	0	0	8
05:15 PM	0	0	0	0	0	0	1	0	5	2	0	0	8
05:30 PM	0	0	0	0	0	1	2	0	4	1	0	0	8
05:45 PM	0	0	0	0	0	0	2	0	4	3	0	0	9
Total	0	0	0	0	0	4	5	0	17	7	0	0	33
Grand Total	0	0	0	0	0	6	7	0	30	74	0	0	117
Apprch %	0	0	0	0	0	100	18.9	0	81.1	100	0	0	
Total %	0	0	0	0	0	5.1	6	0	25.6	63.2	0	0	

City: COSTA MESA  
 N-S Direction: DRIVEWAY 1  
 E-W Direction: BAKER STREET

File Name : H1304007  
 Site Code : 00005423  
 Start Date : 4/11/2013  
 Page No : 2

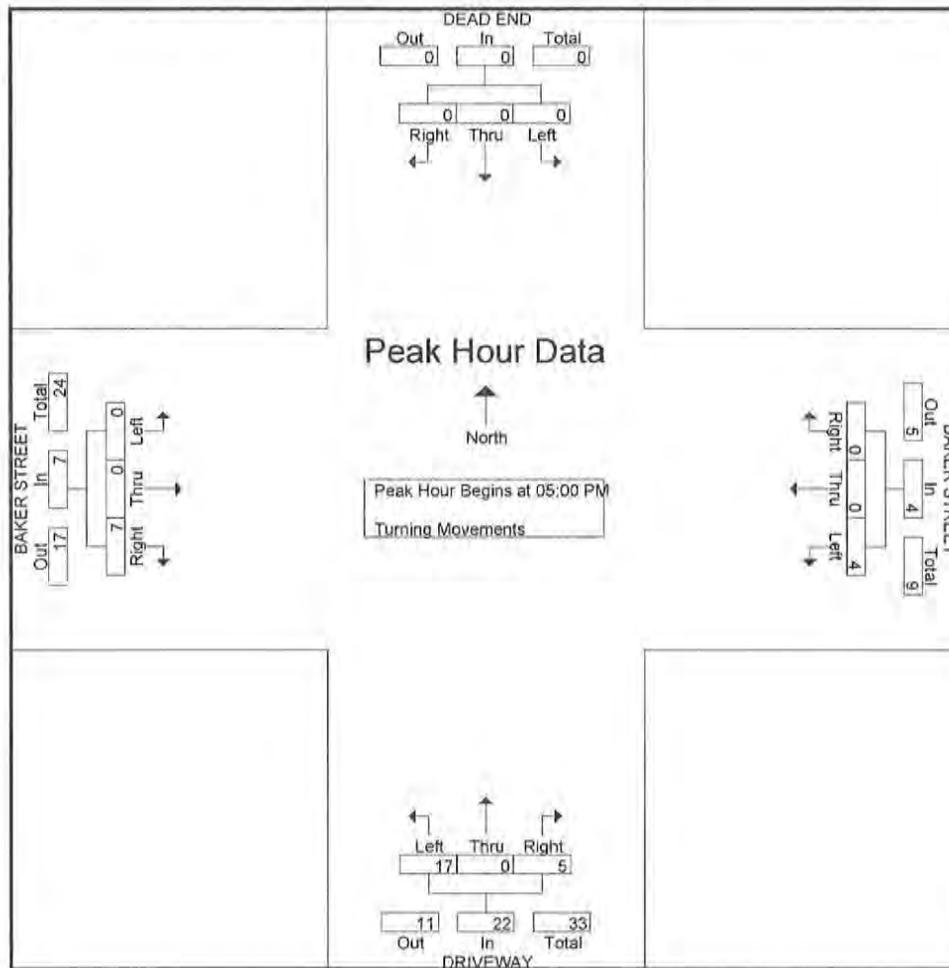
Start Time	DEAD END Southbound				BAKER STREET Westbound				DRIVEWAY Northbound				BAKER STREET Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	8
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	6
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	12	12
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	11	11
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	37	37
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.771	.000	.000	.771	.771



City: COSTA MESA  
 N-S Direction: DRIVEWAY 1  
 E-W Direction: BAKER STREET

File Name : H1304007  
 Site Code : 00005423  
 Start Date : 4/11/2013  
 Page No : 3

Start Time	DEAD END Southbound				BAKER STREET Westbound				DRIVEWAY Northbound				BAKER STREET Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	3	3	0	0	4	4	1	0	0	1	8
05:15 PM	0	0	0	0	0	0	0	0	1	0	5	6	2	0	0	2	8
05:30 PM	0	0	0	0	0	0	1	1	2	0	4	6	1	0	0	1	8
05:45 PM	0	0	0	0	0	0	0	0	2	0	4	6	3	0	0	3	9
Total Volume	0	0	0	0	0	0	4	4	5	0	17	22	7	0	0	7	33
% App. Total	0	0	0	0	0	0	100		22.7	0	77.3		100	0	0		
PHF	.000	.000	.000	.000	.000	.000	.333	.333	.625	.000	.850	.917	.583	.000	.000	.583	.917



City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: DRIVEWAY 2

File Name : H1304003  
 Site Code : 00000557  
 Start Date : 4/11/2013  
 Page No : 1

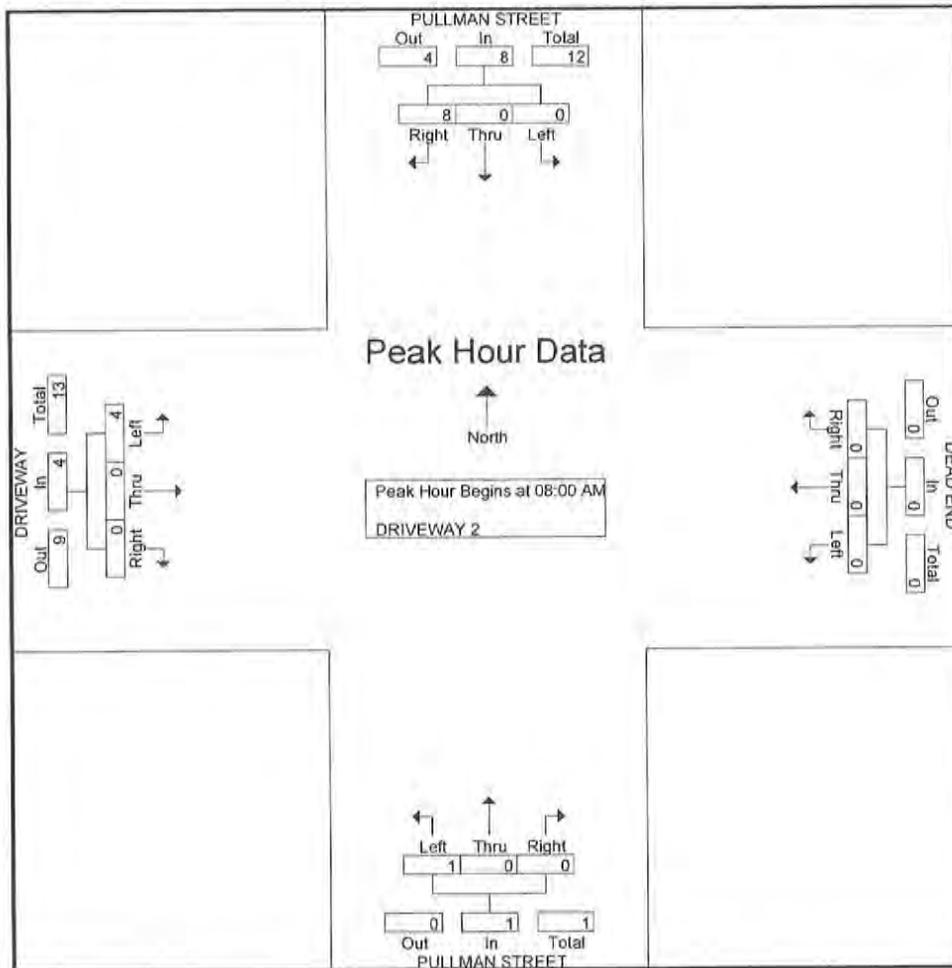
Groups Printed- DRIVEWAY 2

Start Time	PULLMAN STREET Southbound			DEAD END Westbound			PULLMAN STREET Northbound			DRIVEWAY Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	1	0	0	0	0	0	0	0	0	0	0	1	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
07:30 AM	1	0	0	0	0	0	0	0	0	0	0	1	2
07:45 AM	1	0	0	0	0	0	0	0	0	1	0	2	4
Total	3	0	0	0	0	0	0	0	0	1	0	5	9
*** BREAK ***													
08:15 AM	3	0	0	0	0	0	0	0	0	0	0	1	4
08:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	4	0	0	0	0	0	0	0	1	0	0	3	8
Total	8	0	0	0	0	0	0	0	1	0	0	4	13
*** BREAK ***													
04:00 PM	1	0	0	0	0	0	0	0	1	1	0	4	7
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	4	4
04:30 PM	2	0	0	0	0	0	0	0	0	1	0	3	6
04:45 PM	2	0	0	0	0	0	0	0	0	0	0	2	4
Total	5	0	0	0	0	0	0	0	1	2	0	13	21
05:00 PM	0	0	0	0	0	0	0	0	1	0	0	7	8
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	3
*** BREAK ***													
Total	0	0	0	0	0	0	0	0	1	0	0	11	12
Grand Total	16	0	0	0	0	0	0	0	3	3	0	33	55
Apprch %	100	0	0	0	0	0	0	0	100	8.3	0	91.7	
Total %	29.1	0	0	0	0	0	0	0	5.5	5.5	0	60	

City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: DRIVEWAY 2

File Name : H1304003  
 Site Code : 00000557  
 Start Date : 4/11/2013  
 Page No : 2

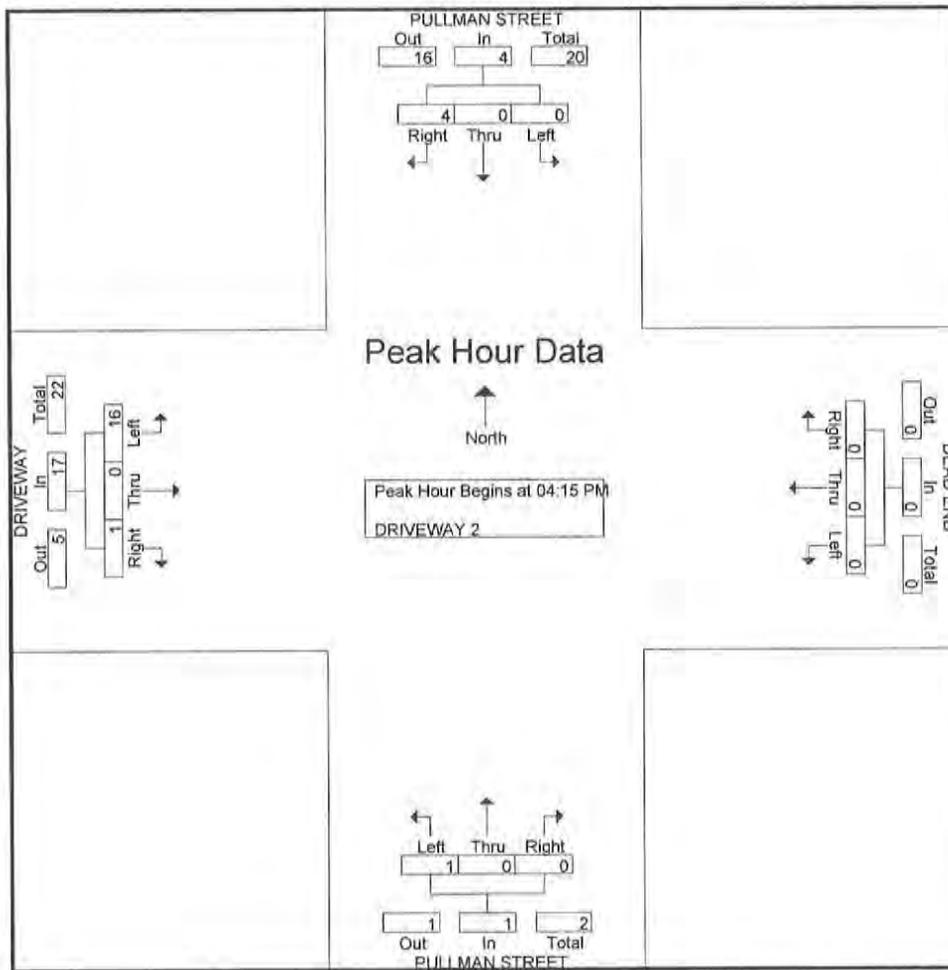
Start Time	PULLMAN STREET Southbound				DEAD END Westbound				PULLMAN STREET Northbound				DRIVEWAY Eastbound				Int. Total	
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:00 AM																		
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	3	0	0	3	0	0	0	0	0	0	0	0	0	0	1	1	1	4
08:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	4	0	0	4	0	0	0	0	0	0	1	1	0	0	3	3	3	8
Total Volume	8	0	0	8	0	0	0	0	0	0	1	1	0	0	4	4	4	13
% App. Total	100	0	0		0	0	0		0	0	100		0	0	100			
PHF	.500	.000	.000	.500	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.333	.333	.406	



City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: DRIVEWAY 2

File Name : H1304003  
 Site Code : 00000557  
 Start Date : 4/11/2013  
 Page No : 3

Start Time	PULLMAN STREET Southbound				DEAD END Westbound				PULLMAN STREET Northbound				DRIVEWAY Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4
04:30 PM	2	0	0	2	0	0	0	0	0	0	0	0	1	0	3	4	6
04:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2	2	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	7	7	8
Total Volume	4	0	0	4	0	0	0	0	0	0	1	1	1	0	16	17	22
% App. Total	100	0	0		0	0	0		0	0	100		5.9	0	94.1		
PHF	.500	.000	.000	.500	.000	.000	.000	.000	.000	.000	.250	.250	.250	.000	.571	.607	.688



City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: DRIVEWAY 3

File Name : H1304005  
 Site Code : 00000558  
 Start Date : 4/11/2013  
 Page No : 1

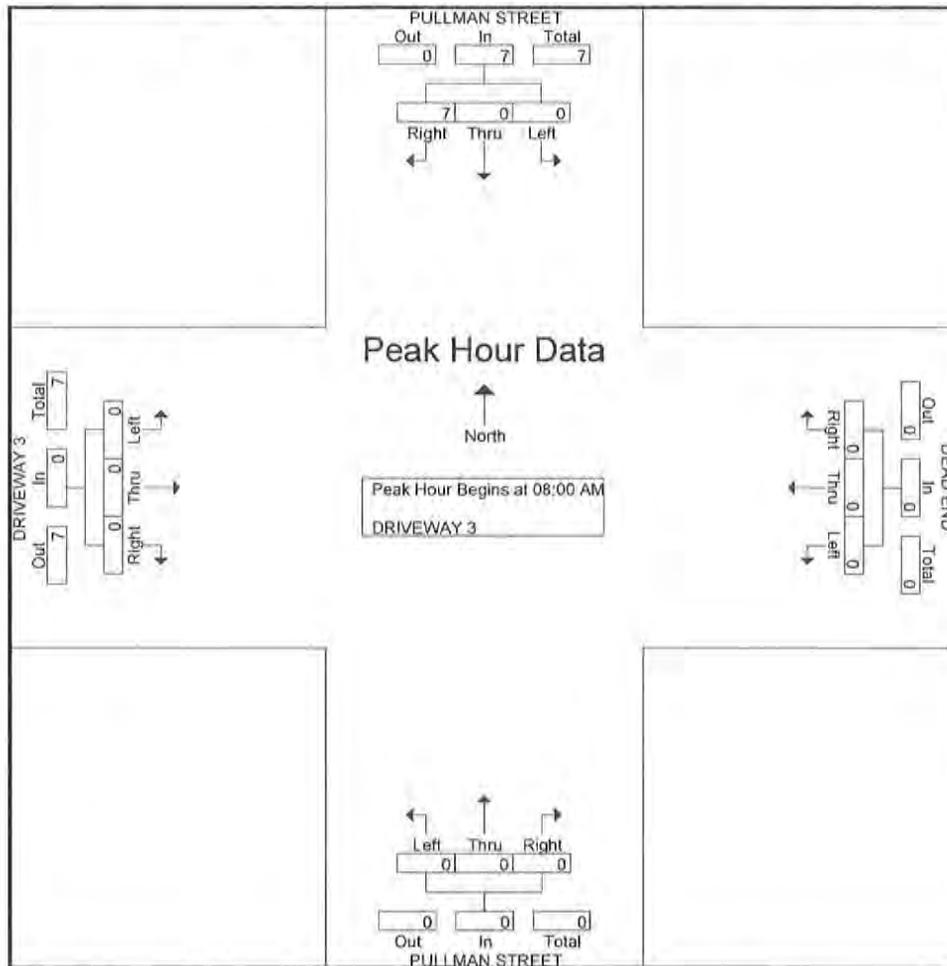
Groups Printed- DRIVEWAY 3

Start Time	PULLMAN STREET Southbound			DEAD END Westbound			PULLMAN STREET Northbound			DRIVEWAY 3 Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
*** BREAK ***													
Total	1	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	3	0	0	0	0	0	0	0	0	0	0	0	3
08:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	2	0	0	0	0	0	0	0	0	0	0	0	2
Total	7	0	0	0	0	0	0	0	0	0	0	0	7
*** BREAK ***													
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	1	1	0	1	3
04:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
Total	0	0	0	0	0	0	0	0	2	2	0	4	8
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
*** BREAK ***													
05:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	1	0	0	2	3
Total	0	0	0	0	0	0	0	0	2	0	0	3	5
Grand Total	8	0	0	0	0	0	0	0	4	2	0	7	21
Apprch %	100	0	0	0	0	0	0	0	100	22.2	0	77.8	
Total %	38.1	0	0	0	0	0	0	0	19	9.5	0	33.3	

City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: DRIVEWAY 3

File Name : H1304005  
 Site Code : 00000558  
 Start Date : 4/11/2013  
 Page No : 2

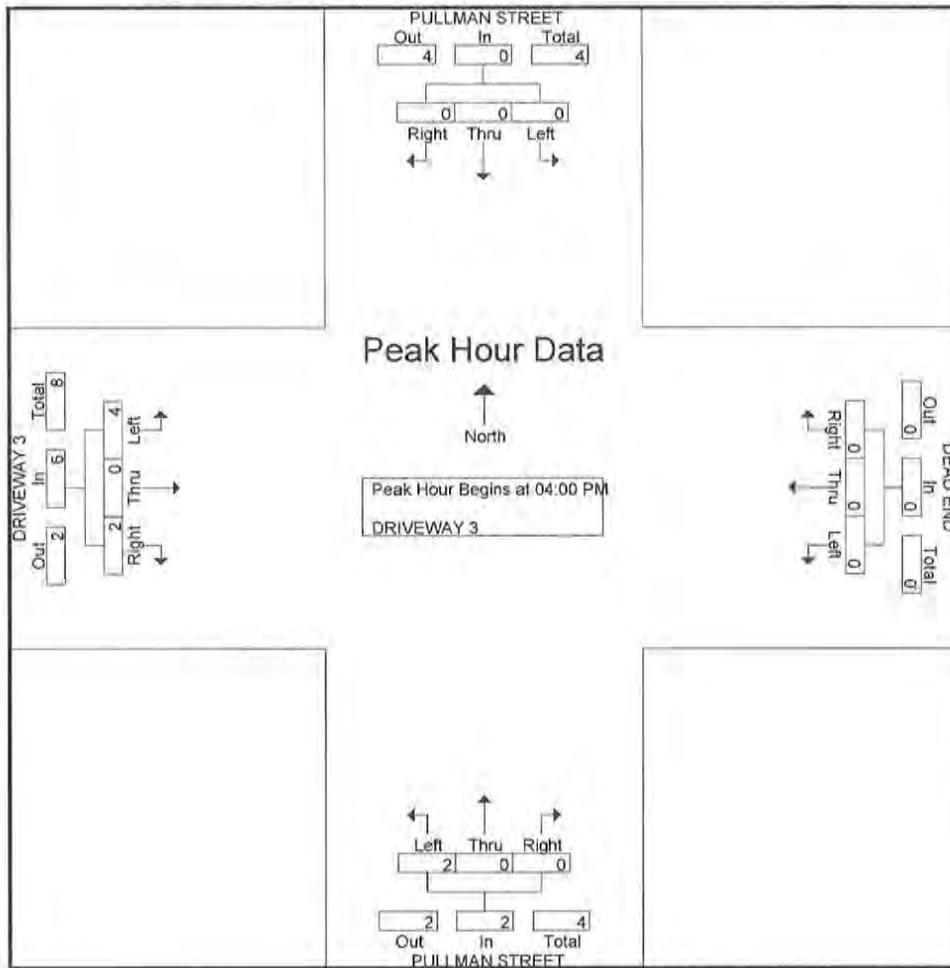
Start Time	PULLMAN STREET Southbound				DEAD END Westbound				PULLMAN STREET Northbound				DRIVEWAY 3 Eastbound				Int. Total	
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:00 AM																		
08:00 AM	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
08:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
% App. Total	100	0	0		0	0	0		0	0	0		0	0	0			
PHF	.583	.000	.000	.583	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.583



City: COSTA MESA  
 N-S Direction: PULLMAN STREET  
 E-W Direction: DRIVEWAY 3

File Name : H1304005  
 Site Code : 00000558  
 Start Date : 4/11/2013  
 Page No : 3

Start Time	PULLMAN STREET Southbound				DEAD END Westbound				PULLMAN STREET Northbound				DRIVEWAY 3 Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	2	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	2	2	2	0	4	6	8
% App. Total	0	0	0	0	0	0	0	0	0	0	100	100	33.3	0	66.7	66.7	66.7
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.500	.500	.000	.500	.750	.667



*APPENDIX B-II*

**ROADWAY SEGMENT COUNTS**



**Transportation Studies, Inc.**

2640 Walnut Avenue, Ste H  
Tustin, CA. 92780

Location : PULLMAN STREET  
Segment : S/O BAKER STREET  
Client : LL&G

Site: COSTA MESA  
Date: 04/11/13

Interval	NB				SB				Combined				Day:	Thursday	
	AM		PM		AM		PM		AM		PM				
12:00	2	11	76	251	2	6	43	221	4	17	119	472			
12:15	3		53		1		47		4		100				
12:30	2		66		2		63		4		129				
12:45	4		56		1		68		5		124				
01:00	3	8	72	228	0	1	65	240	3	9	137	468			
01:15	3		49		1		59		4		108				
01:30	1		56		0		50		1		106				
01:45	1		51		0		66		1		117				
02:00	2	8	58	218	0	1	54	187	2	9	112	405			
02:15	2		53		0		44		2		97				
02:30	3		54		0		48		3		102				
02:45	1		53		1		41		2		94				
03:00	5	10	98	260	1	7	28	123	6	17	126	383			
03:15	1		50		1		34		2		84				
03:30	0		48		2		30		2		78				
03:45	4		64		3		31		7		95				
04:00	6	9	70	265	3	15	32	97	9	24	102	362			
04:15	2		56		2		15		4		71				
04:30	0		73		3		26		3		99				
04:45	1		66		7		24		8		90				
05:00	2	14	107	288	16	88	24	68	18	102	131	356			
05:15	1		57		21		17		22		74				
05:30	1		69		28		11		29		80				
05:45	10		55		23		16		33		71				
06:00	6	52	56	176	30	182	12	56	36	234	68	232			
06:15	10		52		54		16		64		68				
06:30	18		38		36		12		54		50				
06:45	18		30		62		16		80		46				
07:00	10	42	32	97	68	330	10	31	78	372	42	128			
07:15	6		25		76		8		82		33				
07:30	16		28		86		6		102		34				
07:45	10		12		100		7		110		19				
08:00	16	77	13	50	160	476	3	18	176	553	16	68			
08:15	16		10		118		2		134		12				
08:30	17		9		104		7		121		16				
08:45	28		18		94		6		122		24				
09:00	17	87	29	63	82	311	7	17	99	398	36	80			
09:15	23		10		81		2		104		12				
09:30	28		15		84		5		112		20				
09:45	19		9		64		3		83		12				
10:00	38	163	11	31	56	198	2	6	94	361	13	37			
10:15	36		5		52		1		88		6				
10:30	48		9		46		1		94		10				
10:45	41		6		44		2		85		8				
11:00	55	249	7	23	40	159	0	5	95	408	7	28			
11:15	44		3		42		2		86		5				
11:30	88		10		39		2		127		12				
11:45	62		3		38		1		100		4				
Totals	730		1,950		1,774		1,069		2,504		3,019				
Split%	29.2		64.6		70.8		35.4								
Day Totals		2,680				2,843				5,523					
Day Splits		48.5				51.5									
Peak Hour	11:00		04:30		07:45		12:30		08:00		12:30				
Volume	249		303		482		255		553		498				
Factor	0.71		0.71		0.75		0.94		0.79		0.91				

**Transportation Studies, Inc.**

2640 Walnut Avenue, Ste H  
Tustin, CA. 92780

Location: : BAKER STREET  
Segment: : W/O PULLMAN STREET  
Client: : LL&G

Site: COSTA MESA  
Date: 04/11/13

Interval	EB				WB				Combined				Day:	Thursday
	AM		PM		AM		PM		AM		PM			
12:00	4	15	144	738	10	41	218	729	14	56	362	1,467		
12:15	4		176		14		168		18		344			
12:30	5		188		6		179		11		367			
12:45	2		230		11		164		13		394			
01:00	1	5	186	709	5	16	206	645	6	21	392	1,354		
01:15	0		180		4		160		4		340			
01:30	3		173		1		143		4		316			
01:45	1		170		6		136		7		306			
02:00	1	11	150	615	5	16	170	680	6	27	320	1,295		
02:15	4		157		3		156		7		313			
02:30	0		160		6		184		6		344			
02:45	6		148		2		170		8		318			
03:00	2	22	144	602	7	31	279	845	9	53	423	1,447		
03:15	4		156		4		160		8		316			
03:30	6		144		10		210		16		354			
03:45	10		158		10		196		20		354			
04:00	7	57	125	554	9	19	248	986	16	76	373	1,540		
04:15	5		149		5		202		10		351			
04:30	14		128		2		310		16		438			
04:45	31		152		3		226		34		378			
05:00	26	222	121	495	6	39	393	1,228	32	261	514	1,723		
05:15	42		129		7		300		49		429			
05:30	58		131		10		288		68		419			
05:45	96		114		16		247		112		361			
06:00	72	521	78	301	20	102	200	614	92	623	278	915		
06:15	125		86		20		164		145		250			
06:30	116		67		32		132		148		199			
06:45	208		70		30		118		238		188			
07:00	208	1,050	48	153	44	280	114	323	252	1,330	162	476		
07:15	218		36		52		76		270		112			
07:30	288		32		70		70		358		102			
07:45	336		37		114		63		450		100			
08:00	414	1,438	29	108	90	321	52	208	504	1,759	81	316		
08:15	352		28		69		52		421		80			
08:30	336		26		76		54		412		80			
08:45	336		25		86		50		422		75			
09:00	235	785	20	95	62	283	54	182	297	1,068	74	277		
09:15	204		29		68		46		272		75			
09:30	181		24		75		50		256		74			
09:45	165		22		78		32		243		54			
10:00	138	548	16	50	110	455	32	106	248	1,003	48	156		
10:15	142		9		100		27		242		36			
10:30	125		9		120		28		245		37			
10:45	143		16		125		19		268		35			
11:00	122	540	9	31	136	638	34	77	258	1,178	43	108		
11:15	128		8		158		18		286		26			
11:30	136		6		188		15		324		21			
11:45	154		8		156		10		310		18			
Totals	5,214		4,451		2,241		6,623		7,455		11,074			
Split%	69.9		40.2		30.1		59.8							
Day Totals		9,665				8,864				18,529				
Day Splits		52.2				47.8								
Peak Hour	07:45		12:30		11:00		04:30		07:45		04:30			
Volume	1,438		784		638		1,229		1,787		1,759			
Factor	0.87		0.85		0.85		0.78		0.89		0.86			

*APPENDIX B-III*

**PROJECT DRIVEWAYS  
TURNING MOVEMENT COUNTS WORKSHEET**

**TABLE 1**  
**PROJECT DRIVEWAYS TURNING MOVEMENT COUNTS**

Time	Driveway 1			Driveway 2			Driveway 3			Total of All Driveways
	In	Out	Total	In	Out	Total	In	Out	Total	
7:00 AM	3	0	3	1	1	2	1	0	1	6
7:15 AM	2	0	2	0	1	1	--	--	--	3
7:30 AM	6	0	6	1	1	2	--	--	--	8
7:45 AM	7	1	8	1	3	4	--	--	--	12
8:00 AM	8	0	8	--	--	--	3	0	3	11
8:15 AM	6	0	6	3	1	4	1	0	1	11
8:30 AM	12	0	12	1	0	1	1	0	1	14
8:45 AM	11	0	11	5	3	8	2	0	2	21
<b>AM Peak Hour</b>	<b>37</b>	<b>0</b>	<b>37</b>	<b>9</b>	<b>4</b>	<b>13</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>57</b>
4:00 PM	5	4	9	2	5	7	0	2	2	18
4:15 PM	3	4	7	0	4	4	0	2	2	13
4:30 PM	2	4	6	2	4	6	1	2	3	15
4:45 PM	4	2	6	2	2	4	1	0	1	11
5:00 PM	4	4	8	1	7	8	0	1	1	17
5:15 PM	2	6	8	0	1	1	--	--	--	9
5:30 PM	2	6	8	0	3	3	1	0	1	12
5:45 PM	3	6	9	--	--	--	1	2	3	12
<b>PM Peak Hour</b>	<b>14</b>	<b>14</b>	<b>28</b>	<b>6</b>	<b>15</b>	<b>21</b>	<b>2</b>	<b>6</b>	<b>8</b>	<b>57</b>

= AM/PM Peak Hour turning movement counts conducted on April 11, 2013.



## APPENDIX C

### INTERSECTIONS LEVEL OF SERVICE CALCULATION WORKSHEETS

*APPENDIX C-1*

**EXISTING TRAFFIC CONDITIONS**

AM Existing Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 SR-55 SB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.672  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 57 Level Of Service: B

\*\*\*\*\*

Street Name:	SR-55 SB Ramps						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	0	2	0	1	0

Volume Module:

Base Vol:	0	0	0	470	141	255	0	1048	261	81	432	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	470	141	255	0	1048	261	81	432	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	470	141	255	0	1048	261	81	432	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	470	141	255	0	1048	261	81	432	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	470	141	255	0	1048	261	81	432	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	470	141	255	0	1048	261	81	432	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.41	0.59	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	658	942	0	3200	1600	1600	3200	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.29	0.21	0.27	0.00	0.33	0.16	0.05	0.14	0.00
Crit Moves:				****			****			****		

\*\*\*\*\*

AM Existing Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #2 SR-55 NB Ramps at Baker Street
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.730
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 94 Level Of Service: C
\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 NB Ramps and Baker Street with various traffic movements and signal settings.

Volume Module: Table showing traffic volume calculations including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table showing saturation flow values for different lane configurations and adjustments.

Capacity Analysis Module: Table showing Vol/Sat and Crit Moves for the intersection.

AM Existing Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #3 Pullman Street at Baker Street
\*\*\*\*\*

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: D[ 33.5]

Table with columns for Street Name (Pullman Street, Baker Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign, Uncontrolled), Rights (Include, Ignore), and Lanes.

Volume Module: Table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume for each approach.

Critical Gap Module: Table showing Critical Gp and FollowUpTim for each approach.

Capacity Module: Table showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap for each approach.

Level Of Service Module: Table showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS for each approach.

Note: Queue reported is the number of cars per lane.

AM Existing Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #4 Red Hill Avenue at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.453

Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 42 Level Of Service: A

\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes for Red Hill Avenue and Baker Street.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

\*\*\*\*\*

AM Existing Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Pullman Street at Briggs Avenue

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[ 9.6]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes for Pullman Street and Briggs Avenue.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume.

Table with columns for Critical Gap Module: Critical Gp, FollowUpTim.

Table with columns for Capacity Module: Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns for Level Of Service Module: 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

Note: Queue reported is the number of cars per lane.

AM Existing Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Red Hill Avenue at Briggs Avenue

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[ 17.9]

Table with columns for Street Name (Red Hill Avenue, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across various movements.

Critical Gap Module table with columns for Critical Gp and FollowUpTim across different movements.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap. across different movements.

Level Of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

PM Existing Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 SR-55 SB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.678

Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 106 Level Of Service: B

\*\*\*\*\*

Street Name: SR-55 SB Ramps Baker Street

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Permitted Protected

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 0 0 0 0 0 0 1 0 1 0 0 0 2 0 1 1 0 2 0 0

Volume Module:

Base Vol: 0 0 0 80 299 558 0 470 401 267 1053 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 80 299 558 0 470 401 267 1053 0

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 0 0 0 80 299 558 0 470 401 267 1053 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 80 299 558 0 470 401 267 1053 0

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 80 299 558 0 470 401 267 1053 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 0 0 80 299 558 0 470 401 267 1053 0

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.00 0.00 0.00 0.17 0.83 1.00 0.00 2.00 1.00 1.00 2.00 0.00

Final Sat.: 0 0 0 273 1327 1600 0 3200 1600 1600 3200 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.29 0.23 0.35 0.00 0.15 0.25 0.17 0.33 0.00

Crit Moves: \*\*\*\*

\*\*\*\*\*

PM Existing Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 SR-55 NB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.726

Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 68 Level Of Service: C

\*\*\*\*\*

Street Name: SR-55 NB Ramps Baker Street

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Permitted

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 0 1 0 1 0 0 0 0 0 0 1 0 2 0 0 0 0 2 0 1

Volume Module:

Base Vol: 300 275 232 0 0 0 255 297 0 0 1005 273

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 300 275 232 0 0 0 255 297 0 0 1005 273

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 300 275 232 0 0 0 255 297 0 0 1005 273

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 300 275 232 0 0 0 255 297 0 0 1005 273

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 300 275 232 0 0 0 255 297 0 0 1005 273

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 300 275 232 0 0 0 255 297 0 0 1005 273

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.75 0.68 0.57 0.00 0.00 0.00 1.00 2.00 0.00 0.00 2.00 1.00

Final Sat.: 1190 1090 920 0 0 0 1600 3200 0 0 3200 1600

Capacity Analysis Module:

Vol/Sat: 0.25 0.25 0.25 0.00 0.00 0.00 0.16 0.09 0.00 0.00 0.31 0.17

Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\*

\*\*\*\*\*

PM Existing Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #3 Pullman Street at Baker Street
\*\*\*\*\*

Average Delay (sec/veh): 27.7 Worst Case Level Of Service: F[133.3]

Table with columns for Street Name (Pullman Street, Baker Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign, Uncontrolled), Rights (Include, Ignore), and Lanes (0, 1, 0, 1, 0).

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume across four approaches.

Critical Gap Module: Table with columns for Critical Gp, FollowUpTim across four approaches.

Capacity Module: Table with columns for Cnflct Vol, Potent Cap., Move Cap., Volume/Cap. across four approaches.

Level Of Service Module: Table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS across four approaches.

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

PM Existing Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Red Hill Avenue at Baker Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.619
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level Of Service: B

Table with columns for Street Name (Red Hill Avenue, Baker Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

PM Existing Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Pullman Street at Briggs Avenue

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[ 10.7]

Table with columns for Street Name (Pullman Street, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (0, 1, 0, 0).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across four approaches.

Critical Gap Module table with columns for Critical Gp and FollowUpTim across four approaches.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap across four approaches.

Level Of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS across four approaches.

Note: Queue reported is the number of cars per lane.

PM Existing Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Red Hill Avenue at Briggs Avenue

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[ 19.4]

Table with columns for Street Name, Approach, Movement, Control, Rights, and Lanes for Red Hill Avenue and Briggs Avenue.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module table with columns for Critical Gp and FollowUpTim.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

*APPENDIX C-II*

**EXISTING WITH PROJECT  
TRAFFIC CONDITIONS**

AM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 SR-55 SB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec):	100	Critical Vol./Cap.(X):	0.675
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

\*\*\*\*\*

Street Name:	SR-55 SB Ramps						Baker Street														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R						
Control:	Split Phase			Split Phase			Permitted			Protected											
Rights:	Include			Include			Include			Include											
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0									
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0									
Lanes:	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0	1	1	0	2	0	0

Volume Module:												
Base Vol:	0	0	0	457	141	255	0	1047	261	99	446	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	457	141	255	0	1047	261	99	446	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	457	141	255	0	1047	261	99	446	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	457	141	255	0	1047	261	99	446	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	457	141	255	0	1047	261	99	446	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	457	141	255	0	1047	261	99	446	0

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.40	0.60	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	643	957	0	3200	1600	1600	3200	0

Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.29	0.22	0.27	0.00	0.33	0.16	0.06	0.14	0.00
Crit Moves:				****				****		****		

\*\*\*\*\*

AM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 SR-55 NB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.731  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 69 Level Of Service: C

\*\*\*\*\*

Street Name:	SR-55 NB Ramps						Baker Street					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	0	0	0	1	0	2	0	0	2

Volume Module:												
Base Vol:	265	563	400	0	0	0	415	1086	0	0	264	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	265	563	400	0	0	0	415	1086	0	0	264	140
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	265	563	400	0	0	0	415	1086	0	0	264	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	265	563	400	0	0	0	415	1086	0	0	264	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	265	563	400	0	0	0	415	1086	0	0	264	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	265	563	400	0	0	0	415	1086	0	0	264	140

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.43	0.92	0.65	0.00	0.00	0.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	691	1467	1042	0	0	0	1600	3200	0	0	3200	1600

Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.00	0.00	0.00	0.26	0.34	0.00	0.00	0.08	0.09
Crit Moves:	****						****			****		

\*\*\*\*\*

AM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #3 Pullman Street at Baker Street  
\*\*\*\*\*

Average Delay (sec/veh): 7.0 Worst Case Level Of Service: F[ 71.8]

Street Name:	Pullman Street					Baker Street														
	North Bound			South Bound		East Bound			West Bound											
Approach:	L	T	R	L	T	R	L	T	R	L	T	R								
Movement:																				
Control:	Stop Sign					Stop Sign		Uncontrolled			Uncontrolled									
Rights:	Include					Include		Ignore			Include									
Lanes:	1	0	0	0	1	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0

Volume Module:

Base Vol:	106	0	34	0	0	5	2	1005	466	13	308	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	0	34	0	0	5	2	1005	466	13	308	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	0	34	0	0	5	2	1005	466	13	308	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	112	0	36	0	0	5	2	1058	0	14	324	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	112	0	36	0	0	5	2	1058	0	14	324	1

Critical Gap Module:

Critical Gp:	7.5	xxxx	6.9	xxxxxx	xxxx	6.9	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxxx	xxxx	3.3	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	1198	xxxx	529	xxxx	xxxx	109	325	xxxx	xxxxxx	1058	xxxx	xxxxxx
Potent Cap.:	144	xxxx	500	xxxx	xxxx	931	1246	xxxx	xxxxxx	666	xxxx	xxxxxx
Move Cap.:	140	xxxx	500	xxxx	xxxx	931	1246	xxxx	xxxxxx	666	xxxx	xxxxxx
Volume/Cap:	0.79	xxxx	0.07	xxxx	xxxx	0.01	0.00	xxxx	xxxx	0.02	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	4.9	xxxx	0.2	xxxx	xxxx	0.0	0.0	xxxx	xxxxxx	0.1	xxxx	xxxxxx			
Control Del:	90.8	xxxx	12.8	xxxxxx	xxxx	8.9	7.9	xxxx	xxxxxx	10.5	xxxx	xxxxxx			
LOS by Move:	F	*	B	*	*	A	A	*	*	B	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxxx												
SharedQueue:	xxxxxx	xxxx	xxxxxx												
Shrd ConDel:	xxxxxx	xxxx	xxxxxx												
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*			
ApproachDel:	71.8			8.9			xxxxxx			xxxxxx					
ApproachLOS:	F			A			*			*					

Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

AM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #4 Red Hill Avenue at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.457  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 42 Level Of Service: A

\*\*\*\*\*

Street Name:	Red Hill Avenue						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	1	0	1	1	1	0	1	0	1

Volume Module:

Base Vol:	160	686	63	37	470	121	548	308	177	4	52	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	686	63	37	470	121	548	308	177	4	52	17
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	160	686	63	37	470	121	548	308	177	4	52	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	686	63	37	470	121	548	308	177	4	52	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	686	63	37	470	121	548	308	177	4	52	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	686	63	37	470	121	548	308	177	4	52	17

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.83	0.17	1.00	1.59	0.41	1.92	1.08	1.00	1.00	1.51	0.49
Final Sat.:	3200	2931	269	1600	2545	655	3073	1727	1600	1600	2412	788

Capacity Analysis Module:

Vol/Sat:	0.05	0.23	0.23	0.02	0.18	0.18	0.18	0.18	0.11	0.00	0.02	0.02
Crit Moves:	****			****			****			****		

\*\*\*\*\*

AM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #5 Pullman Street at Briggs Avenue  
\*\*\*\*\*

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[ 10.6]  
\*\*\*\*\*

Street Name:	Pullman Street						Briggs Avenue																	
Approach:	North Bound			South Bound			East Bound			West Bound														
Movement:	L	T	R	L	T	R	L	T	R	L	T	R												
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign														
Rights:	Include			Include			Include			Include														
Lanes:	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Volume Module:	Pullman Street			Pullman Street			Briggs Avenue			Briggs Avenue		
Base Vol:	0	128	11	35	442	0	0	0	0	2	0	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	128	11	35	442	0	0	0	0	2	0	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	128	11	35	442	0	0	0	0	2	0	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	135	12	37	465	0	0	0	0	2	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	135	12	37	465	0	0	0	0	2	0	4

Critical Gap Module:	Pullman Street			Pullman Street			Briggs Avenue			Briggs Avenue		
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3

Capacity Module:	Pullman Street			Pullman Street			Briggs Avenue			Briggs Avenue		
Cnflct Vol:	xxxx	xxxx	xxxxx	146	xxxx	xxxxx	xxxx	xxxx	xxxxx	679	679	141
Potent Cap.:	xxxx	xxxx	xxxxx	1448	xxxx	xxxxx	xxxx	xxxx	xxxxx	420	376	913
Move Cap.:	xxxx	xxxx	xxxxx	1448	xxxx	xxxxx	xxxx	xxxx	xxxxx	412	366	913
Volume/Cap:	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.00

Level of Service Module:	Pullman Street			Pullman Street			Briggs Avenue			Briggs Avenue		
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	649	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.6	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	10.6	xxxxxxx	
ApproachLOS:	*	*	*	*	*	*	*	*	*	B	*	

\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

AM Existing Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Red Hill Avenue at Briggs Avenue

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[ 14.4]

Table with columns for Street Name (Red Hill Avenue, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (1, 0, 2, 0, 0).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across various movements.

Critical Gap Module table with columns for Critical Gp and FollowUpTim, showing values like 6.8, 6.9, 3.5, and 3.3.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap, showing values like 1176, 349, 187, 653, 0.03, and 0.02.

Level of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS, showing values like 0.1, 24.8, C, B, 14.4, and B.

Note: Queue reported is the number of cars per lane.

PM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 SR-55 SB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.679  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 109 Level Of Service: B

\*\*\*\*\*

Street Name:	SR-55 SB Ramps						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	0	2	0	1	0

Volume Module:	SR-55 SB Ramps			SR-55 SB Ramps			Baker Street			Baker Street		
Base Vol:	0	0	0	104	299	558	0	482	401	270	1057	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	104	299	558	0	482	401	270	1057	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	104	299	558	0	482	401	270	1057	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	104	299	558	0	482	401	270	1057	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	104	299	558	0	482	401	270	1057	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	104	299	558	0	482	401	270	1057	0

Saturation Flow Module:	SR-55 SB Ramps			SR-55 SB Ramps			Baker Street			Baker Street		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.22	0.78	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	346	1254	1600	0	3200	1600	1600	3200	0

Capacity Analysis Module:	SR-55 SB Ramps			SR-55 SB Ramps			Baker Street			Baker Street		
Vol/Sat:	0.00	0.00	0.00	0.30	0.24	0.35	0.00	0.15	0.25	0.17	0.33	0.00
Crit Moves:						****					****	

\*\*\*\*\*

PM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 SR-55 NB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.733  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 70 Level Of Service: C

\*\*\*\*\*

Street Name:	SR-55 NB Ramps						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	1	0	0	0	0	0	0	0	1

Volume Module:

Base Vol:	300	275	247	0	0	0	255	333	0	0	1012	277
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	300	275	247	0	0	0	255	333	0	0	1012	277
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	300	275	247	0	0	0	255	333	0	0	1012	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	300	275	247	0	0	0	255	333	0	0	1012	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	275	247	0	0	0	255	333	0	0	1012	277
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	300	275	247	0	0	0	255	333	0	0	1012	277

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.73	0.67	0.60	0.00	0.00	0.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	1168	1071	962	0	0	0	1600	3200	0	0	3200	1600

Capacity Analysis Module:

Vol/Sat:	0.26	0.26	0.26	0.00	0.00	0.00	0.16	0.10	0.00	0.00	0.32	0.17
Crit Moves:	****						****			****		

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PM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #3 Pullman Street at Baker Street  
\*\*\*\*\*

Average Delay (sec/veh): 44.5 Worst Case Level Of Service: F[201.0]  
\*\*\*\*\*

Street Name:	Pullman Street						Baker Street													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled										
Rights:	Include			Include			Ignore			Include										
Lanes:	0	1	0	1	0	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0

Volume Module:	Pullman Street			Pullman Street			Baker Street			Baker Street		
Base Vol:	331	3	72	0	0	1	2	439	131	20	974	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	331	3	72	0	0	1	2	439	131	20	974	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	331	3	72	0	0	1	2	439	131	20	974	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	348	3	76	0	0	1	2	462	0	21	1025	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	348	3	76	0	0	1	2	462	0	21	1025	1

Critical Gap Module:	Pullman Street			Pullman Street			Baker Street			Baker Street		
Critical Gp:	7.5	6.5	6.9	xxxxx	xxxx	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:	Pullman Street			Pullman Street			Baker Street			Baker Street		
Cnflct Vol:	850	1535	231	xxxx	xxxx	342	1026	xxxx	xxxxx	462	xxxx	xxxxx
Potent Cap.:	257	117	777	xxxx	xxxx	660	684	xxxx	xxxxx	1110	xxxx	xxxxx
Move Cap.:	252	115	777	xxxx	xxxx	660	684	xxxx	xxxxx	1110	xxxx	xxxxx
Volume/Cap:	1.38	0.03	0.10	xxxx	xxxx	0.00	0.00	xxxx	xxxx	0.02	xxxx	xxxx

Level Of Service Module:	Pullman Street			Pullman Street			Baker Street			Baker Street		
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.5	10.3	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	B	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	250	xxxx	632	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	19.5	xxxx	0.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	243.6	xxxx	11.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	F	*	B	*	*	*	*	*	*	*	*	*
ApproachDel:	201.0			10.5			xxxxxxx			xxxxxxx		
ApproachLOS:	F			B			*			*		

\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

PM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #4 Red Hill Avenue at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.626  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 61 Level Of Service: B

\*\*\*\*\*

Street Name:	Red Hill Avenue						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	1	0	1	1	1	0	1	0	1

Volume Module:

Base Vol:	252	666	17	8	587	449	388	71	85	45	274	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	252	666	17	8	587	449	388	71	85	45	274	53
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	252	666	17	8	587	449	388	71	85	45	274	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	252	666	17	8	587	449	388	71	85	45	274	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	666	17	8	587	449	388	71	85	45	274	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	666	17	8	587	449	388	71	85	45	274	53

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.95	0.05	1.00	1.13	0.87	2.00	1.00	1.00	1.00	1.68	0.32
Final Sat.:	3200	3120	80	1600	1813	1387	3200	1600	1600	1600	2681	519

Capacity Analysis Module:

Vol/Sat:	0.08	0.21	0.21	0.01	0.32	0.32	0.12	0.04	0.05	0.03	0.10	0.10
Crit Moves:	****			****			****			****		

\*\*\*\*\*

PM Existing Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Pullman Street at Briggs Avenue

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[ 11.9]

Table with columns for Street Name (Pullman Street, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (0, 1, 0, 0).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across various movements.

Critical Gap Module table with columns for Critical Gp and FollowUpTim, showing values like 4.1, 6.4, 6.5, 6.2, 2.2, 3.5, 4.0, 3.3.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap., showing values like 325, 492, 492, 319, 1246, 540, 481, 726, 538, 478, 726, 0.01, 0.06, 0.00, 0.01.

Level Of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS, showing values like 0.0, 7.9, A, 561, 0.2, 11.9, B.

Note: Queue reported is the number of cars per lane.

PM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #6 Red Hill Avenue at Briggs Avenue  
\*\*\*\*\*

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[ 19.7]  
\*\*\*\*\*

Street Name:	Red Hill Avenue						Briggs Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1	0	2	0	0	1	1	0	0	0	0	0

Volume Module:	Red Hill Avenue			Red Hill Avenue			Briggs Avenue			Briggs Avenue		
Base Vol:	12	923	0	0	682	8	17	0	17	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	923	0	0	682	8	17	0	17	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	923	0	0	682	8	17	0	17	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	13	972	0	0	718	8	18	0	18	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	13	972	0	0	718	8	18	0	18	0	0	0

Critical Gap Module:	Red Hill Avenue			Red Hill Avenue			Briggs Avenue			Briggs Avenue		
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	xxxxxx	xxxx	xxxxxx

Capacity Module:	Red Hill Avenue			Red Hill Avenue			Briggs Avenue			Briggs Avenue		
Cnflct Vol:	726	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	1233	xxxx	363	xxxx	xxxx	xxxxxx
Potent Cap.:	886	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	172	xxxx	639	xxxx	xxxx	xxxxxx
Move Cap.:	886	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	170	xxxx	639	xxxx	xxxx	xxxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	xxxx	0.03	xxxx	xxxx	xxxx

Level Of Service Module:	Red Hill Avenue			Red Hill Avenue			Briggs Avenue			Briggs Avenue		
2Way95thQ:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	0.3	xxxx	0.1	xxxx	xxxx	xxxxxx
Control Del:	9.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	28.6	xxxx	10.8	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	D	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			19.7			xxxxxxx		
ApproachLOS:	*			*			C			*		

Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

*APPENDIX C-III*

**EXISTING WITH PROJECT  
TRAFFIC CONDITIONS WITH IMPROVEMENTS**

AM Existing Plus Project Conditions - ICU (Mitigation)  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #3 Pullman Street at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.409  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 31 Level Of Service: A

\*\*\*\*\*

Street Name:	Pullman Street						Baker Street									
	North Bound			South Bound			East Bound			West Bound						
Approach:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Permitted			Permitted			Protected			Protected						
Rights:	Include			Include			Include			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Lanes:	1	0	0	0	0	0	1	0	2	0	1	1	0	2	1	0

Volume Module:

Base Vol:	106	0	34	0	0	5	2	1005	466	13	308	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	0	34	0	0	5	2	1005	466	13	308	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	0	34	0	0	5	2	1005	466	13	308	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	112	0	36	0	0	5	2	1058	491	14	324	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	0	36	0	0	5	2	1058	491	14	324	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	112	0	36	0	0	5	2	1058	491	14	324	1

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	1.00	1.00	2.00	1.00	1.00	2.99	0.01
Final Sat.:	1600	0	1600	0	0	1600	1600	3200	1600	1600	4784	16

Capacity Analysis Module:

Vol/Sat:	0.07	0.00	0.02	0.00	0.00	0.00	0.00	0.33	0.31	0.01	0.07	0.07
Crit Moves:	****			****			****			****		

\*\*\*\*\*

PM Existing Plus Project Conditions - ICU (Mitigation)  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #3 Pullman Street at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.433  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 33 Level Of Service: A

\*\*\*\*\*

Street Name:	Pullman Street						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	1	0	0	0	0	0	0	1	1
	0	1	0	1	0	0	1	0	2	0	1	1

Volume Module:

Base Vol:	331	3	72	0	0	1	2	439	131	20	974	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	331	3	72	0	0	1	2	439	131	20	974	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	331	3	72	0	0	1	2	439	131	20	974	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	348	3	76	0	0	1	2	462	138	21	1025	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	348	3	76	0	0	1	2	462	138	21	1025	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	348	3	76	0	0	1	2	462	138	21	1025	1

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.65	0.35	0.00	0.00	1.00	1.00	2.00	1.00	1.00	2.99	0.01
Final Sat.:	1600	1033	567	0	0	1600	1600	3200	1600	1600	4795	5

Capacity Analysis Module:

Vol/Sat:	0.22	0.00	0.13	0.00	0.00	0.00	0.00	0.14	0.09	0.01	0.21	0.21
Crit Moves:	****			****			****			****		

\*\*\*\*\*

*APPENDIX C-IV*

**YEAR 2016 WITHOUT PROJECT  
CUMULATIVE TRAFFIC CONDITIONS**

AM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 SR-55 SB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.692
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level Of Service: B

\*\*\*\*\*

Street Name: SR-55 SB Ramps Baker Street

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Permitted Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 0 0 1 0 1 0 0 0 2 0 1 1 0 2 0 0

Volume Module:
Base Vol: 0 0 0 484 145 263 0 1079 269 83 445 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 484 145 263 0 1079 269 83 445 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 484 145 263 0 1079 269 83 445 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 484 145 263 0 1079 269 83 445 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 484 145 263 0 1079 269 83 445 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 484 145 263 0 1079 269 83 445 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.41 0.59 0.00 2.00 1.00 1.00 2.00 0.00
Final Sat.: 0 0 0 1600 657 943 0 3200 1600 1600 3200 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.30 0.22 0.28 0.00 0.34 0.17 0.05 0.14 0.00
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\*

\*\*\*\*\*

AM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 SR-55 NB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.752
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 107 Level Of Service: C

\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 NB Ramps and Baker Street with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume. Rows include SR-55 NB Ramps and Baker Street.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. Rows include SR-55 NB Ramps and Baker Street.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves. Rows include SR-55 NB Ramps and Baker Street.

\*\*\*\*\*

AM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Pullman Street at Baker Street

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: E[ 36.3]

Table with columns for Street Name (Pullman Street, Baker Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign, Uncontrolled), Rights (Include, Ignore), and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume for each approach.

Critical Gap Module table showing Critical Gp and FollowUpTim for each approach.

Capacity Module table showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap for each approach.

Level Of Service Module table showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS for each approach.

Note: Queue reported is the number of cars per lane.

AM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #4 Red Hill Avenue at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.467
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: A

\*\*\*\*\*

Street Name: Red Hill Avenue Baker Street
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 1 1 0 1 0 1 1 0 1 1 0 1 1 0 1 1 0

Volume Module:
Base Vol: 165 707 65 38 484 128 546 317 182 4 54 18
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 165 707 65 38 484 128 546 317 182 4 54 18
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 165 707 65 38 484 128 546 317 182 4 54 18
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 165 707 65 38 484 128 546 317 182 4 54 18
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 165 707 65 38 484 128 546 317 182 4 54 18
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 165 707 65 38 484 128 546 317 182 4 54 18

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 1.83 0.17 1.00 1.58 0.42 1.90 1.10 1.00 1.00 1.50 0.50
Final Sat.: 3200 2931 269 1600 2531 669 3037 1763 1600 1600 2400 800

Capacity Analysis Module:
Vol/Sat: 0.05 0.24 0.24 0.02 0.19 0.19 0.18 0.18 0.11 0.00 0.02 0.02
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*

\*\*\*\*\*

AM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Pullman Street at Briggs Avenue

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[ 9.6]

Table with columns for Street Name (Pullman Street, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (0, 1, 0, 0).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across four approaches.

Critical Gap Module table with columns for Critical Gp and FollowUpTim across four approaches.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap. across four approaches.

Level of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS across four approaches.

Note: Queue reported is the number of cars per lane.

AM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Red Hill Avenue at Briggs Avenue

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[ 18.5]

Table with columns for Street Name, Approach, Movement, Control, Rights, and Lanes for Red Hill Avenue and Briggs Avenue.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Table for Critical Gap Module showing Critical Gp and FollowUpTim.

Table for Capacity Module showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Table for Level Of Service Module showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

PM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 SR-55 SB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.698
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 124 Level Of Service: B

\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 SB Ramps and Baker Street with various traffic parameters.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

\*\*\*\*\*

PM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 SR-55 NB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.748
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 74 Level Of Service: C

\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 NB Ramps and Baker Street with various movement and control details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume across different approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, Final Sat. for different approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves for different approaches.

\*\*\*\*\*

PM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Pullman Street at Baker Street

Average Delay (sec/veh): 33.5 Worst Case Level Of Service: F[161.2]

Table with columns for Street Name (Pullman Street, Baker Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign, Uncontrolled), Rights (Include, Ignore), and Lanes (0, 1, 0, 1, 0).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across four approaches.

Critical Gap Module table with columns for Critical Gp and FollowUpTim across four approaches.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap across four approaches.

Level of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS across four approaches.

Note: Queue reported is the number of cars per lane.

PM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #4 Red Hill Avenue at Baker Street
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.638
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 63 Level Of Service: B
\*\*\*\*\*

Table with columns for Street Name (Red Hill Avenue, Baker Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat and Crit Moves.

PM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Pullman Street at Briggs Avenue

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[ 10.8]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes for Pullman Street and Briggs Avenue.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume.

Critical Gap Module table with columns for Critical Gp, FollowUpTim.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Level of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

Note: Queue reported is the number of cars per lane.

PM Cumulative Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Red Hill Avenue at Briggs Avenue

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[ 20.3]

Table with columns for Street Name (Red Hill Avenue, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L-T-R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (1 0 2 0 0, 0 0 1 1 0, 1 0 0 0 1, 0 0 0 0 0).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across four approaches.

Critical Gap Module table with columns for Critical Gp and FollowUpTim across four approaches.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap across four approaches.

Level of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS across four approaches.

Note: Queue reported is the number of cars per lane.

*APPENDIX C-V*

**YEAR 2016 WITH PROJECT  
CUMULATIVE TRAFFIC CONDITIONS**

AM Cumulative Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #1 SR-55 SB Ramps at Baker Street
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.694
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: B
\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 SB Ramps and Baker Street with sub-columns for North, South, East, and West Bound.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

AM Cumulative Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #2 SR-55 NB Ramps at Baker Street
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.752
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 75 Level Of Service: C
\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 NB Ramps and Baker Street with sub-columns for North Bound, South Bound, East Bound, and West Bound.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume. Rows include SR-55 NB Ramps and Baker Street.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. Rows include SR-55 NB Ramps and Baker Street.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves. Rows include SR-55 NB Ramps and Baker Street.

AM Cumulative Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Pullman Street at Baker Street

Average Delay (sec/veh): 7.9 Worst Case Level Of Service: F[ 83.7]

Table with columns for Street Name (Pullman Street, Baker Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign, Uncontrolled), Rights (Include, Ignore), and Lanes (1, 0, 0, 0, 1).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across various movements.

Critical Gap Module table showing Critical Gp and FollowUpTim values for different movements.

Capacity Module table showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap. for various movements.

Level Of Service Module table showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

AM Cumulative Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #4 Red Hill Avenue at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.471
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: A

\*\*\*\*\*

Table with columns for Street Name (Red Hill Avenue, Baker Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Split Phase), Rights (Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for each movement.

\*\*\*\*\*

AM Cumulative Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Pullman Street at Briggs Avenue

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[ 10.7]

Table with columns for Street Name (Pullman Street, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (0, 1, 0, 0).

Volume Module:

Table with 12 columns for traffic volume metrics: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume.

Critical Gap Module:

Table with 12 columns for critical gap metrics: Critical Gp, FollowUpTim.

Capacity Module:

Table with 12 columns for capacity metrics: Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Level Of Service Module:

Table with 12 columns for level of service metrics: 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

Note: Queue reported is the number of cars per lane.

AM Cumulative Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #6 Red Hill Avenue at Briggs Avenue

\*\*\*\*\*

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[ 14.7]

\*\*\*\*\*

Table with columns for Street Name (Red Hill Avenue, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L-T-R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (1 0 2 0 0, 0 0 1 1 0, 1 0 0 0 1, 0 0 0 0 0).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across various movements.

Critical Gap Module table with columns for Critical Gp and FollowUpTim, showing values like 6.8, 6.9, 3.5, 3.3.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap., showing values like 1212, 359, 178, 643, 0.03, 0.02.

Level of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, Approach Del, and Approach LOS, showing values like 0.1, 25.9, D, B, 14.7, B.

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

PM Cumulative Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 SR-55 SB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.700  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 128 Level Of Service: B

\*\*\*\*\*

Street Name: SR-55 SB Ramps Baker Street  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	2	0	1	0	0

Volume Module:												
Base Vol:	0	0	0	106	308	575	0	496	413	278	1089	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	106	308	575	0	496	413	278	1089	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	106	308	575	0	496	413	278	1089	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	106	308	575	0	496	413	278	1089	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	106	308	575	0	496	413	278	1089	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	106	308	575	0	496	413	278	1089	0

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.21	0.79	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	343	1257	1600	0	3200	1600	1600	3200	0

Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.31	0.25	0.36	0.00	0.16	0.26	0.17	0.34	0.00
Crit Moves:						****					****	

\*\*\*\*\*

PM Cumulative Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 SR-55 NB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.754  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 76 Level Of Service: C

\*\*\*\*\*

Street Name: SR-55 NB Ramps Baker Street

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Split Phase			Split Phase			Protected			Permitted								
Rights:	Include			Include			Include			Include								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0						
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0						
Lanes:	0	1	0	1	0	0	0	0	0	1	0	2	0	0	0	0	0	1

Volume Module:

Base Vol:	309	283	254	0	0	0	263	342	0	0	1042	285
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	309	283	254	0	0	0	263	342	0	0	1042	285
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	309	283	254	0	0	0	263	342	0	0	1042	285
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	309	283	254	0	0	0	263	342	0	0	1042	285
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	309	283	254	0	0	0	263	342	0	0	1042	285
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	309	283	254	0	0	0	263	342	0	0	1042	285

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.73	0.67	0.60	0.00	0.00	0.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	1169	1070	961	0	0	0	1600	3200	0	0	3200	1600

Capacity Analysis Module:

Vol/Sat:	0.26	0.26	0.26	0.00	0.00	0.00	0.16	0.11	0.00	0.00	0.33	0.18
Crit Moves:	****						****			****		

\*\*\*\*\*

PM Cumulative Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #3 Pullman Street at Baker Street  
\*\*\*\*\*

Average Delay (sec/veh): 52.0 Worst Case Level Of Service: F[235.3]

Street Name:	Pullman Street						Baker Street													
	North Bound			South Bound			East Bound			West Bound										
Approach:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled										
Rights:	Include			Include			Ignore			Include										
Lanes:	0	1	0	1	0	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0

Volume Module:

Base Vol:	340	3	74	0	0	1	2	452	133	20	1003	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	3	74	0	0	1	2	452	133	20	1003	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	340	3	74	0	0	1	2	452	133	20	1003	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	358	3	78	0	0	1	2	476	0	21	1056	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	358	3	78	0	0	1	2	476	0	21	1056	1

Critical Gap Module:

Critical Gp:	7.5	6.5	6.9	xxxxx	xxxx	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	874	1579	238	xxxx	xxxx	352	1057	xxxx	xxxxx	476	xxxx	xxxxx
Potent Cap.:	247	110	770	xxxx	xxxx	650	667	xxxx	xxxxx	1097	xxxx	xxxxx
Move Cap.:	243	108	770	xxxx	xxxx	650	667	xxxx	xxxxx	1097	xxxx	xxxxx
Volume/Cap:	1.48	0.03	0.10	xxxx	xxxx	0.00	0.00	xxxx	xxxx	0.02	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.6	10.4	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	B	*	*	A	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	240	xxxx	621	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	21.5	xxxx	0.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	285.4	xxxx	11.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	F	*	B	*	*	*	*	*	*	*	*	*
ApproachDel:	235.3		10.6				xxxxxx			xxxxxx		
ApproachLOS:	F		B				*			*		

Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

PM Cumulative Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #4 Red Hill Avenue at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.645  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 64 Level Of Service: B

\*\*\*\*\*

Street Name: Red Hill Avenue Baker Street  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1 1 0	1	0	1 1 0	1	1	1 0 1	1	0	1 1 0

Volume Module:

Base Vol:	260	686	18	8	605	462	399	73	88	46	282	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	686	18	8	605	462	399	73	88	46	282	55
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	260	686	18	8	605	462	399	73	88	46	282	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	686	18	8	605	462	399	73	88	46	282	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	686	18	8	605	462	399	73	88	46	282	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	686	18	8	605	462	399	73	88	46	282	55

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.95	0.05	1.00	1.13	0.87	2.00	1.00	1.00	1.00	1.67	0.33
Final Sat.:	3200	3118	82	1600	1814	1386	3200	1600	1600	1600	2678	522

Capacity Analysis Module:

Vol/Sat:	0.08	0.22	0.22	0.01	0.33	0.33	0.12	0.05	0.06	0.03	0.11	0.11
Crit Moves:	****			****			****			****		

\*\*\*\*\*

PM Cumulative Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #5 Pullman Street at Briggs Avenue

\*\*\*\*\*

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[ 12.0]

\*\*\*\*\*

Street Name:	Pullman Street						Briggs Avenue					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	1	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	305	12	7	152	0	0	0	0	32	0	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	305	12	7	152	0	0	0	0	32	0	6
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	305	12	7	152	0	0	0	0	32	0	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	321	13	7	160	0	0	0	0	34	0	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	321	13	7	160	0	0	0	0	34	0	6

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	334	xxxx	xxxxx	xxxx	xxxx	xxxxx	502	502	327
Potent Cap.:	xxxx	xxxx	xxxxx	1237	xxxx	xxxxx	xxxx	xxxx	xxxxx	532	474	719
Move Cap.:	xxxx	xxxx	xxxxx	1237	xxxx	xxxxx	xxxx	xxxx	xxxxx	530	471	719
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	0.00	0.01

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	553	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.0	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx	12.0	xxxxxx									
ApproachLOS:	*	*	*	*	*	*	*	*	*	B	*	

Note: Queue reported is the number of cars per lane.

\*\*\*\*\*

PM Cumulative Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #6 Red Hill Avenue at Briggs Avenue
\*\*\*\*\*

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C [ 20.6]

Table with columns for Street Name (Red Hill Avenue, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L-T-R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (1 0 2 0 0, 0 0 1 1 0, 1 0 0 0 1, 0 0 0 0 0).

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume, and values for each approach.

Critical Gap Module: Table with columns for Critical Gp, FollowUpTim, and values for each approach.

Capacity Module: Table with columns for Cnflct Vol, Potent Cap., Move Cap., Volume/Cap, and values for each approach.

Level Of Service Module: Table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS, and values for each approach.

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

*APPENDIX C-VI*

**YEAR 2016 WITH PROJECT  
CUMULATIVE TRAFFIC CONDITIONS  
WITH IMPROVEMENTS**

AM Cumulative Plus Project Conditions - ICU (Mitigation)  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #3 Pullman Street at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.419  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 32 Level Of Service: A

\*\*\*\*\*

Street Name:	Pullman Street					Baker Street						
	North Bound			South Bound		East Bound			West Bound			
Approach:	L	T	R	L	T	R	L	T	R	L	T	R

Control:	Permitted			Permitted			Protected			Protected						
Rights:	Include			Include			Include			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Lanes:	1	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0

Volume Module:	Pullman Street			Pullman Street			Baker Street			Baker Street		
Base Vol:	107	0	34	0	0	5	2	1035	480	13	317	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	0	34	0	0	5	2	1035	480	13	317	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	107	0	34	0	0	5	2	1035	480	13	317	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	113	0	36	0	0	5	2	1089	505	14	334	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	0	36	0	0	5	2	1089	505	14	334	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	113	0	36	0	0	5	2	1089	505	14	334	1

Saturation Flow Module:	Pullman Street			Pullman Street			Baker Street			Baker Street		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	1.00	1.00	2.00	1.00	1.00	2.99	0.01
Final Sat.:	1600	0	1600	0	0	1600	1600	3200	1600	1600	4785	15

Capacity Analysis Module:	Pullman Street			Pullman Street			Baker Street			Baker Street		
Vol/Sat:	0.07	0.00	0.02	0.00	0.00	0.00	0.00	0.34	0.32	0.01	0.07	0.07
Crit Moves:	****			****			****			****		

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PM Cumulative Plus Project Conditions - ICU (Mitigation)  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #3 Pullman Street at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.445  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 34 Level Of Service: A

\*\*\*\*\*

Street Name:	Pullman Street						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	1	0	0	0	0	0	0	1	0
	1	0	2	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	340	3	74	0	0	1	2	452	133	20	1003	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	3	74	0	0	1	2	452	133	20	1003	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	340	3	74	0	0	1	2	452	133	20	1003	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	358	3	78	0	0	1	2	476	140	21	1056	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	358	3	78	0	0	1	2	476	140	21	1056	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	358	3	78	0	0	1	2	476	140	21	1056	1

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.65	0.35	0.00	0.00	1.00	1.00	2.00	1.00	1.00	2.99	0.01
Final Sat.:	1600	1032	568	0	0	1600	1600	3200	1600	1600	4795	5

Capacity Analysis Module:

Vol/Sat:	0.22	0.00	0.14	0.00	0.00	0.00	0.00	0.15	0.09	0.01	0.22	0.22
Crit Moves:	****			****			****			****		

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*APPENDIX C-VII*

**GENERAL PLAN BUILDOUT WITHOUT PROJECT  
TRAFFIC CONDITIONS**

AM General Plan Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 SR-55 SB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.672  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 57 Level Of Service: B

\*\*\*\*\*

Street Name:	SR-55 SB Ramps						Baker Street					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	1	0	0	1	1	1	0

Volume Module:

Base Vol:	0	0	0	420	120	270	0	1130	360	90	650	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	420	120	270	0	1130	360	90	650	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	420	120	270	0	1130	360	90	650	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	420	120	0	0	1130	360	90	650	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	420	120	0	0	1130	360	90	650	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	420	120	0	0	1130	360	90	650	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	1600	1600	0	3200	1600	1600	3200	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.26	0.08	0.00	0.00	0.35	0.23	0.06	0.20	0.00
Crit Moves:				****				****		****		

\*\*\*\*\*

AM General Plan Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 SR-55 NB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.809  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 98 Level Of Service: D

\*\*\*\*\*

Street Name: SR-55 NB Ramps Baker Street  
 Approach: North Bound South Bound East Bound West Bound  
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	0	1	0	0	2	0	0	0	0	1

Volume Module:

Base Vol:	330	510	730	0	0	0	640	890	0	0	490	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	510	730	0	0	0	640	890	0	0	490	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	330	510	730	0	0	0	640	890	0	0	490	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	330	510	730	0	0	0	640	890	0	0	490	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	330	510	730	0	0	0	640	890	0	0	490	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	330	510	730	0	0	0	640	890	0	0	490	60

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	1600	1600	1600	0	0	0	3200	3200	0	0	3200	1600

Capacity Analysis Module:

Vol/Sat:	0.21	0.32	0.46	0.00	0.00	0.00	0.20	0.28	0.00	0.00	0.15	0.04
Crit Moves:			****				****			****		

\*\*\*\*\*

AM General Plan Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Pullman Street at Baker Street

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: F[ 56.2]

Table with columns for Street Name (Pullman Street, Baker Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module table with columns for Critical Gp and FollowUpTim.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

AM General Plan Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #4 Red Hill Avenue at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.678
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level Of Service: B

\*\*\*\*\*

Street Name: Red Hill Avenue Baker Street

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Table with 4 columns for movements (L, T, R) and 4 rows for Control, Rights, Min. Green, and Y+R. Values include Protected, Split Phase, and various timing parameters.

Volume Module:

Table with 13 columns for volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module:

Table with 13 columns for saturation flow parameters. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table with 13 columns for capacity analysis. Rows include Vol/Sat and Crit Moves.

\*\*\*\*\*

AM General Plan Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Pullman Street at Briggs Avenue

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[ 9.6]

Table with columns for Street Name (Pullman Street, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (0, 1, 0, 0).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across four approaches.

Critical Gap Module table with columns for Critical Gp and FollowUpTim across four approaches.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap across four approaches.

Level of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS across four approaches.

Note: Queue reported is the number of cars per lane.

AM General Plan Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Red Hill Avenue at Briggs Avenue

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[ 22.6]

Table with columns for Street Name (Red Hill Avenue, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (1, 0, 2, 0, 0).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across various movements.

Critical Gap Module table with columns for Critical Gp and FollowUpTim across different movements.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap across different movements.

Level Of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

PM General Plan Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #1 SR-55 SB Ramps at Baker Street
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.621
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B
\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 SB Ramps and Baker Street with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume. Rows include SR-55 SB Ramps and Baker Street.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. Rows include SR-55 SB Ramps and Baker Street.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves. Rows include SR-55 SB Ramps and Baker Street.

\*\*\*\*\*

PM General Plan Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 SR-55 NB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.695
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: B

\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 NB Ramps and Baker Street with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

\*\*\*\*\*

PM General Plan Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Pullman Street at Baker Street

Average Delay (sec/veh): 68.7 Worst Case Level Of Service: F[408.9]

Table with columns for Street Name (Pullman Street, Baker Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign, Uncontrolled), Rights (Include, Ignore), and Lanes (0, 1, 2).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across various movements.

Critical Gap Module table with columns for Critical Gp and FollowUpTim, showing values like 7.5, 6.5, 6.9, 4.1, 2.2 and 'xxxx' placeholders.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap, showing values like 1087, 2002, 310, 457, 1372, 620, 970, 172, 60, 692, 556, 507, 970, 1.91, 0.05, 0.10, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00.

Level of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS, showing values like 0.0, 11.5, 12.1, 8.7, 408.9, 11.5 and 'xxxx' placeholders.

Note: Queue reported is the number of cars per lane.

PM General Plan Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #4 Red Hill Avenue at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.981
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

\*\*\*\*\*

Street Name: Red Hill Avenue Baker Street

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 1 1 0 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 360 740 10 10 1070 870 480 60 180 50 300 60
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 360 740 10 10 1070 870 480 60 180 50 300 60
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 360 740 10 10 1070 870 480 60 180 50 300 60
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 360 740 10 10 1070 870 480 60 180 50 300 60
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 360 740 10 10 1070 870 480 60 180 50 300 60
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 360 740 10 10 1070 870 480 60 180 50 300 60

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 1.97 0.03 1.00 1.10 0.90 2.00 1.00 1.00 1.00 1.67 0.33
Final Sat.: 3200 3157 43 1600 1765 1435 3200 1600 1600 1600 2667 533

Capacity Analysis Module:

Vol/Sat: 0.11 0.23 0.23 0.01 0.61 0.61 0.15 0.04 0.11 0.03 0.11 0.11
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*

\*\*\*\*\*

PM General Plan Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #5 Pullman Street at Briggs Avenue

\*\*\*\*\*

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[ 10.8]

\*\*\*\*\*

Table with columns for Street Name (Pullman Street, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module table with columns for Critical Gp, FollowUpTim, and numerical values.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

\*\*\*\*\*

Note: Queue reported is the number of cars per lane.

\*\*\*\*\*

PM General Plan Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #6 Red Hill Avenue at Briggs Avenue
\*\*\*\*\*

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: D[ 32.2]

Table with columns for Street Name (Red Hill Avenue, Briggs Avenue), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (1, 0, 2, 0, 0).

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across various approaches.

Table for Critical Gap Module showing Critical Gp and FollowUpTim values for different approaches.

Table for Capacity Module showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap. for various approaches.

Table for Level of Service Module showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

*APPENDIX C-VIII*

**GENERAL PLAN BUILDOUT WITH PROJECT  
TRAFFIC CONDITIONS**

AM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 SR-55 SB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.675

Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 57 Level Of Service: B

\*\*\*\*\*

Street Name: SR-55 SB Ramps Baker Street

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Permitted Protected

Rights: Include Ignore Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 0 0 0 0 0 0 1 1 0 1 0 0 1 1 1 1 0 2 0 0

Volume Module:

Base Vol: 0 0 0 407 120 270 0 1129 360 108 664 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 407 120 270 0 1129 360 108 664 0

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 0 0 0 407 120 270 0 1129 360 108 664 0

User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 407 120 0 0 1129 360 108 664 0

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 407 120 0 0 1129 360 108 664 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 0 0 407 120 0 0 1129 360 108 664 0

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.00 0.00 0.00 1.00 1.00 1.00 0.00 2.00 1.00 1.00 2.00 0.00

Final Sat.: 0 0 0 1600 1600 1600 0 3200 1600 1600 3200 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.25 0.08 0.00 0.00 0.35 0.23 0.07 0.21 0.00

Crit Moves: \*\*\*\*

\*\*\*\*\*

AM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #2 SR-55 NB Ramps at Baker Street

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.816  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 101 Level Of Service: D

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Street Name: SR-55 NB Ramps Baker Street

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	0	1	0	0	2	0	2	0	0	1

Volume Module:

Base Vol:	330	510	724	0	0	0	640	875	0	0	523	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	510	724	0	0	0	640	875	0	0	523	92
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	330	510	724	0	0	0	640	875	0	0	523	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	330	510	724	0	0	0	640	875	0	0	523	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	330	510	724	0	0	0	640	875	0	0	523	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	330	510	724	0	0	0	640	875	0	0	523	92

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	1600	1600	1600	0	0	0	3200	3200	0	0	3200	1600

Capacity Analysis Module:

Vol/Sat:	0.21	0.32	0.45	0.00	0.00	0.00	0.20	0.27	0.00	0.00	0.16	0.06
Crit Moves:			****				****			****		

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AM General Plan Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Pullman Street at Baker Street

Average Delay (sec/veh): 14.9 Worst Case Level Of Service: F[181.3]

Table with columns for Street Name (Pullman Street, Baker Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign, Uncontrolled), Rights (Include, Ignore), and Lanes (1, 0, 0, 0, 1).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across four approaches.

Critical Gap Module table with columns for Critical Gp and FollowUpTim across four approaches.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap across four approaches.

Level Of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, Approach Del, and Approach LOS across four approaches.

Note: Queue reported is the number of cars per lane.

AM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #4 Red Hill Avenue at Baker Street

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.684  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 72 Level Of Service: B

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Street Name: Red Hill Avenue Baker Street  
 Approach: North Bound South Bound East Bound West Bound  
 Movement: L - T - R L - T - R L - T - R L - T - R

	Protected			Protected			Split Phase			Split Phase		
Control:	Include			Include			Include			Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	1	0	1	1	1	0	1	0	1

Volume Module:												
Base Vol:	150	1120	60	110	490	257	718	250	150	10	60	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1120	60	110	490	257	718	250	150	10	60	10
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	150	1120	60	110	490	257	718	250	150	10	60	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1120	60	110	490	257	718	250	150	10	60	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1120	60	110	490	257	718	250	150	10	60	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1120	60	110	490	257	718	250	150	10	60	10

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.90	0.10	1.00	1.31	0.69	2.00	1.00	1.00	1.00	1.71	0.29
Final Sat.:	3200	3037	163	1600	2099	1101	3200	1600	1600	1600	2743	457

Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.37	0.07	0.23	0.23	0.22	0.16	0.09	0.01	0.02	0.02
Crit Moves:	****			****			****			****		

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AM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #5 Pullman Street at Briggs Avenue  
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Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[ 10.7]

Street Name:	Pullman Street					Briggs Avenue														
Approach:	North Bound		South Bound			East Bound			West Bound											
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Uncontrolled		Uncontrolled			Stop Sign			Stop Sign											
Rights:	Include		Include			Include			Include											
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0

Volume Module:	Pullman Street					Briggs Avenue						
Base Vol:	0	129	11	36	455	0	0	0	0	2	0	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	129	11	36	455	0	0	0	0	2	0	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	129	11	36	455	0	0	0	0	2	0	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	136	12	38	479	0	0	0	0	2	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	136	12	38	479	0	0	0	0	2	0	4

Critical Gap Module:	Pullman Street					Briggs Avenue						
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3

Capacity Module:	Pullman Street					Briggs Avenue						
Cnflict Vol:	xxxx	xxxx	xxxxx	147	xxxx	xxxxx	xxxx	xxxx	xxxxx	696	696	142
Potent Cap.:	xxxx	xxxx	xxxxx	1447	xxxx	xxxxx	xxxx	xxxx	xxxxx	411	368	912
Move Cap.:	xxxx	xxxx	xxxxx	1447	xxxx	xxxxx	xxxx	xxxx	xxxxx	402	358	912
Volume/Cap:	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.00

Level Of Service Module:	Pullman Street					Briggs Avenue						
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	641	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.7	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	10.7		
ApproachLOS:	*	*	*	*	*	*	*	*	*	B		

\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

AM General Plan Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #6 Red Hill Avenue at Briggs Avenue
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Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[ 17.1]

Table with columns for Street Name, Approach, Movement, Control, Rights, and Lanes for Red Hill Avenue and Briggs Avenue.

Volume Module: Table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module: Table showing Critical Gp and FollowUpTim values.

Capacity Module: Table showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module: Table showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

PM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #1 SR-55 SB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.634  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 51 Level Of Service: B

\*\*\*\*\*

Street Name:	SR-55 SB Ramps						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	1	0	0	1	1	0	2

Volume Module:	SR-55 SB Ramps			SR-55 SB Ramps			Baker Street			Baker Street		
Base Vol:	0	0	0	104	100	650	0	642	610	493	1424	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	104	100	650	0	642	610	493	1424	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	104	100	650	0	642	610	493	1424	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	104	100	0	0	642	610	493	1424	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	104	100	0	0	642	610	493	1424	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	104	100	0	0	642	610	493	1424	0

Saturation Flow Module:	SR-55 SB Ramps			SR-55 SB Ramps			Baker Street			Baker Street		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.54	1.46	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	1600	1600	0	2461	2339	1600	3200	0

Capacity Analysis Module:	SR-55 SB Ramps			SR-55 SB Ramps			Baker Street			Baker Street		
Vol/Sat:	0.00	0.00	0.00	0.07	0.06	0.00	0.00	0.26	0.26	0.31	0.45	0.00
Crit Moves:				****			****			****		

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PM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #2 SR-55 NB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.700  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 62 Level Of Service: C

\*\*\*\*\*

Street Name:	SR-55 NB Ramps						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	0	1	0	0	2	0	2	0	0	1

Volume Module:	SR-55 NB Ramps			SR-55 SB Ramps			Baker Street EB			Baker Street WB		
Base Vol:	370	200	155	0	0	0	290	566	0	0	1467	414
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	370	200	155	0	0	0	290	566	0	0	1467	414
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	370	200	155	0	0	0	290	566	0	0	1467	414
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	370	200	155	0	0	0	290	566	0	0	1467	414
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	370	200	155	0	0	0	290	566	0	0	1467	414
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	370	200	155	0	0	0	290	566	0	0	1467	414

Saturation Flow Module:	SR-55 NB Ramps			SR-55 SB Ramps			Baker Street EB			Baker Street WB		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.53	0.83	0.64	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	2446	1325	1029	0	0	0	3200	3200	0	0	3200	1600

Capacity Analysis Module:	SR-55 NB Ramps			SR-55 SB Ramps			Baker Street EB			Baker Street WB		
Vol/Sat:	0.15	0.15	0.15	0.00	0.00	0.00	0.09	0.18	0.00	0.00	0.46	0.26
Crit Moves:	****						****			****		

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PM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #3 Pullman Street at Baker Street  
\*\*\*\*\*

Average Delay (sec/veh): 95.5 Worst Case Level Of Service: F[531.6]  
\*\*\*\*\*

Street Name:	Pullman Street						Baker Street													
	North Bound			South Bound			East Bound			West Bound										
Approach:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled										
Rights:	Include			Include			Ignore			Include										
Lanes:	0	1	0	1	0	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0

Volume Module:

Base Vol:	340	3	74	0	0	1	2	587	133	20	1301	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	3	74	0	0	1	2	587	133	20	1301	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	340	3	74	0	0	1	2	587	133	20	1301	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	358	3	78	0	0	1	2	618	0	21	1369	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	358	3	78	0	0	1	2	618	0	21	1369	1

Critical Gap Module:

Critical Gp:	7.5	6.5	6.9	xxxxx	xxxx	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	1121	2035	309	xxxx	xxxx	457	1371	xxxx	xxxxx	618	xxxx	xxxxx
Potent Cap.:	164	58	693	xxxx	xxxx	556	507	xxxx	xxxxx	972	xxxx	xxxxx
Move Cap.:	160	56	693	xxxx	xxxx	556	507	xxxx	xxxxx	972	xxxx	xxxxx
Volume/Cap:	2.24	0.06	0.11	xxxx	xxxx	0.00	0.00	xxxx	xxxx	0.02	xxxx	xxxx

Level of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.5	12.1	xxxx	xxxxx	8.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	B	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	157	xxxx	481	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	30.0	xxxx	0.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	647.8	xxxx	14.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	F	*	B	*	*	*	*	*	*	*	*	*
ApproachDel:	531.6			11.5			xxxxxxx			xxxxxxx		
ApproachLOS:	F			B			*			*		

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Note: Queue reported is the number of cars per lane.  
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PM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #4 Red Hill Avenue at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.988

Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

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Street Name: Red Hill Avenue Baker Street

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Split Phase Split Phase

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 2 0 1 1 0 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 360 740 10 10 1070 886 485 60 180 50 300 60

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 360 740 10 10 1070 886 485 60 180 50 300 60

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 360 740 10 10 1070 886 485 60 180 50 300 60

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 360 740 10 10 1070 886 485 60 180 50 300 60

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 360 740 10 10 1070 886 485 60 180 50 300 60

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 360 740 10 10 1070 886 485 60 180 50 300 60

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 2.00 1.97 0.03 1.00 1.09 0.91 2.00 1.00 1.00 1.00 1.67 0.33

Final Sat.: 3200 3157 43 1600 1751 1449 3200 1600 1600 1600 2667 533

Capacity Analysis Module:

Vol/Sat: 0.11 0.23 0.23 0.01 0.61 0.61 0.15 0.04 0.11 0.03 0.11 0.11

Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*

\*\*\*\*\*

PM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #5 Pullman Street at Briggs Avenue  
\*\*\*\*\*

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[ 12.0]  
\*\*\*\*\*

Street Name:	Pullman Street						Briggs Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	1	0	0	0	0	0	0	0	0

Volume Module:	Pullman Street			Pullman Street			Briggs Avenue			Briggs Avenue		
Base Vol:	0	305	12	7	152	0	0	0	0	32	0	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	305	12	7	152	0	0	0	0	32	0	6
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	305	12	7	152	0	0	0	0	32	0	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	321	13	7	160	0	0	0	0	34	0	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	321	13	7	160	0	0	0	0	34	0	6

Critical Gap Module:	Pullman Street			Pullman Street			Briggs Avenue			Briggs Avenue		
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3

Capacity Module:	Pullman Street			Pullman Street			Briggs Avenue			Briggs Avenue		
Cnflct Vol:	xxxx	xxxx	xxxxx	334	xxxx	xxxxx	xxxx	xxxx	xxxxx	502	502	327
Potent Cap.:	xxxx	xxxx	xxxxx	1237	xxxx	xxxxx	xxxx	xxxx	xxxxx	532	474	719
Move Cap.:	xxxx	xxxx	xxxxx	1237	xxxx	xxxxx	xxxx	xxxx	xxxxx	530	471	719
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	0.00	0.01

Level Of Service Module:	Pullman Street			Pullman Street			Briggs Avenue			Briggs Avenue		
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	553	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.0	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			12.0		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

PM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #6 Red Hill Avenue at Briggs Avenue  
\*\*\*\*\*

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: D[ 32.9]

Street Name:	Red Hill Avenue						Briggs Avenue					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:												
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1	0	2	0	0	1	1	0	0	0	0	0

Volume Module:												
Base Vol:	12	1233	0	0	910	8	18	0	18	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	1233	0	0	910	8	18	0	18	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	1233	0	0	910	8	18	0	18	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	13	1298	0	0	958	8	19	0	19	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	13	1298	0	0	958	8	19	0	19	0	0	0

Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	xxxxxx	xxxx	xxxxxx

Capacity Module:												
Cnflct Vol:	966	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	1636	xxxx	483	xxxx	xxxx	xxxxxx
Potent Cap.:	721	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	93	xxxx	535	xxxx	xxxx	xxxxxx
Move Cap.:	721	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	92	xxxx	535	xxxx	xxxx	xxxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.21	xxxx	0.04	xxxx	xxxx	xxxx

Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.7	xxxx	0.1	xxxx	xxxx	xxxxxx
Control Del:	10.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	53.9	xxxx	12.0	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	F	*	B	*	*	*
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shared Queue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			32.9			xxxxxxx		
ApproachLOS:		*			*		D				*	

\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

*APPENDIX C-IX*

**GENERAL PLAN BUILDOUT WITH PROJECT  
TRAFFIC CONDITIONS  
WITH IMPROVEMENTS**

AM General Plan Plus Project Conditions - ICU (Mitigation)  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #3 Pullman Street at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.475  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 35 Level Of Service: A

\*\*\*\*\*

Street Name:	Pullman Street					Baker Street										
	North Bound			South Bound		East Bound			West Bound							
Approach:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Permitted			Permitted			Protected			Protected						
Rights:	Include			Include			Include			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Lanes:	1	0	0	0	0	0	1	0	2	0	1	1	0	2	1	0

Volume Module:

Base Vol:	107	0	34	0	0	5	2	1203	480	13	369	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	0	34	0	0	5	2	1203	480	13	369	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	107	0	34	0	0	5	2	1203	480	13	369	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	113	0	36	0	0	5	2	1266	505	14	388	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	0	36	0	0	5	2	1266	505	14	388	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	113	0	36	0	0	5	2	1266	505	14	388	1

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	1.00	1.00	2.00	1.00	1.00	2.99	0.01
Final Sat.:	1600	0	1600	0	0	1600	1600	3200	1600	1600	4787	13

Capacity Analysis Module:

Vol/Sat:	0.07	0.00	0.02	0.00	0.00	0.00	0.00	0.40	0.32	0.01	0.08	0.08
Crit Moves:	****			****			****			****		

\*\*\*\*\*

PM General Plan Plus Project Conditions - ICU (Mitigation)  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #3 Pullman Street at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.511  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 38 Level Of Service: A

\*\*\*\*\*

Street Name:	Pullman Street						Baker Street								
	North Bound			South Bound			East Bound			West Bound					
Approach:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted			Permitted			Protected			Protected					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	0	1	0	1	0	0	0	0	0	1	1	0	2	1	0

Volume Module:

Base Vol:	340	3	74	0	0	1	2	587	133	20	1301	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	3	74	0	0	1	2	587	133	20	1301	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	340	3	74	0	0	1	2	587	133	20	1301	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	358	3	78	0	0	1	2	618	140	21	1369	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	358	3	78	0	0	1	2	618	140	21	1369	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	358	3	78	0	0	1	2	618	140	21	1369	1

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.65	0.35	0.00	0.00	1.00	1.00	2.00	1.00	1.00	2.99	0.01
Final Sat.:	1600	1032	568	0	0	1600	1600	3200	1600	1600	4796	4

Capacity Analysis Module:

Vol/Sat:	0.22	0.00	0.14	0.00	0.00	0.00	0.00	0.19	0.09	0.01	0.29	0.29
Crit Moves:	****			****			****			****		

\*\*\*\*\*

AM General Plan Plus Project Conditions - ICU (Mitigation)  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #4 Red Hill Avenue at Baker Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.684  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 72 Level Of Service: B

\*\*\*\*\*

Street Name:	Red Hill Avenue						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	1	0		1	0	1	1	1	0

Volume Module:

Base Vol:	150	1120	60	110	490	257	718	250	150	10	60	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1120	60	110	490	257	718	250	150	10	60	10
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	150	1120	60	110	490	257	718	250	150	10	60	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1120	60	110	490	257	718	250	150	10	60	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1120	60	110	490	257	718	250	150	10	60	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	150	1120	60	110	490	257	718	250	150	10	60	10

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.90	0.10	1.00	1.97	1.03	2.00	1.00	1.00	1.00	1.71	0.29
Final Sat.:	3200	3037	163	1600	3149	1651	3200	1600	1600	1600	2743	457

Capacity Analysis Module:

Vol/Sat:	0.05	0.37	0.37	0.07	0.16	0.16	0.22	0.16	0.09	0.01	0.02	0.02
Crit Moves:	****			****			****			****		

\*\*\*\*\*

PM General Plan Plus Project Conditions - ICU (Mitigation)  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #4 Red Hill Avenue at Baker Street  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.784  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 106 Level Of Service: C  
\*\*\*\*\*

Street Name:	Red Hill Avenue						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	1	0	1	1	0	1	1	0	1

Volume Module:	Red Hill Avenue			Red Hill Avenue			Baker Street			Baker Street		
Base Vol:	360	740	10	10	1070	886	485	60	180	50	300	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	360	740	10	10	1070	886	485	60	180	50	300	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	360	740	10	10	1070	886	485	60	180	50	300	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	360	740	10	10	1070	886	485	60	180	50	300	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	360	740	10	10	1070	886	485	60	180	50	300	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	360	740	10	10	1070	886	485	60	180	50	300	60

Saturation Flow Module:	Red Hill Avenue			Red Hill Avenue			Baker Street			Baker Street		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.97	0.03	1.00	1.64	1.36	2.00	1.00	1.00	1.00	1.67	0.33
Final Sat.:	3200	3157	43	1600	2626	2174	3200	1600	1600	1600	2667	533

Capacity Analysis Module:	Red Hill Avenue			Red Hill Avenue			Baker Street			Baker Street		
Vol/Sat:	0.11	0.23	0.23	0.01	0.41	0.41	0.15	0.04	0.11	0.03	0.11	0.11
Crit Moves:	****			****			****			****		

**APPENDIX D**  
**GENERAL PLAN BUILDOUT WORKSHEETS**

65. SR-55 SB Frontage & Baker

Existing (2002/2003) Count

	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	0	0	507	{.32}*	85	
SBT	2	3200	119	.23	263	.19*
SBR	0	0	271	.17	494	.31
EBL	0	0	0		0	
EBT	2	3200	1138	.36*	482	.15
EBR	1	1600	178	.11	366	.23
WBL	1	1600	74	.05*	219	.14
WBT	2	3200	451	.14	1075	.34*
WBR	0	0	0		0	

Right Turn Adjustment Multi .15\*

TOTAL CAPACITY UTILIZATION .73 .68

CMTM 2002 Modeled Volumes

	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	0	0	413	{.26}*	164	
SBT	2	3200	96	.19	293	.23*
SBR	0	0	456	.29	501	.31
EBL	0	0	0		0	
EBT	2	3200	1112	.35*	702	.22
EBR	1	1600	196	.12	483	.30
WBL	1	1600	45	.03*	128	.08
WBT	2	3200	533	.17	1069	.33*
WBR	0	0	0		0	

Right Turn Adjustment Multi .13\*

TOTAL CAPACITY UTILIZATION .64 .69

CMTM 2025 Forecasts (General Plan/MPAH)

	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	0	0	420	{.26}*	80	
SBT	2	3200	120	.17	100	.06*
SBR	f		270		650	
EBL	0	0	0		0	
EBT	1.5	4800	1130	.35*	630	.26*
EBR	1.5		360	.23	610	
WBL	1	1600	90	.06*	490	.31*
WBT	2	3200	650	.20	1420	.44
WBR	0	0	0		0	

TOTAL CAPACITY UTILIZATION .67 .63

66. SR-55 NB Frontage & Baker

Existing (2002/2003) Count						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	335		278	{.17}*
NBT	2	3200	550	.43*	179	.17
NBR	0	0	476		95	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	1	1600	498	.31*	375	.23*
EBT	2	3200	1119	.35	303	.09
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	2	3200	248	.08*	961	.30*
WBR	1	1600	140	.09	469	.29
Right Turn Adjustment			WBR	.01*		
TOTAL CAPACITY UTILIZATION				.83		.70

CMTM 2002 Modeled Volumes						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	257		187	{.12}*
NBT	2	3200	170	.19*	60	.10
NBR	0	0	434	.27	165	.10
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	1	1600	387	.24	375	.23*
EBT	2	3200	1137	.36*	491	.15
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	2	3200	320	.10	1010	.32*
WBR	1	1600	166	.10	504	.32
Right Turn Adjustment			NBR	.08*		
TOTAL CAPACITY UTILIZATION				.63		.67

CMTM 2025 Forecasts (General Plan/MPAH)						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	1.5		330	.21	370	{.15}*
NBT	1.5	4800	510	.32*	200	.15
NBR	0		730	.46	140	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	2	3200	640	.20*	290	.09*
EBT	2	3200	890	.28	530	.17
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	2	3200	490	.15*	1460	.46*
WBR	1	1600	60	.04	410	.26
Right Turn Adjustment			NBR	.09*		
TOTAL CAPACITY UTILIZATION				.76		.70

67. Redhill & Baker

Existing (2002/2003) Count

	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3200	180	.06	316	.10*
NBT	2	3200	874	.29*	558	.18
NBR	0	0	48		11	
SBL	1	1600	50	.03*	7	.00
SBT	2	3200	399	.16	731	.37*
SBR	0	0	100		454	
EBL	1.5		567	.18*	206	.06*
EBT	1.5	4800	253	.16	45	.03
EBR	1	1600	170	.11	81	.05
WBL	1	1600	17	.01	49	.03
WBT	2	3200	42	.02*	279	.10*
WBR	0	0	8		50	

TOTAL CAPACITY UTILIZATION .52 .63

CMTM 2002 Modeled Volumes

	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3200	215	.07	276	.09*
NBT	2	3200	552	.19*	473	.16
NBR	0	0	49		48	
SBL	1	1600	126	.08*	70	.04
SBT	2	3200	449	.18	741	.33*
SBR	0	0	112		323	
EBL	1.5		502	.16*	213	{.07}*
EBT	1.5	4800	229	.14	121	.07
EBR	1	1600	136	.09	42	.03
WBL	1	1600	25	.02	53	.03
WBT	2	3200	56	.03*	314	.13*
WBR	0	0	52		94	

TOTAL CAPACITY UTILIZATION .46 .62

CMTM 2025 Forecasts (General Plan/MPAH)

	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3200	150	.05	360	.11*
NBT	3	4800	1120	.25*	740	.16
NBR	0	0	60		10	
SBL	1	1600	110	.07*	10	.01
SBT	3	4800	490	.15	1070	.33*
SBR	0	0	260	.16	870	.54
EBL	1.5		700	.22*	480	.15*
EBT	1.5	4800	250	.16	60	.04
EBR	1	1600	150	.09	180	.11
WBL	1	1600	10	.01	50	.03
WBT	2	3200	60	.02*	300	.11*
WBR	0	0	10		60	

Right Turn Adjustment SBR .10\*

TOTAL CAPACITY UTILIZATION .56 .80

**Table D-1**

**Growth Rate between Year 2016 (Near-Term) and General Plan Buildout**

Peak Hour	SR-55 SB Ramps at Baker St		SR-55 NB Ramps at Baker St		Red Hill Ave at Baker St		Annual Growth
	Year 2016	GP Buildout	Year 2016	GP Buildout	Year 2016	GP Buildout	
AM	2,768	3,040	3,181	3,650	2,708	3,370	1.8%
PM	3,222	3,980	2,716	3,400	2,961	4,190	3.3%



**APPENDIX E**  
**TRAFFIC SIGNAL WARRANT WORKSHEETS**

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 4/11/13

CALC \_\_\_\_\_ DATE \_\_\_\_\_  
 CHK \_\_\_\_\_ DATE \_\_\_\_\_

DIST \_\_\_\_\_ CO \_\_\_\_\_ RTE \_\_\_\_\_ PM \_\_\_\_\_

Major St: Baker Street  
 Minor St: Pullman Street

Critical Approach Speed 40 mph  
 Critical Approach Speed 35 mph

Speed limit or critical speed on major street traffic > 40 mph.....  }  
 or } RURAL (R)  
 In built up area of isolated community of < 10,000 population.....  }  
 URBAN (U)

**WARRANT 1 - Eight Hour Vehicular Volume** SATISFIED YES  NO   
 (Condition A or Condition B or combination of A and B must be satisfied)

**Condition A - Minimum Vehicle Volume** 100% SATISFIED YES  NO   
 80% SATISFIED YES  NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				10:30	11:30	12:30	1:30	2:30	3:30	4:30	5:30	Hour
	U	R	U	R									
	1		2 or More										
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	887	1,116	1,299	1,093	1,163	1,222	1,533	1,113	
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	188	279	243	218	255	238	303	232	

**Condition B - Interruption of Continuous Traffic** 100% SATISFIED YES  NO   
 80% SATISFIED YES  NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				10:30	11:30	12:30	1:30	2:30	3:30	4:30	5:30	Hour
	U	R	U	R									
	1		2 or More										
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)									
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)									

**Combination of Conditions A & B** SATISFIED YES  NO

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME	<input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC	<input checked="" type="checkbox"/>	
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

**WARRANT 2 - Four Hour Vehicular Volume**

SATISFIED\* YES  NO

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More	Hour			
			12:30	1:30	3:30	4:30
Both Approaches - Major Street		<input checked="" type="checkbox"/>	1,279	1,163	1,222	1,533
Higher Approach - Minor Street		<input checked="" type="checkbox"/>	243	255	288	303

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

**WARRANT 3 - Peak Hour**  
 (Part A or Part B must be satisfied)

SATISFIED YES  NO

**PART A**

SATISFIED YES  NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

**PART B**

SATISFIED YES  NO

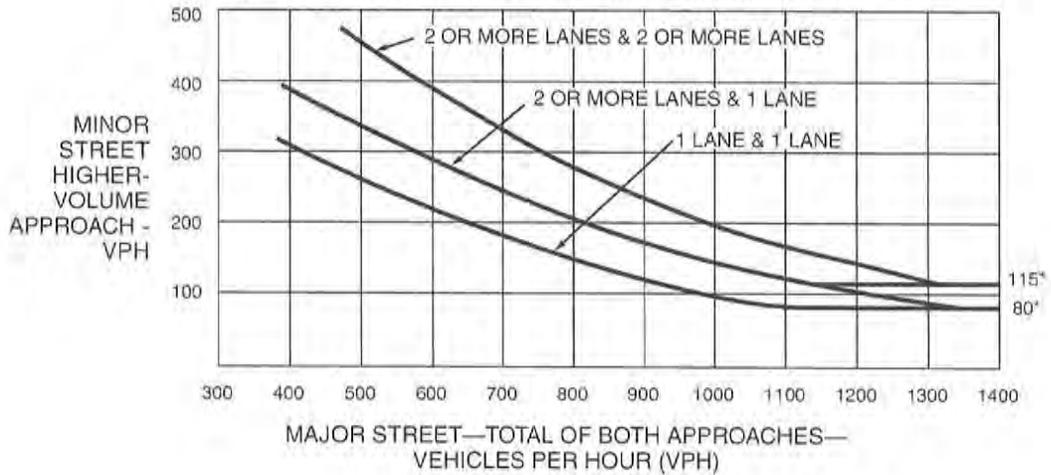
APPROACH LANES	One	2 or More	5:00
			Hour
Both Approaches - Major Street		<input checked="" type="checkbox"/>	1,611
Higher Approach - Minor Street		<input checked="" type="checkbox"/>	417

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

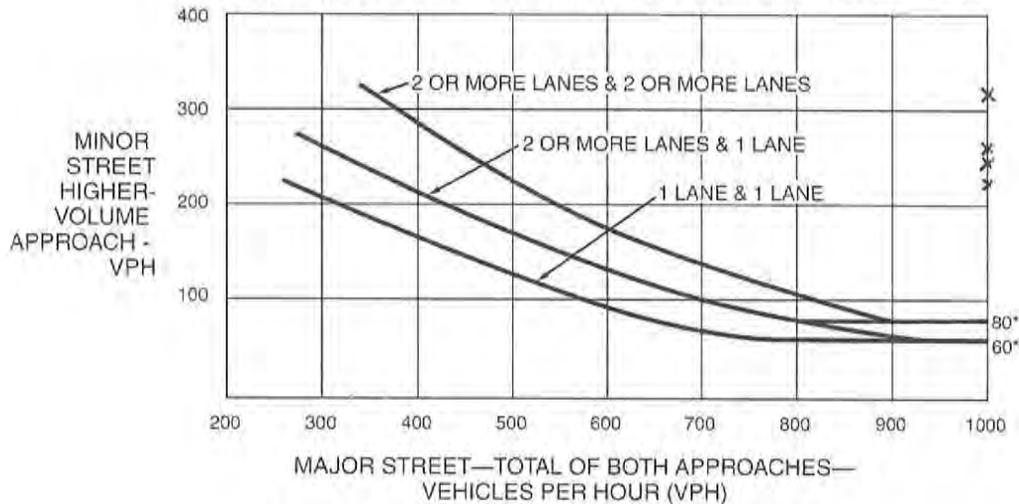
**Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume**



\*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

**Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

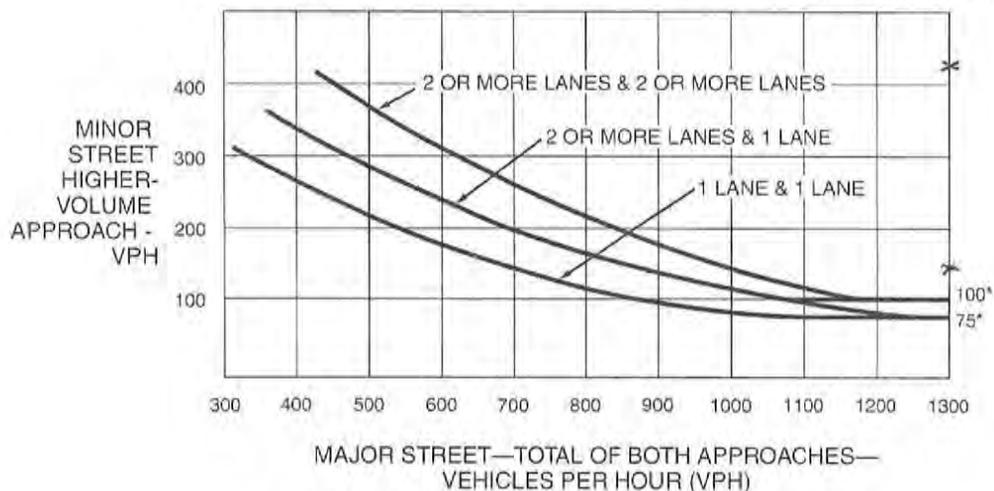
**Figure 4C-3. Warrant 3, Peak Hour**



\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

AM Existing Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*
Intersection #3 Pullman Street at Baker Street
\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Lanes, Initial Vol, and ApproachDel.

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=2.8]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=140]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1940]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=5]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1940]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future.

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction.

AM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*

Intersection #3 Pullman Street at Baker Street

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	1	0	0	0	1	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0
Initial Vol:	106		0		34	0		0		5	2	1005		466		13		308		1
Major Street Volume:											1795									
Minor Approach Volume:											140									
Minor Approach Volume Threshold:	-19 [less than minimum of 100]																			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

PM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*  
Intersection #3 Pullman Street at Baker Street  
\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound									
Movement:	L	T	R	L	T	R	L	T	R	L	T	R							
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled									
Lanes:	0	1	0	1	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0
Initial Vol:	331	3	72	0	0	1	2	439	131	20	974	1							
ApproachDel:	201.0			10.5			xxxxxx			xxxxxx									

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=22.7]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=406]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1974]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=1]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1974]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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PM Existing Plus Project Conditions - ICU  
 125 Baker Street Apartments, Costa Mesa

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*  
 Intersection #3 Pullman Street at Baker Street  
 \*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound									
Movement:	L	T	R	L	T	R	L	T	R	L	T	R							
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled									
Lanes:	0	1	0	1	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0
Initial Vol:	331	3	72	0	0	1	2	439	131	20	974	1							
Major Street Volume:	1567																		
Minor Approach Volume:	406																		
Minor Approach Volume Threshold:	22 [less than minimum of 100]																		

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

AM Cumulative Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Peak Hour Delay Signal Warrant Report

Intersection #3 Pullman Street at Baker Street

Future Volume Alternative: Peak Hour Warrant NOT Met

Table with 5 columns: Approach, Movement, Control, Lanes, Initial Vol, ApproachDel. Rows include North Bound, South Bound, East Bound, and West Bound.

Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=3.3]
Signal Warrant Rule #2: [approach volume=141]
Signal Warrant Rule #3: [approach count=4][total volume=1994]

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
Signal Warrant Rule #2: [approach volume=5]
Signal Warrant Rule #3: [approach count=4][total volume=1994]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future.

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction.

AM Cumulative Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*

Intersection #3 Pullman Street at Baker Street

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled							
Lanes:	1	0	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0
Initial Vol:	107	0	34	0	0	5	2	1035	480	13	317	1					
Major Street Volume:	1848																
Minor Approach Volume:	141																
Minor Approach Volume Threshold:	-28 [less than minimum of 100]																

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

PM Cumulative Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #3 Pullman Street at Baker Street

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound									
Movement:	L	T	R	L	T	R	L	T	R	L	T	R							
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled									
Lanes:	0	1	0	1	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0
Initial Vol:	340	3	74	0	0	1	2	452	133	20	1003	1							
ApproachDel:	235.3			10.6			xxxxxx			xxxxxx									

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=27.3]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=417]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2029]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=1]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2029]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

PM Cumulative Plus Project Conditions - ICU  
 125 Baker Street Apartments, Costa Mesa

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*

Intersection #3 Pullman Street at Baker Street

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound									
Movement:	L	T	R	L	T	R	L	T	R	L	T	R							
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled									
Lanes:	0	1	0	1	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0
Initial Vol:	340		3		74		0		0	1	2	452	133		20	1003		1	
Major Street Volume:							1611												
Minor Approach Volume:							417												
Minor Approach Volume Threshold:	13 [less than minimum of 100]																		

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

AM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*  
Intersection #3 Pullman Street at Baker Street  
\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	1	0	0	0	1	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0
Initial Vol:	107	0	34		0	0	5		2	1203	480		13	369	1					
ApproachDel:	181.3				9.0				xxxxxx				xxxxxx							

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=7.1]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=141]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2214]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=5]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2214]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

AM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*

Intersection #3 Pullman Street at Baker Street

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	1	0	0	0	1	0	0	0	0	1	1	0	2	0	1	1	0	2	1	0
Initial Vol:	107		0		34	0		0		5	2	1203		480		13		369		1
Major Street Volume:					2068															
Minor Approach Volume:					141															
Minor Approach Volume Threshold:					-62 [less than minimum of 100]															

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

PM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*  
Intersection #3 Pullman Street at Baker Street  
\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 1 0 1 0	0 0 0 0 1	1 0 2 0 1	1 0 2 1 0
Initial Vol:	340 3 74	0 0 1	2 587 133	20 1301 1
ApproachDel:	531.6	11.5	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=61.6]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=417]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2462]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=1]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2462]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

PM General Plan Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Peak Hour Volume Signal Warrant Report [Rural]

\*\*\*\*\*  
Intersection #3 Pullman Street at Baker Street  
\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	1	0	0	1	0	2	0	1	0
Initial Vol:	340	3	74	0	0	1	2	587	133	20	1301	1

Major Street Volume: 2044  
Minor Approach Volume: 417  
Minor Approach Volume Threshold: -59 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.



**APPENDIX F**  
**DRIVEWAY LEVEL OF SERVICE**  
**CALCULATION WORKSHEETS**

AM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #7 Pullman Street at Project Driveway 1  
\*\*\*\*\*

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[ 13.5]  
\*\*\*\*\*

Street Name:	Pullman Street						Project Driveway 1					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1	0	0	1	0	0	0	0	0	0

Volume Module:	Pullman Street			Pullman Street			Project Driveway 1			Project Driveway 1		
Base Vol:	0	43	0	0	428	24	98	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	43	0	0	428	24	98	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	43	0	0	428	24	98	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	45	0	0	451	25	103	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	45	0	0	451	25	103	0	0	0	0	0

Critical Gap Module:	Pullman Street			Pullman Street			Project Driveway 1			Project Driveway 1		
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:	Pullman Street			Pullman Street			Project Driveway 1			Project Driveway 1		
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	508	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	528	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	528	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.20	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:	Pullman Street			Pullman Street			Project Driveway 1			Project Driveway 1		
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.7	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.5			xxxxxx		
ApproachLOS:	*			*			B			*		

\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

PM Existing Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #7 Pullman Street at Project Driveway 1  
\*\*\*\*\*

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B[ 11.7]

Street Name:	Pullman Street						Project Driveway 1										
Approach:	North Bound			South Bound			East Bound			West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign							
Rights:	Include			Include			Include			Include							
Lanes:	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	263	0	0	0	90	96	53	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	263	0	0	0	90	96	53	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	263	0	0	0	90	96	53	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	277	0	0	0	95	101	56	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	277	0	0	0	95	101	56	0	0	0	0	0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	422	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	592	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	592	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			11.7			xxxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

AM Cumulative Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #7 Pullman Street at Project Driveway 1

\*\*\*\*\*

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[ 13.7]

\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Rows include Pullman Street and Project Driveway 1 with various traffic parameters.

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns for Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns for Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns for Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

PM Cumulative Plus Project Conditions - ICU  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #7 Pullman Street at Project Driveway 1  
\*\*\*\*\*

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B[ 11.8]  
\*\*\*\*\*

Street Name:	Pullman Street						Project Driveway 1													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled						Uncontrolled						Stop Sign			Stop Sign				
Rights:	Include						Include						Include			Include				
Lanes:	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0

Volume Module:	Pullman Street NB			Pullman Street SB			Project Driveway 1 EB			Project Driveway 1 WB		
Base Vol:	0	271	0	0	93	96	53	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	271	0	0	93	96	53	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	271	0	0	93	96	53	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	285	0	0	98	101	56	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	285	0	0	98	101	56	0	0	0	0	0

Critical Gap Module:	Pullman Street NB			Pullman Street SB			Project Driveway 1 EB			Project Driveway 1 WB		
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:	Pullman Street NB			Pullman Street SB			Project Driveway 1 EB			Project Driveway 1 WB		
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	434	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	583	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	583	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	xxxx	xxxx	xxxx	xxxx	xxxx

Level of Service Module:	Pullman Street NB			Pullman Street SB			Project Driveway 1 EB			Project Driveway 1 WB					
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx			11.8			xxxxxx					
ApproachLOS:	*			*			B			*					

\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

AM General Plan Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Pullman Street at Project Driveway 1

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[ 13.7]

Table with columns for Street Name, Approach, Movement, Control, Rights, and Lanes for Pullman Street and Project Driveway 1.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Table for Critical Gap Module showing Critical Gp and FollowUpTim values.

Table for Capacity Module showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Table for Level Of Service Module showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

PM General Plan Plus Project Conditions - ICU
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Pullman Street at Project Driveway 1

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B [ 11.8]

Table with columns for Street Name, Approach, Movement, Control, Rights, and Lanes for Pullman Street and Project Driveway 1.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module table showing Critical Gp and FollowUpTim values.

Capacity Module table showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level of Service Module table showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.



## APPENDIX G

### INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS - CALTRANS

AM Existing Conditions - Caltrans
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #1 SR-55 SB Ramps at Baker Street
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.767
Loss Time (sec): 12 Average Delay (sec/veh): 28.6
Optimal Cycle: 68 Level Of Service: C
\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 SB Ramps and Baker Street with various movement and control details.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume. Rows include SR-55 SB Ramps and Baker Street.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. Rows include SR-55 SB Ramps and Baker Street.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ. Rows include SR-55 SB Ramps and Baker Street.

Note: Queue reported is the number of cars per lane.

AM Existing Conditions - Caltrans
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 SR-55 NB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.808
Loss Time (sec): 12 Average Delay (sec/veh): 31.1
Optimal Cycle: 76 Level Of Service: C

\*\*\*\*\*

Street Name: SR-55 NB Ramps Baker Street
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Permitted
Rights: Include Include Include Include
Min. Green: 24 24 24 0 0 0 14 14 0 0 14 14
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 1 0 1 0 0 0 0 0 1 0 2 0 0 0 0 2 0 1

Volume Module:
Base Vol: 265 563 406 0 0 0 415 1101 0 0 231 108
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 265 563 406 0 0 0 415 1101 0 0 231 108
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 265 563 406 0 0 0 415 1101 0 0 231 108
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume: 279 593 427 0 0 0 437 1159 0 0 243 114
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 279 593 427 0 0 0 437 1159 0 0 243 114
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 279 593 427 0 0 0 437 1159 0 0 243 114

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.87 0.87 0.87 1.00 1.00 1.00 0.95 0.95 1.00 1.00 0.95 0.85
Lanes: 0.43 0.91 0.66 0.00 0.00 0.00 1.00 2.00 0.00 0.00 2.00 1.00
Final Sat.: 714 1516 1093 0 0 0 1805 3610 0 0 3610 1615

Capacity Analysis Module:
Vol/Sat: 0.39 0.39 0.39 0.00 0.00 0.00 0.24 0.32 0.00 0.00 0.07 0.07
Crit Moves: \*\*\*\*
Green/Cycle: 0.44 0.44 0.44 0.00 0.00 0.00 0.27 0.43 0.00 0.00 0.16 0.16
Volume/Cap: 0.89 0.89 0.89 0.00 0.00 0.00 0.89 0.75 0.00 0.00 0.43 0.45
Delay/Veh: 30.4 30.4 30.4 0.0 0.0 0.0 49.4 23.8 0.0 0.0 34.9 35.8
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 30.4 30.4 30.4 0.0 0.0 0.0 49.4 23.8 0.0 0.0 34.9 35.8
LOS by Move: C C C A A A D C A A C D
HCM2kAvgQ: 21 21 21 0 0 0 15 16 0 0 4 3

\*\*\*\*\*

Note: Queue reported is the number of cars per lane.

PM Existing Conditions - Caltrans
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #1 SR-55 SB Ramps at Baker Street
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap.(X): 0.899
Loss Time (sec): 12 Average Delay (sec/veh): 31.4
Optimal Cycle: 103 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 SB Ramps and Baker Street with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

PM Existing Conditions - Caltrans
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #2 SR-55 NB Ramps at Baker Street
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap.(X): 0.810
Loss Time (sec): 12 Average Delay (sec/veh): 29.7
Optimal Cycle: 77 Level Of Service: C
\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 NB Ramps and Baker Street with sub-columns for North, South, East, and West Bound movements.

Volume Module: Table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume across various movement categories.

Saturation Flow Module: Table showing Sat/Lane, Adjustment, Lanes, Final Sat. for different movement types.

Capacity Analysis Module: Table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ for various movements.

Note: Queue reported is the number of cars per lane.

AM Existing Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #1 SR-55 SB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.769  
Loss Time (sec): 12 Average Delay (sec/veh): 28.0  
Optimal Cycle: 68 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 SB Ramps						Baker Street					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	21	21	21	0	14	14	14	14	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	2	0	1	0	0

Volume Module:

Base Vol:	0	0	0	457	141	255	0	1047	261	99	446	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	457	141	255	0	1047	261	99	446	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	457	141	255	0	1047	261	99	446	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	481	148	268	0	1102	275	104	469	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	481	148	268	0	1102	275	104	469	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	481	148	268	0	1102	275	104	469	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.83	0.83	0.83	1.00	0.95	0.85	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	0.36	0.64	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	1586	565	1021	0	3610	1615	1805	3610	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.30	0.26	0.26	0.00	0.31	0.17	0.06	0.13	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.35	0.35	0.35	0.00	0.36	0.36	0.16	0.51	0.00
Volume/Cap:	0.00	0.00	0.00	0.86	0.74	0.74	0.00	0.86	0.48	0.37	0.25	0.00
Delay/Veh:	0.0	0.0	0.0	34.0	27.9	27.9	0.0	32.7	23.1	34.9	12.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	34.0	27.9	27.9	0.0	32.7	23.1	34.9	12.4	0.0
LOS by Move:	A	A	A	C	C	C	A	C	C	C	B	A
HCM2kAvgQ:	0	0	0	16	12	12	0	18	6	3	4	0

Note: Queue reported is the number of cars per lane.

AM Existing Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 SR-55 NB Ramps at Baker Street

\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.817  
Loss Time (sec): 12 Average Delay (sec/veh): 31.2  
Optimal Cycle: 78 Level Of Service: C

\*\*\*\*\*

Street Name: SR-55 NB Ramps Baker Street  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	24	24	24	0	0	0	14	14	0	0	14	14
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	1	0	0	1	0	2	0	0	1

Volume Module:

Base Vol:	265	563	400	0	0	0	415	1086	0	0	264	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	265	563	400	0	0	0	415	1086	0	0	264	140
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	265	563	400	0	0	0	415	1086	0	0	264	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	279	593	421	0	0	0	437	1143	0	0	278	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	279	593	421	0	0	0	437	1143	0	0	278	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	279	593	421	0	0	0	437	1143	0	0	278	147

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.43	0.92	0.65	0.00	0.00	0.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	717	1524	1082	0	0	0	1805	3610	0	0	3610	1615

Capacity Analysis Module:

Vol/Sat:	0.39	0.39	0.39	0.00	0.00	0.00	0.24	0.32	0.00	0.00	0.08	0.09
Crit Moves:	****						****			****		
Green/Cycle:	0.44	0.44	0.44	0.00	0.00	0.00	0.27	0.43	0.00	0.00	0.16	0.16
Volume/Cap:	0.89	0.89	0.89	0.00	0.00	0.00	0.89	0.74	0.00	0.00	0.49	0.59
Delay/Veh:	30.2	30.2	30.2	0.0	0.0	0.0	48.9	23.5	0.0	0.0	35.4	38.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.2	30.2	30.2	0.0	0.0	0.0	48.9	23.5	0.0	0.0	35.4	38.9
LOS by Move:	C	C	C	A	A	A	D	C	A	A	D	D
HCM2kAvgQ:	21	21	21	0	0	0	15	15	0	0	4	5

\*\*\*\*\*

Note: Queue reported is the number of cars per lane.

PM Existing Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #1 SR-55 SB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.901  
Loss Time (sec): 12 Average Delay (sec/veh): 31.6  
Optimal Cycle: 104 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 SB Ramps						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	21	21	21	0	14	14	14	14	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	0	2	0	1	0

Volume Module:

Base Vol:	0	0	0	104	299	558	0	482	401	270	1057	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	104	299	558	0	482	401	270	1057	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	104	299	558	0	482	401	270	1057	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	109	315	587	0	507	422	284	1113	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	109	315	587	0	507	422	284	1113	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	109	315	587	0	507	422	284	1113	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.85	0.85	0.85	1.00	0.95	0.85	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	0.26	0.74	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	418	1203	1622	0	3610	1615	1805	3610	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.26	0.26	0.36	0.00	0.14	0.26	0.16	0.31	0.00
Crit Moves:						****			****	****		
Green/Cycle:	0.00	0.00	0.00	0.40	0.40	0.40	0.00	0.29	0.29	0.17	0.46	0.00
Volume/Cap:	0.00	0.00	0.00	0.65	0.65	0.90	0.00	0.48	0.90	0.90	0.66	0.00
Delay/Veh:	0.0	0.0	0.0	22.8	22.8	35.3	0.0	26.7	51.0	63.6	19.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.8	22.8	35.3	0.0	26.7	51.0	63.6	19.6	0.0
LOS by Move:	A	A	A	C	C	D	A	C	D	E	B	A
HCM2kAvgQ:	0	0	0	11	11	20	0	6	15	11	13	0

Note: Queue reported is the number of cars per lane.

PM Existing Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #2 SR-55 NB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.819  
Loss Time (sec): 12 Average Delay (sec/veh): 29.9  
Optimal Cycle: 78 Level Of Service: C  
\*\*\*\*\*

Street Name:		SR-55 NB Ramps						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	24	24	24	0	0	0	14	14	0	0	14	14	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	0	1	0	1	0	0	1	0	2	0	0	1	

Volume Module:

Base Vol:	300	275	247	0	0	0	255	333	0	0	1012	277
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	300	275	247	0	0	0	255	333	0	0	1012	277
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	300	275	247	0	0	0	255	333	0	0	1012	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	316	289	260	0	0	0	268	351	0	0	1065	292
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	316	289	260	0	0	0	268	351	0	0	1065	292
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	316	289	260	0	0	0	268	351	0	0	1065	292

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.73	0.67	0.60	0.00	0.00	0.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	1189	1090	979	0	0	0	1805	3610	0	0	3610	1615

Capacity Analysis Module:

Vol/Sat:	0.27	0.27	0.27	0.00	0.00	0.00	0.15	0.10	0.00	0.00	0.30	0.18
Crit Moves:	****						****			****		
Green/Cycle:	0.32	0.32	0.32	0.00	0.00	0.00	0.18	0.54	0.00	0.00	0.36	0.36
Volume/Cap:	0.82	0.82	0.82	0.00	0.00	0.00	0.82	0.18	0.00	0.00	0.82	0.50
Delay/Veh:	33.1	33.1	33.1	0.0	0.0	0.0	50.2	10.5	0.0	0.0	30.3	23.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.1	33.1	33.1	0.0	0.0	0.0	50.2	10.5	0.0	0.0	30.3	23.1
LOS by Move:	C	C	C	A	A	A	D	B	A	A	C	C
HCM2kAvgQ:	14	14	14	0	0	0	10	3	0	0	16	7

Note: Queue reported is the number of cars per lane.

AM Cumulative Conditions - Caltrans
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #1 SR-55 SB Ramps at Baker Street
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.790
Loss Time (sec): 12 Average Delay (sec/veh): 30.0
Optimal Cycle: 72 Level Of Service: C
\*\*\*\*\*

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include SR-55 SB Ramps and Baker Street with various movement details.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

AM Cumulative Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #2 SR-55 NB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.832  
Loss Time (sec): 12 Average Delay (sec/veh): 33.0  
Optimal Cycle: 82 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 NB Ramps						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	24	24	24	0	0	0	14	14	0	0	14	14
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	1	0	0	0	0	0	0	0	1

Volume Module:

Base Vol:	273	580	418	0	0	0	427	1134	0	0	238	111
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	273	580	418	0	0	0	427	1134	0	0	238	111
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	273	580	418	0	0	0	427	1134	0	0	238	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	287	611	440	0	0	0	449	1194	0	0	251	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	287	611	440	0	0	0	449	1194	0	0	251	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	287	611	440	0	0	0	449	1194	0	0	251	117

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.43	0.91	0.66	0.00	0.00	0.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	714	1517	1093	0	0	0	1805	3610	0	0	3610	1615

Capacity Analysis Module:

Vol/Sat:	0.40	0.40	0.40	0.00	0.00	0.00	0.25	0.33	0.00	0.00	0.07	0.07
Crit Moves:	****						****			****		
Green/Cycle:	0.44	0.44	0.44	0.00	0.00	0.00	0.27	0.43	0.00	0.00	0.16	0.16
Volume/Cap:	0.92	0.92	0.92	0.00	0.00	0.00	0.92	0.77	0.00	0.00	0.45	0.46
Delay/Veh:	33.0	33.0	33.0	0.0	0.0	0.0	53.7	24.6	0.0	0.0	35.0	35.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.0	33.0	33.0	0.0	0.0	0.0	53.7	24.6	0.0	0.0	35.0	35.9
LOS by Move:	C	C	C	A	A	A	D	C	A	A	D	D
HCM2kAvgQ:	23	23	23	0	0	0	16	16	0	0	4	3

Note: Queue reported is the number of cars per lane.

PM Cumulative Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #1 SR-55 SB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.926  
Loss Time (sec): 12 Average Delay (sec/veh): 33.3  
Optimal Cycle: 115 Level Of Service: C  
\*\*\*\*\*

Street Name: SR-55 SB Ramps				Baker Street				
Approach: North Bound		South Bound		East Bound		West Bound		
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	
Control:	Split Phase		Split Phase		Permitted		Protected	
Rights:	Include		Include		Include		Include	
Min. Green:	0 0 0	21 21 21	0 14 14	14 14 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	0 0 0 0 0	0 1 0 1 0	0 0 2 0 1	1 0 2 0 0				

Volume Module:

Base Vol:	0 0 0	82 308 575	0 484 413	275 1085 0
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	0 0 0	82 308 575	0 484 413	275 1085 0
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	0 0 0	82 308 575	0 484 413	275 1085 0
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.95 0.95 0.95	0.95 0.95 0.95	0.95 0.95 0.95	0.95 0.95 0.95
PHF Volume:	0 0 0	86 324 605	0 509 435	289 1142 0
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	0 0 0	86 324 605	0 509 435	289 1142 0
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	0 0 0	86 324 605	0 509 435	289 1142 0

Saturation Flow Module:

Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	1.00 1.00 1.00	0.85 0.85 0.85	1.00 0.95 0.85	0.95 0.95 1.00
Lanes:	0.00 0.00 0.00	0.21 0.79 1.00	0.00 2.00 1.00	1.00 2.00 0.00
Final Sat.:	0 0 0	341 1282 1623	0 3610 1615	1805 3610 0

Capacity Analysis Module:

Vol/Sat:	0.00 0.00 0.00	0.25 0.25 0.37	0.00 0.14 0.27	0.16 0.32 0.00
Crit Moves:		****	****	****
Green/Cycle:	0.00 0.00 0.00	0.40 0.40 0.40	0.00 0.29 0.29	0.17 0.46 0.00
Volume/Cap:	0.00 0.00 0.00	0.63 0.63 0.93	0.00 0.49 0.93	0.93 0.68 0.00
Delay/Veh:	0.0 0.0 0.0	22.3 22.3 38.6	0.0 26.7 55.4	68.9 20.1 0.0
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	0.0 0.0 0.0	22.3 22.3 38.6	0.0 26.7 55.4	68.9 20.1 0.0
LOS by Move:	A A A	C C D	A C E	E C A
HCM2kAvgQ:	0 0 0	10 10 21	0 6 16	12 14 0

Note: Queue reported is the number of cars per lane.

PM Cumulative Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #2 SR-55 NB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.835  
Loss Time (sec): 12 Average Delay (sec/veh): 30.9  
Optimal Cycle: 82 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 NB Ramps						Baker Street							
Approach:	North Bound			South Bound			East Bound			West Bound				
Movement:	L	T	R	L	T	R	L	T	R	L	T	R		
Control:	Split Phase			Split Phase			Protected			Permitted				
Rights:	Include			Include			Include			Include				
Min. Green:	24	24	24	0	0	0	14	14	0	0	14	14		
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lanes:	0	1	0	1	0	0	0	0	0	0	0	2	0	1

Volume Module:

Base Vol:	309	283	239	0	0	0	263	306	0	0	1035	281
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	309	283	239	0	0	0	263	306	0	0	1035	281
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	309	283	239	0	0	0	263	306	0	0	1035	281
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	325	298	252	0	0	0	277	322	0	0	1089	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	325	298	252	0	0	0	277	322	0	0	1089	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	325	298	252	0	0	0	277	322	0	0	1089	296

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.74	0.68	0.58	0.00	0.00	0.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	1213	1111	938	0	0	0	1805	3610	0	0	3610	1615

Capacity Analysis Module:

Vol/Sat:	0.27	0.27	0.27	0.00	0.00	0.00	0.15	0.09	0.00	0.00	0.30	0.18
Crit Moves:	****						****			****		
Green/Cycle:	0.32	0.32	0.32	0.00	0.00	0.00	0.18	0.55	0.00	0.00	0.36	0.36
Volume/Cap:	0.83	0.83	0.83	0.00	0.00	0.00	0.83	0.16	0.00	0.00	0.83	0.51
Delay/Veh:	34.2	34.2	34.2	0.0	0.0	0.0	51.9	10.3	0.0	0.0	31.1	23.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.2	34.2	34.2	0.0	0.0	0.0	51.9	10.3	0.0	0.0	31.1	23.2
LOS by Move:	C	C	C	A	A	A	D	B	A	A	C	C
HCM2kAvgQ:	14	14	14	0	0	0	10	2	0	0	17	7

Note: Queue reported is the number of cars per lane.

AM Cumulative Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #1 SR-55 SB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap.(X): 0.791  
Loss Time (sec): 12 Average Delay (sec/veh): 29.3  
Optimal Cycle: 73 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 SB Ramps						Baker Street					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	21	21	21	0	14	14	14	14	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	0	2	0	1	0

Volume Module:

Base Vol:	0	0	0	471	145	263	0	1078	269	101	459	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	471	145	263	0	1078	269	101	459	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	471	145	263	0	1078	269	101	459	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	496	153	277	0	1135	283	106	483	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	496	153	277	0	1135	283	106	483	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	496	153	277	0	1135	283	106	483	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.83	0.83	0.83	1.00	0.95	0.85	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	0.36	0.64	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	1586	564	1022	0	3610	1615	1805	3610	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.31	0.27	0.27	0.00	0.31	0.18	0.06	0.13	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.35	0.35	0.35	0.00	0.36	0.36	0.16	0.51	0.00
Volume/Cap:	0.00	0.00	0.00	0.88	0.76	0.76	0.00	0.88	0.49	0.38	0.26	0.00
Delay/Veh:	0.0	0.0	0.0	36.1	28.6	28.6	0.0	34.6	23.3	34.9	12.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	36.1	28.6	28.6	0.0	34.6	23.3	34.9	12.4	0.0
LOS by Move:	A	A	A	D	C	C	A	C	C	C	B	A
HCM2kAvgQ:	0	0	0	17	13	13	0	19	6	3	4	0

Note: Queue reported is the number of cars per lane.

AM Cumulative Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #2 SR-55 NB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.841  
Loss Time (sec): 12 Average Delay (sec/veh): 33.0  
Optimal Cycle: 84 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 NB Ramps						Baker Street					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	24	24	24	0	0	0	14	14	0	0	14	14
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	1	0	0	1	0	2	0	0	2

Volume Module:

Base Vol:	273	580	412	0	0	0	427	1119	0	0	271	143
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	273	580	412	0	0	0	427	1119	0	0	271	143
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	273	580	412	0	0	0	427	1119	0	0	271	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	287	611	434	0	0	0	449	1178	0	0	285	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	287	611	434	0	0	0	449	1178	0	0	285	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	287	611	434	0	0	0	449	1178	0	0	285	151

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.43	0.92	0.65	0.00	0.00	0.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	717	1524	1082	0	0	0	1805	3610	0	0	3610	1615

Capacity Analysis Module:

Vol/Sat:	0.40	0.40	0.40	0.00	0.00	0.00	0.25	0.33	0.00	0.00	0.08	0.09
Crit Moves:	****						****			****		
Green/Cycle:	0.44	0.44	0.44	0.00	0.00	0.00	0.27	0.43	0.00	0.00	0.16	0.16
Volume/Cap:	0.91	0.91	0.91	0.00	0.00	0.00	0.91	0.76	0.00	0.00	0.51	0.60
Delay/Veh:	32.8	32.8	32.8	0.0	0.0	0.0	53.2	24.1	0.0	0.0	35.6	39.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.8	32.8	32.8	0.0	0.0	0.0	53.2	24.1	0.0	0.0	35.6	39.3
LOS by Move:	C	C	C	A	A	A	D	C	A	A	D	D
HCM2kAvgQ:	23	23	23	0	0	0	16	16	0	0	4	5

Note: Queue reported is the number of cars per lane.

PM Cumulative Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #1 SR-55 SB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.928  
Loss Time (sec): 12 Average Delay (sec/veh): 33.5  
Optimal Cycle: 117 Level Of Service: C

\*\*\*\*\*

Street Name: SR-55 SB Ramps Baker Street

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	21	21	21	0	14	14	14	14	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	0	2	0	1	0

Volume Module:

Base Vol:	0	0	0	106	308	575	0	496	413	278	1089	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	106	308	575	0	496	413	278	1089	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	106	308	575	0	496	413	278	1089	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	112	324	605	0	522	435	293	1146	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	112	324	605	0	522	435	293	1146	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	112	324	605	0	522	435	293	1146	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.85	0.85	0.85	1.00	0.95	0.85	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	0.26	0.74	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	415	1206	1622	0	3610	1615	1805	3610	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.27	0.27	0.37	0.00	0.14	0.27	0.16	0.32	0.00
Crit Moves:						****			****	****		
Green/Cycle:	0.00	0.00	0.00	0.40	0.40	0.40	0.00	0.29	0.29	0.17	0.46	0.00
Volume/Cap:	0.00	0.00	0.00	0.67	0.67	0.93	0.00	0.50	0.93	0.93	0.68	0.00
Delay/Veh:	0.0	0.0	0.0	23.1	23.1	38.7	0.0	26.9	55.9	69.2	20.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	23.1	23.1	38.7	0.0	26.9	55.9	69.2	20.1	0.0
LOS by Move:	A	A	A	C	C	D	A	C	E	E	C	A
HCM2kAvgQ:	0	0	0	11	11	22	0	7	16	12	14	0

Note: Queue reported is the number of cars per lane.

PM Cumulative Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #2 SR-55 NB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.843  
Loss Time (sec): 12 Average Delay (sec/veh): 31.1  
Optimal Cycle: 85 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 NB Ramps						Baker Street													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Split Phase			Split Phase			Protected			Permitted										
Rights:	Include			Include			Include			Include										
Min. Green:	24	24	24	0	0	0	14	14	0	0	14	14								
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0								
Lanes:	0	1	0	1	0	0	0	0	0	0	1	0	2	0	0	0	0	2	0	1

Volume Module:

Base Vol:	309	283	254	0	0	0	263	342	0	0	1042	285
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	309	283	254	0	0	0	263	342	0	0	1042	285
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	309	283	254	0	0	0	263	342	0	0	1042	285
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	325	298	267	0	0	0	277	360	0	0	1097	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	325	298	267	0	0	0	277	360	0	0	1097	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	325	298	267	0	0	0	277	360	0	0	1097	300

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.73	0.67	0.60	0.00	0.00	0.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	1190	1090	978	0	0	0	1805	3610	0	0	3610	1615

Capacity Analysis Module:

Vol/Sat:	0.27	0.27	0.27	0.00	0.00	0.00	0.15	0.10	0.00	0.00	0.30	0.19
Crit Moves:	****						****			****		
Green/Cycle:	0.32	0.32	0.32	0.00	0.00	0.00	0.18	0.54	0.00	0.00	0.36	0.36
Volume/Cap:	0.84	0.84	0.84	0.00	0.00	0.00	0.84	0.18	0.00	0.00	0.84	0.52
Delay/Veh:	34.6	34.6	34.6	0.0	0.0	0.0	53.2	10.5	0.0	0.0	31.6	23.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.6	34.6	34.6	0.0	0.0	0.0	53.2	10.5	0.0	0.0	31.6	23.4
LOS by Move:	C	C	C	A	A	A	D	B	A	A	C	C
HCM2kAvgQ:	15	15	15	0	0	0	10	3	0	0	17	7

Note: Queue reported is the number of cars per lane.

AM General Plan Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #1 SR-55 SB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.775  
Loss Time (sec): 12 Average Delay (sec/veh): 26.1  
Optimal Cycle: 69 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 SB Ramps						Baker Street					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	21	21	21	0	14	14	14	14	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	1	0	0	1	1	1	0

Volume Module:												
Base Vol:	0	0	0	420	120	270	0	1130	360	90	650	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	420	120	270	0	1130	360	90	650	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	420	120	270	0	1130	360	90	650	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	442	126	0	0	1189	379	95	684	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	442	126	0	0	1189	379	95	684	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	442	126	0	0	1189	379	95	684	0

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.84	0.84	1.00	1.00	0.92	0.92	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	1594	1594	1900	0	3480	1740	1805	3610	0

Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.28	0.08	0.00	0.00	0.34	0.22	0.05	0.19	0.00
Crit Moves:				****				****			****	
Green/Cycle:	0.00	0.00	0.00	0.32	0.32	0.00	0.00	0.39	0.39	0.16	0.55	0.00
Volume/Cap:	0.00	0.00	0.00	0.87	0.25	0.00	0.00	0.87	0.55	0.34	0.35	0.00
Delay/Veh:	0.0	0.0	0.0	41.1	22.7	0.0	0.0	30.2	21.5	34.6	11.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	41.1	22.7	0.0	0.0	30.2	21.5	34.6	11.4	0.0
LOS by Move:	A	A	A	D	C	A	A	C	C	C	B	A
HCM2kAvgQ:	0	0	0	15	3	0	0	19	9	3	6	0

Note: Queue reported is the number of cars per lane.

AM General Plan Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #2 SR-55 NB Ramps at Baker Street

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Cycle (sec): 90 Critical Vol./Cap.(X): 0.932  
Loss Time (sec): 12 Average Delay (sec/veh): 34.2  
Optimal Cycle: 119 Level Of Service: C

\*\*\*\*\*

Street Name:	SR-55 NB Ramps						Baker Street					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	24	24	24	0	0	0	14	14	0	0	14	14
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	0	1	0	0	2	0	2	0	0	2

Volume Module:

Base Vol:	330	510	730	0	0	0	640	890	0	0	490	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	510	730	0	0	0	640	890	0	0	490	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	330	510	730	0	0	0	640	890	0	0	490	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	347	537	768	0	0	0	674	937	0	0	516	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	347	537	768	0	0	0	674	937	0	0	516	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	347	537	768	0	0	0	674	937	0	0	516	63

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	1.00	1.00	1.00	0.92	0.95	1.00	1.00	0.95	0.85
Lanes:	1.00	1.00	1.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	1627	1627	1627	0	0	0	3502	3610	0	0	3610	1615

Capacity Analysis Module:

Vol/Sat:	0.21	0.33	0.47	0.00	0.00	0.00	0.19	0.26	0.00	0.00	0.14	0.04
Crit Moves:	****						****			****		
Green/Cycle:	0.51	0.51	0.51	0.00	0.00	0.00	0.21	0.36	0.00	0.00	0.16	0.16
Volume/Cap:	0.42	0.65	0.93	0.00	0.00	0.00	0.93	0.72	0.00	0.00	0.92	0.25
Delay/Veh:	14.1	17.1	30.7	0.0	0.0	0.0	54.5	26.8	0.0	0.0	57.6	33.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.1	17.1	30.7	0.0	0.0	0.0	54.5	26.8	0.0	0.0	57.6	33.9
LOS by Move:	B	B	C	A	A	A	D	C	A	A	E	C
HCM2kAvgQ:	6	12	26	0	0	0	14	13	0	0	11	2

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Note: Queue reported is the number of cars per lane.

PM General Plan Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #1 SR-55 SB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.684  
Loss Time (sec): 12 Average Delay (sec/veh): 24.4  
Optimal Cycle: 61 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 SB Ramps						Baker Street					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	21	21	21	0	14	14	14	14	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	1	0	0	1	1	1	0

Volume Module:

Base Vol:	0	0	0	80	100	650	0	630	610	490	1420	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	80	100	650	0	630	610	490	1420	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	80	100	650	0	630	610	490	1420	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	84	105	0	0	663	642	516	1495	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	84	105	0	0	663	642	516	1495	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	84	105	0	0	663	642	516	1495	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.89	0.89	1.00	1.00	0.88	0.88	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	0.89	1.11	1.00	0.00	1.52	1.48	1.00	2.00	0.00
Final Sat.:	0	0	0	1497	1871	1900	0	2548	2467	1805	3610	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.26	0.26	0.29	0.41	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.21	0.21	0.00	0.00	0.32	0.32	0.35	0.67	0.00
Volume/Cap:	0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.81	0.81	0.82	0.62	0.00
Delay/Veh:	0.0	0.0	0.0	33.3	33.3	0.0	0.0	34.7	34.7	37.6	9.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	33.3	33.3	0.0	0.0	34.7	34.7	37.6	9.8	0.0
LOS by Move:	A	A	A	C	C	A	A	C	C	D	A	A
HCM2kAvgQ:	0	0	0	3	3	0	0	15	15	17	14	0

Note: Queue reported is the number of cars per lane.

PM General Plan Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #2 SR-55 NB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.758  
Loss Time (sec): 12 Average Delay (sec/veh): 25.5  
Optimal Cycle: 69 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 NB Ramps						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	24	24	24	0	0	0	14	14	0	0	14	14
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	0	1	0	0	2	0	2	0	0	2

Volume Module:

Base Vol:	370	200	140	0	0	0	290	530	0	0	1460	410
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	370	200	140	0	0	0	290	530	0	0	1460	410
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	370	200	140	0	0	0	290	530	0	0	1460	410
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	389	211	147	0	0	0	305	558	0	0	1537	432
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	389	211	147	0	0	0	305	558	0	0	1537	432
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	389	211	147	0	0	0	305	558	0	0	1537	432

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.85	0.85	1.00	1.00	1.00	0.92	0.95	1.00	1.00	0.95	0.85
Lanes:	1.56	0.85	0.59	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	2524	1364	955	0	0	0	3502	3610	0	0	3610	1615

Capacity Analysis Module:

Vol/Sat:	0.15	0.15	0.15	0.00	0.00	0.00	0.09	0.15	0.00	0.00	0.43	0.27
Crit Moves:	****						****			****		
Green/Cycle:	0.24	0.24	0.24	0.00	0.00	0.00	0.14	0.64	0.00	0.00	0.50	0.50
Volume/Cap:	0.64	0.64	0.64	0.00	0.00	0.00	0.62	0.24	0.00	0.00	0.85	0.53
Delay/Veh:	35.4	35.4	35.4	0.0	0.0	0.0	43.0	7.7	0.0	0.0	25.9	17.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.4	35.4	35.4	0.0	0.0	0.0	43.0	7.7	0.0	0.0	25.9	17.8
LOS by Move:	D	D	D	A	A	A	D	A	A	A	C	B
HCM2kAvgQ:	8	8	8	0	0	0	6	4	0	0	24	9

Note: Queue reported is the number of cars per lane.

AM General Plan Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #1 SR-55 SB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.777  
Loss Time (sec): 12 Average Delay (sec/veh): 25.4  
Optimal Cycle: 70 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 SB Ramps						Baker Street					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	21	21	21	0	14	14	14	14	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	1	0	0	1	1	1	0

Volume Module:

Base Vol:	0	0	0	407	120	270	0	1129	360	108	664	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	407	120	270	0	1129	360	108	664	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	407	120	270	0	1129	360	108	664	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	428	126	0	0	1188	379	114	699	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	428	126	0	0	1188	379	114	699	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	428	126	0	0	1188	379	114	699	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.84	0.84	1.00	1.00	0.92	0.92	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	1596	1596	1900	0	3480	1740	1805	3610	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.27	0.08	0.00	0.00	0.34	0.22	0.06	0.19	0.00	
Crit Moves:				****				****			****		
Green/Cycle:	0.00	0.00	0.00	0.31	0.31	0.00	0.00	0.40	0.40	0.16	0.55	0.00	
Volume/Cap:	0.00	0.00	0.00	0.86	0.25	0.00	0.00	0.86	0.55	0.40	0.35	0.00	
Delay/Veh:	0.0	0.0	0.0	40.1	23.1	0.0	0.0	29.1	21.1	35.2	11.2	0.0	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	0.0	40.1	23.1	0.0	0.0	29.1	21.1	35.2	11.2	0.0	
LOS by Move:	A	A	A	D	C	A	A	C	C	D	B	A	
HCM2kAvgQ:	0	0	0	15	3	0	0	19	9	3	6	0	

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Note: Queue reported is the number of cars per lane.

AM General Plan Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #2 SR-55 NB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.939  
Loss Time (sec): 12 Average Delay (sec/veh): 35.0  
Optimal Cycle: 122 Level Of Service: C  
\*\*\*\*\*

Street Name:		SR-55 NB Ramps						Baker Street									
Approach:	North Bound			South Bound			East Bound			West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Split Phase			Split Phase			Protected			Permitted							
Rights:	Include			Include			Include			Include							
Min. Green:	24	24	24	0	0	0	14	14	0	0	14	14					
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0					
Lanes:	1	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	1

Volume Module:

Base Vol:	330	510	724	0	0	0	640	875	0	0	523	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	510	724	0	0	0	640	875	0	0	523	92
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	330	510	724	0	0	0	640	875	0	0	523	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	347	537	762	0	0	0	674	921	0	0	551	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	347	537	762	0	0	0	674	921	0	0	551	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	347	537	762	0	0	0	674	921	0	0	551	97

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	1.00	1.00	1.00	0.92	0.95	1.00	1.00	0.95	0.85
Lanes:	1.00	1.00	1.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	1627	1627	1627	0	0	0	3502	3610	0	0	3610	1615

Capacity Analysis Module:

Vol/Sat:	0.21	0.33	0.47	0.00	0.00	0.00	0.19	0.26	0.00	0.00	0.15	0.06
Crit Moves:	****						****			****		
Green/Cycle:	0.50	0.50	0.50	0.00	0.00	0.00	0.21	0.37	0.00	0.00	0.16	0.16
Volume/Cap:	0.43	0.66	0.94	0.00	0.00	0.00	0.94	0.69	0.00	0.00	0.94	0.37
Delay/Veh:	14.4	17.5	31.5	0.0	0.0	0.0	55.2	25.8	0.0	0.0	60.3	34.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.4	17.5	31.5	0.0	0.0	0.0	55.2	25.8	0.0	0.0	60.3	34.5
LOS by Move:	B	B	C	A	A	A	E	C	A	A	E	C
HCM2kAvgQ:	7	12	26	0	0	0	14	12	0	0	12	3

Note: Queue reported is the number of cars per lane.

PM General Plan Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #1 SR-55 SB Ramps at Baker Street  
\*\*\*\*\*

Cycle (sec): 110 Critical Vol./Cap. (X): 0.691  
Loss Time (sec): 12 Average Delay (sec/veh): 24.7  
Optimal Cycle: 61 Level Of Service: C

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Street Name:	SR-55 SB Ramps						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	21	21	21	0	14	14	14	14	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	1	0	0	1	1	1	0

Volume Module:

Base Vol:	0	0	0	104	100	650	0	642	610	493	1424	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	104	100	650	0	642	610	493	1424	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	104	100	650	0	642	610	493	1424	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	109	105	0	0	676	642	519	1499	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	109	105	0	0	676	642	519	1499	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	109	105	0	0	676	642	519	1499	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.88	0.88	1.00	1.00	0.88	0.88	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.54	1.46	1.00	2.00	0.00
Final Sat.:	0	0	0	1668	1668	1900	0	2574	2446	1805	3610	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.07	0.06	0.00	0.00	0.26	0.26	0.29	0.42	0.00
Crit Moves:				****				****				****
Green/Cycle:	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.33	0.33	0.37	0.70	0.00
Volume/Cap:	0.00	0.00	0.00	0.34	0.33	0.00	0.00	0.79	0.79	0.79	0.59	0.00
Delay/Veh:	0.0	0.0	0.0	38.9	38.7	0.0	0.0	35.6	35.6	37.2	8.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.9	38.7	0.0	0.0	35.6	35.6	37.2	8.8	0.0
LOS by Move:	A	A	A	D	D	A	A	D	D	D	A	A
HCM2kAvgQ:	0	0	0	4	3	0	0	16	16	17	14	0

Note: Queue reported is the number of cars per lane.

PM General Plan Plus Project Conditions - Caltrans  
125 Baker Street Apartments, Costa Mesa

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #2 SR-55 NB Ramps at Baker Street  
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Cycle (sec): 110 Critical Vol./Cap. (X): 0.755  
Loss Time (sec): 12 Average Delay (sec/veh): 25.5  
Optimal Cycle: 70 Level Of Service: C  
\*\*\*\*\*

Street Name:	SR-55 NB Ramps						Baker Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	24	24	24	0	0	0	14	14	0	0	14	14
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	0	1	0	0	2	0	2	0	0	1

Volume Module:

Base Vol:	370	200	155	0	0	0	290	566	0	0	1467	414
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	370	200	155	0	0	0	290	566	0	0	1467	414
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	370	200	155	0	0	0	290	566	0	0	1467	414
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	389	211	163	0	0	0	305	596	0	0	1544	436
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	389	211	163	0	0	0	305	596	0	0	1544	436
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	389	211	163	0	0	0	305	596	0	0	1544	436

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.85	0.85	1.00	1.00	1.00	0.92	0.95	1.00	1.00	0.95	0.85
Lanes:	1.53	0.83	0.64	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	2472	1336	1035	0	0	0	3502	3610	0	0	3610	1615

Capacity Analysis Module:

Vol/Sat:	0.16	0.16	0.16	0.00	0.00	0.00	0.09	0.17	0.00	0.00	0.43	0.27
Crit Moves:	****						****			****		
Green/Cycle:	0.22	0.22	0.22	0.00	0.00	0.00	0.13	0.67	0.00	0.00	0.55	0.55
Volume/Cap:	0.72	0.72	0.72	0.00	0.00	0.00	0.68	0.25	0.00	0.00	0.78	0.49
Delay/Veh:	42.4	42.4	42.4	0.0	0.0	0.0	50.3	7.1	0.0	0.0	22.0	16.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.4	42.4	42.4	0.0	0.0	0.0	50.3	7.1	0.0	0.0	22.0	16.0
LOS by Move:	D	D	D	A	A	A	D	A	A	A	C	B
HCM2kAvgQ:	10	10	10	0	0	0	6	4	0	0	23	9

Note: Queue reported is the number of cars per lane.

