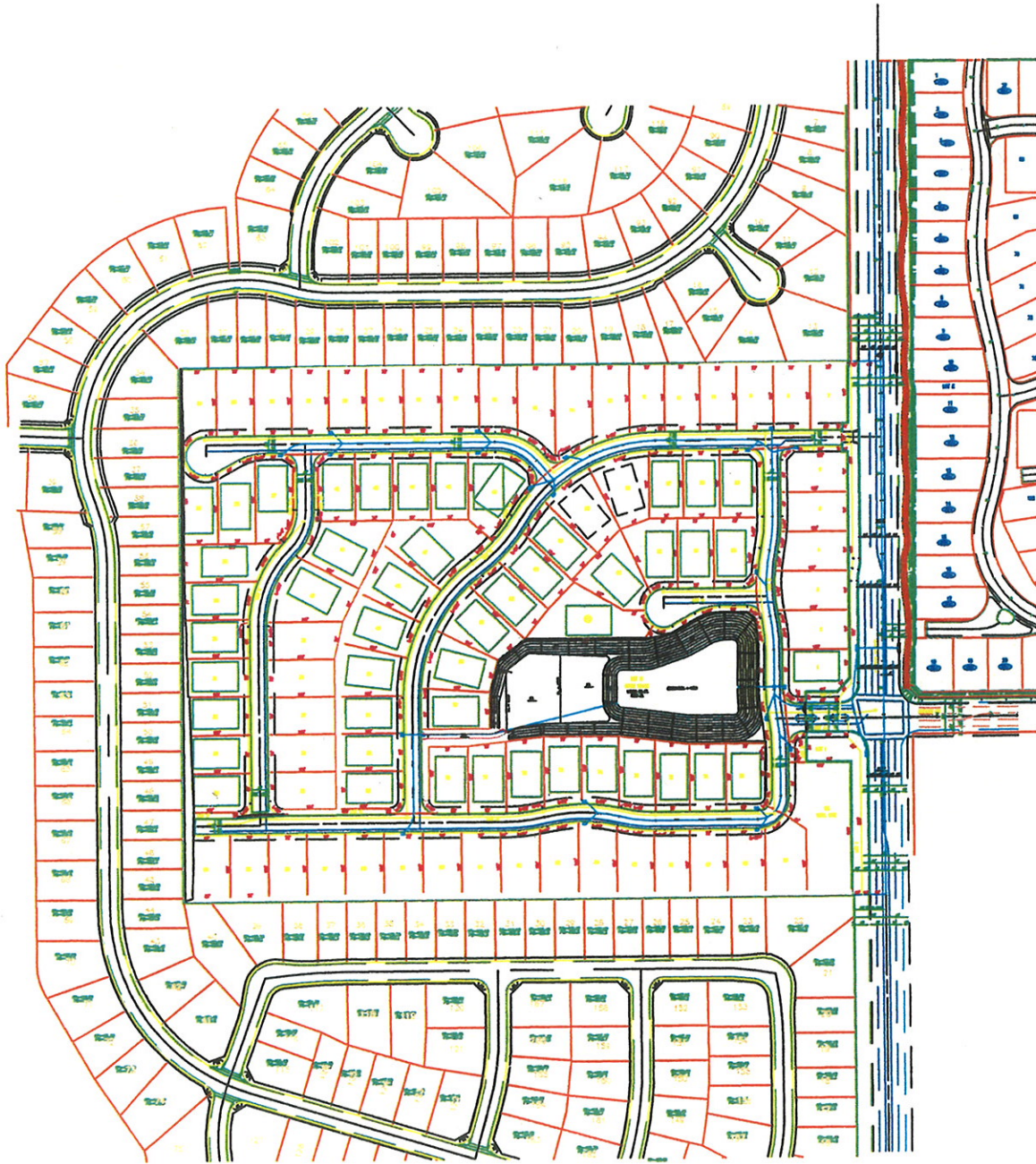


TTM 31434  
TRAFFIC IMPACT STUDY (REVISED 09/02/08)  
City of La Quinta, California



received

SEP 4 2008

City of La Quinta  
Planning Department

City of La Quinta  
**WORK SCOPE FOR TRAFFIC IMPACT ANALYSIS**

PROJECT NAME <b>TTM 31434 Development</b>	LOCATION <b>West of Monroe Street at 61st</b>	DATE <b>6/20/08</b>
DEVELOPER <b>Monroe Dates</b>	CONSULTANT <b>RK Engineering Group</b>	CITY DEPARTMENT <b>Transportation</b>
DEVELOPER CONTACT <b>Craig A. Knight</b>	CONSULTANT CONTACT <b>Gene Kon</b>	CITY CONTACT <b>Rusty Beardley</b>
DEVELOPER PHONE NO. <b>801-573-1604</b>	CONSULTANT PHONE NUMBER <b>949-474-0809</b>	CITY PHONE NO. <b>760-777-7056</b>

<b>STUDY AREA BOUNDARIES</b>	NORTH <b>58th Street</b>	SOUTH <b>62nd Street</b>
	EAST <b>East of Monroe St</b>	WEST <b>W of Monroe St.</b>

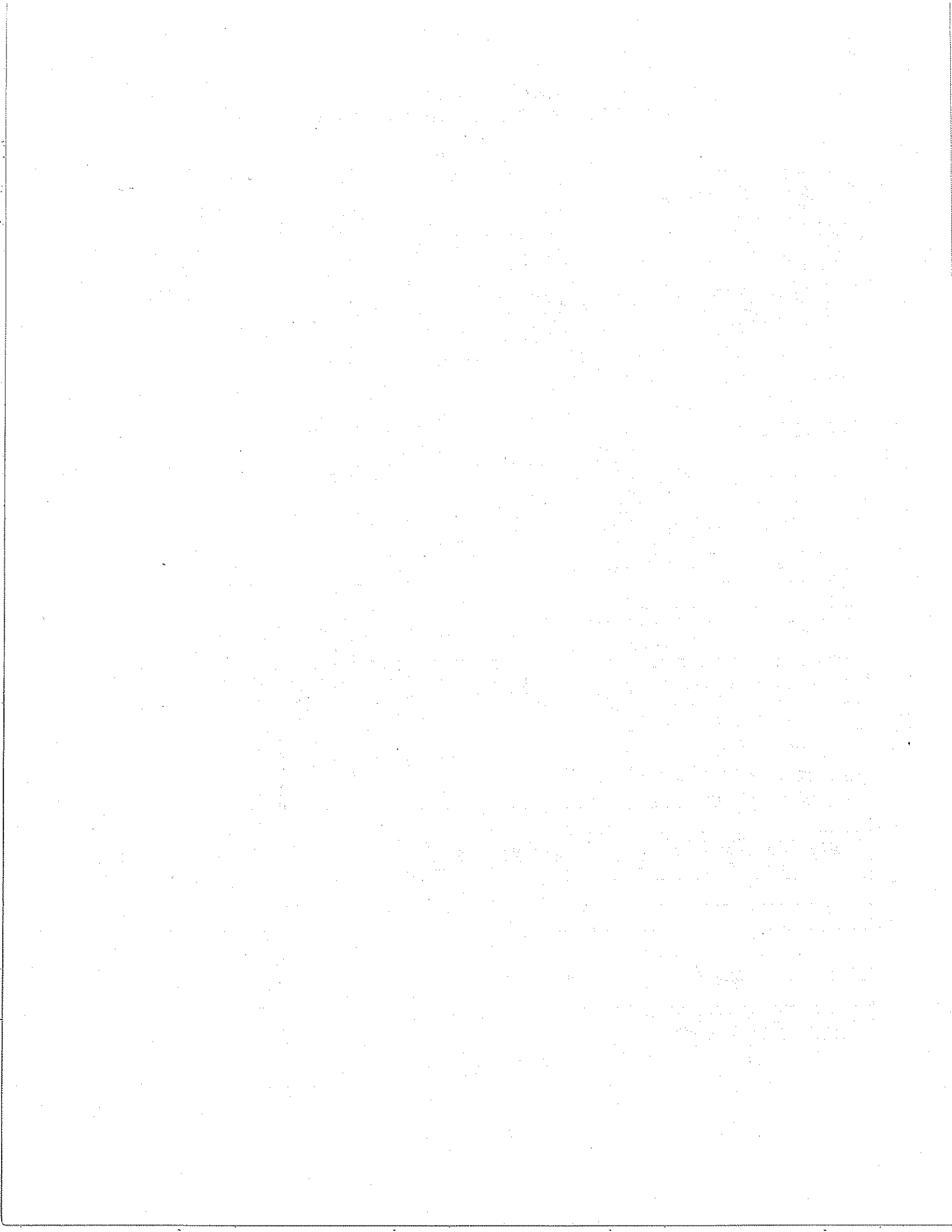
TYPE OF APPLICATION		ITEMS TO BE ADDRESSED IN THE TRAFFIC ANALYSIS	SITE SPECIFIC IMPACTS	STUDY AREA IMPACTS	RECOMMENDING METHOD
			Yes / No	Yes / No	
CHANGE OF ZONE		LAND USE DESCRIPTION	Yes	No	
TENTATIVE TRACT MAP	<input checked="" type="checkbox"/>	TRIP GENERATION (+REDUCTION FACTORS)	Yes	Yes	ITE (7th Edition or other)
TENTATIVE PARCEL MAP		TRIP DISTRIBUTION/ASSIGNMENT	Yes	Yes	
S.D.P.		TDM REDUCTIONS	No	No	
SPECIFIC PLAN		PARKING ANALYSIS (+SHARED PARKING)	No	No	
BUILDING PERMIT		SAFETY ANALYSIS	No	No	
MODIFICATION		TRAFFIC SIGNAL WARRANTS	Yes	Yes	
LAND DIVISION		INTERNAL CIRCULATION	No	Yes	
OTHER		ACCESS DESIGN/AUXILIARY LANES	Yes	Yes	Prepares on traffic impacts

INTERSECTION TO BE ANALYZED	ANALYSIS PERIODS				TRAFFIC VOLUMES (PEAK HOUR)			NOTES
	A.M	NOON	P.M.	OTHER	EXISTING	+PROJ	+CUMUL.	
<b>Monroe St (NS) at 58th (EW)</b>	X		X		X	X	X	
<b>Monroe St (NS) at 60th (EW)</b>	X		X		X	X	X	
<b>Monroe St (NS) at 61st (EW)</b>	X		X		X	X	X	
<b>Monroe St (NS) at 62nd (EW)</b>	X		X		X	X	X	

ROADWAY SEGMENTS TO BE ANALYZED	TRAFFIC VOLUMES (ADT)			NOTES
	EXISTING	+PROJ	+CUMUL	

ATTACHMENTS	YES	NO
		X

CITY APPROVED \_\_\_\_\_ DATE \_\_\_\_\_



**Exhibit B**

**SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY**

This letter acknowledges the Riverside County Transportation Department requirements for traffic impact analysis of the following project. The analysis must follow the Riverside County Transportation Department Traffic Study Guidelines dated April 2008

Case No. \_\_\_\_\_  
 Related Cases - \_\_\_\_\_  
     SP No. \_\_\_\_\_  
     EIR No. \_\_\_\_\_  
     GPA No. \_\_\_\_\_  
     CZ No. \_\_\_\_\_  
 Project Name: TTM 31434 Single Family Residential Development  
 Project Address: West of Monroe Street at 61st Street  
 Project Description: \_\_\_\_\_

	<u>Consultant</u>	<u>Developer</u>
Name:	<u>RK ENGINEERING GROUP, INC</u>	<u>MONROE DATES, LLC</u>
Address:	<u>3991 MacArthur Boulevard, Suite 310</u> <u>Newport Beach, CA 92660</u>	<u>1387 Ambassador Way</u> <u>Salt Lake City, UT 84108</u>
Telephone:	<u>(949) 474-0809</u> <u>Gene Kim</u>	<u>(801) 573-1604</u> <u>Craig A. Knight</u>

**A. Trip Generation Source:** (ITE 7<sup>th</sup> Edition or other)

Current GP Land Use	<u>N/A</u>	Proposed Land Use	<u>SFR</u>
Current Zoning	<u>N/A</u>	Proposed Zoning	<u>Residential</u>
Current Trip Generation		Proposed Trip Generation	
	In      Out      Total	In      Out      Total	
AM Trips	<u>N/A</u> <u>N/A</u> <u>N/A</u>	<u>18</u> <u>53</u> <u>71</u>	
PM Trips	<u>N/A</u> <u>N/A</u> <u>N/A</u>	<u>60</u> <u>35</u> <u>95</u>	

Internal Trip Allowance     Yes       No      ( \_\_\_\_\_ % Trip Discount)  
 Pass-By Trip Allowance     Yes       No      ( \_\_\_\_\_ % Trip Discount)

A passby trip discount of 25% is allowed for appropriate land uses. The passby trips at adjacent study area intersections and project driveways shall be indicated on a report figure.

**B. Trip Geographic Distribution:**    N 30 %    S 0 %    E 30 %    W 40 %  
 (attached exhibit for detailed assignment)

**C. Background Traffic**

Project Build-out Year      2012      Annual Ambient Growth Rate: 8 %  
 Phase Year(s) \_\_\_\_\_  
 Other area projects to be analyzed: To be provided by RCTD

Model/Forecast methodology      Build up method

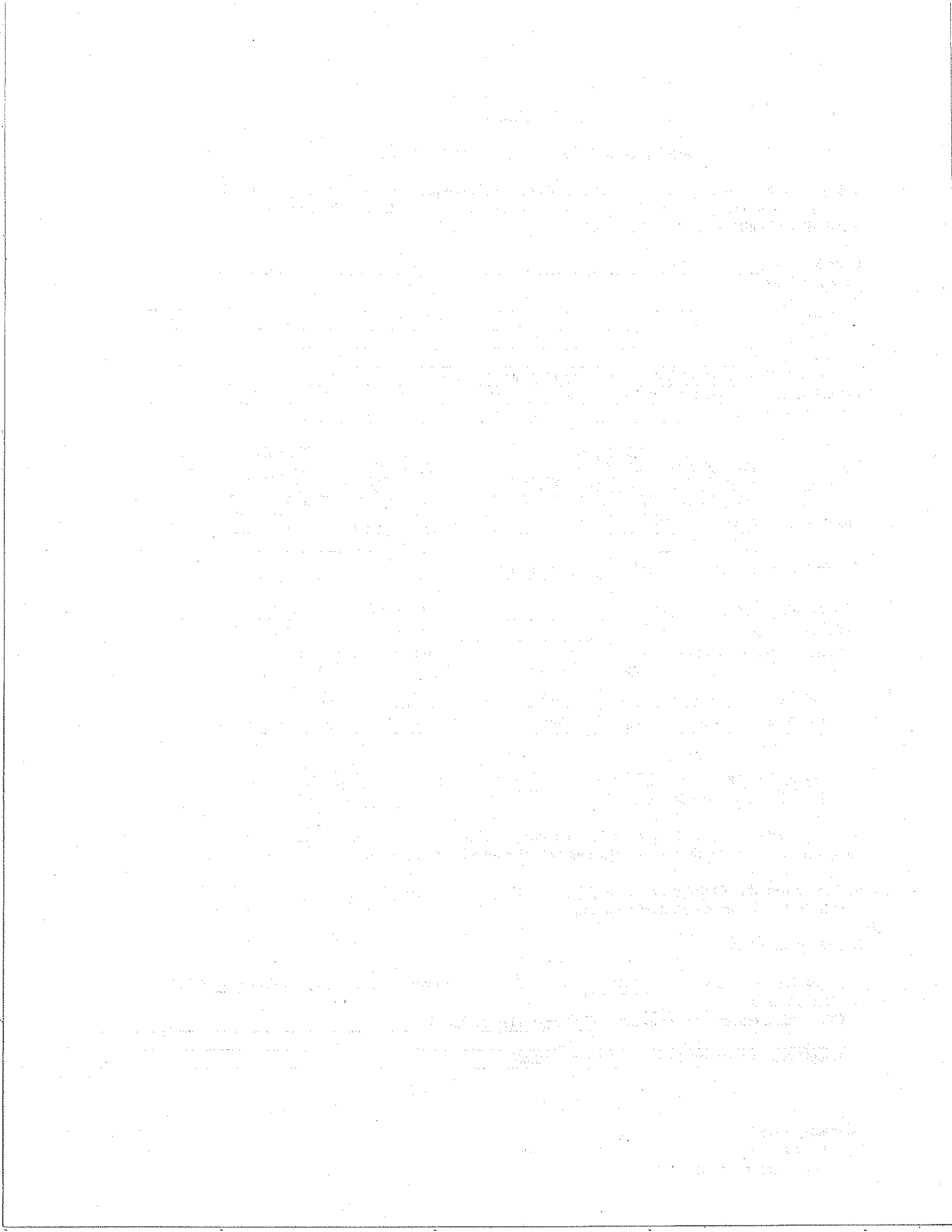


Exhibit B - Scoping Agreement - Page 2

D. Study intersections: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)

- |  |           |
|--|-----------|
| 1. <u>Monroe Street (NS) at 58th Street (EW)</u> | 6. _____  |
| 2. <u>Monroe Street (NS) at 60th Street (EW)</u> | 7. _____  |
| 3. <u>Monroe Street (NS) at 61st Street (EW)</u> | 8. _____  |
| 4. <u>Monroe Street (NS) at 62nd Street (EW)</u> | 9. _____  |
| 5. _____   | 10. _____ |

E. Study Roadway Segments: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)

- |          |           |
|----------|-----------|
| 1. _____ | 6. _____  |
| 2. _____ | 7. _____  |
| 3. _____ | 8. _____  |
| 4. _____ | 9. _____  |
| 5. _____ | 10. _____ |

F. Other Jurisdictional Impacts:

Is this project within a City's Sphere of Influence or one-mile radius of City boundaries?  Yes  NO

If so, name of City Jurisdiction: La Quinta

G. Site Plan (please attach reduced copy)

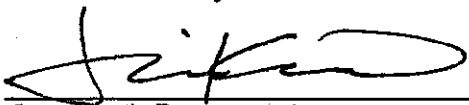
G. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by Transportation Department)

H. Existing Conditions

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.

Date of counts New counts to be provided

Recommended by:

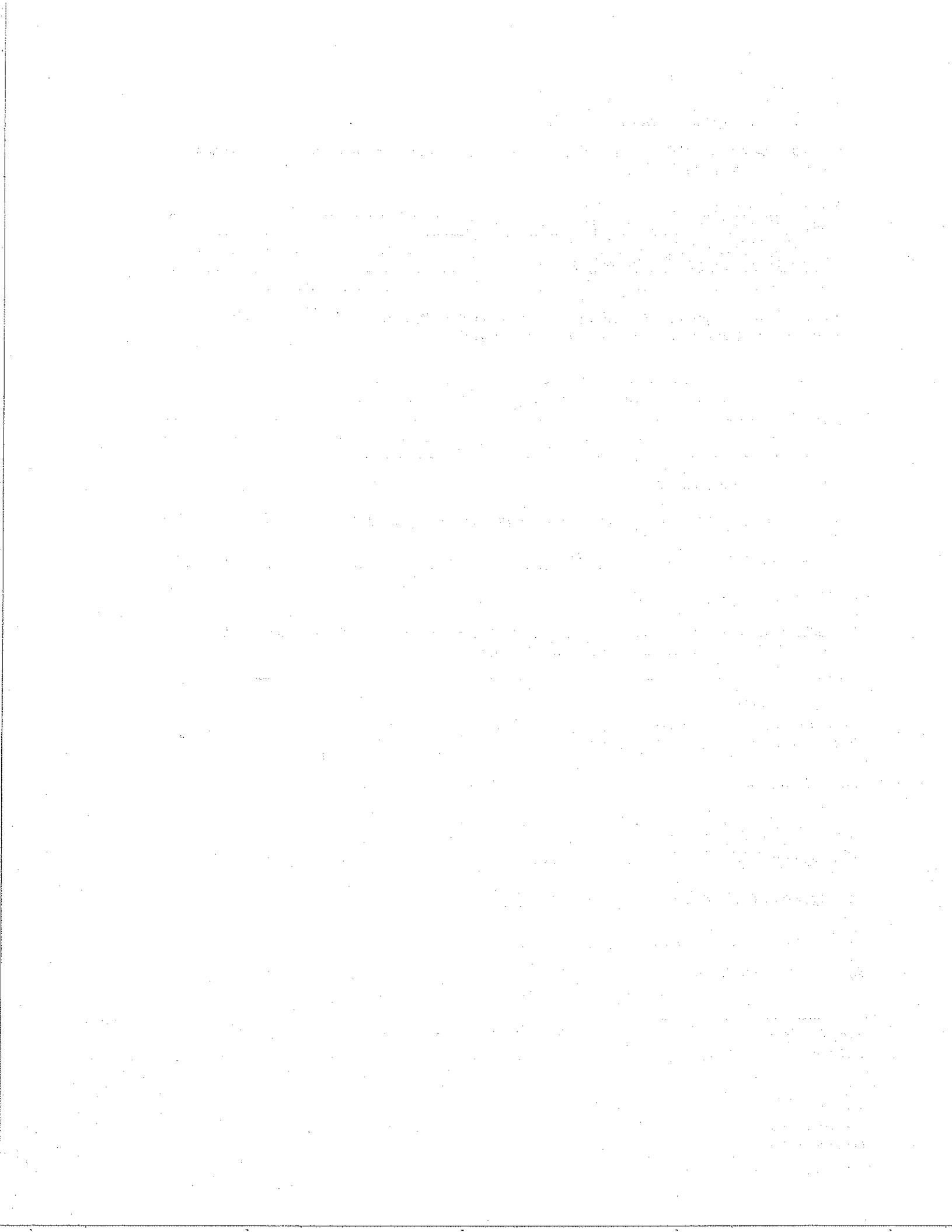
  
\_\_\_\_\_  
Consultant's Representative      6/17/08  
Date

Scoping Agreement Submitted on 6/17/08

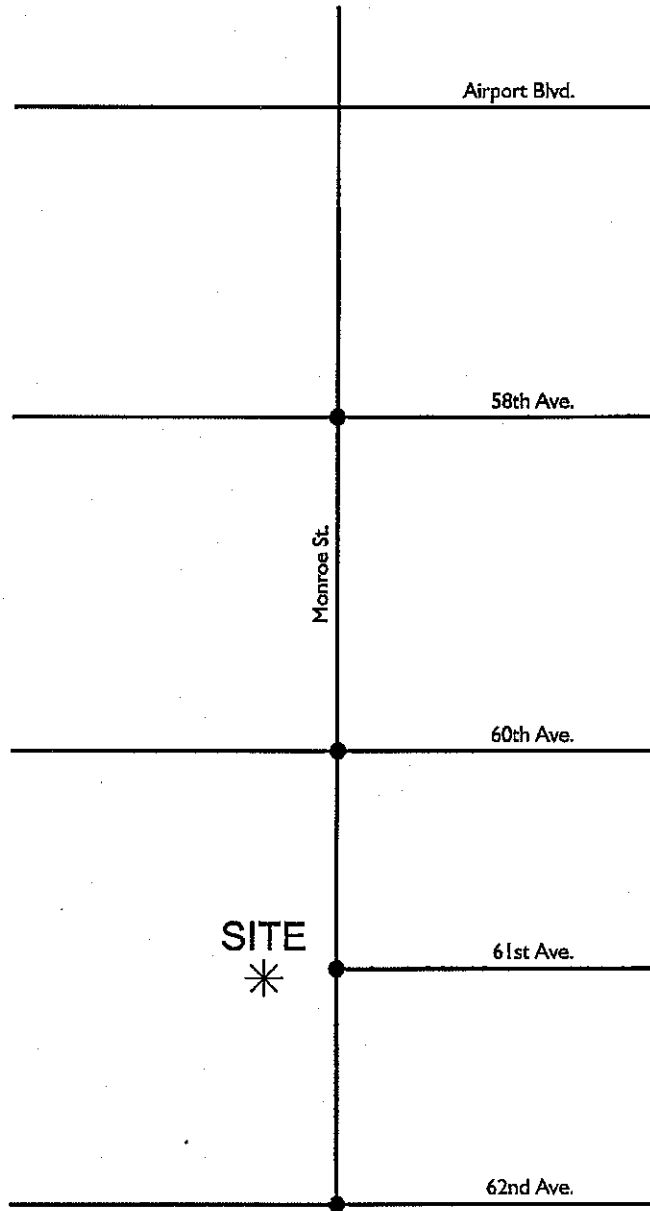
Revised on \_\_\_\_\_

Approved Scoping Agreement:

\_\_\_\_\_  
Riverside County Transportation      \_\_\_\_\_  
Department      Date



# Exhibit A Location Map



**Legend:**

● = Study Area Intersection





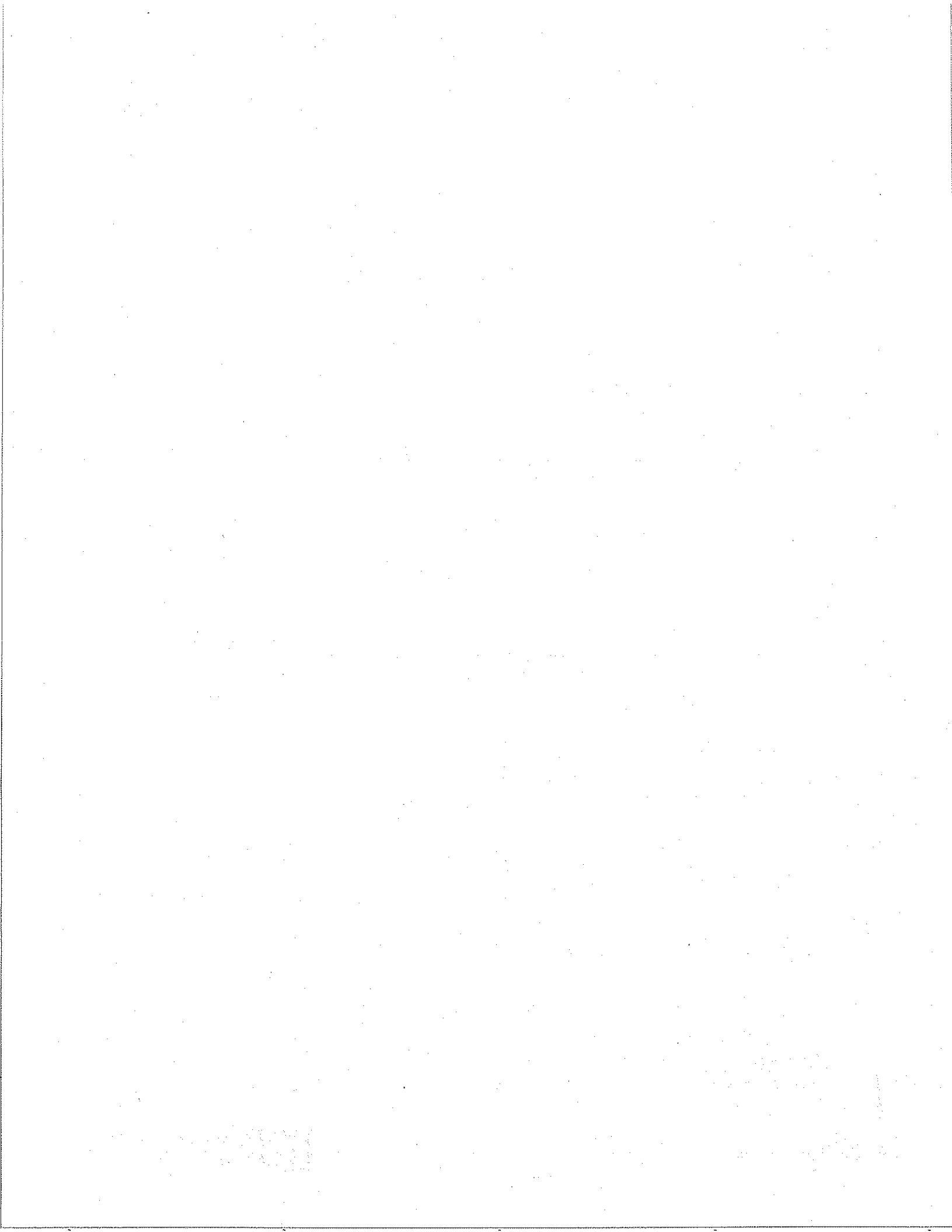
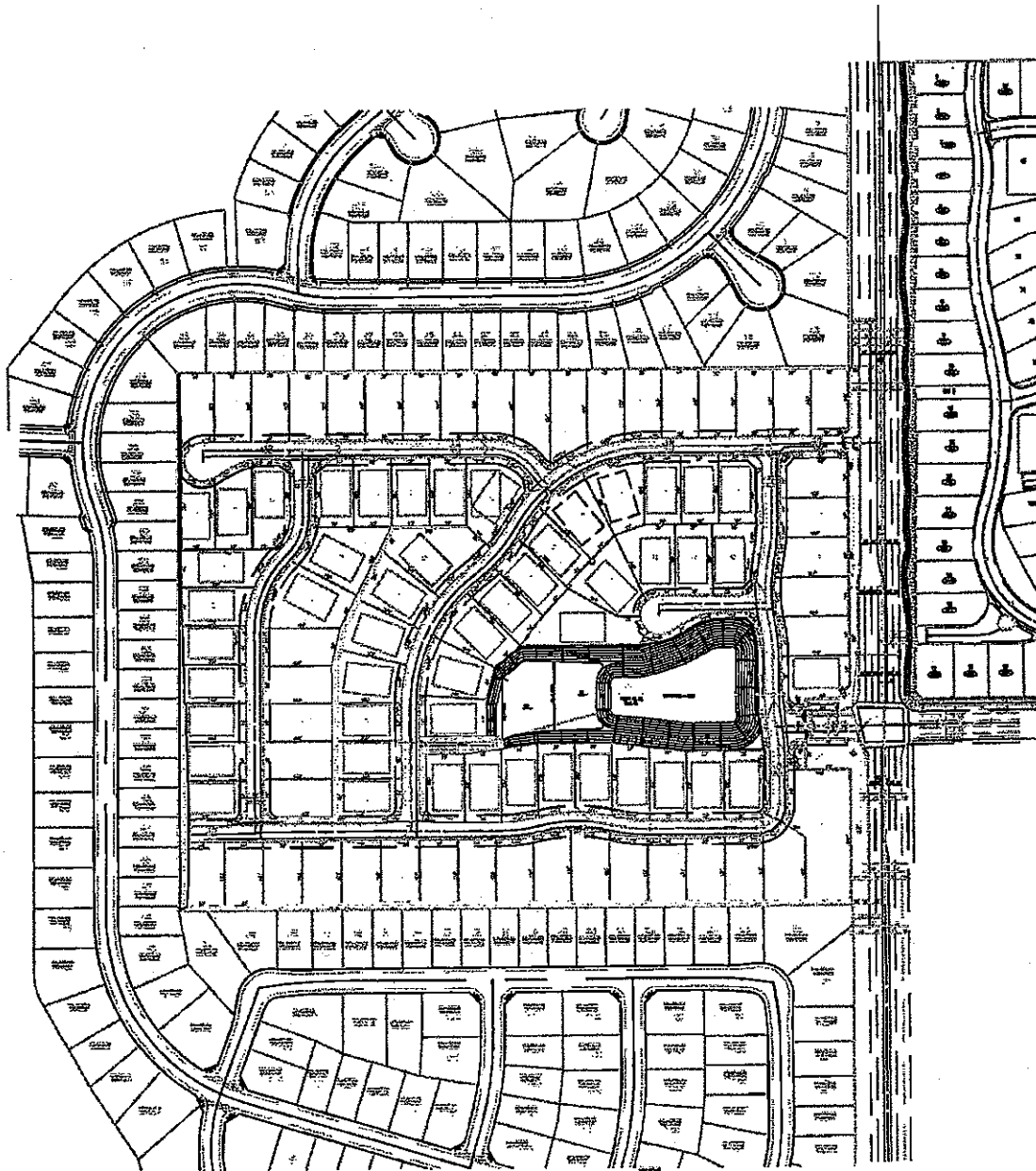
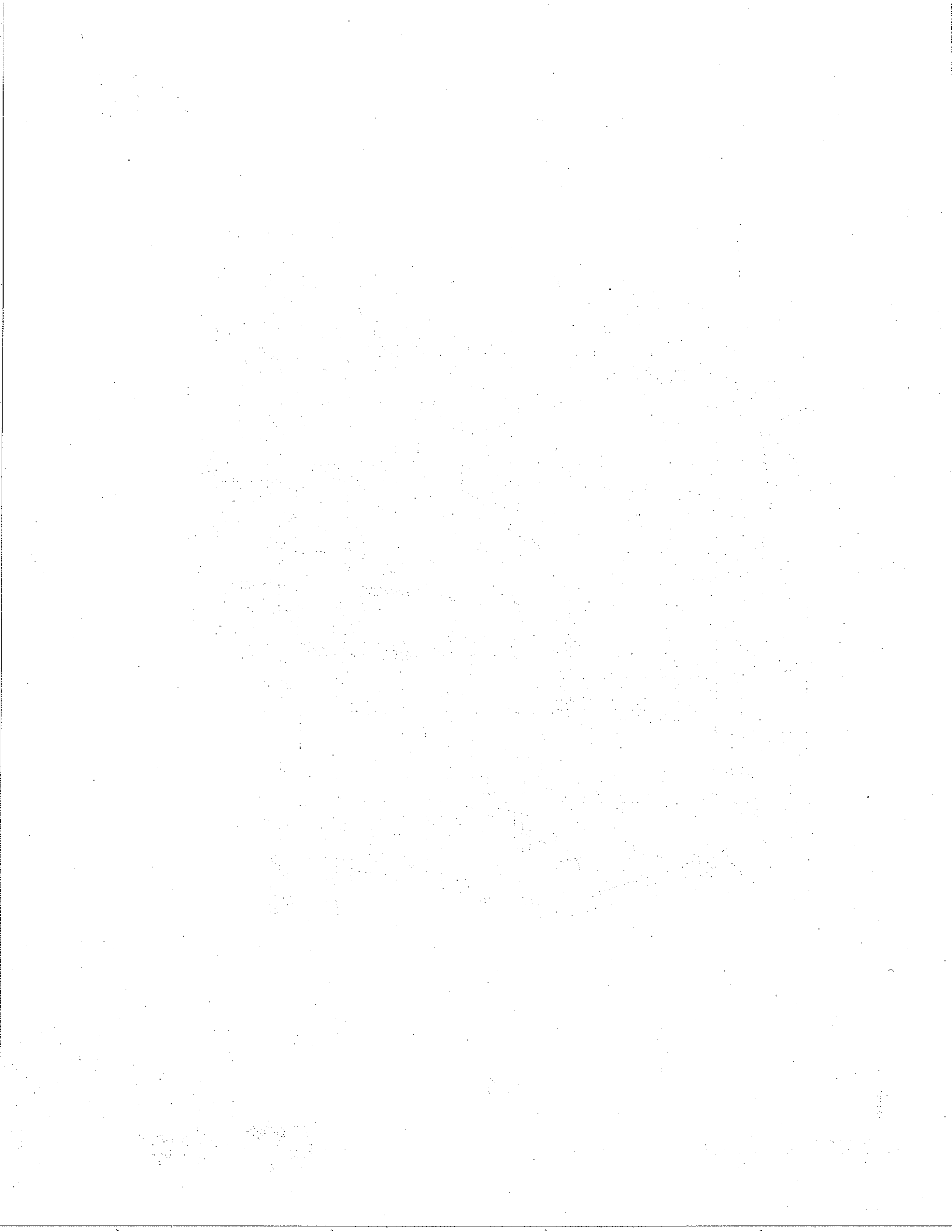
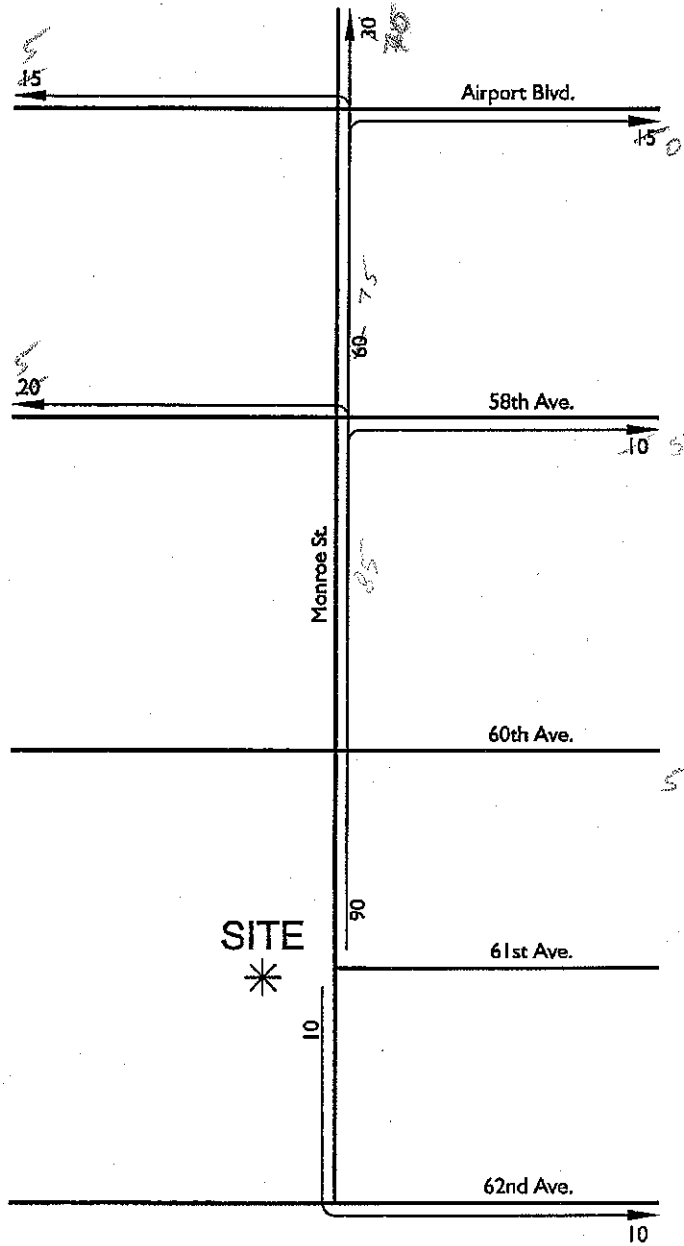


Exhibit B  
Site Plan





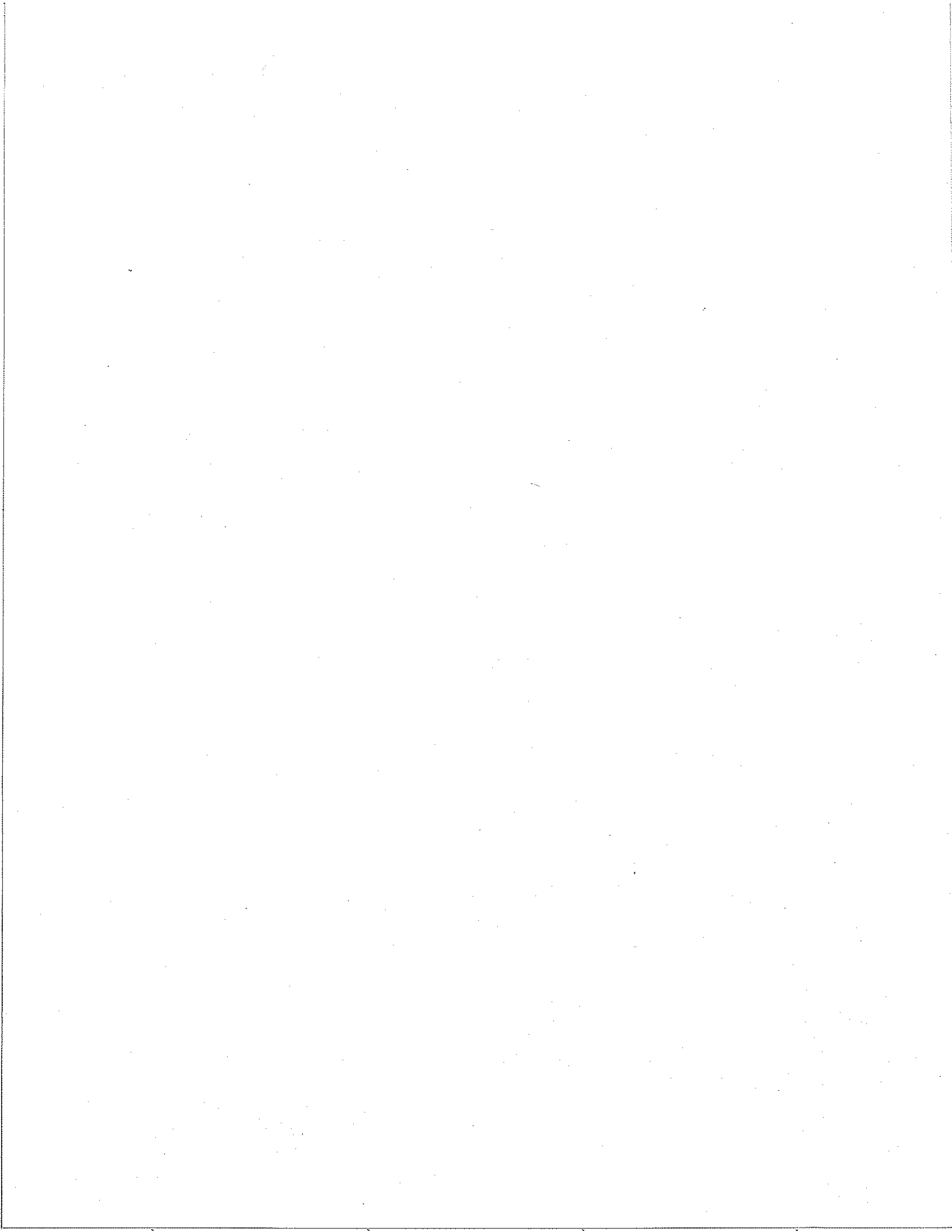
# Exhibit C Project Trip Distribution



### Legend:

10 = Percent to/from Project



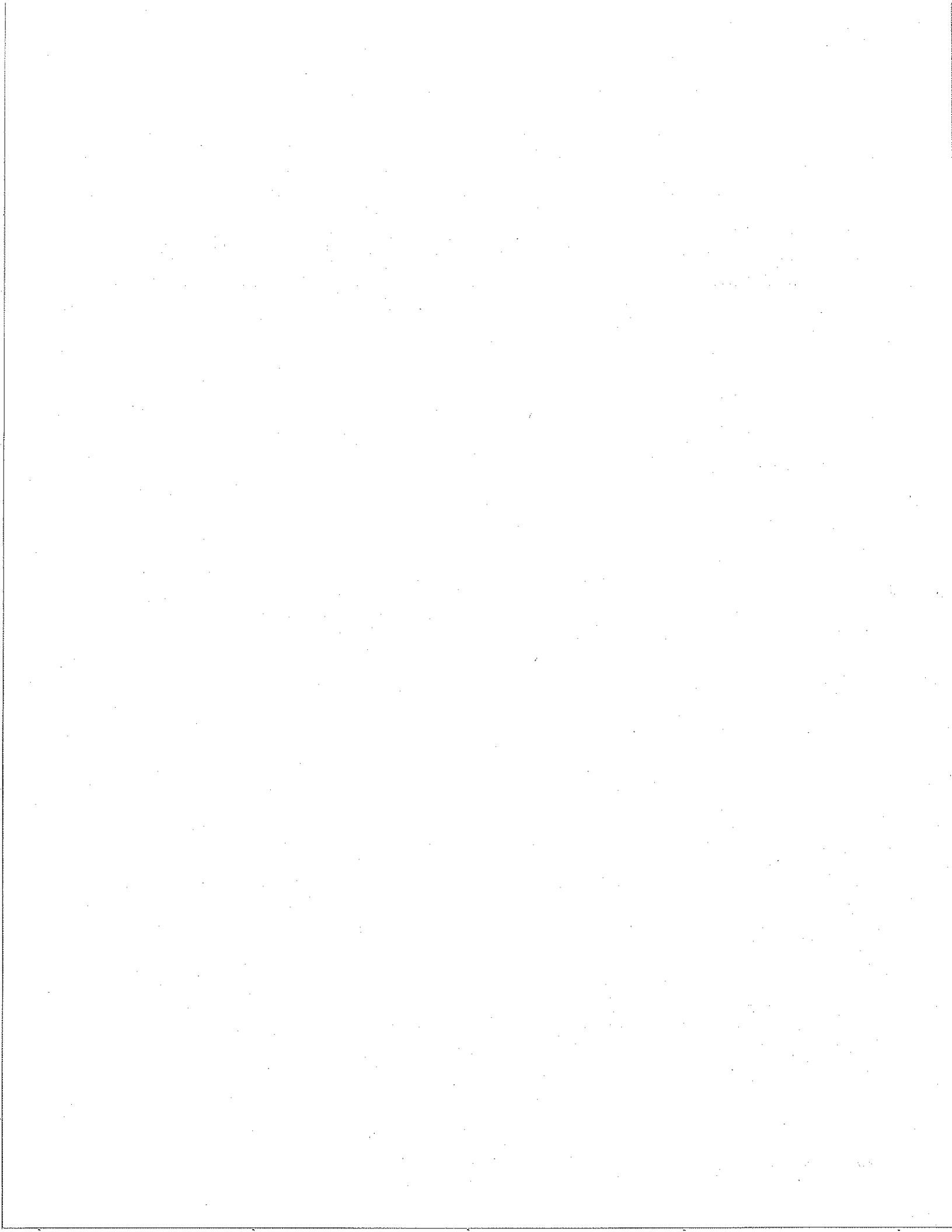


**TABLE 2**  
**Trip Generation Rates<sup>1</sup>**

Land Use	ITE Code	Units <sup>2</sup>	Peak Hour				Daily
			AM		PM		
			In	Out	In	Out	
Single Family Residential	416	DU	0.19	0.56	0.64	0.37	9.57

<sup>1</sup> Source: Institute of Transportation Engineers (ITE), *Trip Generation, 7th Edition*, 2003.

<sup>2</sup> DU = Dwelling Units



**TABLE 3**  
**Project Trip Generation**

Land Use	ITE Code	Quantity	Units <sup>1</sup>	Peak Hour						Daily
				AM			PM			
				In	Out	Total	In	Out	Total	
Campground/Recreational Vehicle Park	210	94	DU	18	53	71	60	35	95	900
<b>Net Total</b>				<b>18</b>	<b>53</b>	<b>71</b>	<b>60</b>	<b>35</b>	<b>95</b>	<b>900</b>

---

<sup>1</sup> DU = Dwelling Units





September 2, 2008

Mr. Craig A. Knight  
MONROE DATES, LLC  
1387 Ambassador Way  
Salt Lake City, Utah 84108

**Subject: TTM 31434 Single Family Residential Development Traffic Impact Study  
(Revised 09/02/08)**

Dear Mr. Knight:

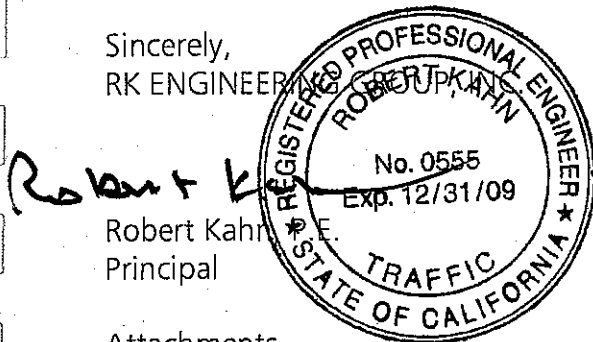
RK ENGINEERING GROUP, INC. (RK) is pleased to submit this traffic impact study of the proposed TTM 31434 single family residential development project. The proposed project is located on the west side of Monroe Street and 61<sup>st</sup> Avenue in the City of La Quinta. The project will consist of 94 single family residential dwelling units. The project will have one (1) full access driveway onto 61<sup>st</sup> Avenue.

The purpose of this traffic impact study is to review existing and future conditions with and without the proposed future development. Future conditions include Project Buildout (Year 2012) projections.

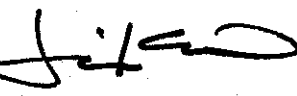
Based upon our analysis of existing and future traffic volumes, all study area intersections are projected to perform at satisfactory levels of service with the recommended improvements. Therefore, the project can be accommodated in the City of La Quinta with the recommendations included in this report.

RK is pleased to provide this traffic study for the proposed TTM 31434 single family residential development located in the City of La Quinta. If you have any questions regarding this study, or would like further review, please do not hesitate to call us at (949) 474-0809.

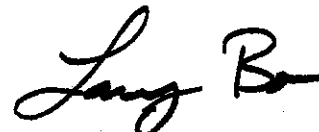
Sincerely,  
RK ENGINEERING



Robert Kahn, E.I.T.  
Principal



Gene Kim, E.I.T.  
Engineer I

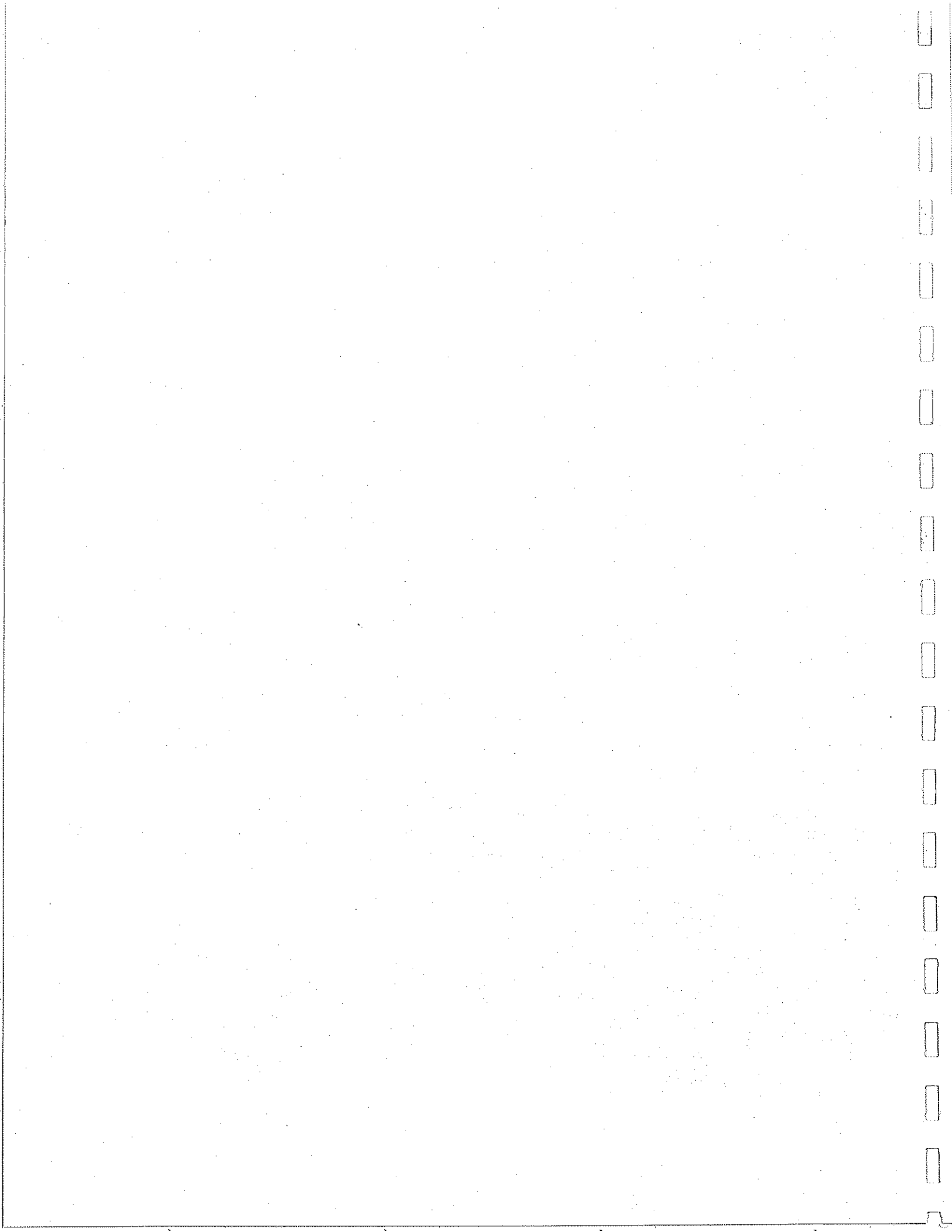


Larry Boer  
Engineer I

Attachments

RK:GK:nq/RK6653  
JN:2078-2008-01

3991 macarthur boulevard, suite 310  
newport beach, california 92660  
tel 949.474.0809 fax 949.474.0902  
<http://www.rkengineer.com>



**TTM 31434 SINGLE FAMILY RESIDENCES  
TRAFFIC IMPACT STUDY (Revised 09/02/08)  
City of La Quinta, California**

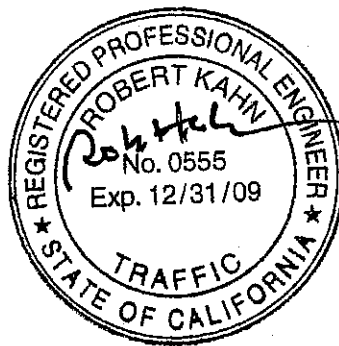
**Prepared for:**

Mr. Craig A. Knight  
MONROE DATES, LLC  
1387 Ambassador Way  
Salt Lake City, Utah 84108

**Prepared by:**

RK ENGINEERING GROUP, INC.  
3991 MacArthur Boulevard, Suite 310  
Newport Beach, CA 92660

**Robert Kahn, P.E.  
Gene Kim, E.I.T.  
Larry Boer**

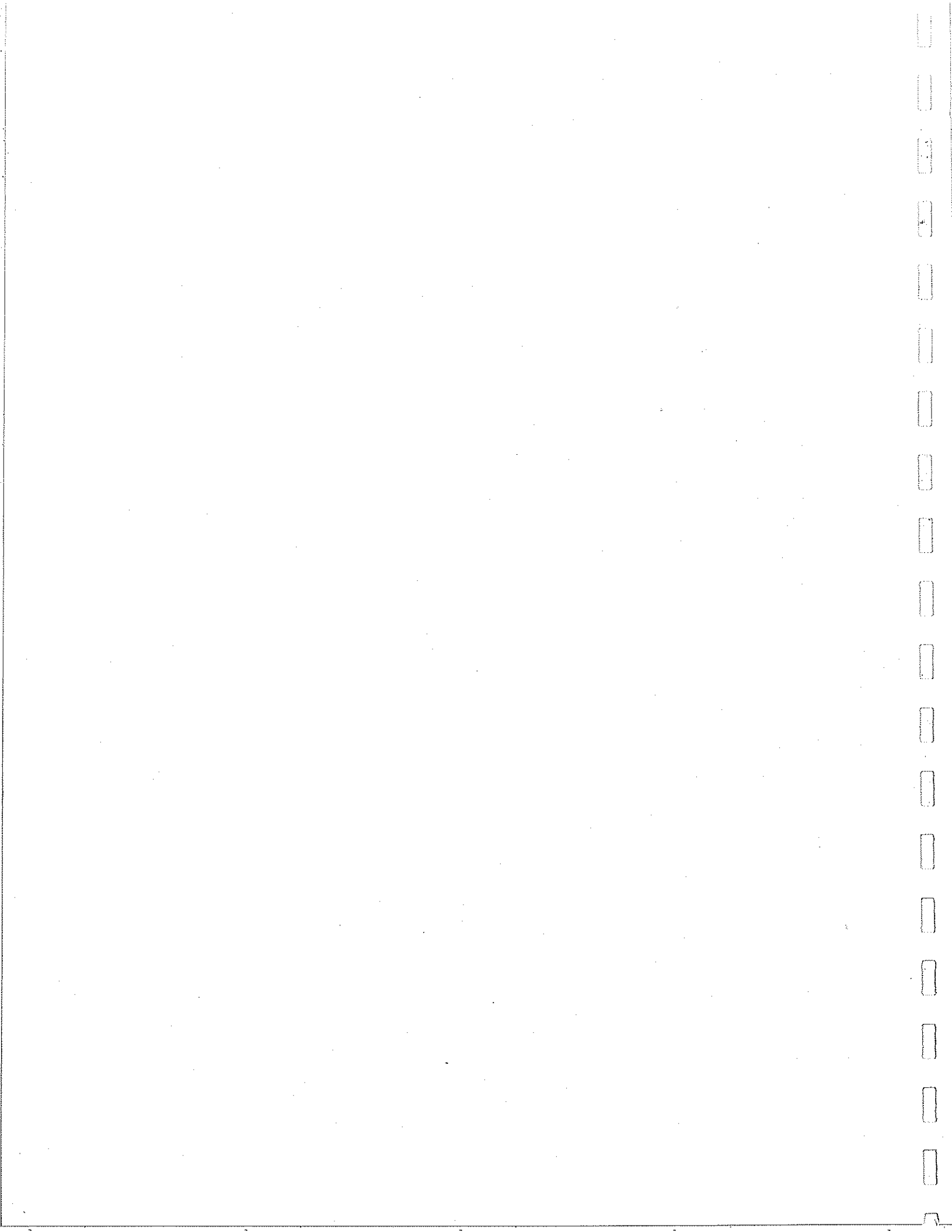


**September 2, 2008**

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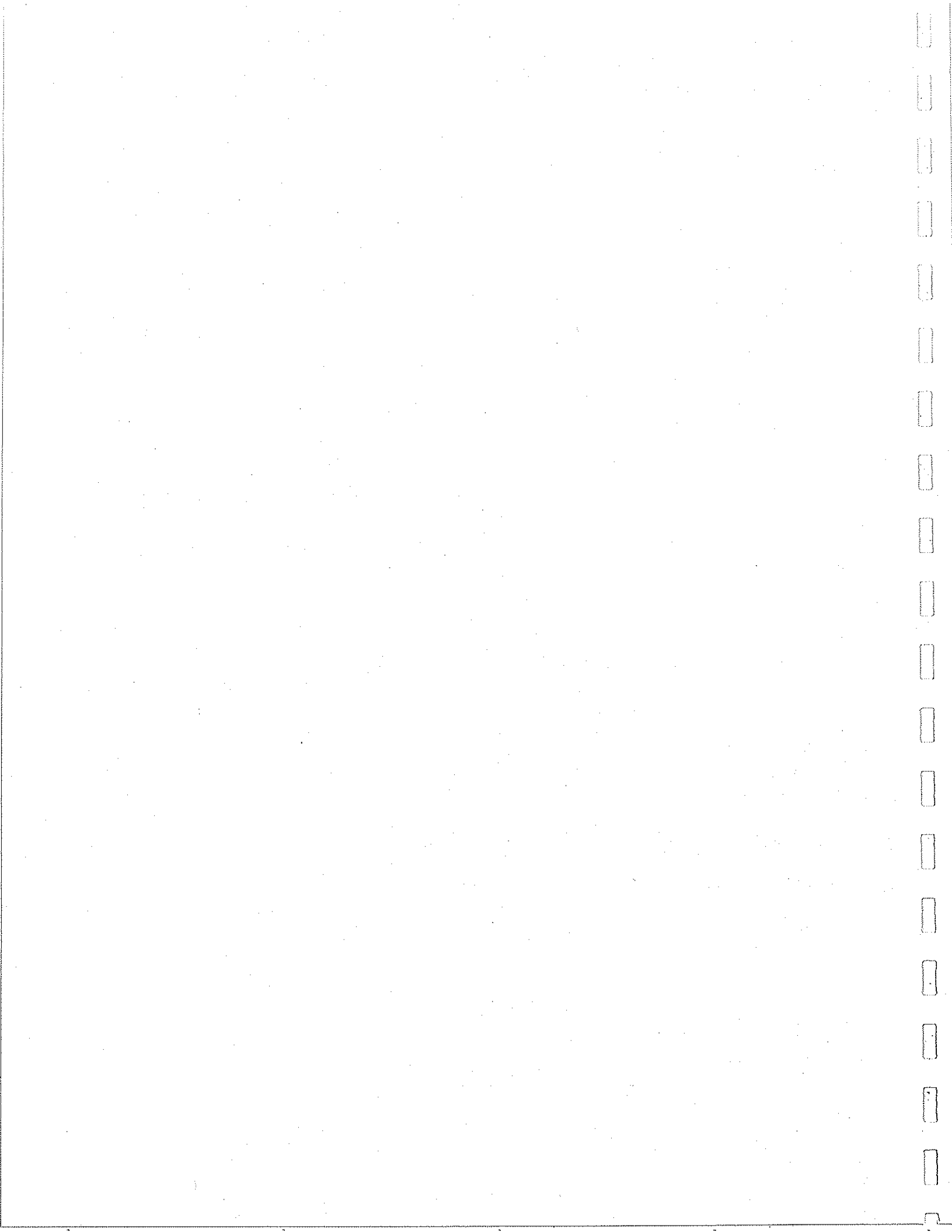
# List of Attachments

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## **Tables**

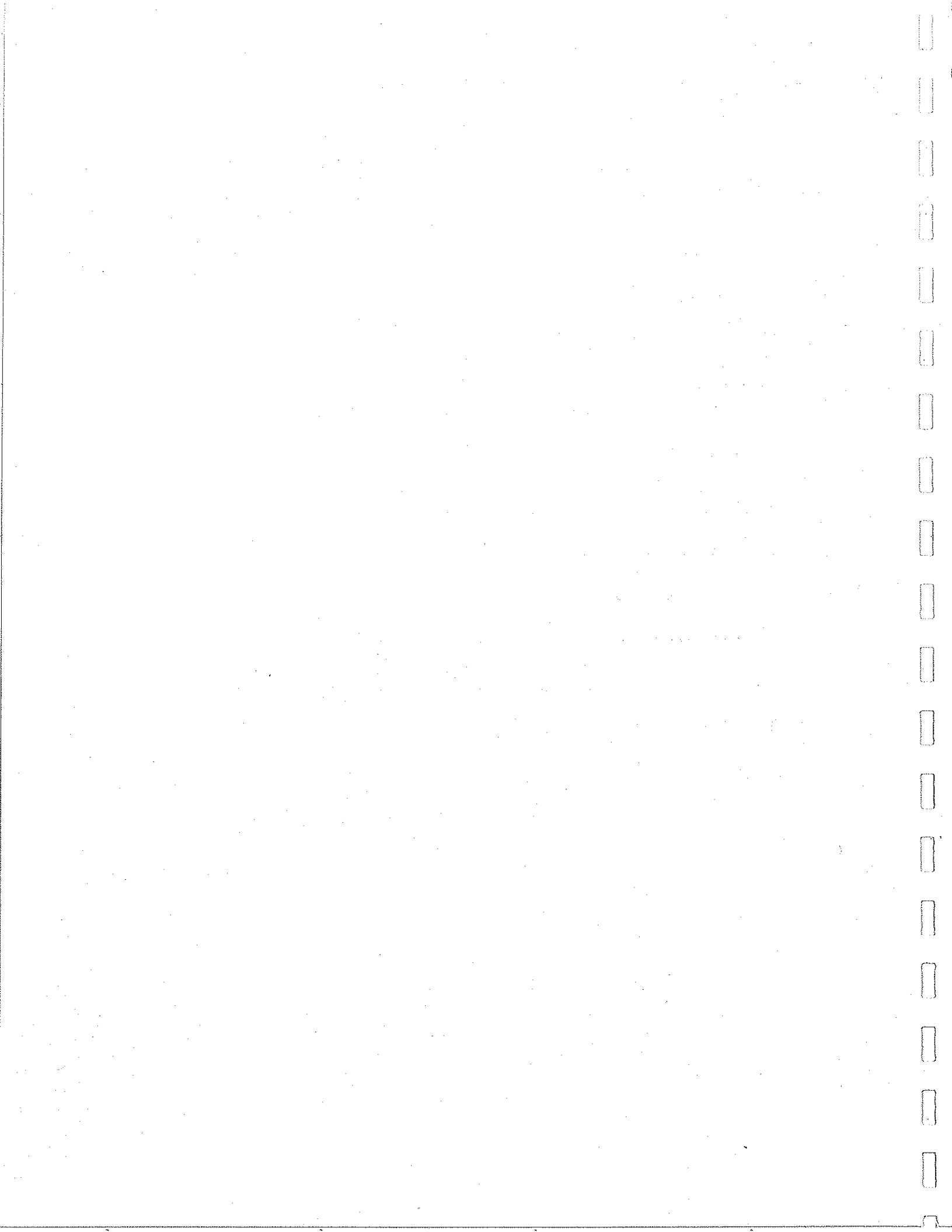
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## 1.0 Introduction

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The proposed project is located on the west side of Monroe Street and 61<sup>st</sup> Avenue in the City of La Quinta, as shown on Exhibit A. The proposed project consists of 94 single family residential dwelling units. The project will have one (1) full access driveway onto 61<sup>st</sup> Avenue and one (1) northern access point onto Monroe Street. The northern access point onto Monroe Street, will be utilized for emergency vehicles and, if need be, construction vehicles. The site plan for the proposed development is illustrated on Exhibit B. The study area includes the following intersections:

North-South Street	East-West Street
Monroe Street	58 <sup>th</sup> Avenue 60 <sup>th</sup> Avenue 61 <sup>st</sup> Avenue 62 <sup>nd</sup> Avenue

The above study intersections were chosen for analysis due to their anticipated impact and proximate location to the project site. Analysis of the above study intersections is expected to determine all significant project related impacts.

The purpose of this traffic impact study is to review Existing, Existing Plus Project, Project Buildout (Year 2012) Without Project, and Project Buildout (Year 2012) With Project traffic conditions. The traffic impact study will determine any recommendations necessary to accommodate the project.

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## **2.0 Existing Conditions**

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Exhibit C shows the City of La Quinta Circulation Element and Exhibits D shows the Roadway Cross Sections. Exhibit E identifies the existing roadway conditions, number of through traffic lanes, and the intersection controls for the study area roadways.

Existing roadways within the vicinity of the project site include Monroe Street (Primary/Secondary Arterial), 58<sup>th</sup> Avenue (Secondary Arterial), 60<sup>th</sup> Avenue (Secondary Arterial), 61<sup>st</sup> Avenue (Collector), and 62<sup>nd</sup> Avenue (Secondary Arterial). Monroe Street runs in the north-south direction adjacent to the project site and includes one travel lane in each direction separated by Caltrans detail 22 (painted double yellow stripe).

Existing traffic volumes on roadways throughout the study area are shown on Exhibit F. These volumes are based upon weekday traffic data collected in June 2008 by Southland Car Counters for RK. The City of La Quinta experiences a seasonal traffic fluctuation, with higher volumes in the winter and spring months typically running from November through April. Since counts were conducted in June, outside of the prime season, a conservative 30% seasonal increase has been applied to the June 2008 counts, as recommended by the City of La Quinta Engineering Bulletin #13-06. The traffic count worksheets are included in Appendix A.

Table 1 represents the Existing conditions intersection levels of service. All study area intersections are currently operating at an acceptable Level of Service during Existing peak hour conditions. Levels of Service worksheets for Existing conditions are included in Appendix B.

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## **3.0 Intersection Analysis**

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### **3.1 HCM Analysis**

The current technical guide to the evaluation of traffic operations is the Highway Capacity Manual (HCM2000), in accordance with Caltrans standards. The HCM defines level of service as a qualitative measure which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate LOS (Level of Service) conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted.

The definitions of level of service for uninterrupted flow (flow unrestrained by the existence of traffic control devices) are:

- LOS A represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.
- LOS B is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.
- LOS C is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.
- LOS D represents high-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.



- LOS E represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.
- LOS F is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount that can traverse the point. Queues form behind such locations.

Uninterrupted flow is generally found only on limited access (freeway) facilities in urban areas.

### **3.2 Level of Service**

The definitions of level of service for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control.

The level of service is typically dependent on the quality of traffic flow at the intersections along a roadway. The HCM methodology expresses the level of service at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control. The levels of service determined in this study are calculated using the HCM methodology.

For signalized intersections, average control delay per vehicle is used to determine the level of service. Levels of service at signalized study intersections have been evaluated using the HCM intersection analysis program.

The levels of service are defined for the various analysis methodologies as follows:

LOS	Average Total Control Delay Per Vehicle (Seconds)	
	Signalized	Unsignalized
A	0.00 - 10.00	0.00 - 10.00
B	10.01 - 20.00	10.01 - 15.00
C	20.01 - 35.00	15.01 - 25.00
D	35.01 - 55.00	25.01 - 35.00
E	55.01 - 80.00	35.01 - 50.00
F	>80.01	>50.01

The LOS analysis for signalized intersections is performed using optimized signal timing. Adjustment factors for elements such as lane width, trucks, grade, obstructions, parking or pedestrians are as stated in the 2000 HCM. The overall intersection peak hour factor was used as counted for Existing conditions analysis, while a 0.95 peak hour factor was used for future (Year 2012) conditions analyses.

Saturation flow rates of 1,900 vehicles per hour of green (vphg) for through and right turn lanes, 1,900 vehicles for single left turn lanes, 1,600 vehicles per lane for dual left turn lanes, and 1,500 vehicles per lane for triple left turn lanes have been assumed for all capacity analysis.

### 3.3 Definition of Deficiency and Significant Impact

The following definitions of deficiencies and significant impacts have been developed in accordance with the City of La Quinta Engineering Bulletin #13-06.

#### *Deficiency*

The definition of an intersection deficiency has been obtained from the City of La Quinta Engineering Bulletin #13-06: "In the City of La Quinta, LOS D and a

maximum volume to capacity ratio of 0.90 is the acceptable build out service level. The maximum volume to capacity ratio applies to peak hours at intersections as well as daily V/C analyses of roadway segments." Therefore, any intersection that has a vehicle to capacity ratio of greater than 0.90 or is operating at LOS E or F will be considered deficient.

### *Significant Impact*

#### *Thresholds of Significance*

#### Intersections

Project Specific Impacts – A significant adverse project specific traffic impact is assumed to occur at any intersections if the project will change the V/C ratio or add Peak Hour Trips (PHT) to impacted intersections that exceed the thresholds for changes in Level of Service (LOS) established in the following table:

**Table 1**  
**Thresholds for Changes in Level of Service (LOS) at Intersections**

Significant Changes in LOS	
Intersection LOS (Existing)	Increase in V/C equal to or greater than
LOS E	20 Trips*
LOS F	10 Trips*

\* To critical movements

## **4.0 Trip Generation**

Trip generation represents the amount of traffic that is attracted and produced by a development. The traffic generation rates are based upon data collected by the Institute of Transportation Engineers (ITE) Trip Generation, 7<sup>th</sup> Edition and San Diego Association of Governments (SANDAG) Traffic Generation Rates. These publications provide a comprehensive evaluation of trip generation rates for a variety of land uses. It should be noted that the City of La Quinta prefers the use of ITE trip generation rates. Both daily and peak hour trip generation rates for the uses analyzed in this study are shown in Table 2.

The traffic generation for the proposed project is based upon the specific land uses that have been planned for the development. The project will consist of constructing 94 single family residential dwelling units. The proposed development is anticipated to generate approximately 900 trip-ends per day with 71 vehicles per hour during the AM peak hour and 95 vehicles per hour during the PM peak hour. Both daily and peak hour trip generation for the proposed project are shown in Table 3.

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## **5.0 Trip Distribution**

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Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is heavily influenced by the geographical location of the site, the location of employment, commercial, and recreational opportunities, and the proximity to the regional freeway system. The directional orientation of traffic was determined by evaluating the proposed land use and highways within the community, existing traffic volumes and has been developed with consultation from City staff.

The proposed project has one (1) full access driveway onto 61<sup>st</sup> Avenue. The trip distribution for this analysis has been based upon project buildout conditions, based upon those highway facilities that are in place or will be contemplated over the near-term. The project trip distribution patterns for the project are shown on Exhibits G.

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## **6.0 Trip Assignment**

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The assignment of traffic from the site to the adjoining roadway system has been based upon the site's trip generation, trip distribution, and existing arterial highway and local street systems. Based upon the identified project trip generation and distributions, project related traffic volumes are shown on Exhibit H.



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## **7.0 Traffic Impact Analysis**

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Traffic impacts have been projected and analyzed for Existing, Existing Plus Project, Project Buildout (Year 2012) Without Project, and Project Buildout (Year 2012) With Project conditions.

### **7.1 Existing Plus Project**

Existing Plus Project traffic volumes have been determined by combining existing traffic volumes with project traffic volumes. The traffic volumes for existing plus project conditions are shown on Exhibit I. Table 5 presents the intersection analysis for Existing Plus Project conditions. The HCM calculation worksheets are included in Appendix C.

### **7.2 Project Buildout (Year 2012) Without Project**

The project is estimated to be complete in the Year 2012. Project Buildout (Year 2012) Without Project traffic volumes have been determined by applying a growth rate and adding traffic associated with other cumulative development in the area to the existing traffic volumes.

Per City of La Quinta traffic impact study guidelines, an annual growth rate of 8 percent is representative of City growth south of Highway 111. Therefore, an 8 percent growth factor was applied to the 2008 Existing volumes to forecast Project Buildout (Year 2012) traffic conditions.

Cumulative projects have been taken into consideration for Project Buildout (Year 2012) Without Project scenario and are shown on Exhibit J. A list of cumulative projects included in the study is provided in Table 4. A list of commercial and residential development was made available to RK by City staff. Projects located within the study area, and those expected to have a significant impact on the study

area intersections were selected from the list of approved projects. Several of the projects are already under construction and with significant portions being occupied and in use at the time traffic counts were conducted. Therefore, only the portions of the projects that have not been constructed or occupied were considered in the analysis. The individual cumulative development trip distribution maps are shown on Exhibits K through M.

Cumulative Development trip generation and distributions have been utilized, and the resulting projected cumulative development traffic volumes are shown on Exhibit N.

To assess Project Buildout (Year 2012) Without Project traffic conditions, Existing Traffic has been combined with area-wide growth and cumulative development within the vicinity of the site. The traffic volumes for Project Buildout (Year 2012) Without Project conditions are shown in Exhibit O.

For Project Buildout (Year 2012) Without Project conditions, all study area intersections are projected to operate at an acceptable Level of Service during peak hour conditions. Table 6 presents the intersection analysis for Project Buildout (Year 2012) Without Project conditions. The HCM calculation worksheets are included in Appendix D.

### **7.3 Project Buildout (Year 2012) With Project**

To assess Project Buildout (Year 2012) With Project conditions, project traffic has been combined with Project Buildout (Year 2012) Without Project traffic. Project Buildout (Year 2012) With Project traffic volumes are shown on Exhibit P.

For Project Buildout (Year 2012) With Project conditions, all study area intersections are projected to operate at an acceptable Level of Service during peak hour conditions. Table 7 presents the intersection analysis for Project Buildout (Year

2012) With Project conditions. The HCM calculation worksheets are included in Appendix E.

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## **8.0 Findings**

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A summary of the level of service analysis for each condition for both AM and PM peak hours is included in Table 8.

All study area intersections are currently operating at an acceptable Level of Service during Existing peak hour conditions. The Existing conditions analysis includes a seasonal adjustment factor of 30% to the existing traffic counts to account for traffic fluctuation at different times of the year.

The proposed project is not a gated community and thus a gated entranceway will not exist. There will also be adequate internal circulation within the proposed project. Lane widths throughout the collector streets range from 33 feet to 37 feet while the entranceway will have a width of 56 feet with a 12 foot center median. Vehicles will have at least 80 feet of stacking distance within the entranceway at Monroe Street. This stacking distance should be sufficient to maintain adequate circulation for vehicle ingress and egress.

The project will consist of constructing 94 single family residential dwelling units. The proposed development is anticipated to generate approximately 900 trip-ends per day with 71 vehicles per hour during the AM peak hour and 95 vehicles per hour during the PM peak hour.

For Existing Plus Project conditions, all study area intersections are projected to operate at an acceptable Level of Service during the peak hour conditions.

For Project Buildout (Year 2012) Without Project conditions, all study area intersections are projected to operate at an acceptable Level of Service during peak hour conditions.

For Project Buildout (Year 2012) With Project conditions, all study area intersections are projected to operate at an acceptable Level of Service during peak hour conditions. However, with the recommended improvements, all study intersections are projected to operate at an acceptable Level of Service and volume-to-capacity (v/c) ratio less than or equal to 0.90 during the peak hours.

## **9.0 Recommendations**

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### **9.1 Project Buildout (Year 2012) With Project Conditions**

Install a stop sign, stop bar, and stop legend at Project Access driveway on 61<sup>st</sup> Avenue. This will be a requirement of the project.

Complete the internal circulation system per City of La Quinta standards.

Participate in the City approved Development Impact Fee program.

In conjunction with the preparation of precise grading, landscape, and street improvement plans, sight distance should be reviewed at the project access point per City of La Quinta/Caltrans standards.

Per Engineering Bulletin #13-06, a right-turn deceleration lane is required since the projected peak hour right ingress turning volume exceeds 50 trips. The taper length shall be included within the required deceleration lane.

Recommendations are summarized on Exhibit Q.



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## **10.0 Conclusions**

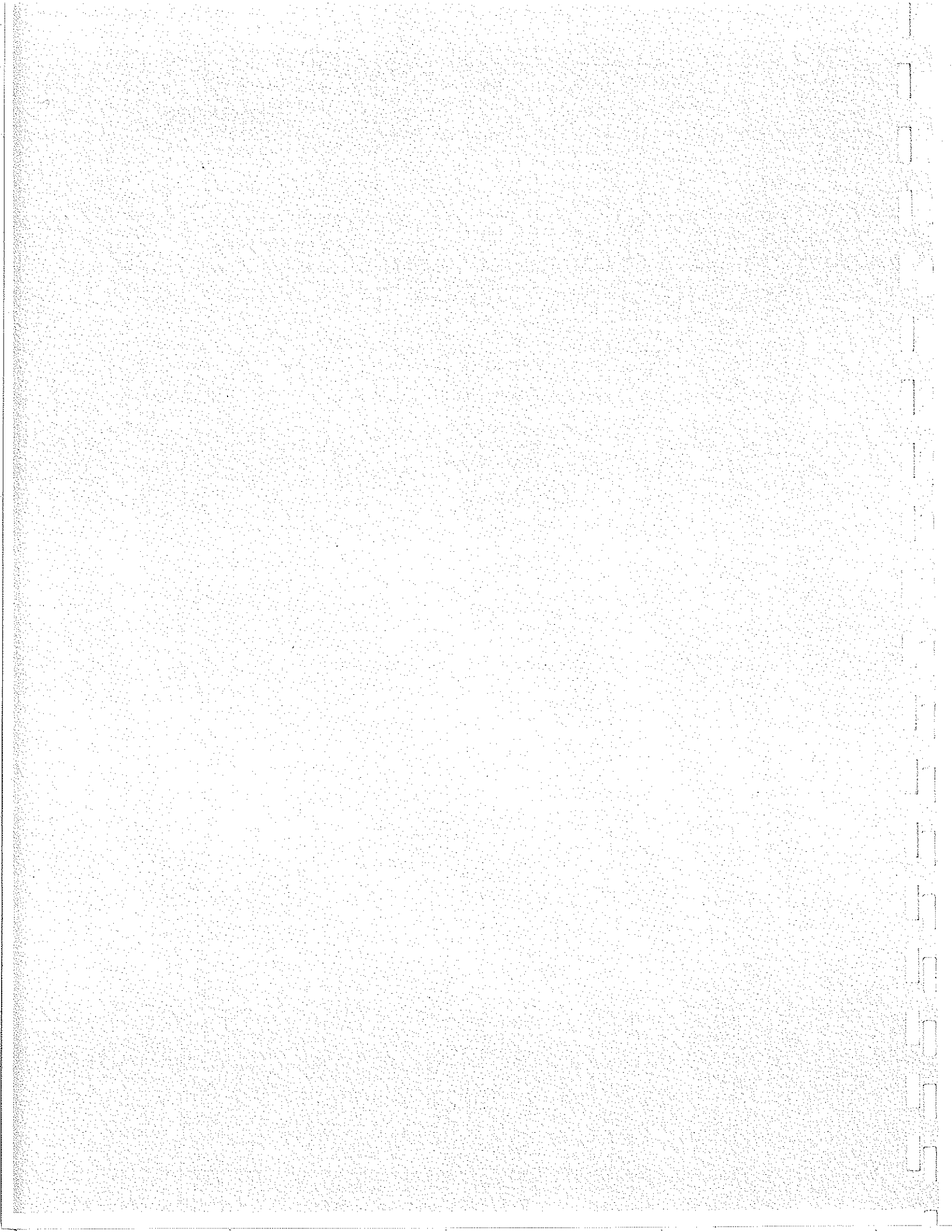
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Based upon this analysis of Existing and Project Buildout (Year 2012) traffic conditions, all study area intersections are projected to perform at satisfactory levels of service with the implementation of the recommendations included in this report. Therefore, the proposed TTM 31434 single family residential development can be accommodated within the City of La Quinta's existing standards for acceptable levels of service for roadways and intersections.

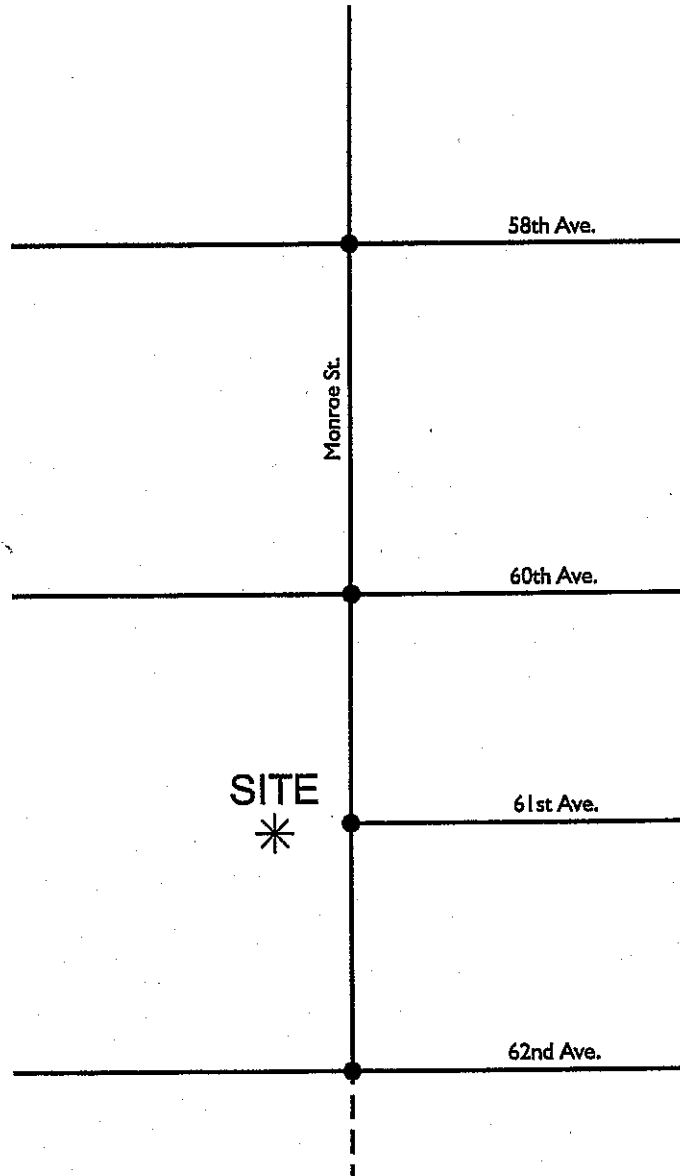
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# Exhibits



# Exhibit A Location Map

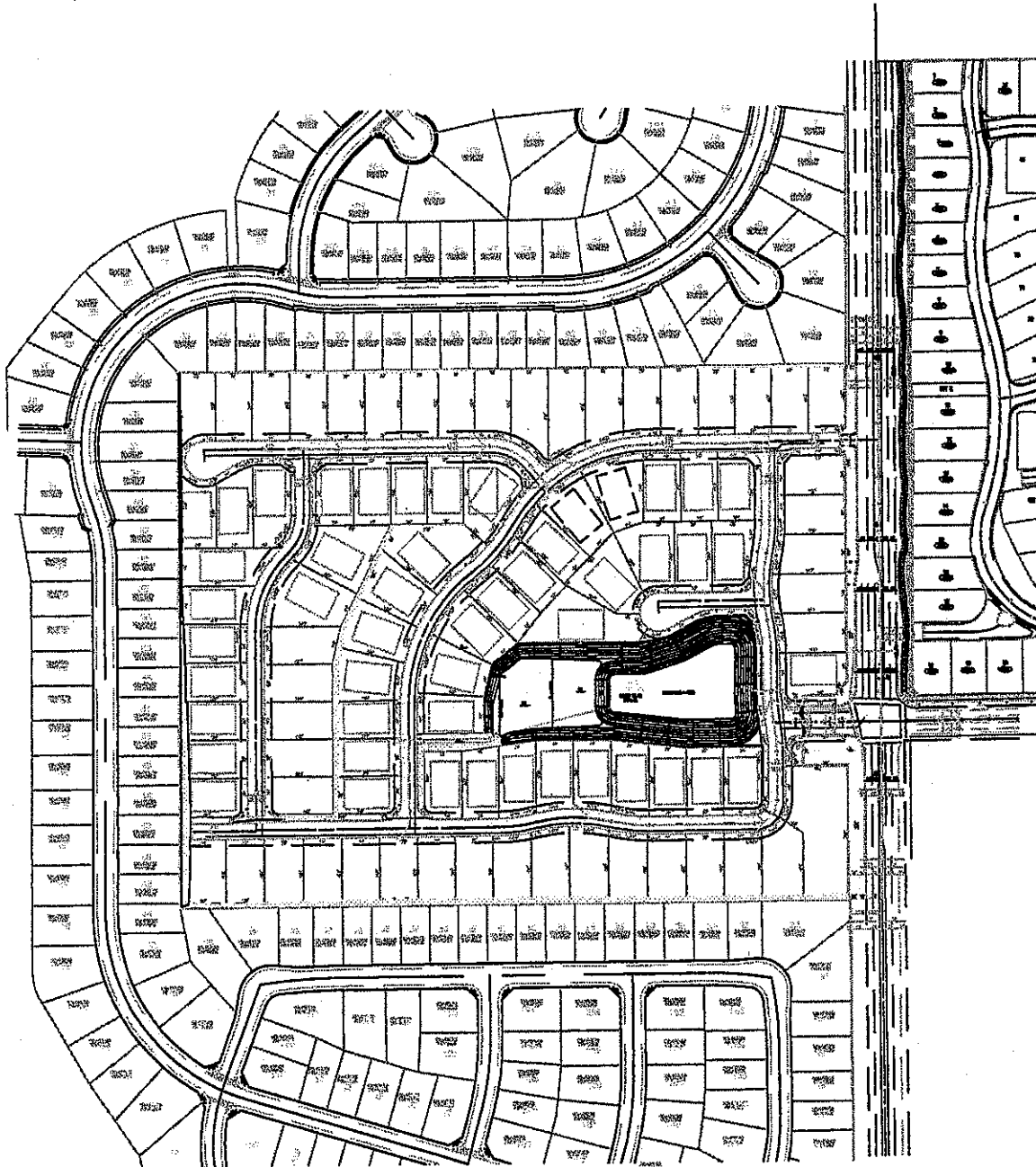


### Legend:

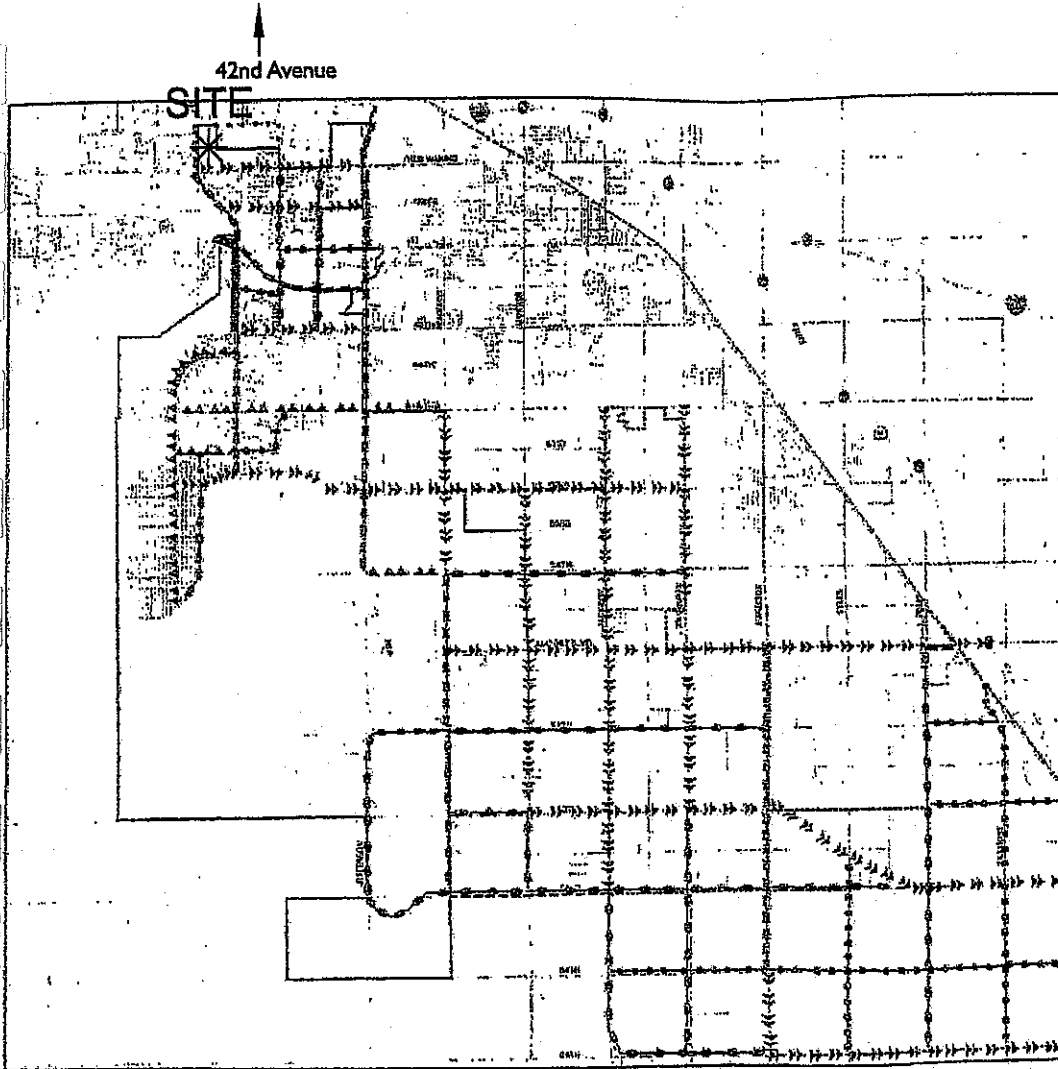
- = Study Area Intersection
- - = Unpaved Road



Exhibit B  
**Site Plan**



# Exhibit C City of La Quinta General Plan Circulation Element



## City of La Quinta General Plan

### LEGEND

- Roads
- Township/Range Sections
- Railroad
- City Limits
- Planning Area #1
- Planning Area #2
- City Spheres of Influence

### EXHIBIT 3.5 CITY ROADWAY CLASSIFICATIONS

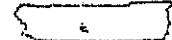
- Freeway Interchange
- Augmented Major (8D)
- Major Arterial (6D)
- Primary Arterial - A (4D)
- Primary Arterial - B (4D)
- Secondary Arterial (4D)
- Modified Secondary (2D)
- Collector (2U)

Source: City of La Quinta General Plan Update Traffic Study, 2002. In Association, San Francisco, 2002.

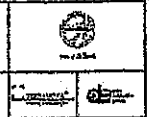
Scale  
1:72,000



Riverside County Vicinity Map



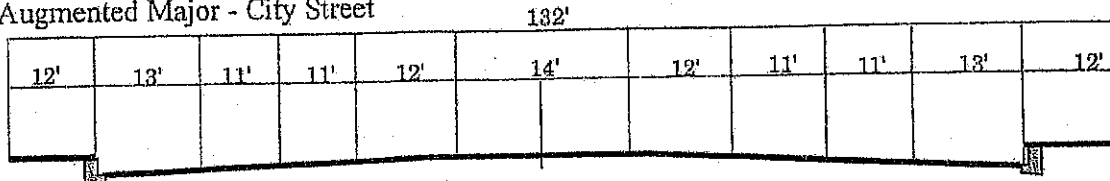
Map Prepared by: December 14, 2001  
Map Provided by: General Information Systems  
Map Version: Rev 0





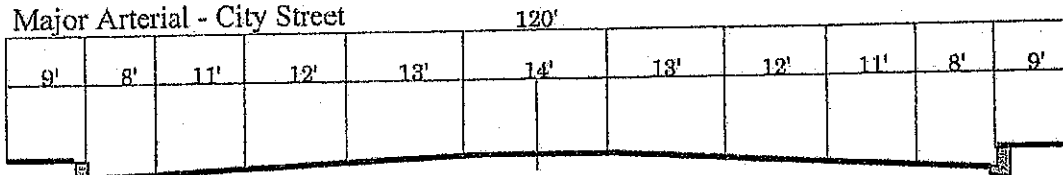
# City of La Quinta General Plan Roadway Cross-Sections City Streets

Augmented Major - City Street



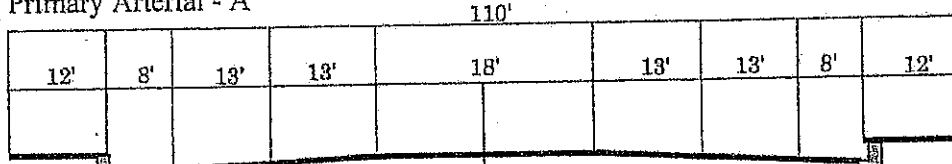
(Eight Lanes divided, no parking)

Major Arterial - City Street



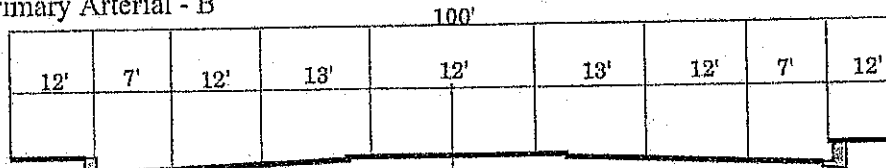
(Six Lanes divided, w/bike lane)

Primary Arterial - A



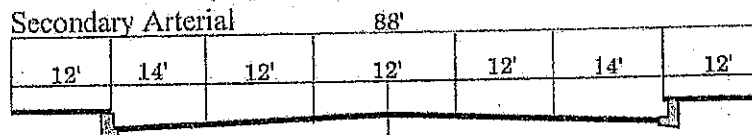
(Four Lanes divided, w/bike lane)

Primary Arterial - B



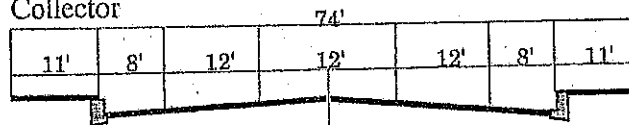
(Four Lanes divided, w/bike lane)

Secondary Arterial



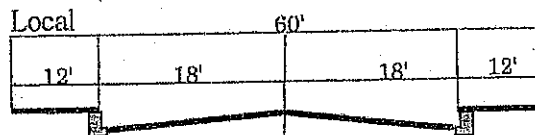
(Four Lanes undivided, no parking)

Collector



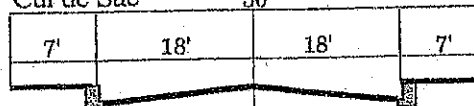
(Two Lanes undivided, w/bike lane)

Local



(Two Lanes w/parking)

Cul de Sac

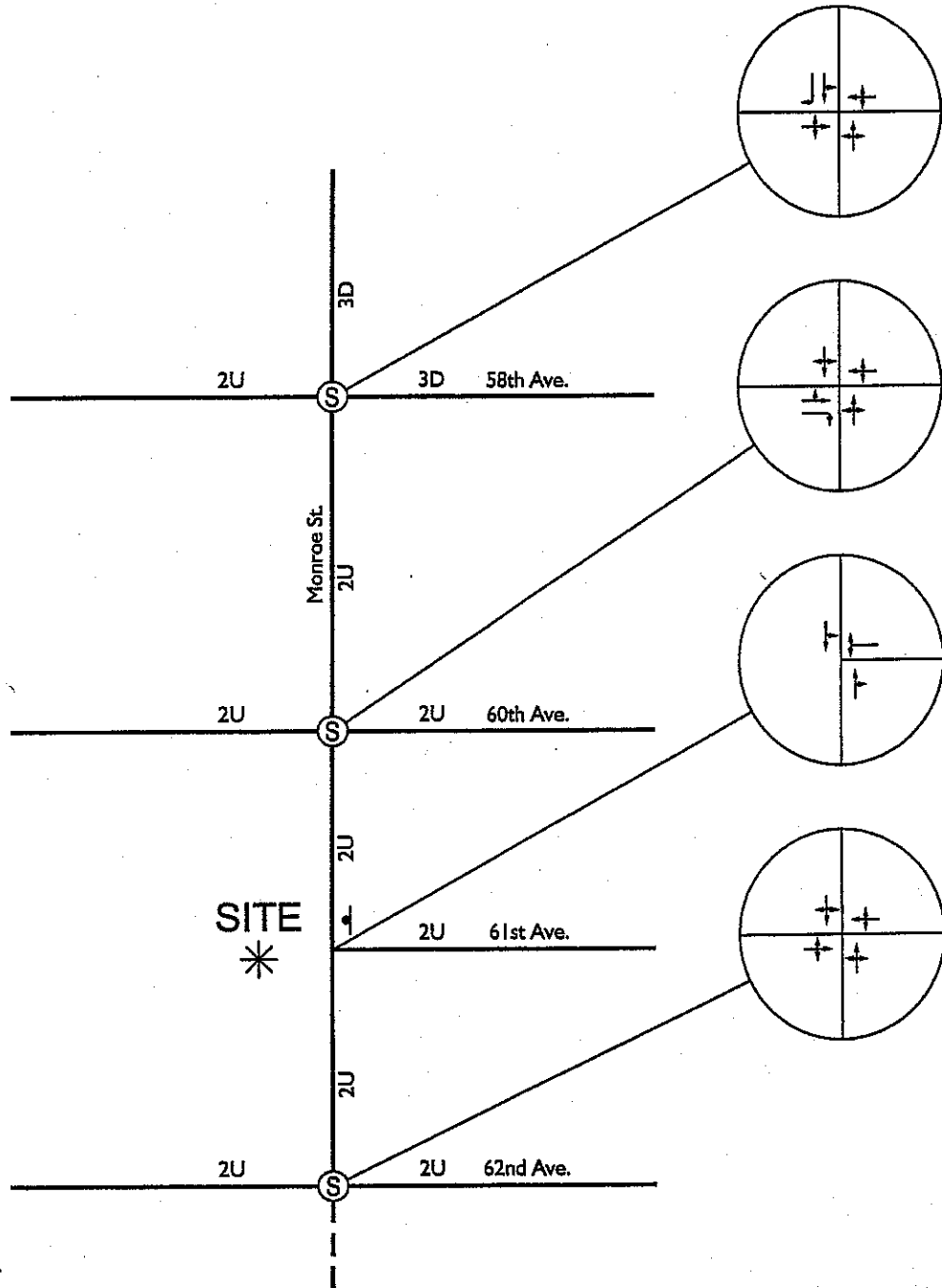


(Two Lanes, w/parking)



# Exhibit E

## Existing Lane Geometry and Intersection Controls

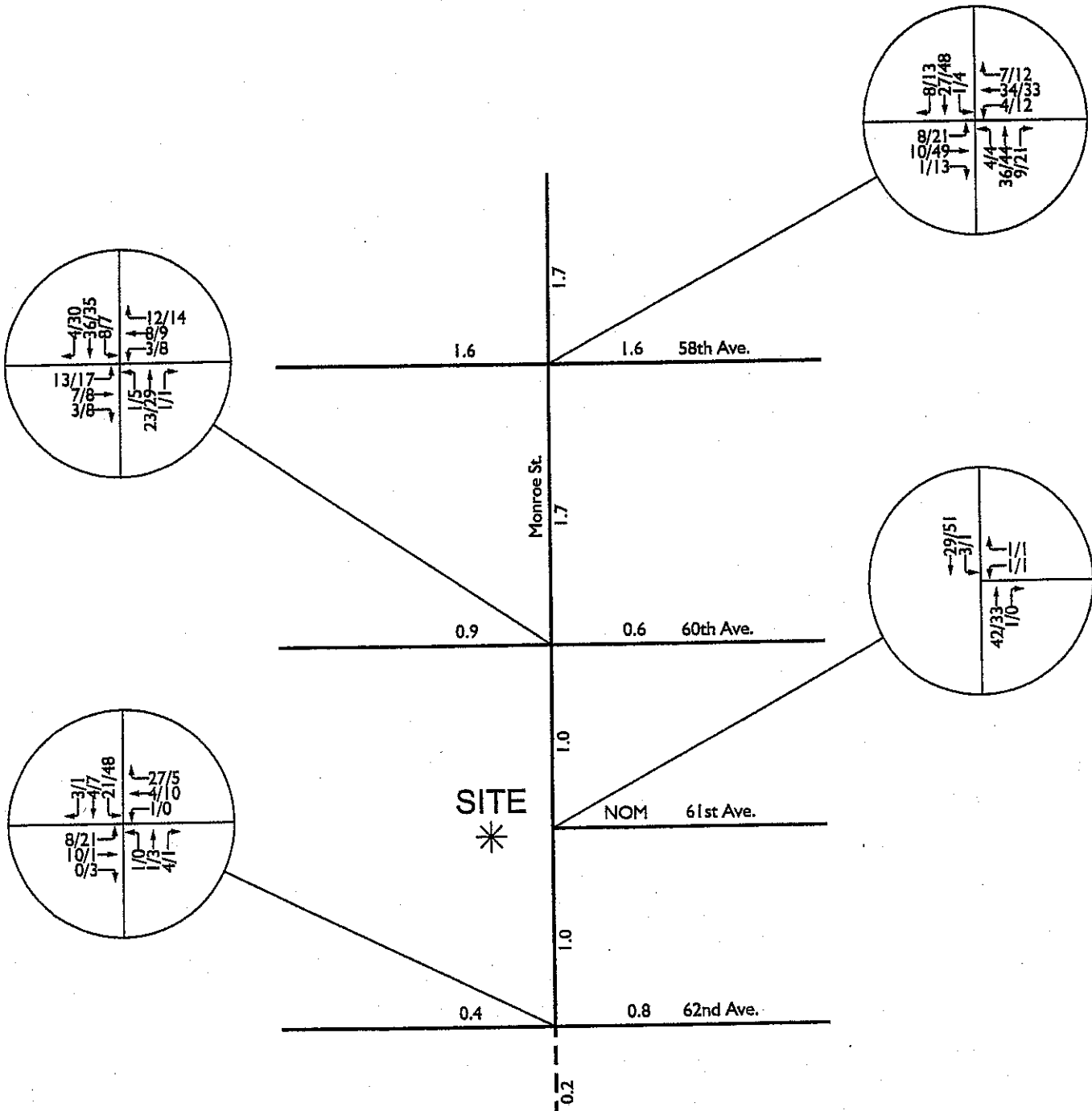


**Legend:**

- Ⓢ = All Way Stop
- ⬮ = Stop Sign
- 2 = Number of Lanes
- D = Divided
- U = Undivided
- - - = Unpaved Road



# Exhibit F Existing Traffic Volumes

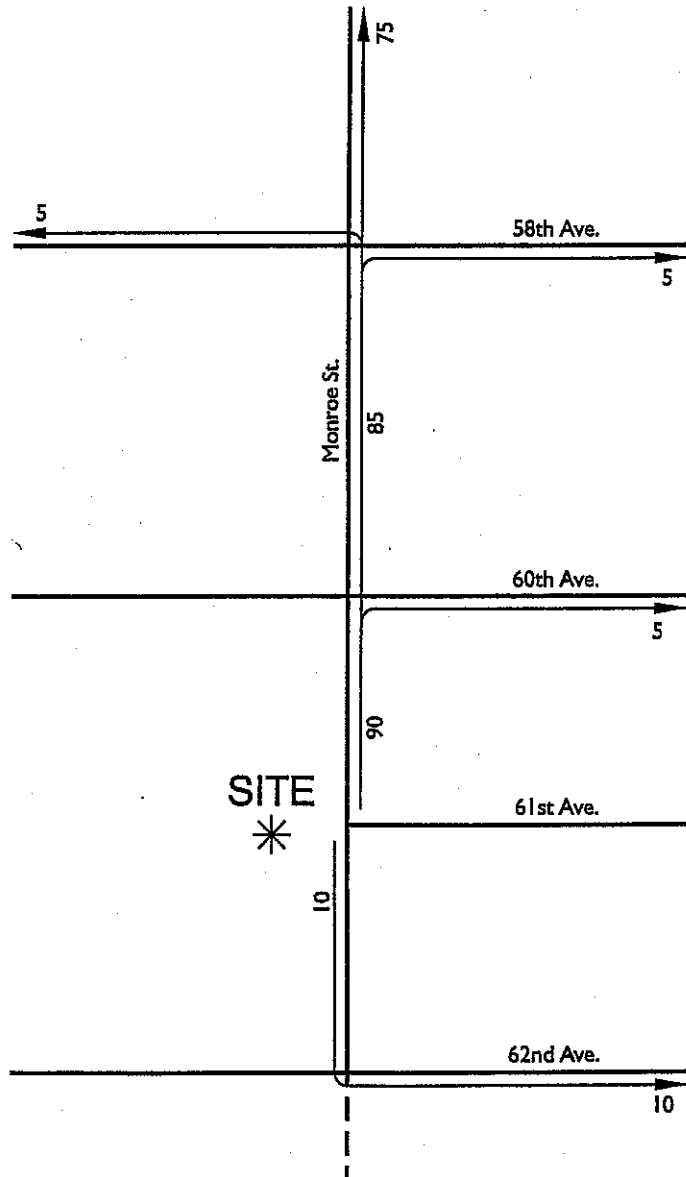


**Legend:**

- 10/20 = AM/PM Peak Hour Volumes
- 10.0 = Average Daily Traffic (1000's)
- NOM = Nominal
- - = Unpaved Road



Exhibit G  
Project Trip Distribution

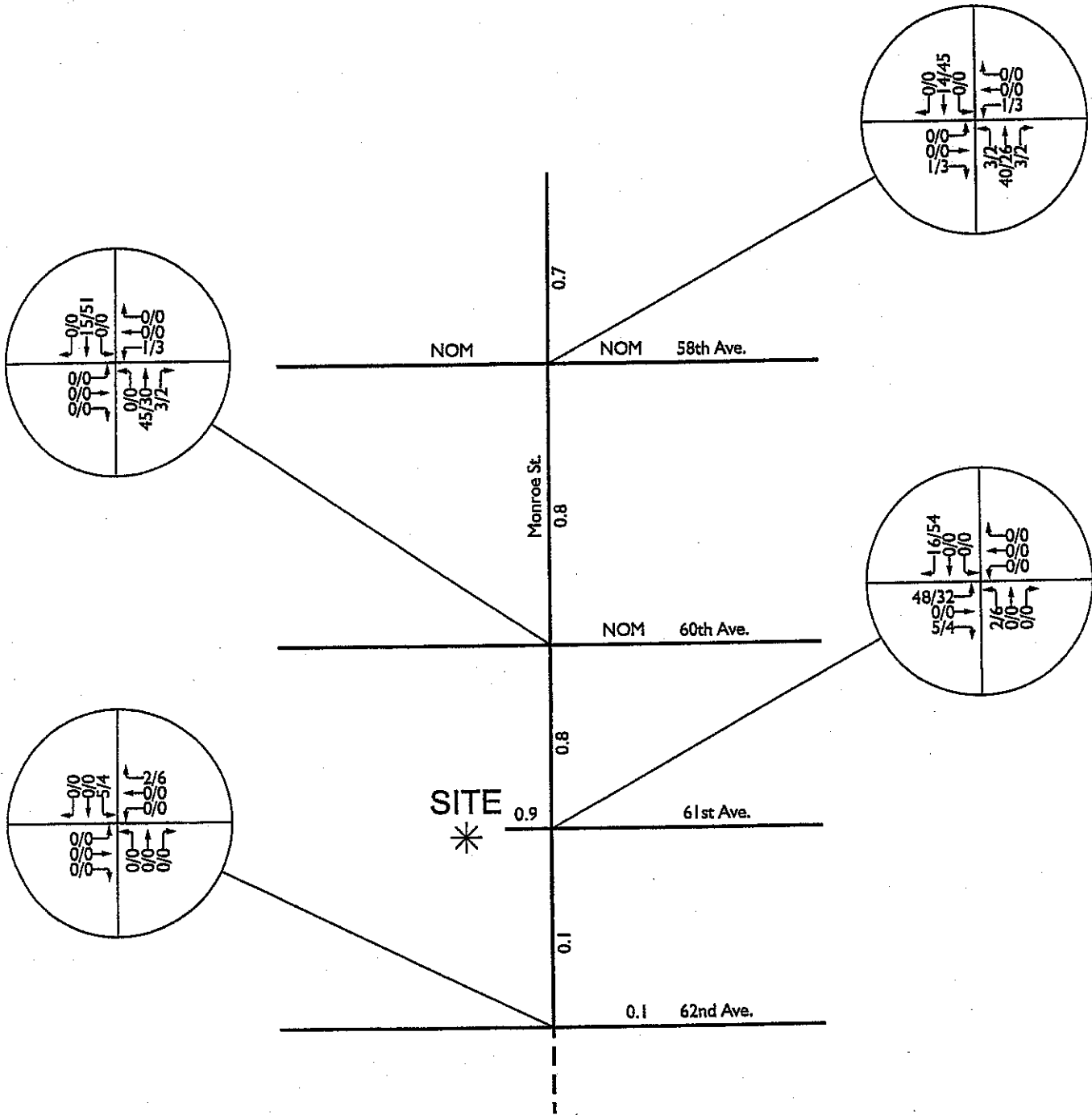


**Legend:**

10 = Percent to/from Project

--- = Unpaved Road

# Exhibit H Project Traffic Volumes

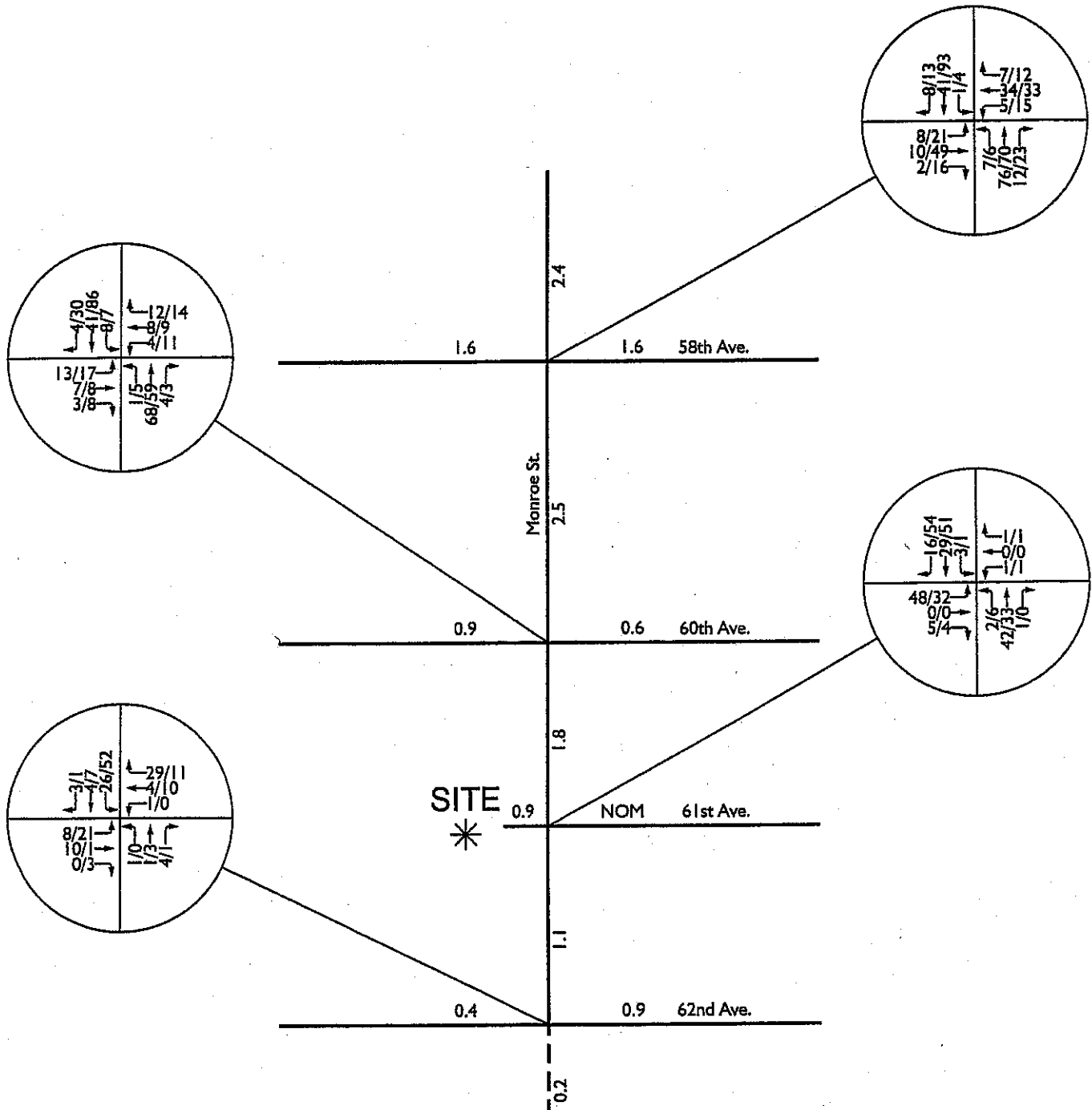


**Legend:**

- 10/20 = AM/PM Peak Hour Volumes
- 10.0 = Average Daily Traffic (1000's)
- NOM = Nominal
- - = Unpaved Road



# Exhibit I Existing Plus Project Traffic Volumes

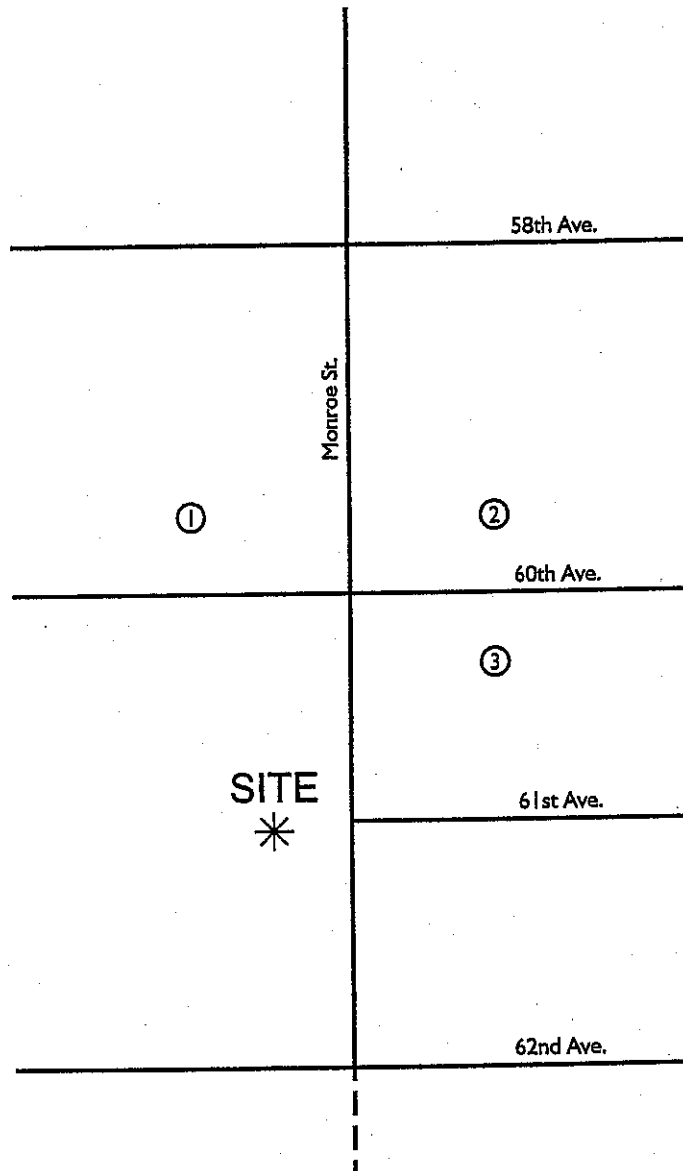


**Legend:**

- 10/20 = AM/PM Peak Hour Volumes
- 10.0 = Average Daily Traffic (1000's)
- NOM = Nominal
- = Unpaved Road



Exhibit J  
**Cumulative Development Location Map**

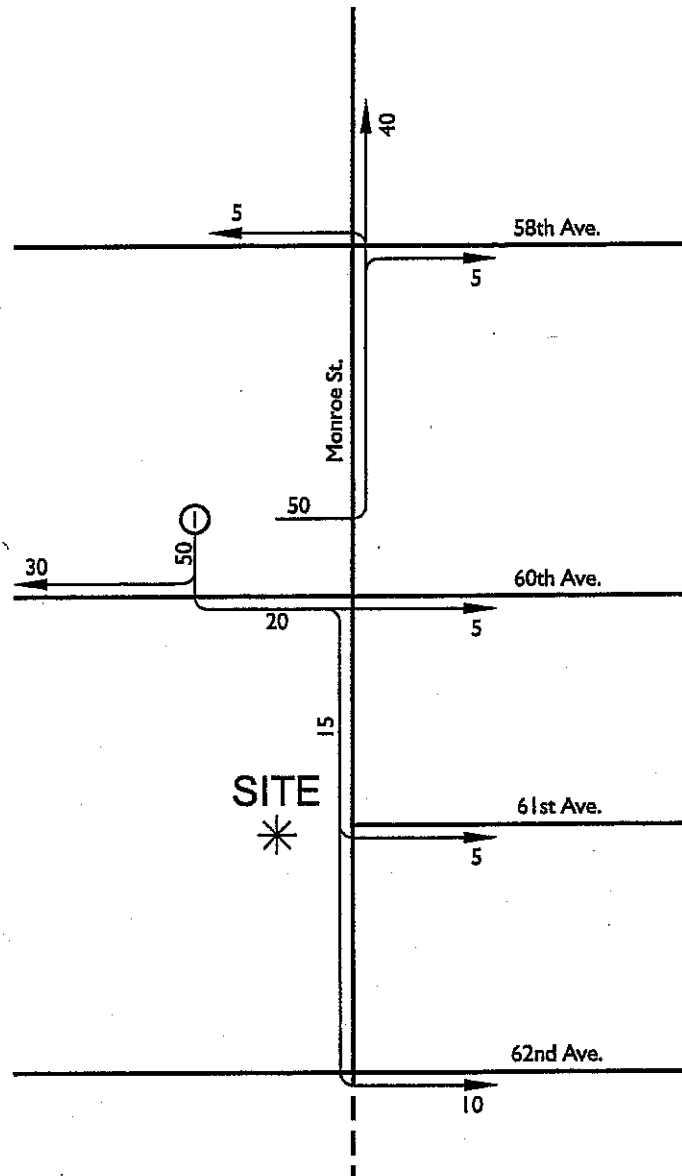


**Legend:**

- ① = TTM 30023
- ② = TTM 32398
- ③ = TTM 31732, TTM 31733
- - - = Unpaved Road



# Exhibit K Zone I Trip Distribution



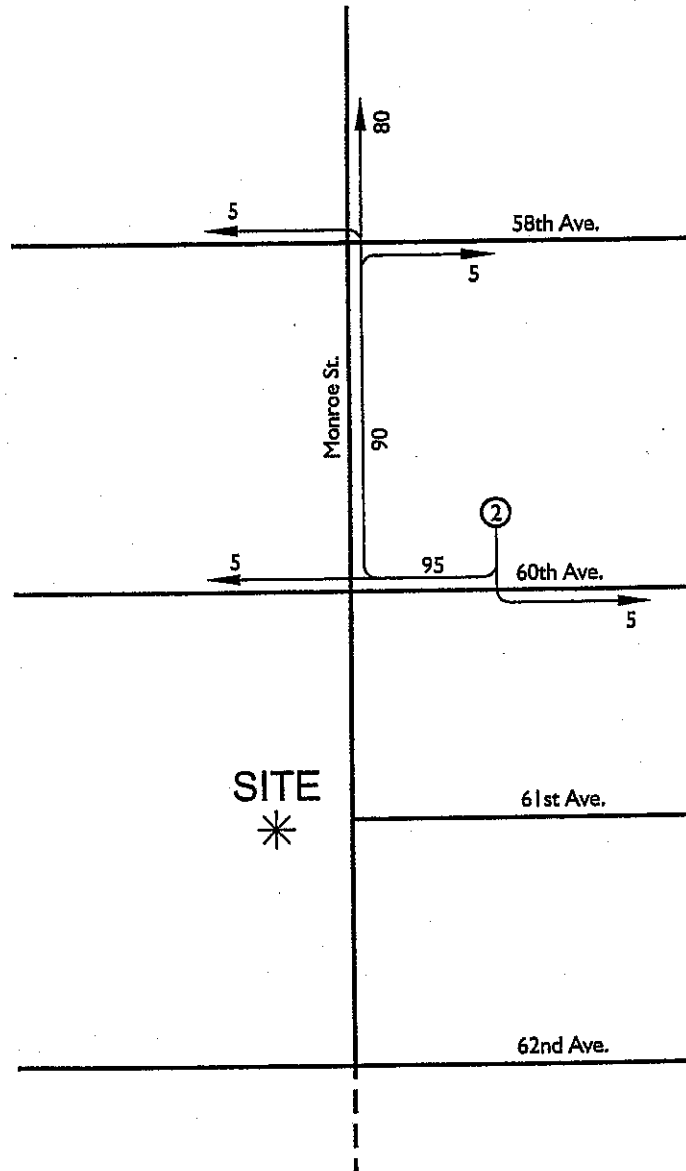
**Legend:**

- ① = TTM 30023
- 10 = Percent to/from Zone
- - = Unpaved Road





Exhibit L  
**Zone 2 Trip Distribution**

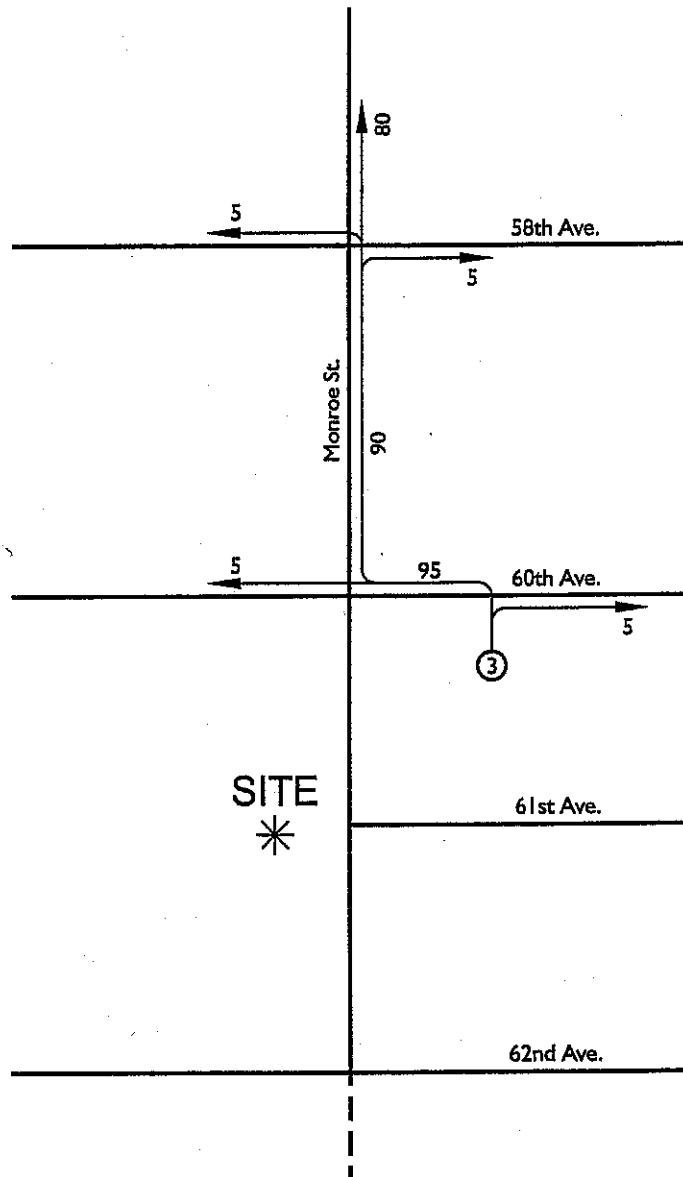


**Legend:**

- ② = TTM 32398
- 10 = Percent to/from Zone
- - = Unpaved Road



# Exhibit M Zone 3 Trip Distribution



**Legend:**

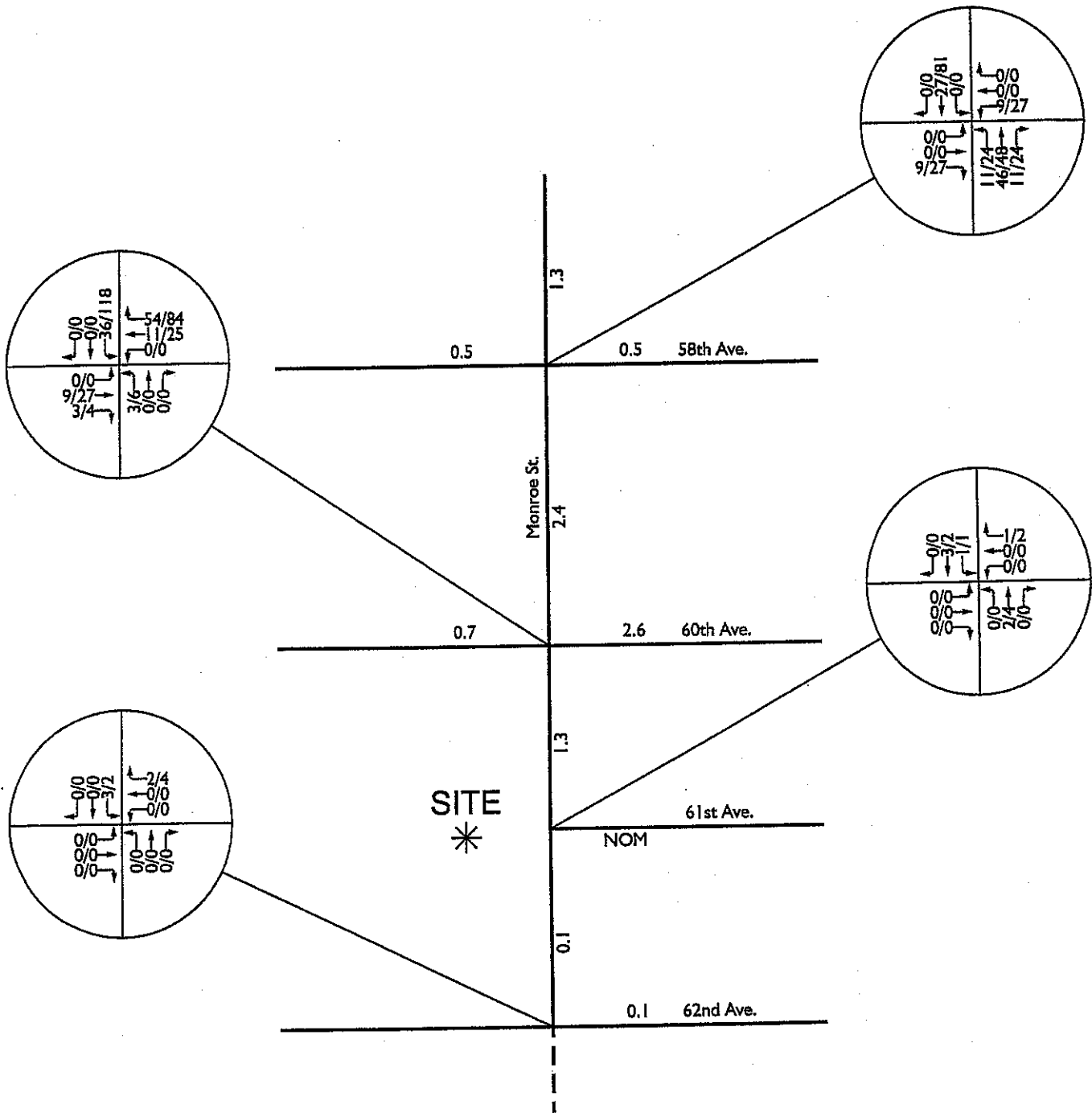
③ = TTM 31732, TTM 31733

10 = Percent to/from Zone

--- = Unpaved Road

# Exhibit N

## Cumulative Development Traffic Volumes



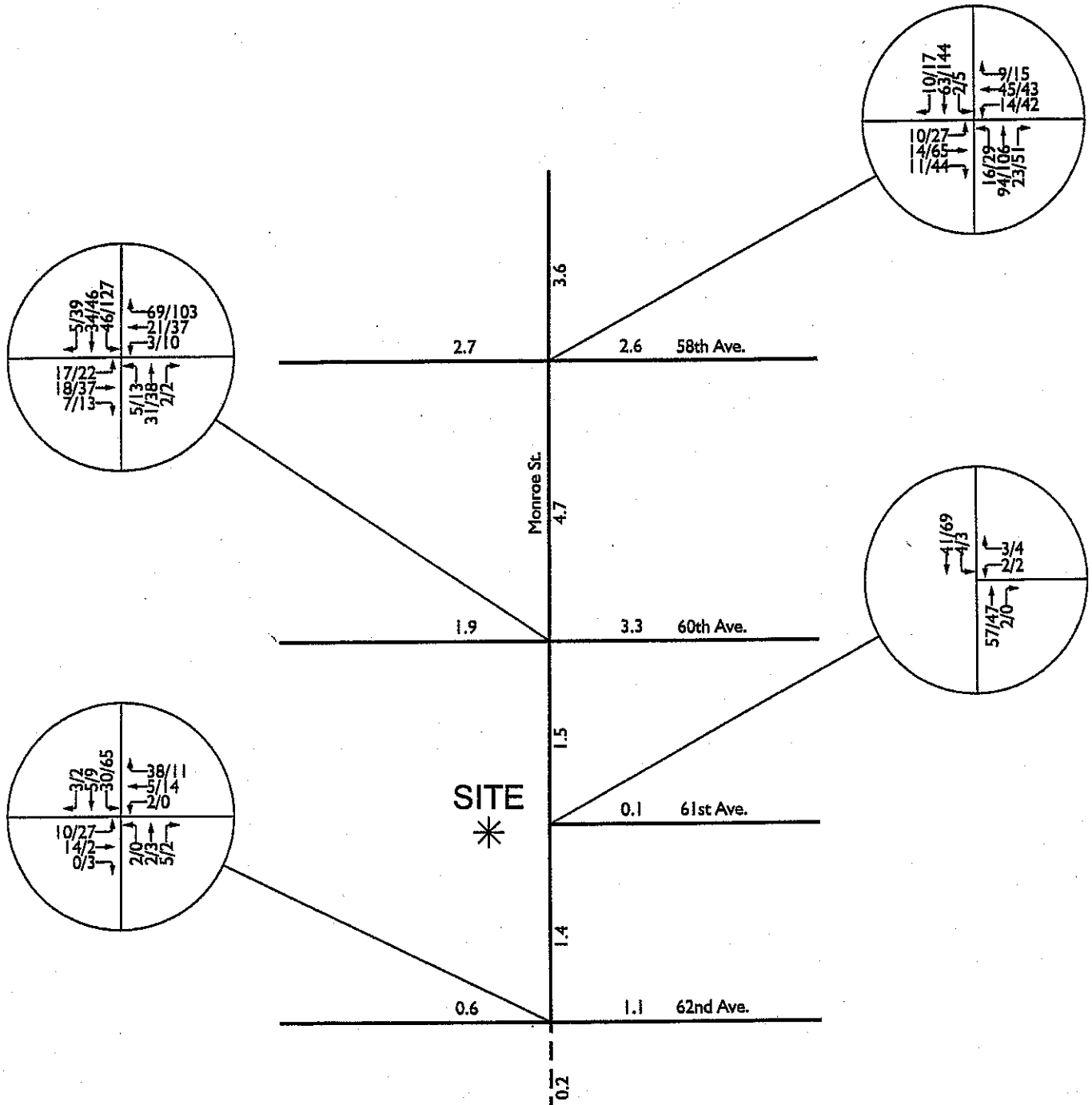
**Legend:**

- 10/20 = AM/PM Peak Hour Volumes
- 10.0 = Average Daily Traffic (1000's)
- NOM = Nominal
- - - = Unpaved Road



# Exhibit O

## Project Buildout (Year 2012) Without Project Traffic Volumes

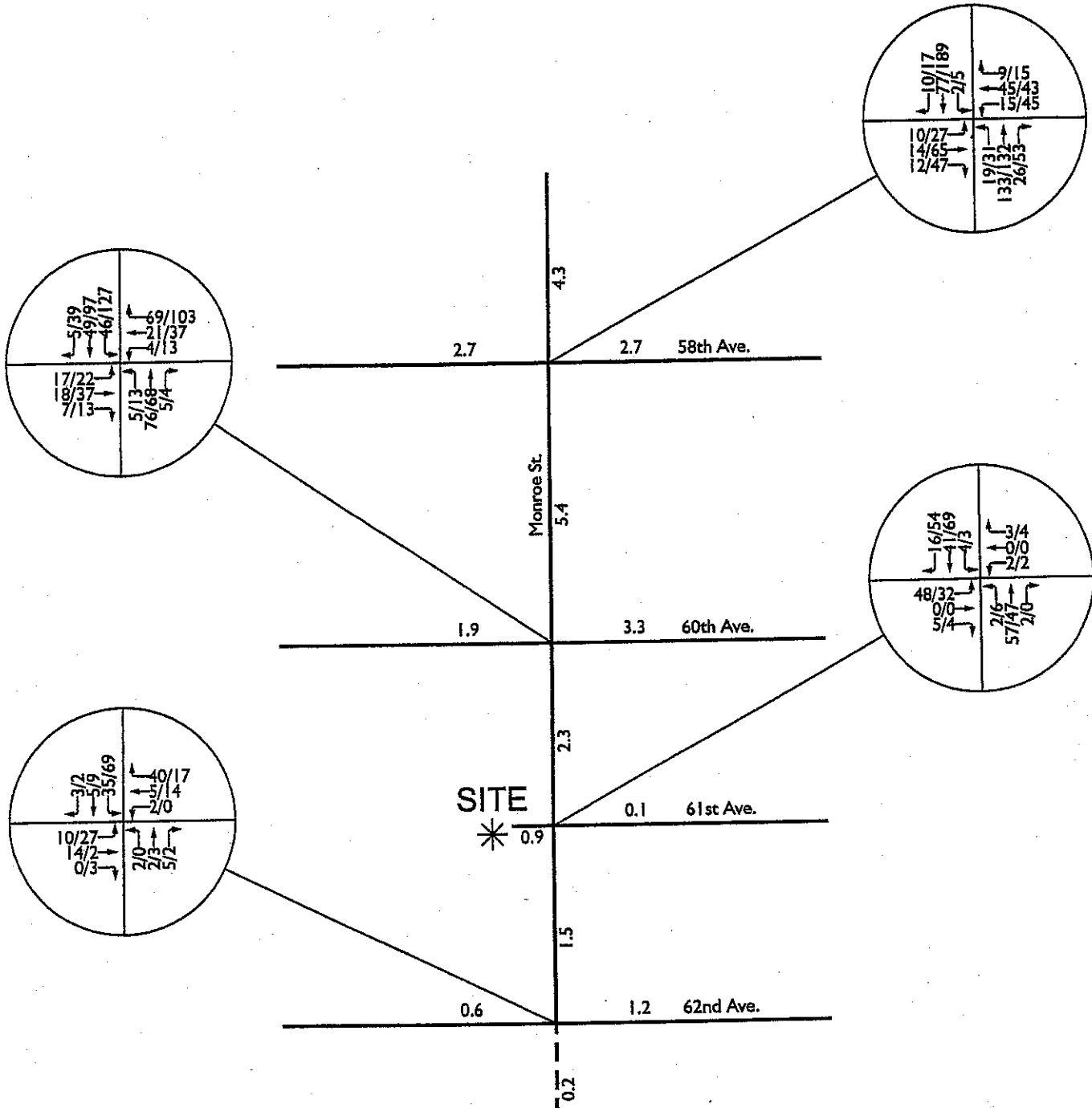


**Legend:**

- 10/20 = AM/PM Peak Hour Volumes
- 10.0 = Average Daily Traffic (1000's)
- NOM = Nominal
- = Unpaved Road



# Exhibit P Project Buildout (Year 2012) With Project Traffic Volumes

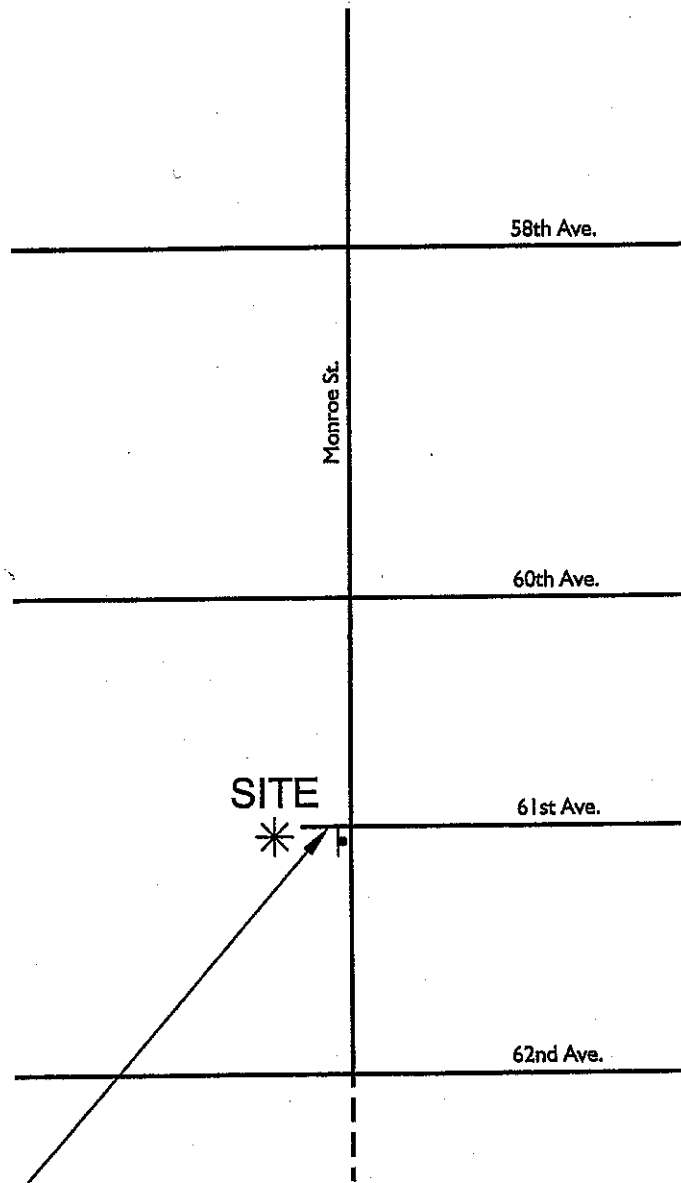


**Legend:**

- 10/20 = AM/PM Peak Hour Volumes
- 10.0 = Average Daily Traffic (1000's)
- NOM = Nominal
- = Unpaved Road



# Exhibit Q Recommendations



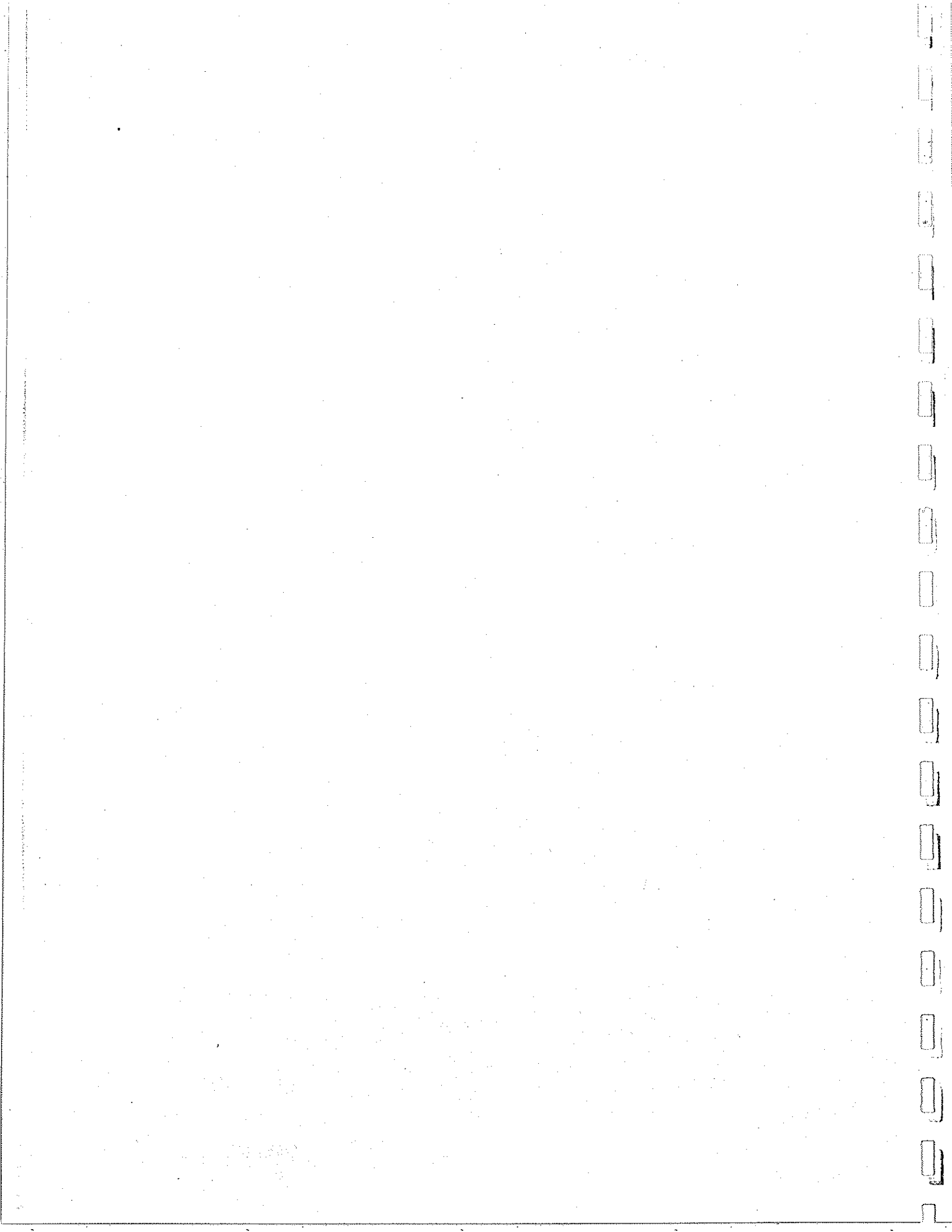
Install a stop sign, stop bar, and stop legend at Project Access driveway on 61st Avenue. This will be a requirement of the project.

Complete the internal circulation system per City of La Quinta standards.

In conjunction with the preparation of precise grading, landscape, and street improvement plans, sight distance should be reviewed at the project access point per City of La Quinta/Caltrans standards.

Participate in the City approved Development Impact Fee program.

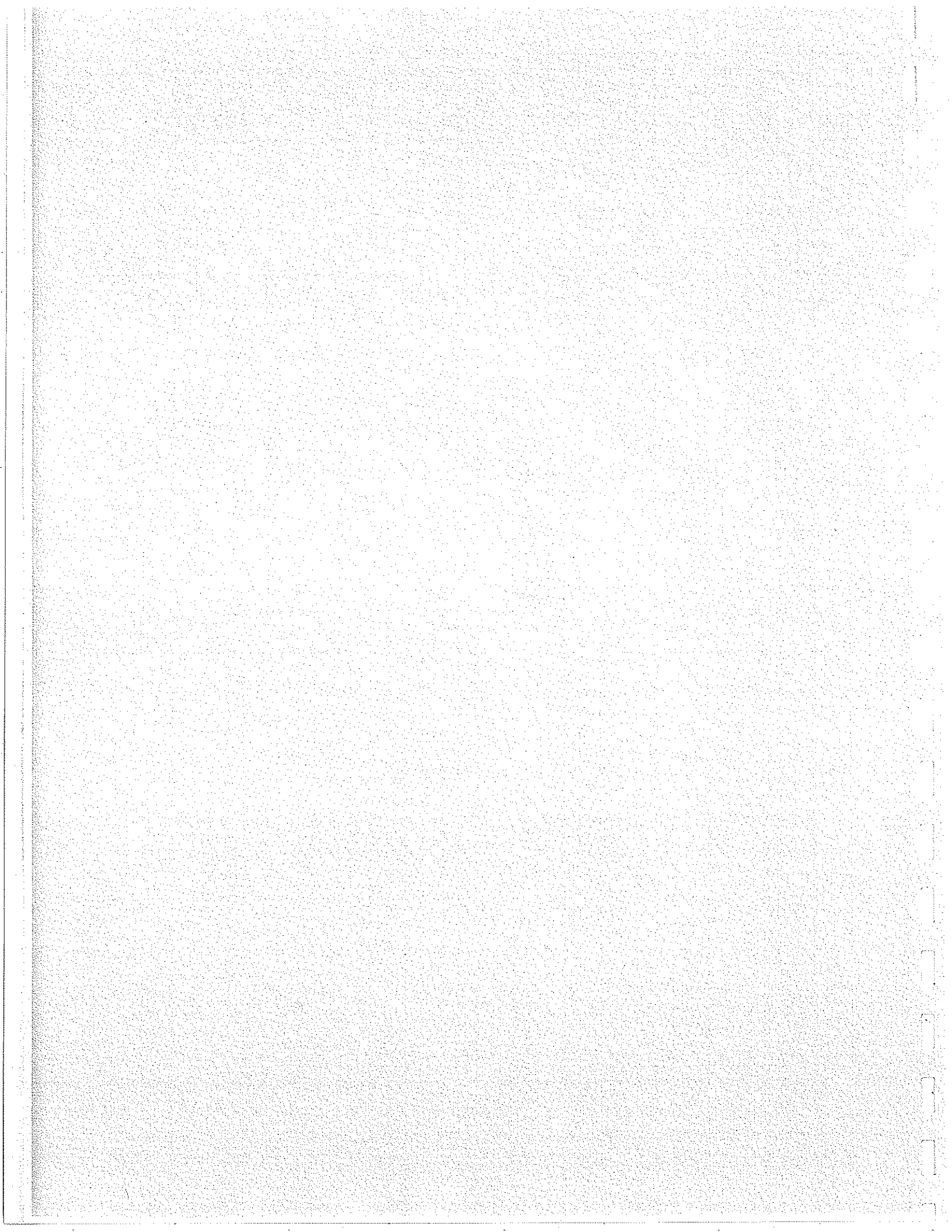
N



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# Tables





**TABLE 1**  
**Intersection Analysis For Existing Conditions**

Intersection	Traffic Control <sup>3</sup>	Intersection Approach Lane(s) <sup>1</sup>												Delay <sup>2</sup> (Seconds)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
		L	T	R	L	T	R	L	T	R	L	T	R				
Monroe Street (NS) at:																	
• 58 <sup>th</sup> Avenue (EW)	AWS	0	1!	0	0.5	0.5	1	0	1!	0	0	1!	0	7.6	8.0	A	A
• 60 <sup>th</sup> Avenue (EW)	AWS	0	1!	0	0	1!	0	0	1!	0	0.5	0.5	1	7.3	7.4	A	A
• 61st Avenue (EW)	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	8.8	8.7	A	A
• 62 <sup>nd</sup> Avenue (EW)	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	7.0	7.3	A	A

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. Where "1" is indicated for the through movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Through; R = Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Improvement

<sup>2</sup> Analysis Software: Traffix, Version 7.9. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> AWS = All Way Stop  
CSS = Cross Street Stop

**TABLE 2**  
**Trip Generation Rates<sup>1</sup>**

Land Use	ITE Code	Units <sup>2</sup>	Peak Hour				Daily
			AM		PM		
			In	Out	In	Out	
Single Family Residential	210	DU	0.19	0.56	0.64	0.37	9.57

<sup>1</sup> Source: Institute of Transportation Engineers (ITE), *Trip Generation, 7th Edition*, 2003.

<sup>2</sup> DU = Dwelling Units

**TABLE 3**  
**Project Trip Generation**

Land Use	ITE Code	Quantity	Units <sup>1</sup>	Peak Hour						Daily
				AM			PM			
				In	Out	Total	In	Out	Total	
Tenative Tract Map 31434	210	94	DU	18	53	71	60	35	95	900

DU = Dwelling Units

**TABLE 4**  
**Other Development Trip Generation<sup>1</sup>**

Zone	Project	Land Use	Quantity	Units <sup>2</sup>	Peak Hour				Daily
					AM		PM		
					In	Out	In	Out	
1	Robert Schumacher (TTM 32398)	Single Family Homes	160	DU	30	90	102	59	1,531
		Shopping Center	174.240	TSF	133	85	434	470	9,743
	Less Pass-by (25% for Commercial Only)				-33	-21	-109	-118	-2,436
	<b>Net Total</b>				130	154	428	412	8,838
2	KB Homes (TTM 31732, 31733)	Single Family Homes	130	DU	25	43	83	48	1,244
3	Trilogy (TTM 30023)	Elderly Housing, Attached	230	DU	18	28	37	23	853
<b>CUMULATIVE DEVELOPMENT TOTAL</b>					173	225	548	483	10,935

<sup>1</sup> Source: Institute of Transportation Engineers (ITE), Trip Generation, 7th Edition, 2003.

<sup>2</sup> TSF = Thousand Square Feet  
DU = Dwelling Units

**TABLE 5**  
**Intersection Analysis For Existing With Project Conditions**

Intersection	Traffic Control <sup>3</sup>	Intersection Approach Lane(s) <sup>1</sup>												Delay <sup>2</sup> (Seconds)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
		L	T	R	L	T	R	L	T	R	L	T	R				
Monroe Street (NS) at:																	
• 58 <sup>th</sup> Avenue (EW)	AWS	0	1!	0	0.5	0.5	1	0	1!	0	0	1!	0	7.9	8.3	A	A
• 60 <sup>th</sup> Avenue (EW)	AWS	0	1!	0	0	1!	0	0	1!	0	0.5	0.5	1	7.5	7.7	A	A
• 61 <sup>st</sup> Avenue (EW)	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	9.6	9.5	A	A
• 62 <sup>nd</sup> Avenue (EW)	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	7.0	7.3	A	A

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. Where "1" is indicated for the through movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Through; R = Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Improvement

<sup>2</sup> Analysis Software: Traffix, Version 7.9. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> AWS = All Way Stop  
 CSS = Cross Street Stop

TABLE 6

Intersection Analysis For Project Buildout (Year 2012) Without Project Conditions

Intersection	Traffic Control <sup>3</sup>	Intersection Approach Lane(s) <sup>1</sup>												Delay <sup>2</sup> (Seconds)		Level of Service		
		Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM	
		L	T	R	L	T	R	L	T	R	L	T	R					
Monroe Street (NS) at:																		
• 58 <sup>th</sup> Avenue (EW)	AWS	0	11	0	0.5	0.5	1	0	11	0	0	11	0	8.1	9.1	A	A	
• 60 <sup>th</sup> Avenue (EW)	AWS	0	11	0	0	11	0	0	11	0	0.5	0.5	1	7.6	8.7	A	A	
• 61 <sup>st</sup> Avenue (EW)	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	8.8	8.7	A	A	
• 62 <sup>nd</sup> Avenue (EW)	AWS	0	11	0	0	11	0	0	11	0	0	11	0	7.0	7.4	A	A	

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. Where "1" is indicated for the through movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Through; R = Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Improvement

<sup>2</sup> Analysis Software: Traffix, Version 7.9. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> AWS = All Way Stop  
CSS = Cross Street Stop

TABLE 7

## Intersection Analysis For Project Buildout (Year 2012) With Project Conditions

Intersection	Traffic Control <sup>3</sup>	Intersection Approach Lane(s) <sup>1</sup>												Delay <sup>2</sup> (Seconds)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
		L	T	R	L	T	R	L	T	R	L	T	R				
Monroe Street (NS) at:																	
• 58 <sup>th</sup> Avenue (EW)	AWS	0	11	0	0.5	0.5	1	0	11	0	0	11	0	8.5	9.5	A	A
• 60 <sup>th</sup> Avenue (EW)	AWS	0	11	0	0	11	0	0	11	0	0.5	0.5	1	7.8	9.3	A	A
• 61 <sup>st</sup> Avenue (EW)	CSS	0	11	0	0	11	0	0	11	0	0	11	0	9.5	9.7	A	A
• 62 <sup>nd</sup> Avenue (EW)	AWS	0	11	0	0	11	0	0	11	0	0	11	0	7.1	7.4	A	A

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. Where "1" is indicated for the through movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Through; R = Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Improvement

<sup>2</sup> Analysis Software: Traffix, Version 7.8. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> AWS = All Way Stop  
CSS = Cross Street Stop



**TABLE 8**  
**Summary Intersection Analysis**

Intersection	Existing				Existing Plus Project				Project Buildout (Year 2012) Without Project				Project Buildout (Year 2012) With Project				
	HCM <sup>1</sup>		LOS <sup>2</sup>		HCM <sup>1</sup>		LOS <sup>2</sup>		HCM <sup>1</sup>		LOS <sup>2</sup>		HCM <sup>1</sup>		LOS <sup>2</sup>		
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
Monroe Street (NS) at:																	
• 58 <sup>th</sup> Avenue (EW)	7.6	8.0	A	A	7.9	8.3	A	A	8.1	9.1	A	A	8.5	9.5	A	A	
• 60 <sup>th</sup> Avenue (EW)	7.3	7.4	A	A	7.5	7.7	A	A	7.6	8.7	A	A	7.8	9.3	A	A	
• 61 <sup>st</sup> Avenue (EW)	8.8	8.7	A	A	9.6	9.5	A	A	8.8	8.7	A	A	9.5	9.7	A	A	
• 62 <sup>nd</sup> Avenue (EW)	7.0	7.3	A	A	7.0	7.3	A	A	7.0	7.4	A	A	7.1	7.4	A	A	

<sup>1</sup> HCM = Highway Capacity Manual

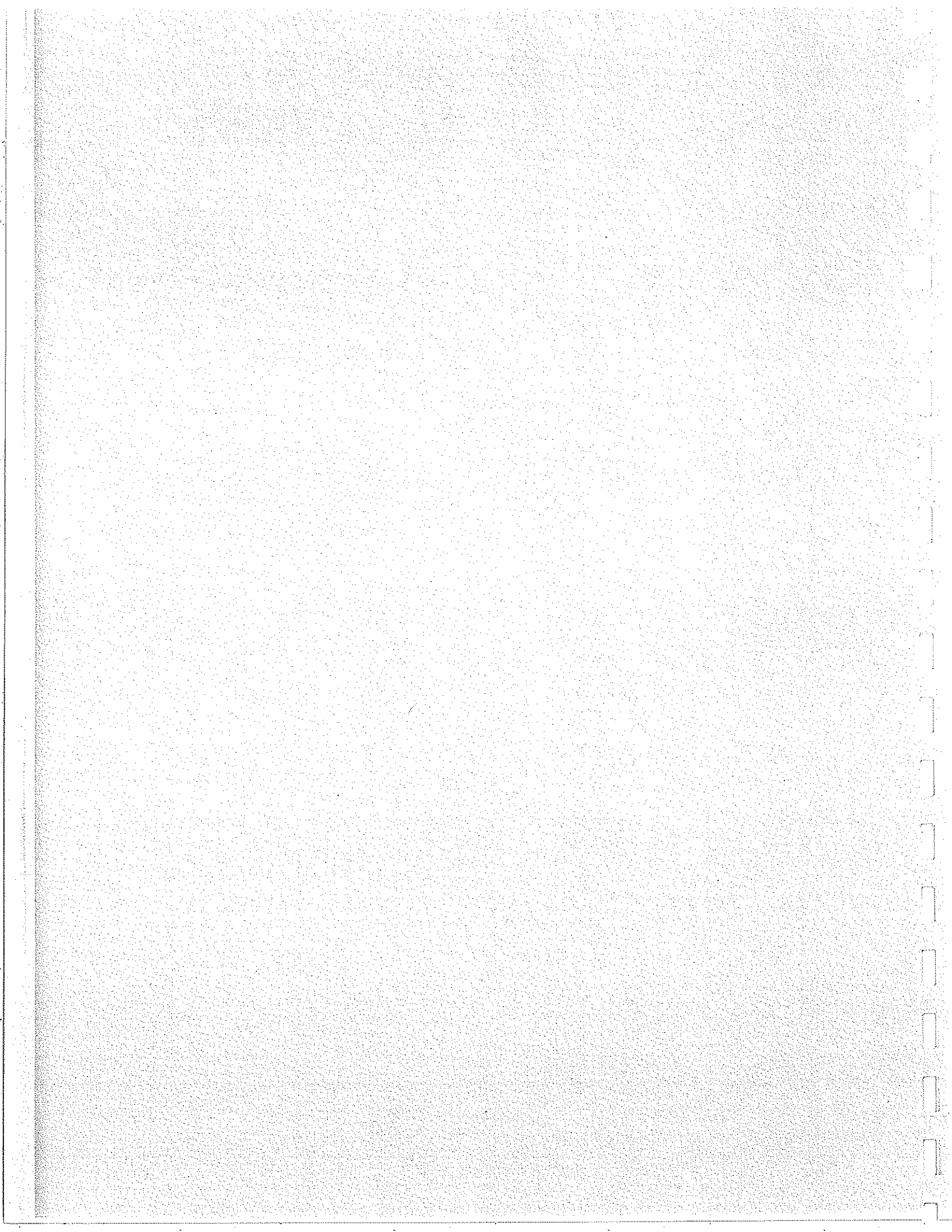
<sup>2</sup> LOS = Level of Service

<sup>3</sup> Delay high and/or V/C Ratio ≥ 0.90. Intersection unstable. Level of Service F.

---

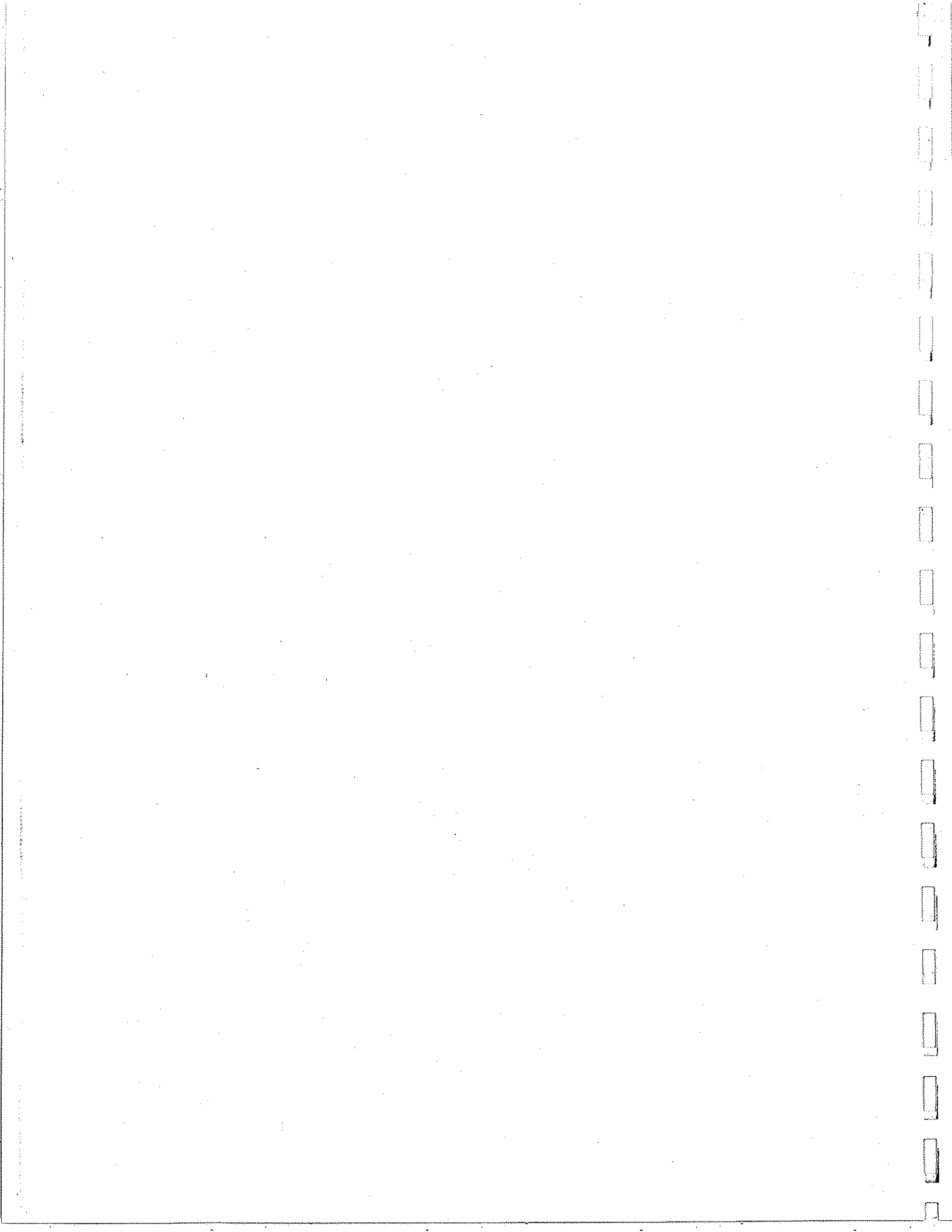
# Appendices

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## **Appendix A**

### Traffic Count Worksheets



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

N-S STREET: Monroe Ave

DATE: 6/26/2008

LOCATION: City of La Quinta

E-W STREET: 58th St

DAY: THURSDAY

PROJECT# 08-3181-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	1	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	3	1	0	3	1	2	3	0	1	2	0	16
7:15 AM	0	8	2	0	5	2	3	1	0	2	5	2	30
7:30 AM	1	5	1	0	8	0	1	4	1	0	7	0	28
7:45 AM	2	8	3	1	6	1	0	2	0	1	6	2	32
8:00 AM	0	7	1	0	2	3	2	1	0	0	8	1	25
8:15 AM	0	9	2	0	4	1	1	2	1	1	4	0	25
8:30 AM	1	10	1	1	3	2	0	1	0	2	2	1	24
8:45 AM	0	6	0	0	1	1	1	0	0	0	2	0	11
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	4	56	11	2	32	11	10	14	2	7	36	6	191

AM Peak Hr Begins at: 7:15 AM

PEAK VOLUMES =	3	28	7	1	21	6	6	8	1	3	26	5	115
PEAK HR. FACTOR:		0.731			0.875			0.625			0.944		0.898

CONTROL: 4-Way Stop

# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

N-S STREET: Monroe Ave

DATE: 6/26/2008

LOCATION: City of La Quinta

E-W STREET: 58th St

DAY: THURSDAY

PROJECT# 08-3181-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	1	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	5	2	0	8	3	2	7	0	0	2	1	30
4:15 PM	0	7	3	0	6	2	4	9	3	2	5	3	44
4:30 PM	0	8	4	1	12	2	3	8	2	3	8	1	52
4:45 PM	1	12	7	0	10	4	4	12	2	2	7	2	63
5:00 PM	2	7	2	2	9	2	5	9	3	2	5	3	51
5:15 PM	1	6	3	1	9	1	2	6	2	3	3	1	38
5:30 PM	1	5	2	1	6	2	4	5	0	2	4	2	34
5:45 PM	1	4	0	2	3	0	3	4	0	0	2	2	21
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	6	54	23	7	63	16	27	60	12	14	36	15	333

PM Peak Hr Begins at: 4:15 PM

PEAK VOLUMES =	3	34	16	3	37	10	16	38	10	9	25	9	210
PEAK HR. FACTOR:		0.663			0.833			0.889			0.896		0.833

CONTROL: 4-Way Stop

# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

N-S STREET: Monroe Ave

DATE: 6/26/2008

LOCATION: City of La Quinta

E-W STREET: 60th St

DAY: THURSDAY

PROJECT# 08-3181-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM	0	1	0	0	1	0	0	1	0	0	1	0	
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	2	0	1	2	1	1	1	0	0	1	1	10
7:15 AM	0	7	0	2	4	0	2	2	1	1	2	2	23
7:30 AM	1	3	1	3	4	2	1	0	0	0	0	1	16
7:45 AM	0	4	0	1	9	1	3	2	0	0	1	4	25
8:00 AM	0	4	0	0	3	0	4	1	1	1	3	2	19
8:15 AM	1	9	1	0	4	1	0	3	0	0	1	0	20
8:30 AM	0	6	0	1	2	1	2	1	1	1	0	1	16
8:45 AM	0	7	0	0	3	0	1	0	0	0	1	2	14
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	42	2	8	31	6	14	10	3	3	9	13	143

AM Peak Hr Begins at: 7:15 AM

PEAK VOLUMES =	1	18	1	6	20	3	10	5	2	2	6	9	83
PEAK HR. FACTOR:		0.714			0.659			0.708			0.708		0.830

CONTROL: 4-Way Stop



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Monroe Ave

DATE: 6/26/2008

LOCATION: City of La Quinta

E-W STREET: 60th St

DAY: THURSDAY

PROJECT# 08-3181-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	2	3	0	0	2	2	2	2	0	0	0	2	15
4:15 PM	1	7	0	2	8	7	4	1	1	1	2	4	38
4:30 PM	1	6	0	0	6	5	2	0	1	1	1	3	26
4:45 PM	0	5	0	1	8	7	4	3	2	2	3	2	37
5:00 PM	2	4	1	2	5	4	3	2	2	2	1	2	30
5:15 PM	0	5	0	0	7	6	2	5	0	0	2	4	31
5:30 PM	0	3	0	1	6	5	5	1	1	1	1	1	25
5:45 PM	1	2	0	1	4	3	3	2	0	0	2	2	20
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	7	35	1	7	46	39	25	16	7	7	12	20	222

PM Peak Hr Begins at: 4:15 PM

PEAK VOLUMES =	4	22	1	5	27	23	13	6	6	6	7	11	131
PEAK HR. FACTOR:		0.844			0.809			0.694			0.857		0.862

CONTROL: 4-Way Stop

# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

N-S STREET: Monroe Ave

DATE: 6/26/2008

LOCATION: City of La Quinta

E-W STREET: 61st St

DAY: THURSDAY

PROJECT# 08-3181-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	3	0	0	2	0	0			0		0	5
7:15 AM	0	9	0	0	3	0	1			1		0	14
7:30 AM	1	8	1	1	9	1	0			0		1	22
7:45 AM	0	9	0	0	4	0	0			0		0	13
8:00 AM	0	6	0	1	6	0	0			0		0	13
8:15 AM	0	5	0	0	2	1	0			0		1	9
8:30 AM	1	4	0	0	2	0	0			0		0	7
8:45 AM	0	3	0	0	1	0	0			0		0	4
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

<b>TOTAL VOLUMES =</b>	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	47	1	2	29	2	1	0	0	1	0	2	87

AM Peak Hr Begins at: 7:15 AM

<b>PEAK VOLUMES =</b>	1	32	1	2	22	1	1	0	0	1	0	1	62
<b>PEAK HR. FACTOR:</b>	0.850			0.568			0.250			0.500			0.705

CONTROL: 2-Way Stop EB & WB

# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

N-S STREET: Monroe Ave

DATE: 6/26/2008

LOCATION: City of La Quinta

E-W STREET: 61st St

DAY: THURSDAY

PROJECT# 08-3181-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	3		1	4	0				0		0	8
4:15 PM	0	8		0	10	1				0		0	19
4:30 PM	0	6		1	10	0				1		0	18
4:45 PM	1	4		0	10	0				0		0	15
5:00 PM	0	7		0	9	0				0		1	17
5:15 PM	0	4		0	8	0				0		0	12
5:30 PM	0	4		0	7	0				0		0	11
5:45 PM	0	3		0	3	0				0		1	7
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	39	0	2	61	1	0	0	0	1	0	2	107

PM Peak Hr Begins at: 4:15 PM

PEAK VOLUMES =	1	25	0	1	39	1	0	0	0	1	0	1	69
PEAK HR. FACTOR:		0.813			0.932			0.000			0.500		0.908

CONTROL: 2-Way Stop EB & WB

# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

N-S STREET: Monroe Ave

DATE: 6/26/2008

LOCATION: City of La Quinta

E-W STREET: 62nd St

DAY: THURSDAY

PROJECT# 08-3181-004

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	2	0	0	1	0		0	0	2	5
7:15 AM	0	0	0	3	0	0	2	1		0	1	8	15
7:30 AM	0	0	1	2	1	0	0	2		1	0	7	14
7:45 AM	1	1	1	1	0	1	3	3		0	2	4	17
8:00 AM	0	0	0	9	1	0	1	1		0	1	6	19
8:15 AM	0	0	1	4	1	1	2	2		0	0	4	15
8:30 AM	1	0	0	2	0	0	1	0		0	1	5	10
8:45 AM	0	1	0	0	0	1	0	1		0	1	2	6
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

<b>TOTAL VOLUMES =</b>	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	2	3	23	3	3	10	10	0	1	6	38	101

AM Peak Hr Begins at: 730 AM

<b>PEAK VOLUMES =</b>	1	1	3	16	3	2	6	8	0	1	3	21	65
<b>PEAK HR. FACTOR:</b>	0.417			0.525			0.583			0.781			0.855

CONTROL: 2-Way Stop NB & SB

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Monroe Ave

DATE: 6/26/2008

LOCATION: City of La Quinta

E-W STREET: 62nd St

DAY: THURSDAY

PROJECT# 08-3181-004

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	0	6	1	0	2	0	1		2	3	15
4:15 PM	0	0	0	13	1	0	5	0	0		1	1	21
4:30 PM	0	0	0	10	2	0	4	0	0		3	0	19
4:45 PM	0	2	1	8	1	1	5	1	1		2	0	22
5:00 PM	1	1	2	4	0	0	1	0	0		0	2	11
5:15 PM	0	0	0	3	1	1	2	1	0		2	2	12
5:30 PM	0	1	0	4	0	0	2	0	0		1	0	8
5:45 PM	1	1	1	5	1	0	3	1	0		0	1	14
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	5	4	53	7	2	24	3	2	0	11	9	122

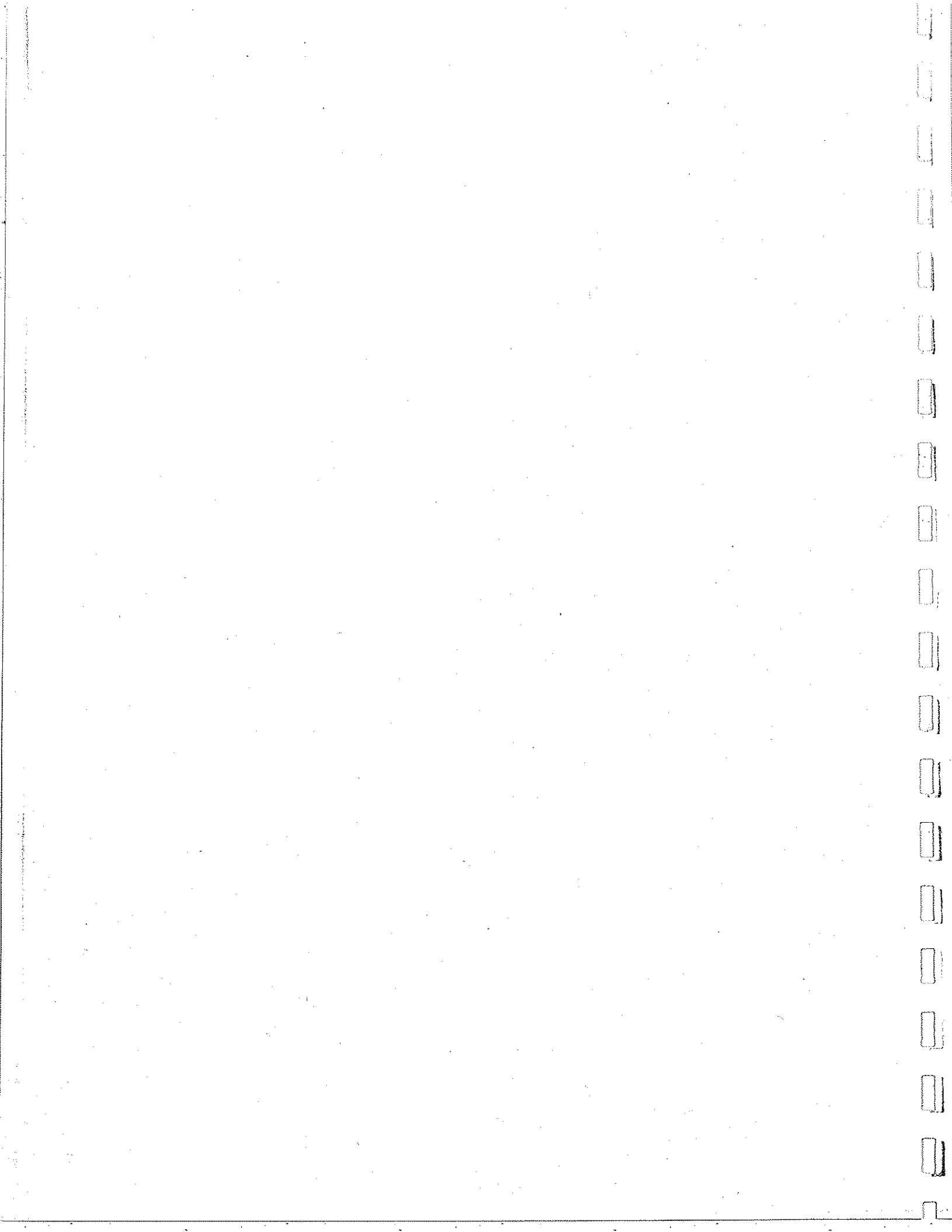
PM Peak Hr Begins at: 400 PM

PEAK VOLUMES =	0	2	1	37	5	1	16	1	2	0	8	4	77
PEAK HR. FACTOR:		0.250			0.768			0.679			0.600		0.875

CONTROL: 2-Way Stop NB & SB

## **Appendix B**

Existing Level of Service Analysis Worksheets



TTM 31434 Traffic Impact Study
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

\*\*\*\*\*
Intersection #1 Monroe Street (NS) at 58th Street (EW)
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.060
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.6
Optimal Cycle: 0 Level Of Service: A
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 58th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLE Adj, and Final Volume.

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

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

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



TTM 31434 Traffic Impact Study
Existing Conditions
PM Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Monroe Street (NS) at 58th Street (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.086
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.0
Optimal Cycle: 0 Level of Service: A

Table with columns for Street Name (Monroe Street, 58th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across four approaches.

Saturation Flow Module table with columns for Adjustment, Lanes, and Final Sat. across four approaches.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ across four approaches.

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

TTM 31434 Traffic Impact Study
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

\*\*\*\*\*
Intersection #2 Monroe Street (NS) at 60th Street (EW)
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.051
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.3
Optimal Cycle: 0 Level Of Service: A
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 60th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across 12 lanes.

Saturation Flow Module: Table with columns for Adjustment, Lanes, and Final Sat. across 12 lanes.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ across 12 lanes.

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

TTM 31434 Traffic Impact Study
Existing Conditions
PM Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

\*\*\*\*\*
Intersection #2 Monroe Street (NS) at 60th Street (EW)
\*\*\*\*\*
Cycle (sec): 100 Critical Vol./Cap. (X): 0.091
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.4
Optimal Cycle: 0 Level Of Service: A
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 60th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movements.

Table for Saturation Flow Module showing Adjustment, Lanes, and Final Sat. values.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

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

TTM 31434 Traffic Impact Study
Existing Conditions
AM Peak Hour

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

\*\*\*\*\*
Intersection #3 Monroe Street (NS) at 61st Street (EW)
\*\*\*\*\*

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: A[ 8.8]
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 61st 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, 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.
\*\*\*\*\*

TTM 31434 Traffic Impact Study
Existing Conditions
PM Peak Hour

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Monroe Street (NS) at 61st Street (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A[ 8.7]

Table with columns for Street Name (Monroe Street, 61st Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume for various movements.

Critical Gap Module table showing Critical Gp and FollowUpTim 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, Approach Del, and Approach LOS.

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

TTM 31434 Traffic Impact Study
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Monroe Street (NS) at 62nd Street (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.037
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.0
Optimal Cycle: 0 Level Of Service: A

Table with columns for Street Name (Monroe Street, 62nd Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

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

TTM 31434 Traffic Impact Study
Existing Conditions
PM Peak Hour

Level of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

\*\*\*\*\*
Intersection #4 Monroe Street (NS) at 62nd Street (EW)
\*\*\*\*\*
Cycle (sec): 100 Critical Vol./Cap.(X): 0.074
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.3
Optimal Cycle: 0 Level Of Service: A
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 62nd Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across four approaches.

Saturation Flow Module table with columns for Adjustment, Lanes, and Final Sat. across four approaches.

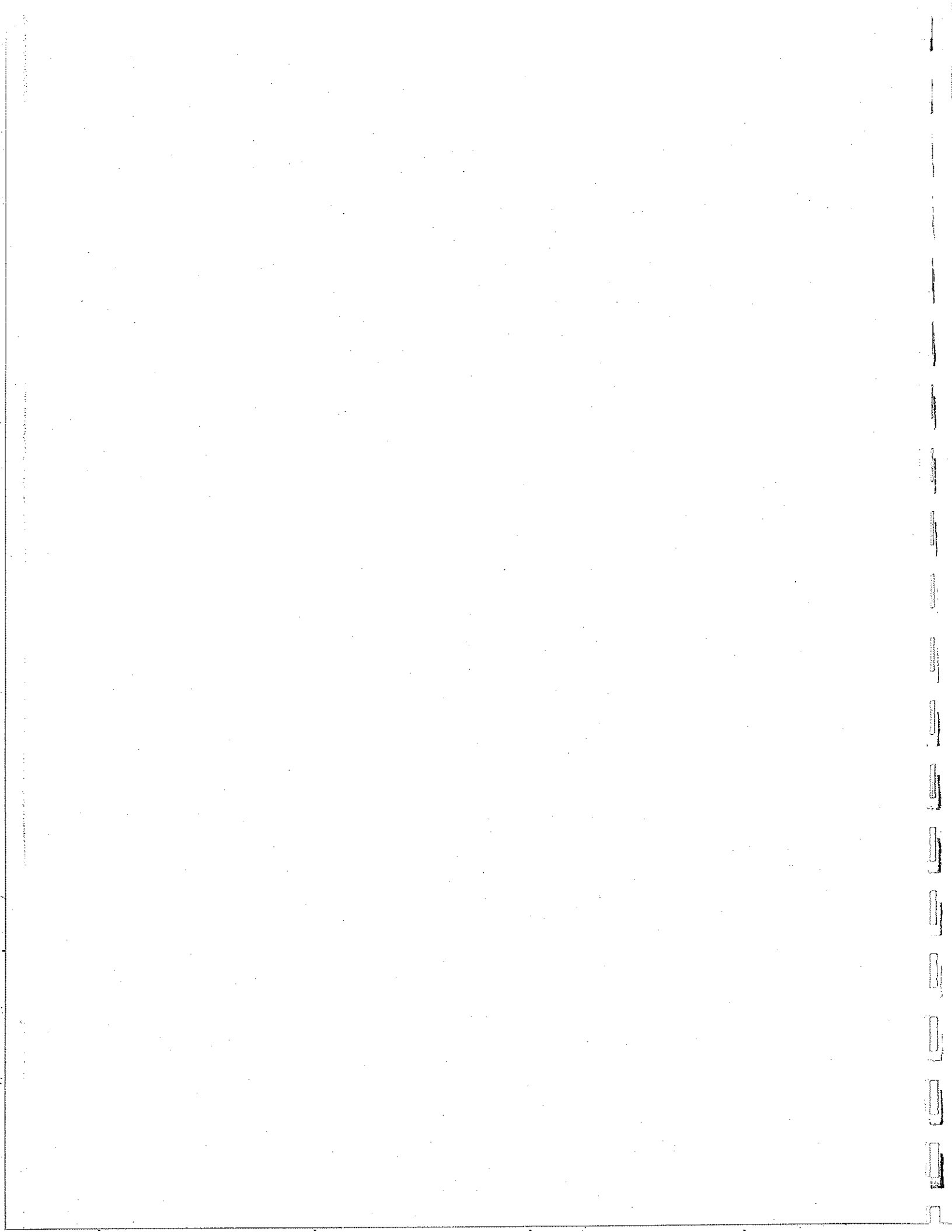
Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ across four approaches.

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

## **Appendix C**

Existing Plus Project  
Level of Service Analysis Worksheets





TTM 31434 Traffic Impact Study
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #1 Monroe Street (NS) at 58th Street (EW)
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.125
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 0 Level Of Service: A

Table with columns for Street Name (Monroe Street, 58th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, 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 various movements.

Saturation Flow Module: Table showing Adjustment, Lanes, and Final Sat. for different movements.

Capacity Analysis Module: Table showing Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

TMM 31434 Traffic Impact Study  
Existing Plus Project Conditions  
PM Peak Hour

Level of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 Monroe Street (NS) at 58th Street (EW)

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.134  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.3  
Optimal Cycle: 0 Level of Service: A

\*\*\*\*\*

Street Name:	Monroe Street						58th 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			Stop Sign			Stop Sign					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	1	0	0	1	1	0	2	0	1	1	0	1	0	1

Volume Module:

Base Vol:	3	34	16	3	37	10	16	38	10	9	25	9
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	4	44	21	4	48	13	21	49	13	12	33	12
Added Vol:	2	26	2	0	45	0	0	0	3	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	70	23	4	93	13	21	49	16	15	33	12
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:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	7	84	27	5	112	16	25	59	19	18	39	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	84	27	5	112	16	25	59	19	18	39	14
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:	7	84	27	5	112	16	25	59	19	18	39	14

Saturation Flow Module:

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:	0.08	0.92	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.31	0.69	1.00
Final Sat.:	53	628	789	607	1329	762	593	647	739	200	442	756

Capacity Analysis Module:

Vol/Sat:	0.13	0.13	0.03	0.01	0.08	0.02	0.04	0.09	0.03	0.09	0.09	0.02
Crit Moves:	****			****			****			****		
Delay/Veh:	8.6	8.6	7.2	8.5	8.4	7.3	8.8	8.5	7.4	8.6	8.6	7.3
Delay 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
AdjDel/Veh:	8.6	8.6	7.2	8.5	8.4	7.3	8.8	8.5	7.4	8.6	8.6	7.3
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	8.3			8.3			8.4			8.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.3			8.3			8.4			8.3		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0

\*\*\*\*\*

TTM 31434 Traffic Impact Study  
 Existing Plus Project Conditions  
 AM Peak Hour

Level Of Service Computation Report  
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 Monroe Street (NS) at 60th Street (EW)

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.102

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.5

Optimal Cycle: 0 Level Of Service: A

\*\*\*\*\*

Street Name:	Monroe Street				60th Street				
Approach:	North Bound		South Bound		East Bound		West Bound		
Movement:	L	T	R	L	T	R	L	T	R
Control:	Stop Sign		Stop Sign		Stop Sign		Stop Sign		
Rights:	Include		Include		Include		Include		
Min. Green:	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1	0	0	0	1	0	0

Volume Module:

Base Vol:	1	18	1	6	20	3	10	5	2	2	6	9
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	1	23	1	8	26	4	13	7	3	3	8	12
Added Vol:	0	45	3	0	15	0	0	0	0	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	68	4	8	41	4	13	7	3	4	8	12
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:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	2	82	5	9	49	5	16	8	3	4	9	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	82	5	9	49	5	16	8	3	4	9	14
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:	2	82	5	9	49	5	16	8	3	4	9	14

Saturation Flow Module:

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:	0.02	0.92	0.06	0.15	0.78	0.07	0.67	0.33	1.00	0.15	0.34	0.51
Final Sat.:	15	809	51	128	674	64	452	226	842	133	288	432

Capacity Analysis Module:

Vol/Sat:	0.10	0.10	0.10	0.07	0.07	0.07	0.03	0.03	0.00	0.03	0.03	0.03
Crit Moves:	****		****		****		****		****		****	
Delay/Veh:	7.5	7.5	7.5	7.4	7.4	7.4	8.0	8.0	6.8	7.2	7.2	7.2
Delay 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
AdjDel/Veh:	7.5	7.5	7.5	7.4	7.4	7.4	8.0	8.0	6.8	7.2	7.2	7.2
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	7.5		7.4		7.9		7.2					
Delay Adj:	1.00		1.00		1.00		1.00					
ApprAdjDel:	7.5		7.4		7.9		7.2					
LOS by Appr:	A		A		A		A					
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0

\*\*\*\*\*

TTM 31434 Traffic Impact Study  
Existing Plus Project Conditions  
PM Peak Hour

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 Monroe Street (NS) at 60th Street (EW)

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.162  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.7  
Optimal Cycle: 0 Level Of Service: A

\*\*\*\*\*

Street Name:	Monroe Street						60th 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			Stop Sign			Stop Sign					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	1	0	0	1	0	0	0	1	0	0	1	0	0

Volume Module:	Monroe Street			Monroe Street			60th Street			60th Street		
Base Vol:	4	22	1	5	27	23	13	6	6	6	7	11
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	5	29	1	7	35	30	17	8	8	8	9	14
Added Vol:	0	30	2	0	51	0	0	0	0	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	59	3	7	86	30	17	8	8	11	9	14
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:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	6	68	4	8	100	35	20	9	9	13	11	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	68	4	8	100	35	20	9	9	13	11	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:	6	68	4	8	100	35	20	9	9	13	11	17

Saturation Flow Module:	Monroe Street			Monroe Street			60th Street			60th Street		
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:	0.08	0.87	0.05	0.05	0.71	0.24	0.68	0.32	1.00	0.31	0.27	0.42
Final Sat.:	65	733	41	47	618	215	445	206	802	252	212	333

Capacity Analysis Module:	Monroe Street			Monroe Street			60th Street			60th Street		
Vol/Sat:	0.09	0.09	0.09	0.16	0.16	0.16	0.04	0.04	0.01	0.05	0.05	0.05
Crit Moves:	****			****			****			****		
Delay/Veh:	7.6	7.6	7.6	7.8	7.8	7.8	8.3	8.3	7.0	7.5	7.5	7.5
Delay 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
AdjDel/Veh:	7.6	7.6	7.6	7.8	7.8	7.8	8.3	8.3	7.0	7.5	7.5	7.5
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.6			7.8			8.0			7.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.6			7.8			8.0			7.5	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.1	0.1	0.1	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0

\*\*\*\*\*

TMM 31434 Traffic Impact Study  
Existing Plus Project Conditions  
AM Peak Hour

Level of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #3 Monroe Street (NS) at 61st Street (EW)  
\*\*\*\*\*

Average Delay (sec/veh): 3.8 Worst Case Level of Service: A[ 9.6]

\*\*\*\*\*  
Street Name: Monroe Street 61st Street  
\*\*\*\*\*

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	1 0	0	0	1 0	0	0	1 0

Volume Module:

Base Vol:	0	32	1	2	22	0	0	0	0	1	0	1
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	0	42	1	3	29	0	0	0	0	1	0	1
Added Vol:	2	0	0	0	0	16	48	0	5	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	42	1	3	29	16	48	0	5	1	0	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:	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
PHF Volume:	3	59	2	4	41	23	68	0	7	2	0	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	59	2	4	41	23	68	0	7	2	0	2

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	63	xxxx	xxxxxx	61	xxxx	xxxxxx	126	126	52	128	136	60
Potent Cap.:	1552	xxxx	xxxxxx	1555	xxxx	xxxxxx	853	768	1022	849	758	1011
Move Cap.:	1552	xxxx	xxxxxx	1555	xxxx	xxxxxx	848	765	1022	841	755	1011
Volume/Cap:	0.00	xxxx	xxxxxx	0.00	xxxx	xxxxxx	0.08	0.00	0.01	0.00	0.00	0.00

Level of Service Module:

2Way95thQ:	0.0	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	7.3	xxxx	xxxxxx	7.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	862	xxxxxx	xxxx	918	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.3	xxxxxx	xxxxxx	0.0	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	9.6	xxxxxx	xxxxxx	8.9	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	A	*	*	A	*
ApproachDel:	xxxxxxx			xxxxxxx			9.6			8.9		
ApproachLOS:	*			*			A			A		

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

TTM 31434 Traffic Impact Study  
 Existing Plus Project Conditions  
 PM Peak Hour

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

\*\*\*\*\*  
 Intersection #3 Monroe Street (NS) at 61st Street (EW)  
 \*\*\*\*\*

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: A[ 9.5]  
 \*\*\*\*\*

Street Name:	Monroe Street						61st Street											
	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:	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0

Volume Module:												
Base Vol:	0	25	0	1	39	0	0	0	0	1	0	1
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	0	33	0	1	51	0	0	0	0	1	0	1
Added Vol:	6	0	0	0	0	54	32	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	33	0	1	51	54	32	0	4	1	0	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:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	7	36	0	1	56	59	35	0	4	1	0	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	36	0	1	56	59	35	0	4	1	0	1

Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:												
Cnflct Vol:	115	xxxx	xxxxx	36	xxxx	xxxxx	138	137	86	140	167	36
Potent Cap.:	1486	xxxx	xxxxx	1588	xxxx	xxxxx	837	757	979	835	729	1043
Move Cap.:	1486	xxxx	xxxxx	1588	xxxx	xxxxx	832	753	979	828	725	1043
Volume/Cap:	0.00	xxxx	xxxxx	0.00	xxxx	xxxxx	0.04	0.00	0.00	0.00	0.00	0.00

Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	847	xxxxx	xxxx	923	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	0.0	xxxxx
Shrd ConDel:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.5	xxxxx	xxxxx	8.9	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx				9.5			8.9	
ApproachLOS:	*			*				A			A	

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

TTM 31434 Traffic Impact Study  
Existing Plus Project Conditions  
AM Peak Hour

Level of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #4 Monroe Street (NS) at 62nd Street (EW)  
\*\*\*\*\*  
Cycle (sec): 100 Critical Vol./Cap. (X): 0.044  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.0  
Optimal Cycle: 0 Level Of Service: A  
\*\*\*\*\*

Street Name:		Monroe Street						62nd 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			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	1 0	0	0	1 0	0	1	0	0	0	0	

Volume Module:	Monroe Street			Monroe Street			62nd Street			62nd Street		
Base Vol:	1	1	3	16	3	2	6	8	0	1	3	21
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	1	1	4	21	4	3	8	10	0	1	4	27
Added Vol:	0	0	0	5	0	0	0	0	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	1	4	26	4	3	8	10	0	1	4	29
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:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	2	2	5	30	5	3	9	12	0	2	5	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	5	30	5	3	9	12	0	2	5	34
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:	2	2	5	30	5	3	9	12	0	2	5	34

Saturation Flow Module:	Monroe Street			Monroe Street			62nd Street			62nd Street		
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:	0.20	0.20	0.60	0.80	0.12	0.08	0.43	0.57	0.00	0.04	0.11	0.85
Final Sat.:	190	190	569	686	104	69	371	495	0	38	114	859

Capacity Analysis Module:	Monroe Street			Monroe Street			62nd Street			62nd Street		
Vol/Sat:	0.01	0.01	0.01	0.04	0.04	0.04	0.02	0.02	xxxx	0.04	0.04	0.04
Crit Moves:	****			****			****			****		
Delay/Veh:	6.8	6.8	6.8	7.3	7.3	7.3	7.2	7.2	0.0	6.7	6.7	6.7
Delay 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
AdjDel/Veh:	6.8	6.8	6.8	7.3	7.3	7.3	7.2	7.2	0.0	6.7	6.7	6.7
LOS by Move:	A	A	A	A	A	A	A	A	*	A	A	A
ApproachDel:	6.8			7.3			7.2			6.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	6.8			7.3			7.2			6.7		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TTM 31434 Traffic Impact Study  
 Existing Plus Project Conditions  
 PM Peak Hour

Level of Service Computation Report  
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #4 Monroe Street (NS) at 62nd Street (EW)  
 \*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.080  
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.3  
 Optimal Cycle: 0 Level of Service: A  
 \*\*\*\*\*

Street Name:	Monroe Street						62nd 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			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1	0	0	1	0	0	1	0	0	1

Volume Module:												
	Monroe Street			Monroe Street			62nd Street			62nd Street		
Base Vol:	0	2	1	37	5	1	16	1	2	0	8	4
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	0	3	1	48	7	1	21	1	3	0	10	5
Added Vol:	0	0	0	4	0	0	0	0	0	0	0	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3	1	52	7	1	21	1	3	0	10	11
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:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	3	1	60	7	1	24	1	3	0	12	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3	1	60	7	1	24	1	3	0	12	13
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	3	1	60	7	1	24	1	3	0	12	13

Saturation Flow Module:												
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	0.67	0.33	0.87	0.11	0.02	0.84	0.05	0.11	0.00	0.48	0.52
Final Sat.:	0	610	305	742	93	19	713	45	89	0	451	486

Capacity Analysis Module:												
Vol/Sat:	xxxx	0.00	0.00	0.08	0.08	0.08	0.03	0.03	0.03	xxxx	0.03	0.03
Crit Moves:	****			****			****			****		
Delay/Veh:	0.0	6.9	6.9	7.5	7.5	7.5	7.3	7.3	7.3	0.0	6.9	6.9
Delay 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
AdjDel/Veh:	0.0	6.9	6.9	7.5	7.5	7.5	7.3	7.3	7.3	0.0	6.9	6.9
LOS by Move:	*	A	A	A	A	A	A	A	A	*	A	A
ApproachDel:		6.9			7.5			7.3			6.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		6.9			7.5			7.3			6.9	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0

## **Appendix D**

Project Buildout (Year 2012) Without Project  
Level of Service Analysis Worksheets

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TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #1 Monroe Street (NS) at 58th Street (EW)
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.161
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 0 Level Of Service: A
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 58th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, 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 Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) Without Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 Monroe Street (NS) at 58th Street (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.226
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 9.1
Optimal Cycle: 0 Level Of Service: A

Table with columns for Street Name (Monroe Street, 58th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, 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 Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) Without Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #2 Monroe Street (NS) at 60th Street (EW)
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.112
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.6
Optimal Cycle: 0 Level Of Service: A
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 60th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, 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 Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) Without Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Monroe Street (NS) at 60th Street (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.291
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.7
Optimal Cycle: 0 Level Of Service: A

Table with columns for Street Name (Monroe Street, 60th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, 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 Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) Without Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #3 Monroe Street (NS) at 61st Street (EW)
\*\*\*\*\*

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[ 8.8]

Table with columns for Street Name, Approach, Movement, Control, Rights, and Lanes. Rows include North Bound, South Bound, East Bound, and West Bound for both Monroe Street and 61st 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, and FinalVolume. Rows include various volume and adjustment factors.

Critical Gap Module: Table with columns for Critical Gp and FollowUpTim. Rows include gap and follow-up time values for different approaches.

Capacity Module: Table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap. Rows include capacity and volume-to-capacity ratios.

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. Rows include level of service and delay metrics.

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



TMM 31434 Traffic Impact Study
Project Buildout (Year 2012) Without Project Conditions
PM Peak Hour

Level of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #3 Monroe Street (NS) at 61st Street (EW)
\*\*\*\*\*

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: A [ 8.7]
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 61st Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, 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 Gap and FollowUp Time for each approach.

Capacity Module: Table showing Conflict 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, Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS for each approach.

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

TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #4 Monroe Street (NS) at 62nd Street (EW)
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.048
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.0
Optimal Cycle: 0 Level Of Service: A
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 62nd Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, 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 Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) Without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #4 Monroe Street (NS) at 62nd Street (EW)
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.094
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.4
Optimal Cycle: 0 Level Of Service: A
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 62nd Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, 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 Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

## **Appendix E**

Project Buildout (Year 2012) With Project  
Level of Service Analysis Worksheets

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) With Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #1 Monroe Street (NS) at 58th Street (EW)
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.224
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.5
Optimal Cycle: 0 Level Of Service: A
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 58th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, 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 Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) With Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 Monroe Street (NS) at 58th Street (EW)

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.277
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 9.5
Optimal Cycle: 0 Level Of Service: A

\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 58th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module:

Table with columns for various volume and adjustment factors: 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 Saturation Flow factors: Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with columns for Capacity Analysis factors: Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, AllWayAvgQ.

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 TTM 31434 Traffic Impact Study  
 Project Buildout (Year 2012) With Project Conditions  
 AM Peak Hour  
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Level Of Service Computation Report  
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #2 Monroe Street (NS) at 60th Street (EW)  
 \*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.133  
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.8  
 Optimal Cycle: 0 Level Of Service: A  
 \*\*\*\*\*

Street Name:	Monroe Street						60th 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			Stop Sign			Stop Sign										
Rights:	Include			Include			Include			Include										
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0								
Lanes:	0	0	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	1	18	1	6	20	3	10	5	2	2	6	9
Growth Adj:	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72
Initial Bse:	2	31	2	10	34	5	17	9	3	3	10	15
Added Vol:	3	45	3	36	15	0	0	9	4	1	11	54
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	76	5	46	49	5	17	18	7	4	21	69
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:	5	80	5	49	52	5	18	19	8	5	22	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	80	5	49	52	5	18	19	8	5	22	73
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:	5	80	5	49	52	5	18	19	8	5	22	73

Saturation Flow Module:

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:	0.05	0.89	0.06	0.46	0.49	0.05	0.49	0.51	1.00	0.05	0.22	0.73
Final Sat.:	45	719	45	367	391	41	327	334	800	40	191	621

Capacity Analysis Module:

Vol/Sat:	0.11	0.11	0.11	0.13	0.13	0.13	0.06	0.06	0.01	0.12	0.12	0.12
Crit Moves:	****			****			****			****		
Delay/Veh:	7.8	7.8	7.8	8.0	8.0	8.0	8.2	8.2	7.0	7.6	7.6	7.6
Delay 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
AdjDel/Veh:	7.8	7.8	7.8	8.0	8.0	8.0	8.2	8.2	7.0	7.6	7.6	7.6
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	7.8			8.0			8.0			7.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.8			8.0			8.0			7.6		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1



TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) With Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Monroe Street (NS) at 60th Street (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.366
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 9.3
Optimal Cycle: 0 Level Of Service: A

Table with columns for Street Name (Monroe Street, 60th Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, 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 Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) With Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #3 Monroe Street (NS) at 61st Street (EW)
\*\*\*\*\*

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: A[ 9.5]

Table with columns for Street Name (Monroe Street, 61st Street), 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.
\*\*\*\*\*

TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) With Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #3 Monroe Street (NS) at 61st Street (EW)
\*\*\*\*\*

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: A[ 9.7]

Table with columns for Street Name (Monroe Street, 61st 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., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

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

TTM 31434 Traffic Impact Study
Project Buildout (Year 2012) With Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #4 Monroe Street (NS) at 62nd Street (EW)
\*\*\*\*\*
Cycle (sec): 100 Critical Vol./Cap.(X): 0.055
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.1
Optimal Cycle: 0 Level Of Service: A
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 62nd Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, 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 Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

TFM 31434 Traffic Impact Study
Project Buildout (Year 2012) With Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #4 Monroe Street (NS) at 62nd Street (EW)
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.099
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.4
Optimal Cycle: 0 Level Of Service: A
\*\*\*\*\*

Table with columns for Street Name (Monroe Street, 62nd Street), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green, 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 Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

# **Appendix F**

## Scoping Agreement



City of La Quinta  
**WORK SCOPE FOR TRAFFIC IMPACT ANALYSIS**

PROJECT NAME <b>TTM 31434 Development</b>	LOCATION <b>West of Monroe Street at 61st</b>	DATE <b>6/20/08</b>
DEVELOPER <b>Monroe Dates</b>	CONSULTANT <b>RIK Engineering Group</b>	CITY DEPARTMENT <b>Transportation</b>
DEVELOPER CONTACT <b>Craig A. Knight</b>	CONSULTANT CONTACT <b>Gene Kon</b>	CITY CONTACT <b>Rusty Beardley</b>
DEVELOPER PHONE NO. <b>801-573-1604</b>	CONSULTANT PHONE NUMBER <b>949-474-0809</b>	CITY PHONE NO. <b>760-777-7056</b>

<b>STUDY AREA BOUNDARIES</b>	NORTH <b>58th Street</b>	SOUTH <b>62nd Street</b>
	EAST <b>East of Monroe St.</b>	WEST <b>W of Monroe St.</b>

TYPE OF APPLICATION	ITEMS TO BE ADDRESSED IN THE TRAFFIC ANALYSIS	SITE SPECIFIC IMPACTS	STUDY AREA IMPACTS	RECOMMENDING METHOD
		Yes / No	Yes / No	
CHANGE OF ZONE	LAND USE DESCRIPTION	Yes	No	
TENTATIVE TRACT MAP	<input checked="" type="checkbox"/> TRIP GENERATION (+REDUCTION FACTORS)	Yes	Yes	ITE (7th Edition or other)
TENTATIVE PARCEL MAP	TRIP DISTRIBUTION/ASSIGNMENT	Yes	Yes	
S.D.P.	TDM REDUCTIONS	No	No	
SPECIFIC PLAN	PARKING ANALYSIS (+SHARED PARKING)	No	No	
BUILDING PERMIT	SAFETY ANALYSIS	No	No	
MODIFICATION	TRAFFIC SIGNAL WARRANTS	Yes	Yes	
LAND DIVISION	INTERNAL CIRCULATION	No	Yes	
OTHER	ACCESS DESIGN/AUXILIARY LANES	Yes	Yes	Repeals on traffic impact

INTERSECTION TO BE ANALYZED	ANALYSIS PERIODS				TRAFFIC VOLUMES (PEAK HOUR)			NOTES
	A.M	NOON	P.M.	OTHER	EXISTING	+PROJ	+CUMUL	
<b>Monroe St (W) at 58th (EW)</b>	X		X		X	X	X	
<b>Monroe St (W) at 60th (EW)</b>	X		X		X	X	X	
<b>Monroe St (W) at 61st (EW)</b>	X		X		X	X	X	
<b>Monroe St (W) at 62nd (EW)</b>	X		X		X	X	X	

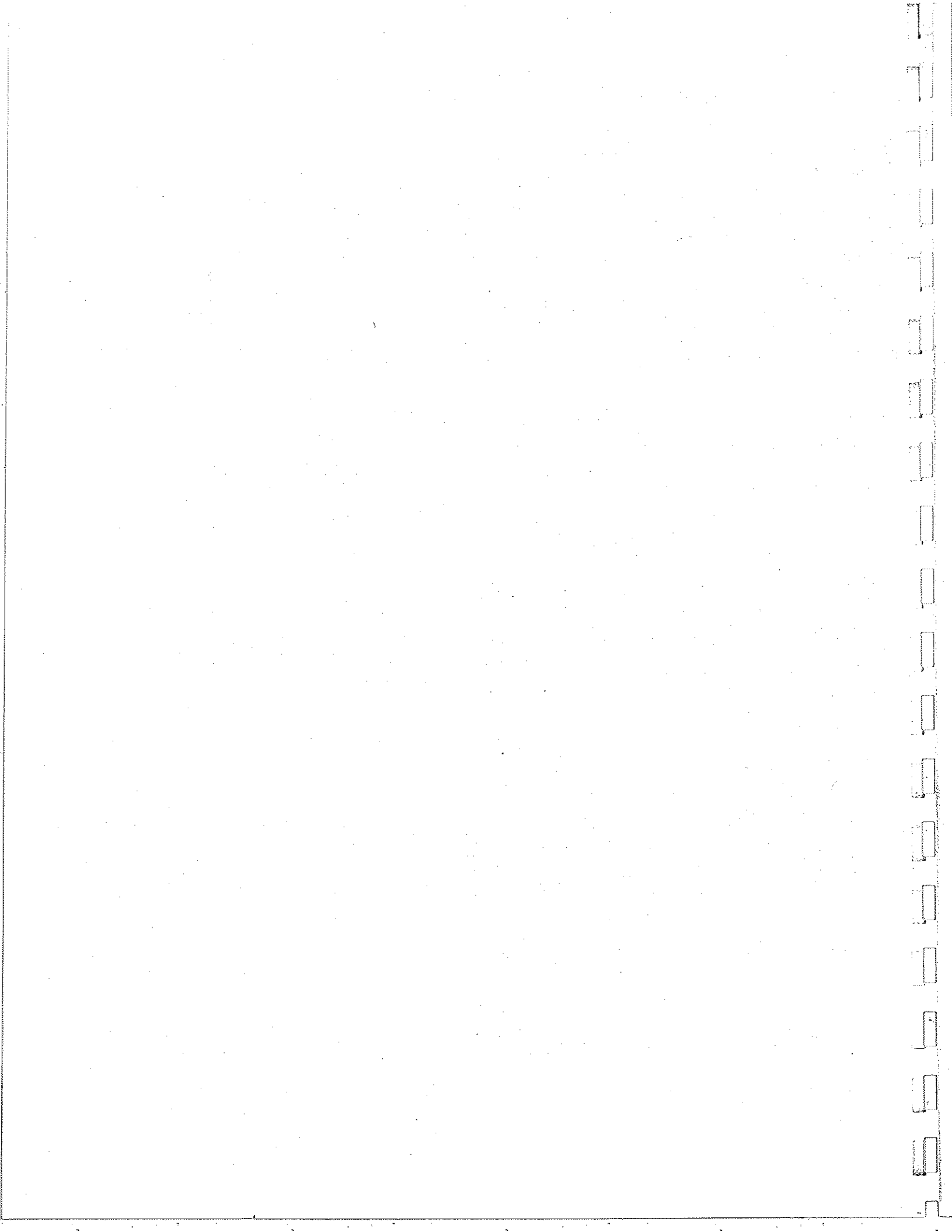
ROADWAY SEGMENTS TO BE ANALYZED	TRAFFIC VOLUMES (ADT)			NOTES
	EXISTING	+PROJ	+CUMUL	

ATTACHMENTS	YES	NO	
		X	

CITY APPROVED \_\_\_\_\_

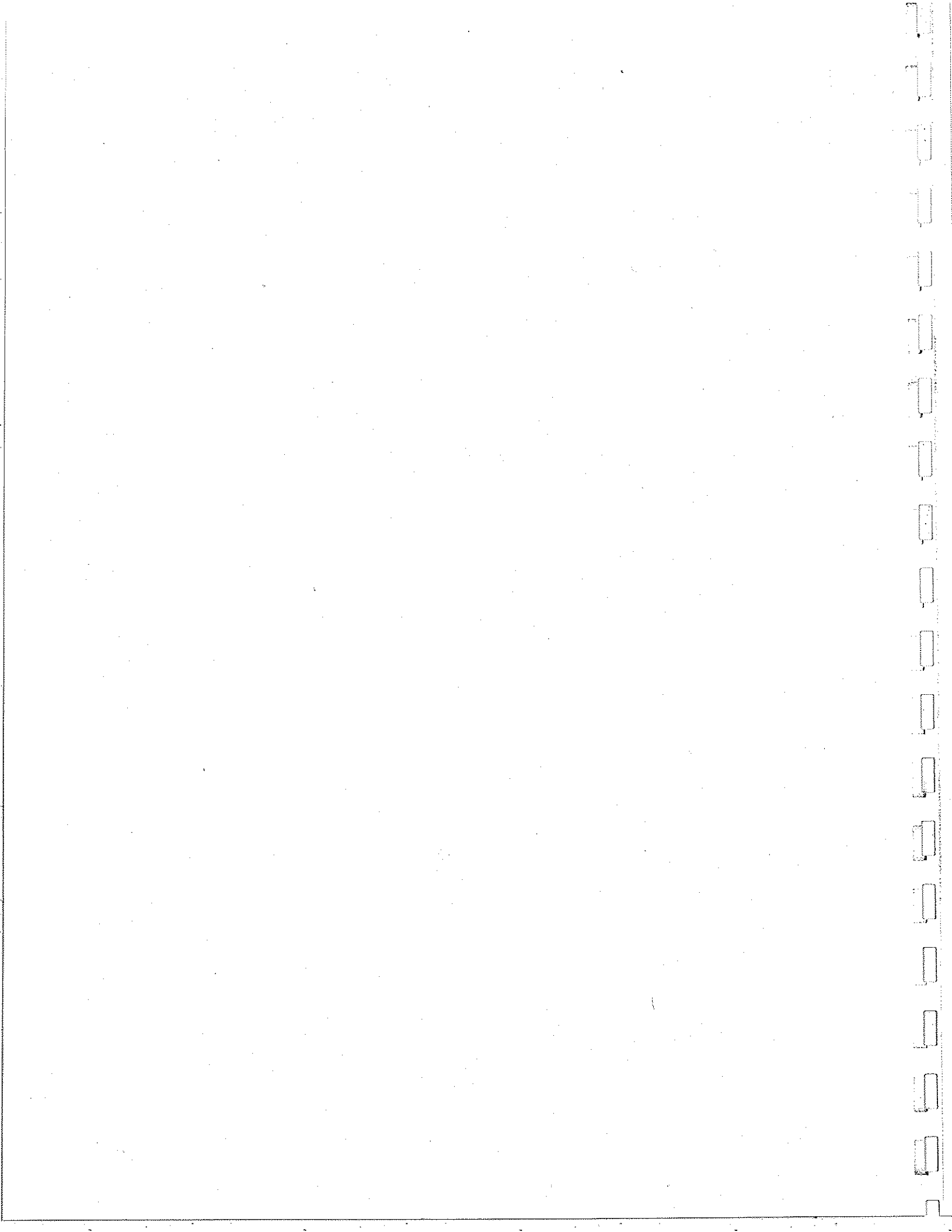
DATE \_\_\_\_\_





## **Appendix G**

### Cumulative Projects List



As of 5/1/08

**CUMULATIVE PROJECT SUMMARY REPORT  
RESIDENTIAL PROJECTS APPROVED/UNDER CONSTRUCTION/PENDING**

Project	Lots/Units Approved	Permits Issued	Lot/Unit Balance	Round Acres
1. TT 29894 - Hideaway - CONSTRUCTION Between Jefferson, Madison, 52 and 54 - SFD	496	220	276	525
2. Madison Club - CONSTRUCTION Northeast of Ave 54 and Madison - SFD	275	13	262	470
3. Tract 30092 - Piazza Serena - CONSTRUCTION NWC Ave 58 and Monroe - SFD	97	54	43	37
4. Tract 28983 - The Palms - CONSTRUCTION SWC Ave 56 and Monroe - SFD	101	86	15	200
5. TR 30023 - Trilogy - CONSTRUCTION Between Madison, Monroe, 60 and 62 - SFD	1,203	973	230	525
6. TT 30834 - Stone Creek - CONSTRUCTION North side Ave 58, ½ mile west of Madison - SFD	76	14	62	29
7. TT 31202 - Rancho Santana - CONSTRUCTION SWC Ave 52 and Monroe - SFD	203	132	69	77
8. TT 31249 - Coral Ridge Estates - CONSTRUCTION South side Ave 58, ½ mile west of Madison - SFD	85	0	85	33
9. TT 30138 - Diamonte - APPROVED North side Ave 52, ½ mile east of Jefferson - SFD	47	0	47	14
10. SP 2001-055 - Centerpointe - CONSTRUCTION SEC Miles Ave and Washington - SFD/MF	224	56	168	55
11. SP 2003-069 - Watermark Villas - CONSTRUCT NWC Ave 52 and Jefferson Street - CONDO	250	8	242	21
12. SP 2003-070 - Codorniz - CONSTRUCTION SEC Ave 52 and Jefferson Street - SFA	145	48	97	15
13. SP 2004-072 - Schumacher - APPROVED NEC Ave 60 and Monroe Street - SFD	392	0	392	100
14. TT 31910 - Capistrano - CONSTRUCTION West side Monroe St, ¼ mile north of Ave 58 - SFD	130	15	115	39
15. TT 31348 - Estates at Point Happy - CONSTRUCT West side Washington St at Simon Dr. - SFD	72	41	31	38
16. SP 2003-067 - Andalusia - CONSTRUCTION Between Ave 58, Ave 60, west of Monroe - SFD	1,400	160	1,240	934
17. TT 32279 - Palo Verde - CONSTRUCTION N side Ave 58, ½ mile W of Madison - SFD	31	19	12	10
18. TT 32201 - Desert Shell - APPROVED NWC Ave 60 and Madison St - SFD	24	0	24	7
19. TT 32225 - Santerra - CONSTRUCTION	29	14	15	8

NWC Madison and Ave 58 - SFD					
20.	TT 32397 - Laing Homes - APPROVED West side Washington, north of Ave 48 - SFD	74	0	74	28
21.	TT 32848 - Khatchadourian - APPROVED North side Ave 60, 660' west of Madison - SFD	16	0	16	4
22.	TT 32879 / 34642 - Griffin Ranch - CONSTRUCT S side Ave 54 between Madison and Monroe - SFD	393	67	326	242
23.	TT 31852 - Polo Estates - CONSTRUCTION NWC Madison and Ave 52 - SFD	14	0	14	8
<del>24.</del>	<del>TT 33336 - Mirage at LQ - EXPIRED N side Ave 58, 1/2 mile W of Madison - SFD</del>	<del>23</del>	<del>0</del>	<del>23</del>	<del>8</del>
25.	TT 33085 - Core Homes - APPROVED W/side Madison, N of Ave 52 - SFD	7	0	7	5
26.	TT 33597 - Malaga - APPROVED SWC Ave 60 and Madison - SFD	57	3	54	23
27.	TT 32742 - Four Seasons - APPROVED W side Monroe, 1/2 mi S of Ave 54 - SFD	40	0	40	15
28.	TT 33444 - Coral Canyon - APPROVED N'west of Jefferson and Ave 58 - SFD	219	0	219	15
<del>29.</del>	<del>Vista Dunes SDP 05-826 - City RDA - COMPLETE North side of Miles, west of Adams - SFA</del>	<del>80</del>	<del>80</del>	<del>0</del>	<del>9</del>
30.	Wolff Waters - City RDA - CONSTRUCTION W side Dune Palms Rd, so of Hwy 111 - MF	218	218	0	15
31.	TT 31732, TT 31733 - APPROVED SE corner Ave 60 and Monroe - SFD	326	0	326	80
32.	SP 94-026 - Travertine - *CURRENT APPROVAL Between Jefferson, Madison, 62 and 64 *Revision to 1,549 units in process - SFD	2,300	0	2,300	909
<del>33.</del>	<del>TT 33717 - EXPIRED S/SIDE Ave 58, W of Madison - SFD</del>	<del>47</del>	<del>0</del>	<del>47</del>	<del>5</del>
34.	TT 34038 - Casa LQ - APPROVED - CONDO S/side Calle Tampico between Navarro and Villa	20	0	20	1.25
35.	TT 31087 - Avignon - APPROVED S/side Darby Road, E of Palm Royale - SFD	19	0	19	5
36.	Eden Rock - TT 33226 - APPROVED In PGA West - was resort core site - CONDO	264	0	264	42
37.	TT 29436 - Hidden Canyon - CONSTRUCTION NW of Coachella/Eisenhower intersection - SFD	169	145	24	190
38.	Tradition Club - Ave 52/Bermudas - CONSTRUCT	292	201	91	746
39.	Quarry Course - CONSTRUCTION SW of Lake Cahuilla, off Ave 58 - SFD	100	60	40	367
40.	TT 33485 - Maman - APPROVED So.side Ave 58, W of Monroe - SFD	12	0	12	5

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## PROJECTS PROPOSED IN CITY SPHERE OF INFLUENCE

These projects are under review as City projects but are in unincorporated territory. There are other projects under review by Riverside County which may be of significance

### UNAPPROVED / IN PROCESS

1. The Enclave – TT 33982 - 467 SFD units on 154 acres, at the NEC Avenue 62/Monroe Street.
2. La Quinta Motorcoach Resort – TT 35238 – 354 luxury motorcoach spaces on 81 acres; south side of Ave 58, ¼ mile east of Monroe Street.
3. Majestic Ranch – TT 33559 – 152 SFD lots on 100 acres, at the SEC of Ave 53/Monroe Street
4. Twin Development, LLC - TT 34360 – 219 SFD lots on 80 acres, south side of Avenue 60, ¼ mile east of Monroe.
5. Family Development – TT 33697 – 69 SFD lots on 38 acres; SWC Ave 53/Jackson Street.

### COMMERCIAL PROJECTS

#### UNAPPROVED / IN PROCESS:

- A. Mayer Villa Capri – 104 KSF retail; 130,500 SF medical office – NEC Fred Waring/Washington
- B. Nadel Architects – 105 KSF neighborhood retail center at SE and SW corners Ave 58/Madison
- C. Shovlin (SDP 07-884) – proposed 9,781 square foot, 2-story, office building on last pad within the Point Happy Commercial Center – NWC Washington/Hwy 111.
- D. Brad Sobel – Madison Square – 92 KSF retail center on 9.5 ac, NEC Dune Palms/Hwy 111

#### APPROVED / NOT YET PERMITTED:

- E. SilverRock Resort – One 18-hole golf course (1 existing), 200-room boutique hotel (259 keys), 45 KSF of support services, 22,600 s.f golf clubhouse with 17,250 s.f. cart/storage; 8 KSF spa, two resort hotels with casitas of up to 855 units (1,020 keys), resort retail of up to 160 KSF. South of Avenue 52, west of Jefferson. One course operational; boutique hotel and golf clubhouse site plans approved. Bounded by Ave 52, Jefferson, Ave 54 and Coral Reef Mtns.
- F. Shopping center – NWC Jefferson and Avenue 50 – 100 KSF neighborhood retail center. No approved plans, specific plan concept only
- G. La Paloma Assisted Living care facility – 236 assisted and independent living units, and 38 dementia and nursing care beds, at north and southeast corners of Ave 50 and Washington. No approved plans, specific plan concept only.
- H. VUP 06-035 – Daniel Cline – proposed 31,500 s.f. retail project, at NEC Desert Club/Tampico.
- I. VUP 07-039 – David Chapman – 14,100 s.f. office space on Palmers restaurant site at NEC Desert

Club/Ave 52

- J. Foundation Group – Develop 6,700 s.f. office pad in existing La Quinta Village Center (Ralph's) at NWC Tampico/Washington.
- K. Jefferson Square/Regency Marinita – 90,440 SF retail complex, SWC Jefferson and Fred Waring

APPROVED & UNDER CONSTRUCTION:

- L. Washington Park – Approved for up to 857 KSF retail. About 75% complete. Between Adams Street, Avenue 47, Washington Street, Simon Drive and Highway 111. Includes Lowe's, Target, Circuit City, Steinmart, Trader Joe's, Office Depot. Most existing spaces occupied.
- M. Centerpointe – 84 KSF PH 1 of 196.5 KSF medical office space underway. 5,900 s.f. Applebee restaurant underway as part of 12 KSF restaurant space. 56 of 164 residential casitas completed. 60 SFD approved but not started.
- N. La Quinta Business Center – 23,700 s.f. office building, east side of Washington, ±1,000 ft. north of Fred Waring. CO issued in December 2007; 40% occupied.
- O. Pavillions – 175,000 s.f. retail project, originally part of overall Corporate Center specific plan area, 18 acres at NEC of Hwy 111 and Adams Street. Center completed; 90% leased.
- P. Centre at La Quinta – Approved for up to 675 KSF. About 65% complete. South side of Highway 111, between Dune Palms Road and Adams Street. 105 KSF JC Penney, s'westerly of Adams and Ave 47, on hold indefinitely by owner.
- Q. 111 La Quinta Centre – Approved for up to 618 KSF; about 90% completed. Located north side Hwy 111 between Washington and Adams
- R. Caleo Bay Park – 27,595 s.f. office complex, with 10 KSF completed to date. Located at NWC of Ave 48/Caleo Bay
- S. Costco center (Komar) - south side of Highway 111 and east of Dune Palms Road. Additional parcels north of existing Costco site near Hwy 111 are planned for 81 KSF of retail/restaurant space. Souplantation (7 KSF) and Mimi's (7,700 s.f.) are near complete, remainder underway.
- T. Dunes Business Park – Phase 1 completed. Phase 2: 22,550 s.f. retail space. Located north side of Hwy 111 at Depot Drive. Phase 2 no occupancies.

**OTHER MAJOR PROJECTS NEAR LA QUINTA**

INDIO - (Contact City directly for specific project info/updates. There may be other significant projects not identified here as well)

IND-1: Polo Square - Proposes the following land uses - 350,000 s.f. of Retail; 200,000 s.f. of office; 250 room service hotel; 572 residential units; 35,000 s.f. of commercial uses. North side Highway 111

between Madison & Jefferson  
APPROVED - CK STATUS WITH CITY

IND-2: Jefferson Park Center – 8.1 acre mixed use project of office, retail and restaurants. South side of Hwy 111, east of Jefferson  
CK STATUS WITH CITY

INDIAN WELLS – (Contact City directly for specific project info. There may be other significant projects not identified here as well))

IW-1: Miles Crossing – 18 acre mixed-use project, anchored by 150 KSF retail/restaurant and Fairmont Residences 129 condo-hotel units. North side of Highway 111 at Miles Ave.  
APPROVED, NO CONSTRUCTION.

IW-2: Indian Wells Tennis Garden Town Center – 279 KSF lifestyle center with Cineplex, west side of Washington Street at Miles Ave. A 267-unit Remington Hotel will also be located proximately.  
CK STATUS WITH CITY



1950