GEORGE DUNN
ENGINEERING

Memorandum

To: **Ms. Dee McKown**
Coachella Valley Engineers
77-899 Wolf Road, Suite 102
Palm Desert, California 92211
Telephone: (760) 360-4200
Fax: (760) 360-4204

From: **George Dunn, P.E.**

George Dunn, P.E.

Digitally signed by George Dunn, P.E.
DN: cn=George Dunn, P.E., o=George Dunn Engineering, ou, email=georgedunn@earthlink.net, c=US
Date: 2010.11.17 09:31:37 -08'00'

Date: **November 17, 2010**

Re: **Tract No. 36279, La Quinta, California**
Traffic Assessment

PA10001

INTRODUCTION

This memorandum is intended to satisfy the City of La Quinta traffic assessment requirements specified by the City traffic engineer for the subdivision of Tract 36279 into lots suitable for the construction of 11 single-family homes.

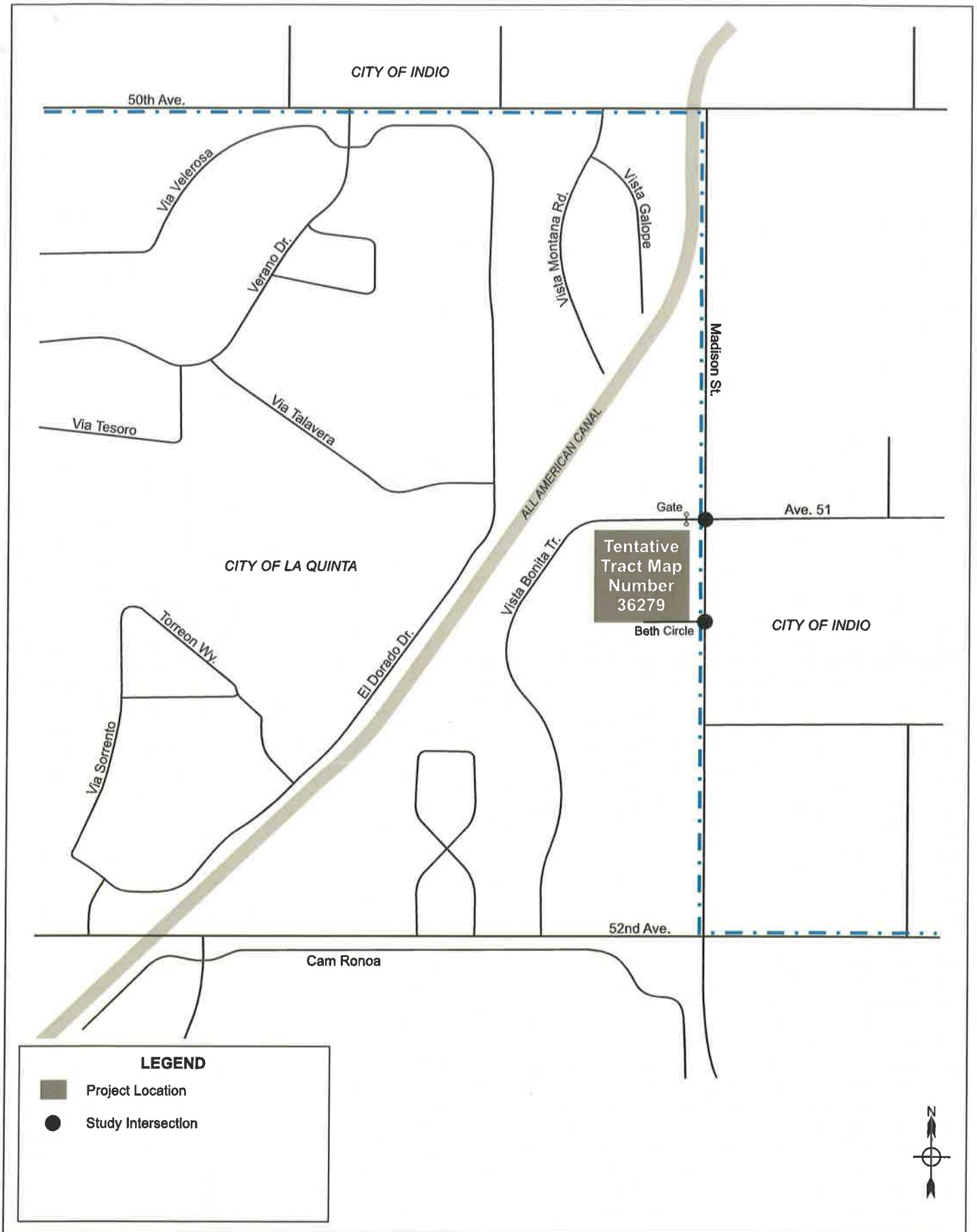
This memorandum was prepared in compliance with the City of La Quinta's Engineering Bulletin #60-13. Based on that bulletin, the City requires a traffic impact study for all new development projects that are forecast to generate 50 or more peak hour trips. For projects, such as the Tract 36279 project, that are forecast to generate less than 50 peak hour trips, a focused traffic impact is required. This memorandum is a focused traffic impact memorandum that follows the City guidelines.

This traffic study assesses project impacts at the project entrance, the Madison Street/Beth Circle intersection and the Madison Street/Vista Bonita Trail/Avenue 51 intersection located just north of the project site.

PROJECT DESCRIPTION

The proposed project site is located near the southwest corner of the Madison Street/Avenue 51/Vista Bonita Trail intersection. The project site is currently vacant but is divided by existing walls to provide for 8 lots. A street, named Beth Circle (a private street), has been constructed to provide for access from Madison Street to these 8 lots. For purposes of this analysis, it is assumed that the project construction will be completed no later than the Year 2014.

Figure 1 shows the project location. Figure 2 shows the project site plan.



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City of La Quinta Tentative Tract Map No. 36279

Figure 1

Project Location

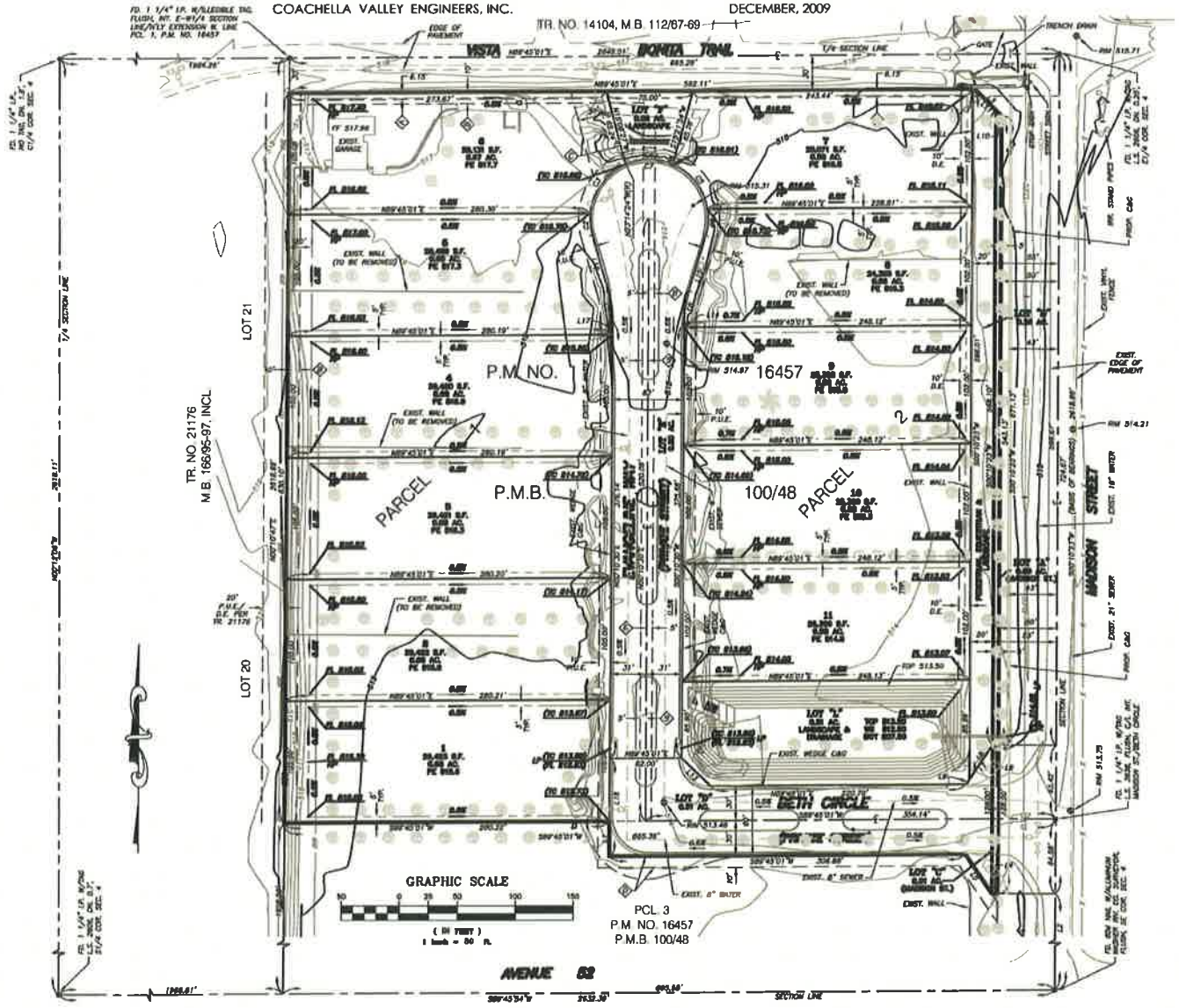
P10001

IN THE CITY OF LA QUINTA, COUNTY OF RIVERSIDE

TENTATIVE TRACT MAP NO. 36279

A SUBDIVISION OF PARCELS 1, 2, LOT "C", LOT "D", A PORTION OF LOT "B" & A PORTION OF PARCEL 3, OF PARCEL MAP NO. 16457, FILED IN P.M.B. 100, PAGE 48, AND BEING A PORTION OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER (NE1/4 SE1/4) OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 7 EAST OF THE SAN BERNARDINO MERIDIAN, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

COACHELLA VALLEY ENGINEERS, INC. DECEMBER, 2009



GEORGE DUNN ENGINEERING	City of La Quinta Tentative Tract Map No. 36279	Figure 2
		Project Site Plan

P10001

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ADJACENT ROADWAYS

Madison Street is a two-lane north-south roadway adjacent to the project site. The roadway is 24-feet wide and has a posted speed limit of 50 MPH.

Project access will be provided to the project site at the Madison Street/Beth Circle intersection. The street name "Beth Circle" is provided on the project site plan. Photographs 1, 2, 3 and 4 show this study intersection.

Picture 1 - Looking north along the west side of Madison Street from the project entrance

Picture 2 - Looking south along the west side of Madison Street from the project entrance

Picture 3 - Looking east from the southwest corner of the Madison Street/Project Entrance intersection

Picture 4 - Looking west from the northeast corner of the Madison Street/Project Entrance intersection

The Madison Street/Vista Bonita Trail/Avenue 51 intersection is located approximately 650 feet north of the project site. Traffic count data collected at this intersection serve as the basis for the traffic analysis provided in this memorandum. The street segment located west of Madison Street at this intersection is a private street designated "Vista Bonita Trail", which serves a very small gated residential community. The street segment located east of Madison Street is designated "Avenue 51", which serves as an entrance to the El Dorado Polo Club. Avenue 51 is only 20 feet wide while the Vista Bonita Trail roadway/driveway is 40 feet wide at Madison Street. Vehicles on Vista Bonita Trail and Avenue 51 must stop before turning onto Madison Street.

Photographs 5, 6, 7 and 8 show this intersection.

Picture 5 - Looking south from the northeast corner of the Madison Street/Avenue 51/Vista Bonita Trail intersection

Picture 6 - Looking south from the northwest corner of the Madison Street/Avenue 51/Vista Bonita Trail intersection

Picture 7 - Looking east from the southwest corner of the Madison Street/Avenue 51/Vista Bonita Trail intersection

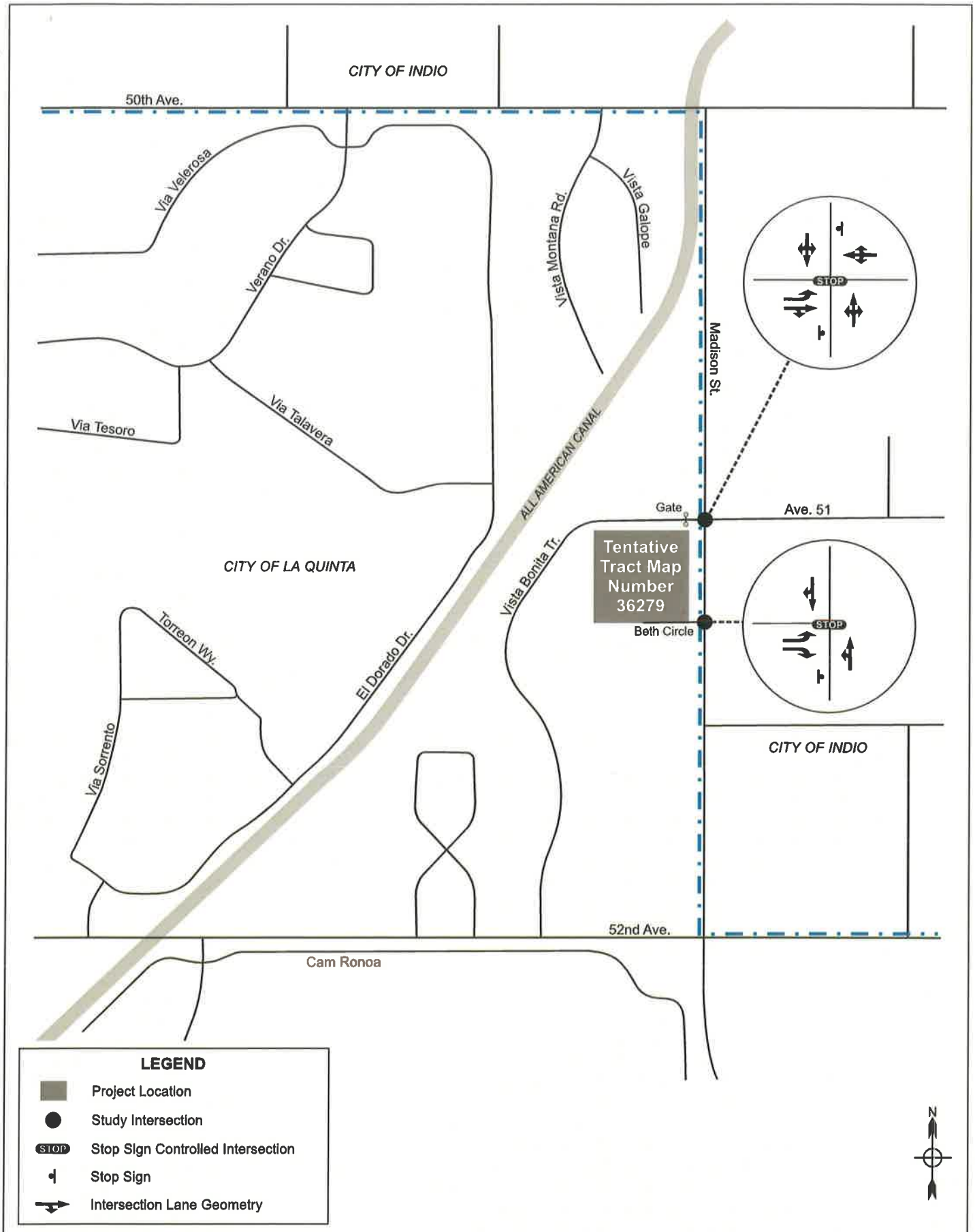
Picture 8 - Looking west from the northeast corner of the Madison Street/Avenue 51/Vista Bonita Trail intersection

The first significant intersection north of the project site is the Madison Street/Avenue 50 intersection. This intersection provides one lane in each direction and also has striped left-turn lanes in each direction. The intersection is controlled by stop signs in all directions.

Figure 3 shows the roadway geometries at the two study intersections along Madison Street, at the proposed project access site and at Vista Bonita Trail/Avenue 51.

The first significant intersection south of the project site is the Madison Street/Avenue 52 intersection. This intersection also is controlled by stop signs in all directions and is striped as follows:

North Leg – one lane in each direction
South Leg - Northbound: one left-turn lane, two through lanes and one right-turn lane
Southbound: two lanes
East Leg - Westbound: one left-turn lane, one through lane and one right-turn lane
Eastbound: two lanes
West Leg - Eastbound: one left-turn lane, one through lane and one shared through/right-turn lane
Westbound: one lane



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City of La Quinta Tentative Tract Map No. 36279 — Figure 3

Study Intersection Geometries and Control

P10001

TRAFFIC COUNTS

Traffic count data to be used in the traffic analysis was collected on Tuesday, November 2, 2010 at the Madison Street/Avenue 51/Vista Bonita Trail intersection:

AM Peak Period – 6:00 AM to 8:30 AM
PM Peak Period – 2:30 PM to 5:30 PM

The AM and PM peak hour volumes are provided on Figures 4 and 5. The volumes shown on these and all other figures increase the traffic count results by 5% to account for tourist seasonality whereby peak traffic volumes generally occur between January and April. The 5% increase was coded into the TRAFFIX software model runs and ALSO was applied to the project-generated trips.

TRAFFIC ANALYSIS STUDY SCENARIOS

The City traffic study guidelines require the analysis of the following scenarios:

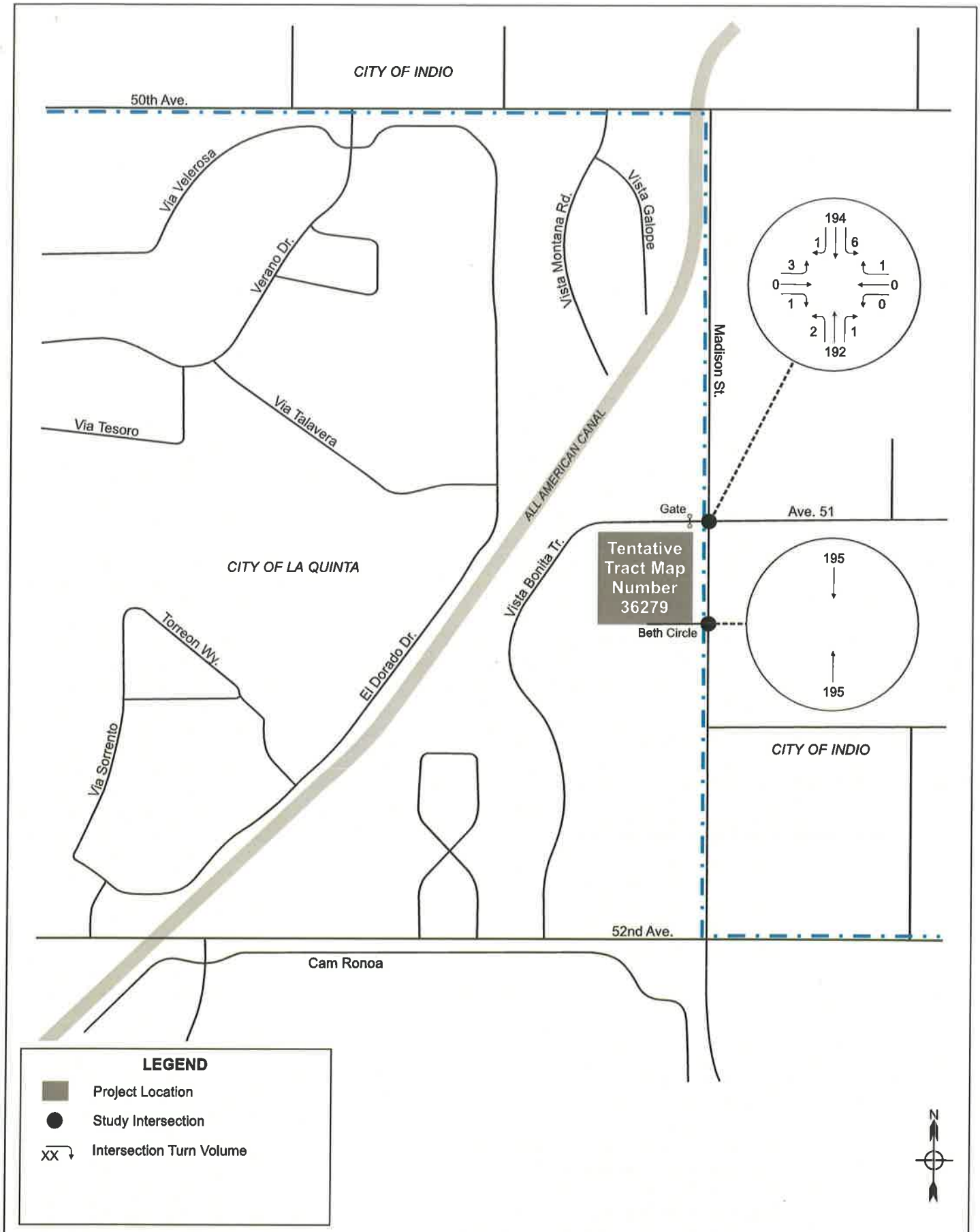
- Existing (Year 2010) Conditions
- Future Year 2014 Conditions with the Project Only
- Future Year 2014 Conditions with the Addition of Project Traffic and Ambient Traffic Growth

Again, the Year 2014 was selected for analysis since the project is scheduled to be completed no later than the Year 2014 and using a longer time frame means using a higher ambient growth rate and provides a conservative analysis.

PROJECT TRIP GENERATION FORECAST

In accordance with the City's traffic study requirements (Engineering Bulletin #06-13 – Revised August 17, 2010), the project trip rates in the traffic analysis will be based on the ITE Trip Generation, 8th Edition publication. For single-family homes, the City of La Quinta guidelines require that trip generation rates be based on the Peak Hour of the Generator, rather than the Peak Hour of the Adjacent Street traffic.

Engineering Bulletin #06-13 indicates that the usage of a fitted curve equation if the coefficient of determination (R^2) of the identified land use is greater than 0.70. Based on the ITE Manual, the R^2 of Single Family Residential for both the AM and PM peak hours are greater than 0.70. As a result the fitted-curve equation should be utilized to calculate the trip generation since the R^2 is greater than 0.70. Table 1 provides the proposed project trip rates along with the calculated project trip generation using those rates.

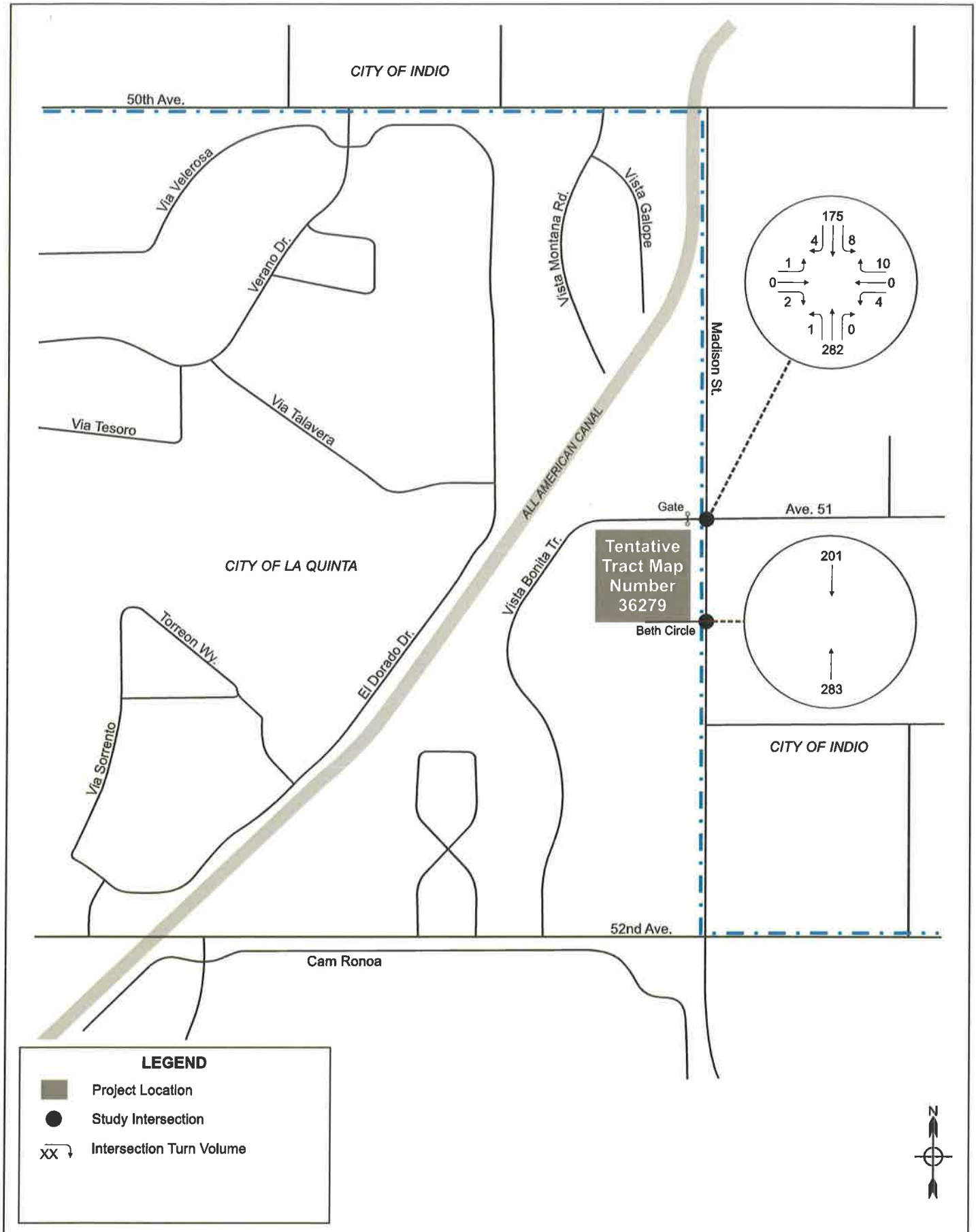


GEORGE DUNN ENGINEERING

City of La Quinta Tentative Tract Map No. 36279 — Figure 4

Existing (Year 2010) AM Peak Hour Volumes (Seasonally Adjusted)

P10001



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City of La Quinta Tentative Tract Map No. 36279 — Figure 5

Existing (Year 2010) PM Peak Hour Volumes (Seasonally Adjusted)

P10001

Table 1 –Project Trip Generation Forecast

TRIP GENERATION RATES									
Land Use	Intensity	Units	Daily	Weekday AM Total	Weekday AM IN	Weekday AM OUT	Weekday PM Total	Weekday PM IN	Weekday PM OUT
Single Family Detached (Land Use 210)	-	D.U.	12.86	2.47	0.64	1.83	0.97	0.62	0.35
FORECAST TRIP GENERATION									
Land Use	Intensity	Units	Daily	Weekday AM Total	Weekday AM IN	Weekday AM OUT	Weekday PM Total	Weekday PM IN	Weekday PM OUT
Proposed Land Use									
Single Family Detached (Land Use 210)	11	D.U.	141	27	7	20	11	7	4

As indicated in Table 1 and based on the proposed project trip generation rates, the project at build-out is forecast generate 141 daily trips with 27 trips during the AM peak hour and 11 trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION ASSUMPTIONS

All project trips will access the surrounding street system via the existing connect from the private street Beth Circle onto Madison Street south of Bonita Trail. For purposes of analysis, it will be assumed that 50% of the trips enter/exiting the project site will come from the north and 50% of the project trips entering/exiting the project site will come from the south.

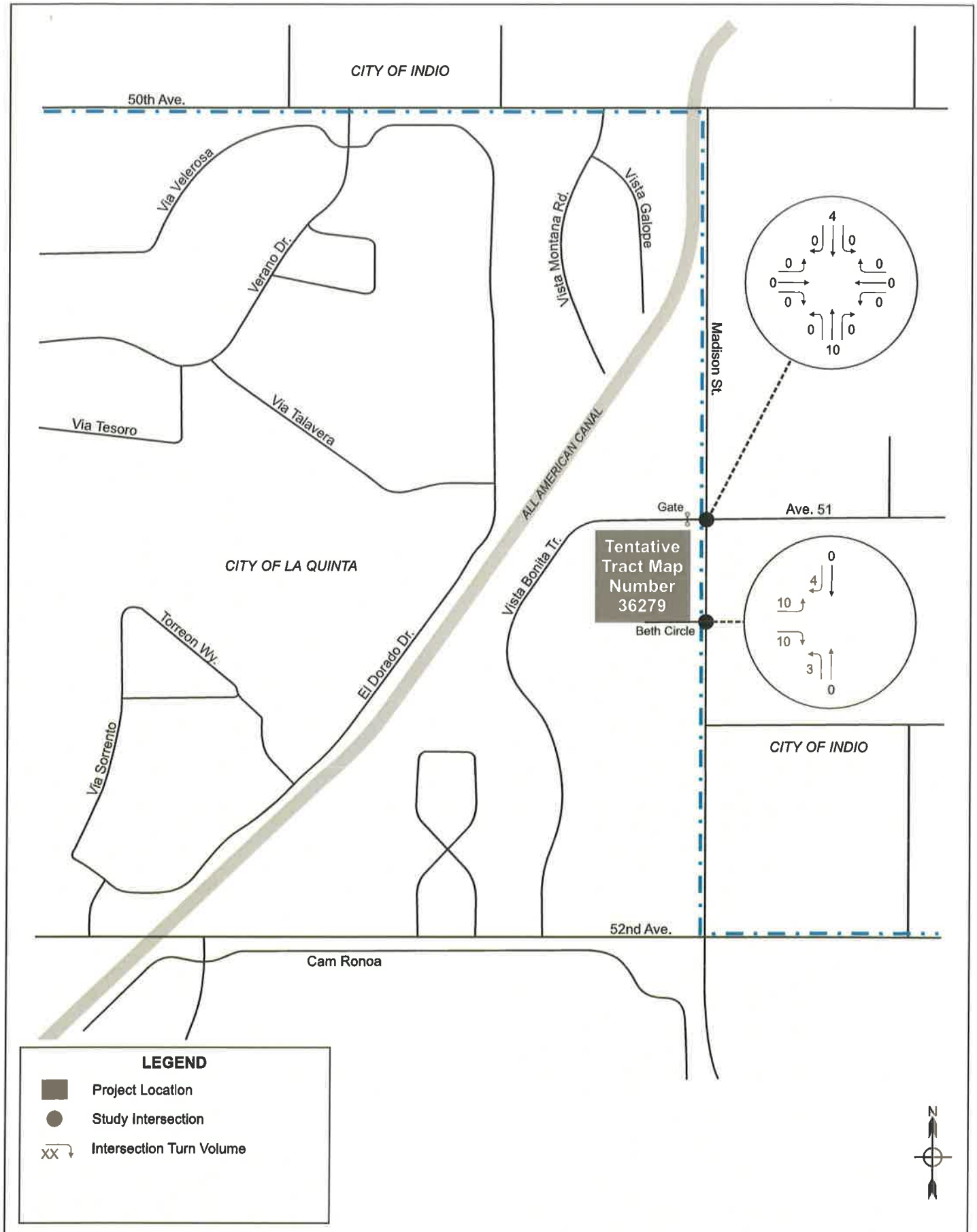
This is consistent with the direction bias on Madison Avenue during the AM peak hour. During the PM peak hour, the directional bias of traffic exiting the polo club is biased to the north, as might be expected as the major transportation network is located in that direction, though the traffic from the development that gets access from Vista Bonita is only three cars with two going south.

Figures 6 and 7 show the AM and PM peak hour project trip distribution. Figures 8 and 9 show the future forecast traffic volumes with the addition of project trips only.

AMBIENT GROWTH ASSUMPTIONS

A 1% per year ambient growth rate will be applied and it will be assumed that the project will be completed in the Year 2014.

To develop traffic volumes to assess Year 2014 conditions, with the addition of both the forecast traffic and ambient traffic growth, existing volumes were increased by 4% and then forecast traffic volumes were added. The resulting AM and PM peak hour volumes for future Year 2014 Conditions with the addition of both ambient traffic growth and project traffic are provided in Figures 10 and 11.



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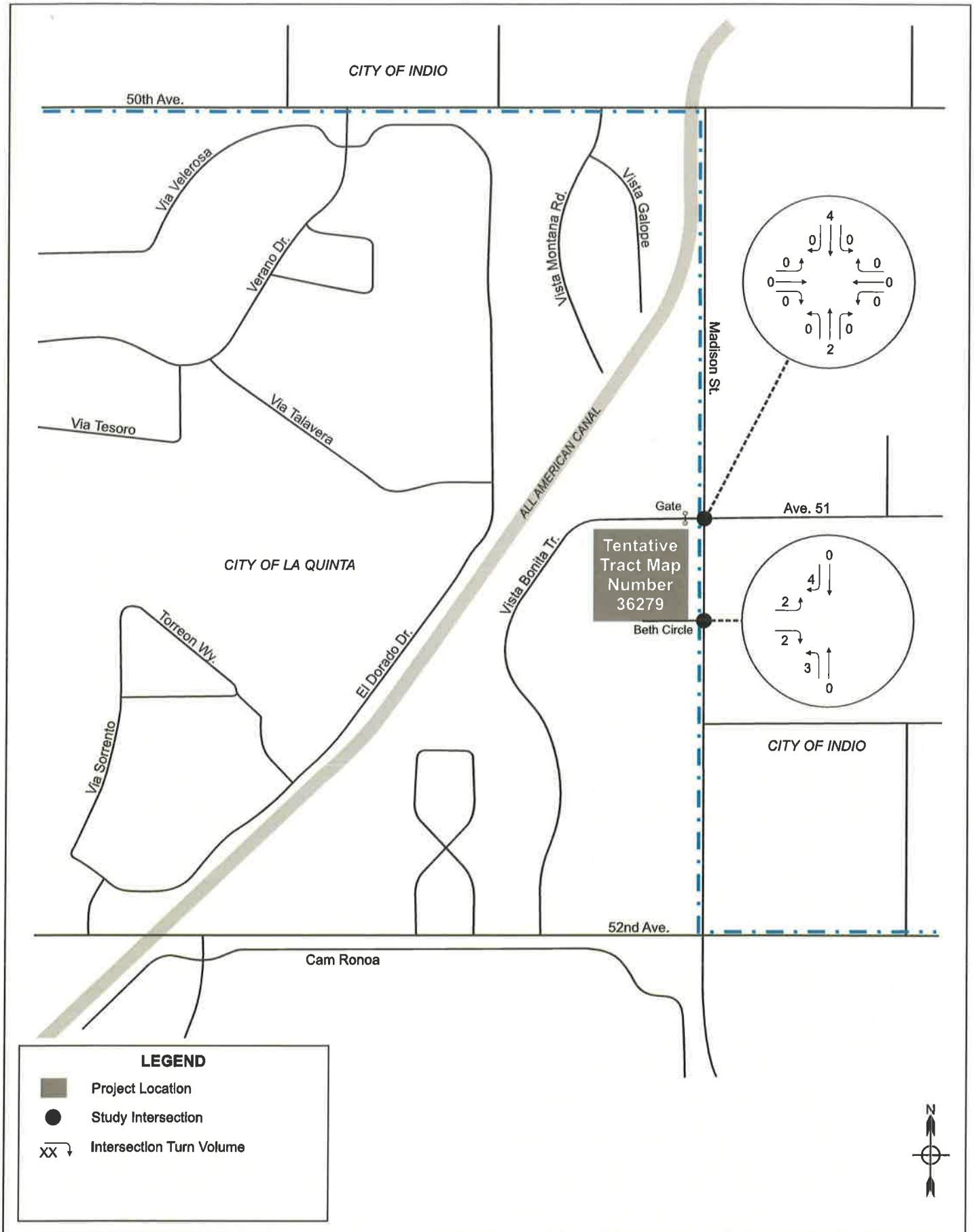
City of La Quinta Tentative Tract Map No. 36279 — Figure 6

AM Peak Hour Project Trip Distribution Forecast

P10001



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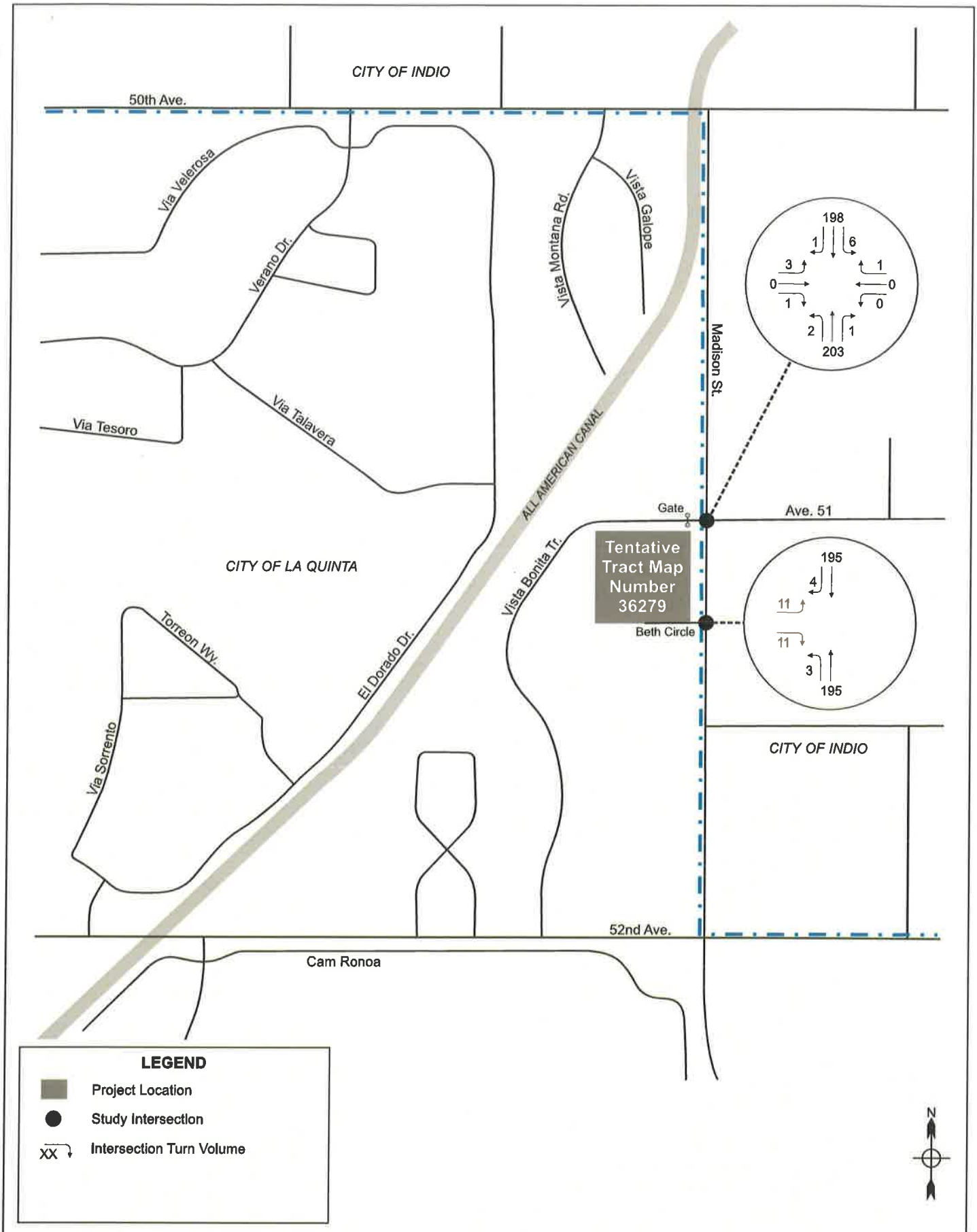
City of La Quinta Tentative Tract Map No. 36279 — Figure 7

PM Peak Hour Project Trip Distribution Forecast

P10001



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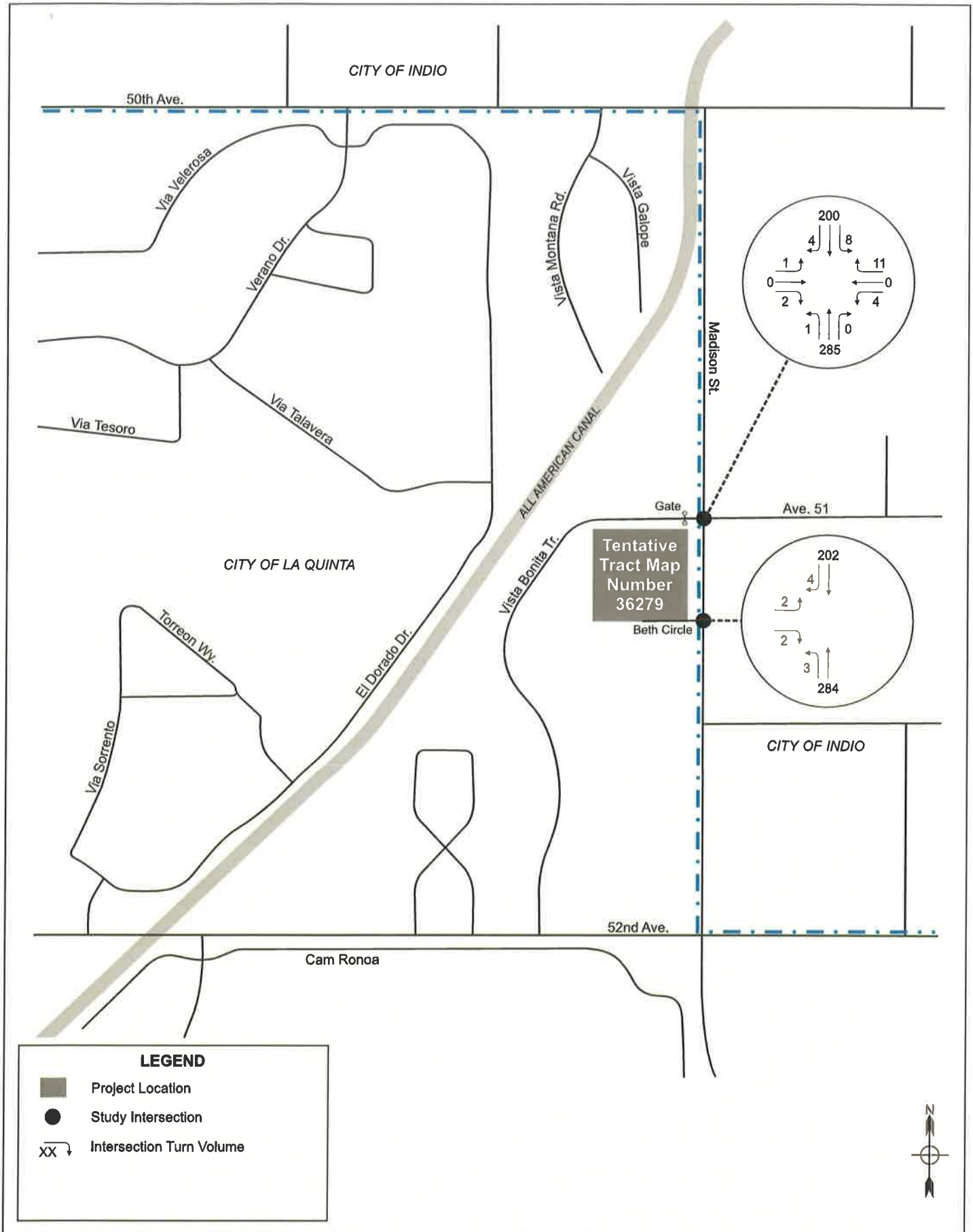
City of La Quinta Tentative Tract Map No. 36279 — Figure 8

Existing (Year 2010) Plus Project AM Peak Hour Volumes (Seasonally Adjusted)

P10001



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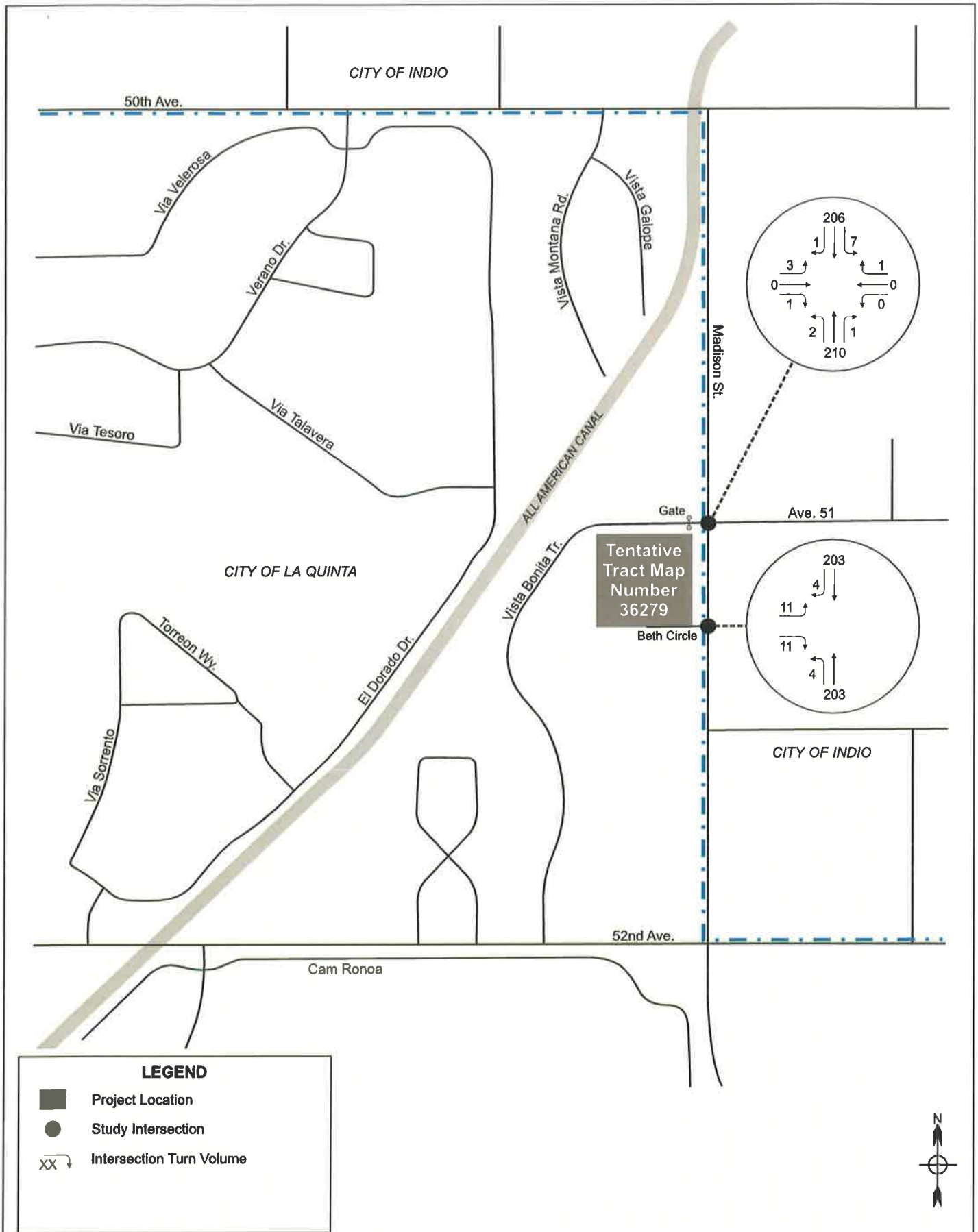
City of La Quinta Tentative Tract Map No. 36279 — Figure 9

Existing (Year 2010) Plus Project PM Peak Hour Volumes (Seasonally Adjusted)

P10001



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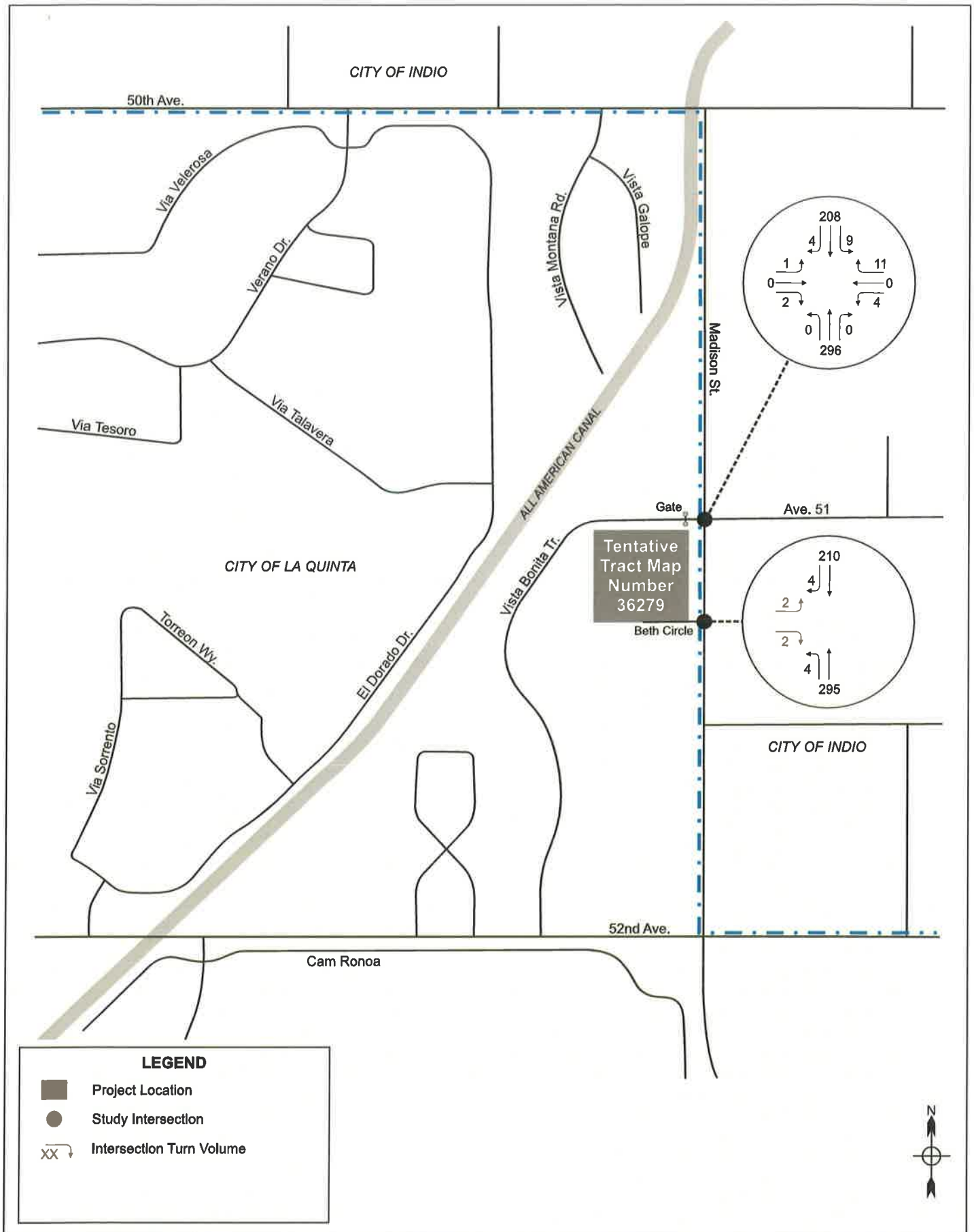
City of La Quinta Tentative Tract Map No. 36279 — Figure 10

Year 2014 Ambient Growth Plus Project AM Peak Hour Volumes (Seasonally Adjusted)

P10001



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City of La Quinta Tentative Tract Map No. 36279 — Figure 11

Year 2014 Ambient Growth Plus Project PM Peak Hour Volumes (Seasonally Adjusted)

P10001

LEVEL-OF-SERVICE ANALYSIS

The TRAFFIX software was used to perform the analysis for the surface street network for the above conditions. The intersection analysis was performed utilizing the *2000 Highway Capacity Manual* methodologies.

The City of Indio requirements are to maintain the intersection levels-of-service (LOS) at D.

Table 2 shows the results of the AM and PM peak hour level-of-service analysis for each of the study timeframe scenarios. The intersection level-of-service analysis worksheets are provided as Attachment C to this memorandum.

Table 2 – Level-of-Service Analysis Summary

Intersection	Existing (Year 2010) Conditions LOS - Delay (sec.)	Existing Plus Project Conditions LOS - Delay (sec.)	Year 2014 Existing Plus Ambient Growth Pluse Project Conditions LOS - Delay (sec.)
AM PEAK HOUR			
Madison Street/Vista Bonita/Avenue 51	B - 10.9 sec.	B - 11.1 sec.	B - 11.2 sec.
Madison Street/Project Entrance		B - 10.2 sec.	B - 10.2 sec.
PM PEAK HOUR			
Madison Street/Vista Bonita/Avenue 51	B - 10.6 sec.	B - 10.7 sec.	B - 10.8 sec.
Madison Street/Project Entrance		B - 10.5 sec.	B - 10.6 sec.

The table shows that the project has a very nominal impact on area traffic conditions, since the project is not a very large trip generator. The operations at the project entrance and at the Madison Street/Vista Bonita Trail/Avenue 51 intersection are both very good and the small amount of traffic added to the Madison Street intersections north and south of the project would also not be expected to make any noticeable changes in operations at those two intersections.

DETERMINATION OF NEED FOR FURTHER TRAFFIC ANALYSIS

The proposed project is forecast to generate small amounts of weekday peak hour traffic, less than the City threshold of 50 peak hour trips that would require a more detailed traffic analysis. The analysis performed as part of this traffic assessment shows that the project will have no noticeable impact on area traffic operations.

SITE PLAN ASSESSMENT

The proposed project provides for the subdivision of Tract 36279 into 11 lots intended for the construction of single-family homes. This subdivision does not provided a detailed layout of the proposed structures that will be built on each lot. As plans are developed for each lot, those plans will need to provide for all the necessary conditions of the City's municipal code.

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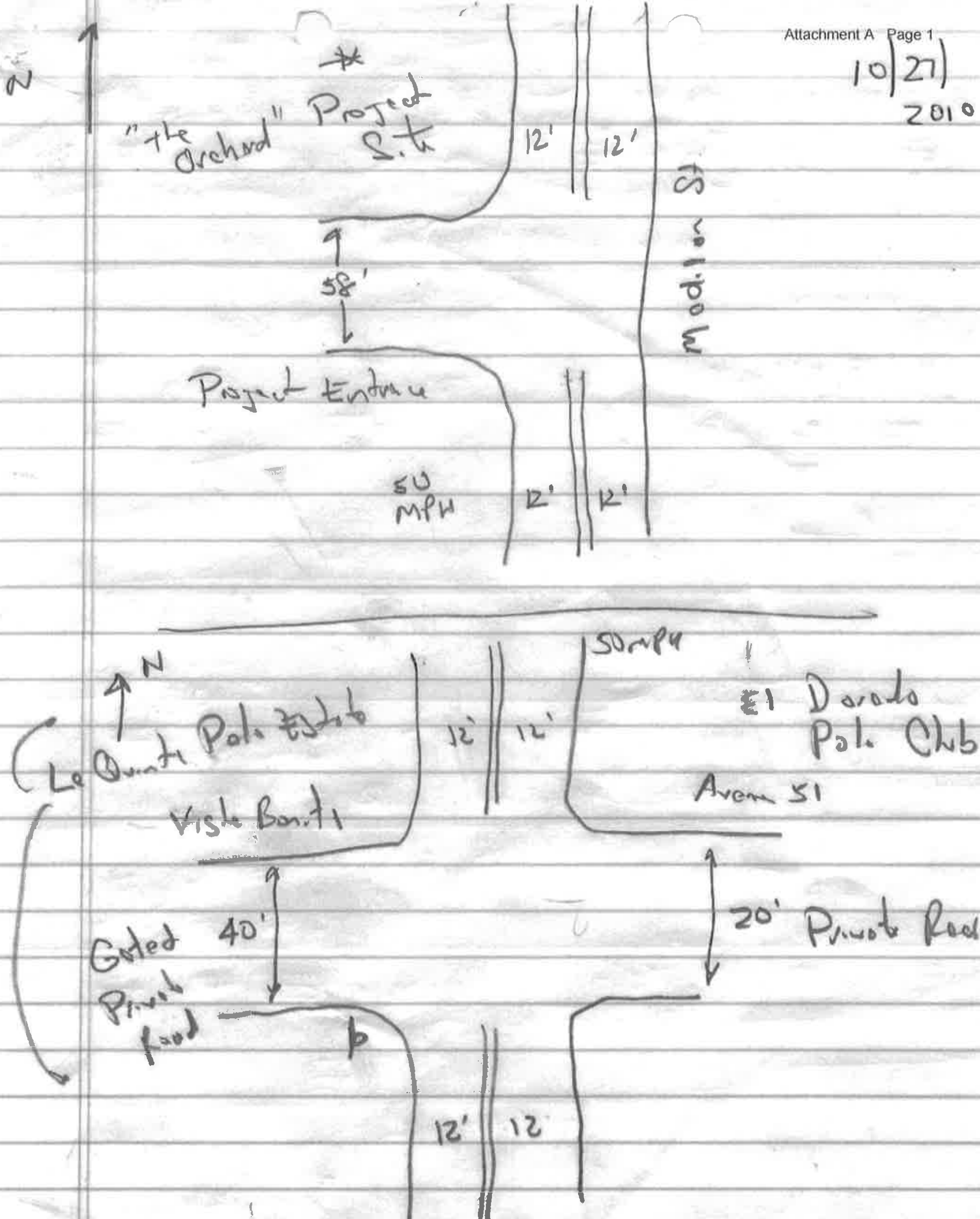
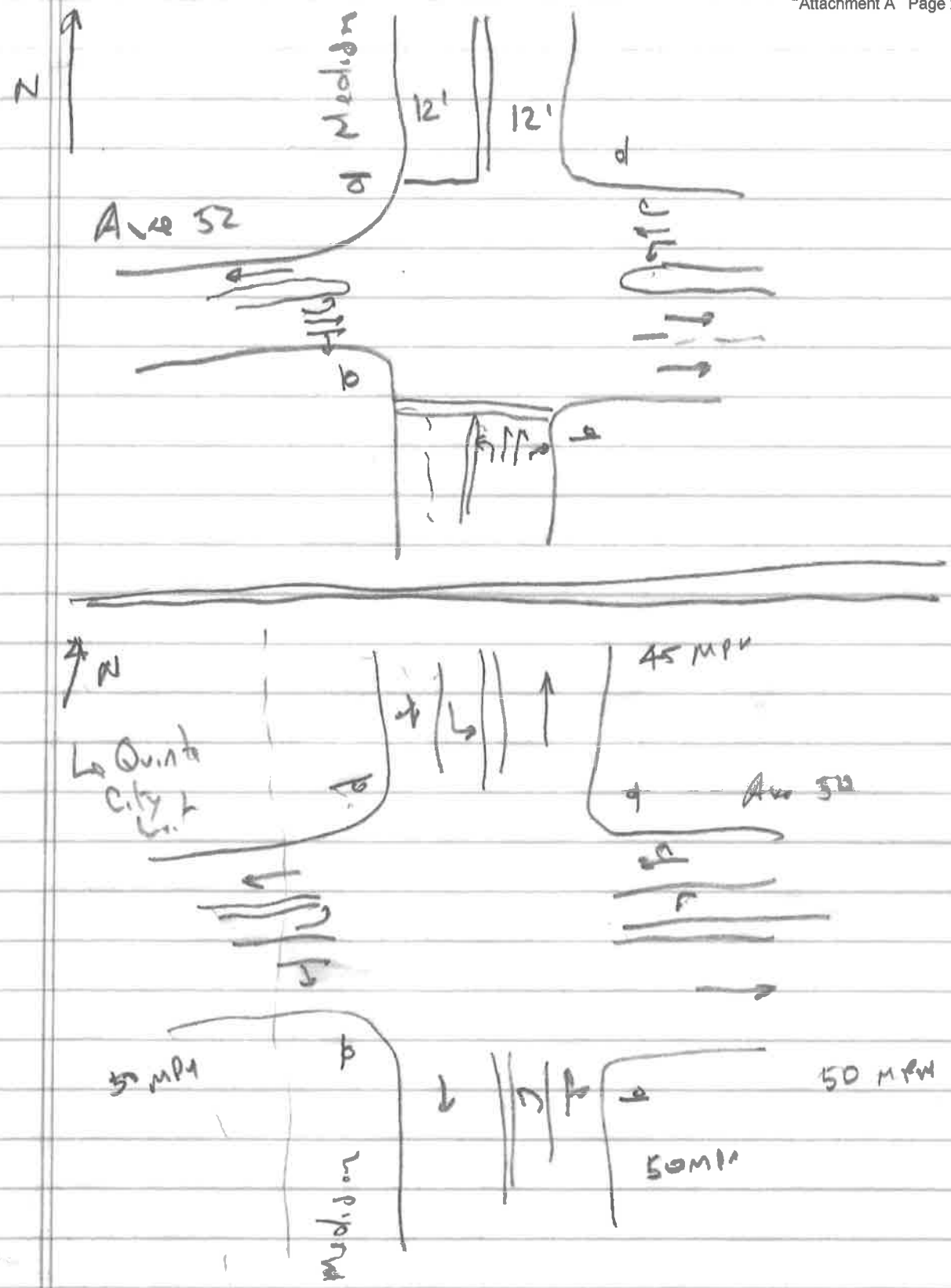
ENGINEERING

Attachment A
Field Check Notes

Tract 36279, La Quinta, California
Prepared for Coachella Valley Engineers
November 17, 2010

George Dunn Engineering


10/27/2010
N
"the Orchard" Project Site
12'
12'
Madison St
58'
Project Entrance
50 MPH
12'
12'
50 MPH
N
La Quinta Polo Estate
Vista Bonita
12'
12'
El Dorado Polo Club
Avenue 51
40'
Gated Private Road
20' Private Road
12'
12


N
Median
12'
12'
Ave 52
45 MPH
La Quinta City Limit
Ave 52
50 MPH
50 MPH
50 MPH
Median

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ENGINEERING

Attachment B
Traffic Counts

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of La Quinta
N/S: Madison Street
E/W: Vista Bonita Trail
Weather: Sunny

File Name : LQAMAVBAM
Site Code : 10234001
Start Date : 11/2/2010
Page No : 1

Groups Printed- Total Volume

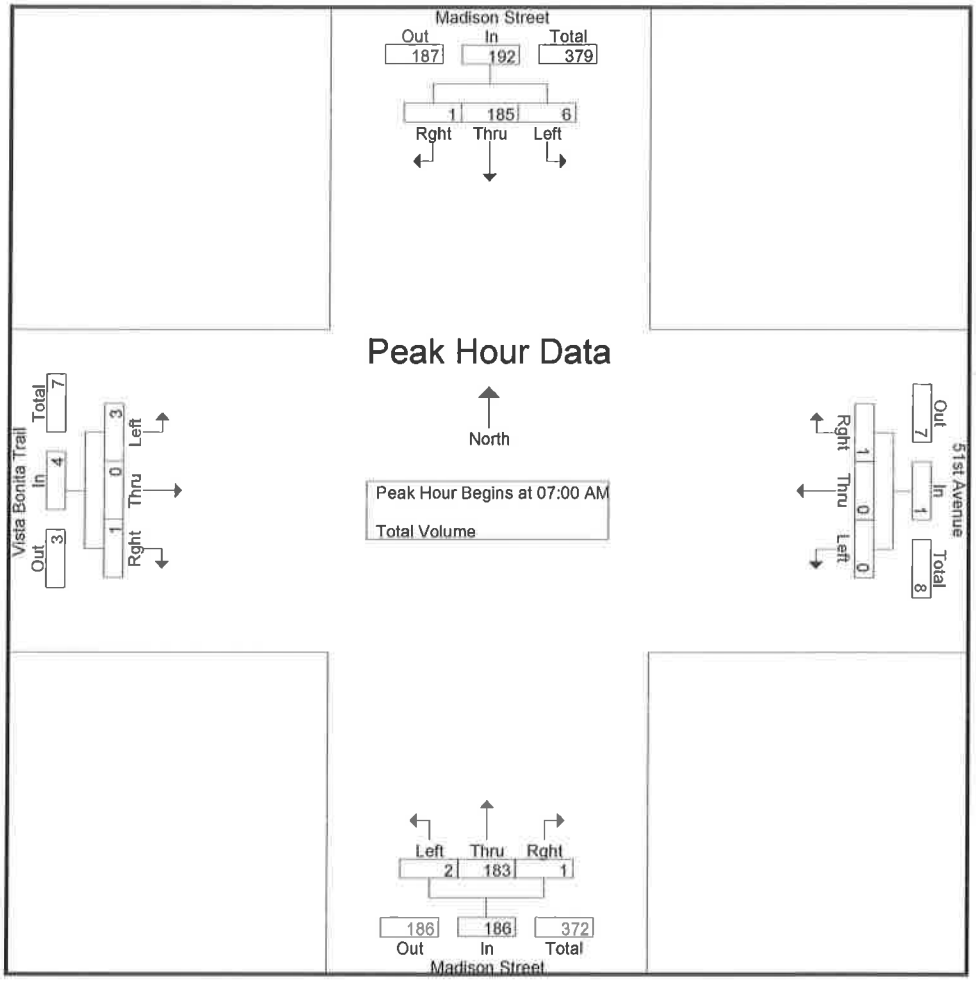
	Madison Street Southbound				51st Avenue Westbound				Madison Street Northbound				Vista Bonita Trail Eastbound				
Start Time	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Int. Total
06:00 AM	1	14	1	16	0	0	0	0	0	18	0	18	0	0	0	0	34
06:15 AM	5	27	0	32	0	1	2	3	0	23	0	23	0	1	0	1	59
06:30 AM	3	33	1	37	1	0	1	2	0	37	1	38	0	0	0	0	77
06:45 AM	10	54	0	64	0	0	1	1	0	43	2	45	0	0	0	0	110
Total	19	128	2	149	1	1	4	6	0	121	3	124	0	1	0	1	280
07:00 AM	1	48	0	49	0	0	0	0	1	41	0	42	1	0	0	1	92
07:15 AM	2	36	0	38	0	0	1	1	0	43	1	44	0	0	1	1	84
07:30 AM	1	53	0	54	0	0	0	0	0	43	0	43	1	0	0	1	98
07:45 AM	2	48	1	51	0	0	0	0	1	56	0	57	1	0	0	1	109
Total	6	185	1	192	0	0	1	1	2	183	1	186	3	0	1	4	383
08:00 AM	2	51	0	53	1	0	0	1	0	38	0	38	2	0	0	2	94
08:15 AM	2	30	0	32	0	0	1	1	1	40	0	41	0	0	0	0	74
Grand Total	29	394	3	426	2	1	6	9	3	382	4	389	5	1	1	7	831
Apprch %	6.8	92.5	0.7		22.2	11.1	66.7		0.8	98.2	1		71.4	14.3	14.3		
Total %	3.5	47.4	0.4	51.3	0.2	0.1	0.7	1.1	0.4	46	0.5	46.8	0.6	0.1	0.1	0.8	

	Madison Street Southbound				51st Avenue Westbound				Madison Street Northbound				Vista Bonita Trail Eastbound				
Start Time	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	48	0	49	0	0	0	0	1	41	0	42	1	0	0	1	92
07:15 AM	2	36	0	38	0	0	1	1	0	43	1	44	0	0	1	1	84
07:30 AM	1	53	0	54	0	0	0	0	0	43	0	43	1	0	0	1	98
07:45 AM	2	48	1	51	0	0	0	0	1	56	0	57	1	0	0	1	109
Total Volume	6	185	1	192	0	0	1	1	2	183	1	186	3	0	1	4	383
% App. Total	3.1	96.4	0.5		0	0	100		1.1	98.4	0.5		75	0	25		
PHF	.750	.873	.250	.889	.000	.000	.250	.250	.500	.817	.250	.816	.750	.000	.250	1.000	.878

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of La Quinta
N/S: Madison Street
E/W: Vista Bonita Trail
Weather: Sunny

File Name : LQAMAVBAM
Site Code : 10234001
Start Date : 11/2/2010
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	1	48	0	49	0	0	0	0	1	41	0	42	1	0	0	1
+15 mins.	2	36	0	38	0	0	1	1	0	43	1	44	0	0	1	1
+30 mins.	1	53	0	54	0	0	0	0	0	43	0	43	1	0	0	1
+45 mins.	2	48	1	51	0	0	0	0	1	56	0	57	1	0	0	1
Total Volume	6	185	1	192	0	0	1	1	2	183	1	186	3	0	1	4
% App. Total	3.1	96.4	0.5		0	0	100		1.1	98.4	0.5		75	0	25	
PHF	.750	.873	.250	.889	.000	.000	.250	.250	.500	.817	.250	.816	.750	.000	.250	1.000

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of La Quinta
N/S: Madison Street
E/W: Vista Bonita Trail
Weather: Sunny

File Name : LQAMAVBPM
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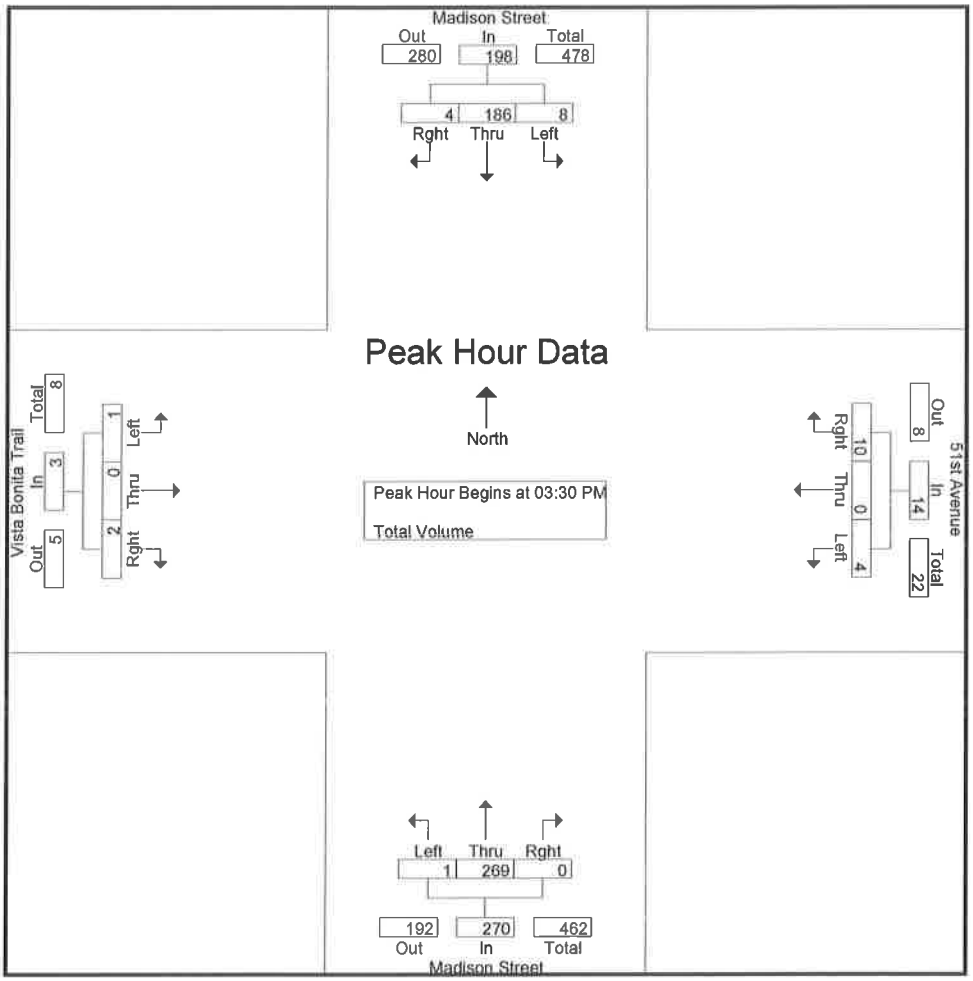
	Madison Street Southbound				51st Avenue Westbound				Madison Street Northbound				Vista Bonita Trail Eastbound				
Start Time	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Int. Total
02:30 PM	2	47	3	52	0	0	2	2	0	69	0	69	0	0	0	0	123
02:45 PM	1	45	3	49	0	0	1	1	0	60	0	60	1	0	0	1	111
Total	3	92	6	101	0	0	3	3	0	129	0	129	1	0	0	1	234
03:00 PM	3	62	0	65	0	0	2	2	0	71	0	71	1	0	2	3	141
03:15 PM	2	73	0	75	0	0	1	1	1	80	0	81	0	0	1	1	158
03:30 PM	1	48	2	51	2	0	9	11	0	78	0	78	0	0	1	1	141
03:45 PM	1	53	2	56	2	0	0	2	0	71	0	71	0	0	0	0	129
Total	7	236	4	247	4	0	12	16	1	300	0	301	1	0	4	5	569
04:00 PM	4	41	0	45	0	0	0	0	1	69	0	70	1	0	1	2	117
04:15 PM	2	44	0	46	0	0	1	1	0	51	0	51	0	0	0	0	98
04:30 PM	2	42	0	44	3	0	1	4	0	54	1	55	1	0	0	1	104
04:45 PM	0	46	2	48	0	0	1	1	0	62	0	62	1	0	0	1	112
Total	8	173	2	183	3	0	3	6	1	236	1	238	3	0	1	4	431
05:00 PM	2	59	1	62	0	0	1	1	0	59	0	59	0	0	0	0	122
05:15 PM	0	46	0	46	0	0	4	4	1	59	0	60	0	0	0	0	110
Grand Total	20	606	13	639	7	0	23	30	3	783	1	787	5	0	5	10	1466
Apprch %	3.1	94.8	2		23.3	0	76.7		0.4	99.5	0.1		50	0	50		
Total %	1.4	41.3	0.9	43.6	0.5	0	1.6	2	0.2	53.4	0.1	53.7	0.3	0	0.3	0.7	

	Madison Street Southbound				51st Avenue Westbound				Madison Street Northbound				Vista Bonita Trail Eastbound				
Start Time	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Left	Thru	Rght	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	1	48	**2**	51	**2**	0	**9**	**11**	0	**78**	0	**78**	0	0	**1**	1	**141**
03:45 PM	1	**53**	2	**56**	2	0	0	2	0	71	0	71	0	0	0	0	129
04:00 PM	**4**	41	0	45	0	0	0	0	**1**	69	0	70	**1**	0	1	**2**	117
04:15 PM	2	44	0	46	0	0	1	1	0	51	0	51	0	0	0	0	98
Total Volume	8	186	4	198	**4**	0	10	14	1	269	0	270	1	0	2	3	**485**
% App. Total	4	93.9	2		28.6	0	71.4		0.4	99.6	0		33.3	0	66.7		
PHF	.500	.877	.500	.884	.500	.000	.278	.318	.250	.862	.000	.865	.250	.000	.500	.375	.860

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of La Quinta
N/S: Madison Street
E/W: Vista Bonita Trail
Weather: Sunny

File Name : LQAMAVBPM
Site Code : 10234001
Start Date : 11/2/2010
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	1	48	**2**	51	**2**	0	**9**	**11**	0	**78**	0	**78**	0	0	**1**	1
+15 mins.	1	**53**	2	**56**	2	0	0	2	0	71	0	71	0	0	0	0
+30 mins.	**4**	41	0	45	0	0	0	0	**1**	69	0	70	1	0	1	**2**
+45 mins.	2	44	0	46	0	0	1	1	0	51	0	51	0	0	0	0
Total Volume	8	186	4	198	4	0	10	14	1	269	0	270	1	0	2	3
% App. Total	4	93.9	2		28.6	0	71.4		0.4	99.6	0		33.3	0	66.7	
PHF	.500	.877	.500	.884	.500	.000	.278	.318	.250	.862	.000	.865	.250	.000	.500	.375

GEORGE DUNN
ENGINEERING

Attachment C
Intersection Level-of-Service Analysis Worksheets

Tract 36279, La Quinta, California
Prepared for Coachella Valley Engineers
November 17, 2010

George Dunn Engineering

Scenario Report

Scenario:	AM Existing
Command:	AM Existing
Volume:	AM Peak Hour
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	AM Peak Hour
Trip Distribution:	Project
Paths:	Default Paths
Routes:	Default Routes
Configuration:	AM Existing

```
AM Existing                Fri Nov 5, 2010 11:34:17                Page 2-1
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
                2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #1 Madison Street/Avenue 51
******************************************************************************
Average Delay (sec/veh):      0.3   Worst Case Level Of Service:       B[ 10.9]
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:       0  0  1! 0  0    0  0  1! 0  0    1  0  0  1  0    0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      2  183     1     6  185     1     3    0     1     0    0     1
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   2  183     1     6  185     1     3    0     1     0    0     1
User Adj:    1.05 1.05  1.05  1.05 1.05  1.05  1.05 1.05  1.05  1.05 1.05  1.05
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    2  192     1     6  194     1     3    0     1     0    0     1
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:    2  192     1     6  194     1     3    0     1     0    0     1
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx   4.1 xxxx xxxxx   7.1 xxxx   6.2 xxxxx xxxx   6.2
FollowUpTim:  2.2 xxxx xxxxx   2.2 xxxx xxxxx   3.5 xxxx   3.3 xxxxx xxxx   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  195 xxxx xxxxx   193 xxxx xxxxx   405 xxxx   195  xxxx xxxx   193
Potent Cap.: 1390 xxxx xxxxx  1392 xxxx xxxxx   560 xxxx   852  xxxx xxxx   854
Move Cap.:   1390 xxxx xxxxx  1392 xxxx xxxxx   557 xxxx   852  xxxx xxxx   854
Volume/Cap:  0.00 xxxx  xxxx  0.00 xxxx  xxxx  0.01 xxxx  0.00  xxxx xxxx  0.00
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:         0.0 xxxx xxxxx   0.0 xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx   0.0
Stopped Del:   7.6 xxxx xxxxx   7.6 xxxx xxxxx  11.5 xxxx xxxxx xxxxx xxxx   9.2
LOS by Move:     A    *     *     A    *     *     B    *     *     *    *     A
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   852  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   0.0 xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   9.2 xxxxx xxxx xxxxx
Shared LOS:    *     *     *     *    *     *     *    *     A     *    *     *
ApproachDel:      xxxxxx           xxxxxx           10.9           9.2
ApproachLOS:         *                *              B             A

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Scenario Report

Scenario:	PM Existing
Command:	PM Existing
Volume:	PM Peak Hour
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak Hour
Trip Distribution:	Project
Paths:	Default Paths
Routes:	Default Routes
Configuration:	PM Existing

PM Existing Fri Nov 5, 2010 11:34:40 Page 2-1

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

Intersection #1 Madison Street/Avenue 51

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

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 1!	0	0	1	0 0	1	0	0 0 1!	0 0
Volume Module:												
Base Vol:	0	269	0	8	186	4	1	0	2	4	0	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	269	0	8	186	4	1	0	2	4	0	10
User Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	282	0	8	195	4	1	0	2	4	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	282	0	8	195	4	1	0	2	4	0	11
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	xxxx	6.2	7.1	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	3.3	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	282	xxxx	xxxxx	502	xxxx	197	498	xxxx	282
Potent Cap.:	xxxx	xxxx	xxxxx	1292	xxxx	xxxxx	483	xxxx	849	486	xxxx	761
Move Cap.:	xxxx	xxxx	xxxxx	1292	xxxx	xxxxx	474	xxxx	849	483	xxxx	761
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	0.00	xxxx	0.00	0.01	xxxx	0.01
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	12.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	849	xxxx	653	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	0.1	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.3	xxxxx	10.6	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	A	*	B	*
ApproachDel:	xxxxxx			xxxxxx			10.4			10.6		
ApproachLOS:	*			*			B			B		

Scenario Report

Scenario:	AM Existing Plus Project
Command:	AM Existing Plus Project
Volume:	AM Peak Hour
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	AM Peak Hour
Trip Distribution:	Project
Paths:	Default Paths
Routes:	Default Routes
Configuration:	AM Existing Plus Project

AM Existing Plus Project Fri Nov 5, 2010 11:33:04 Page 2-1

Trip Generation Report

Forecast for AM Peak Hour

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Tract 36279	1.00	Tract 36279	7.00	20.00	7	20	27	100.0
	Zone 1 Subtotal					7	20	27	100.0
TOTAL						7	20	27	100.0

AM Existing Plus Project Fri Nov 5, 2010 11:33:04 Page 3-1

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

Intersection #1 Madison Street/Avenue 51

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 0 1 0			0 0 0 0 1		
Volume Module:												
Base Vol:	2	183	1	6	185	1	3	0	1	0	0	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	183	1	6	185	1	3	0	1	0	0	1
Added Vol:	0	10	0	0	4	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	193	1	6	189	1	3	0	1	0	0	1
User Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	203	1	6	198	1	3	0	1	0	0	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	2	203	1	6	198	1	3	0	1	0	0	1
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	xxxx	6.2	xxxxx	xxxx	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	200	xxxx	xxxxx	204	xxxx	xxxxx	419	xxxx	199	xxxx	xxxx	203
Potent Cap.:	1385	xxxx	xxxxx	1380	xxxx	xxxxx	548	xxxx	847	xxxx	xxxx	843
Move Cap.:	1385	xxxx	xxxxx	1380	xxxx	xxxxx	544	xxxx	847	xxxx	xxxx	843
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.01	xxxx	0.00	xxxx	xxxx	0.00

Level Of Service Module:												
Queue:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	0.0
Stopped Del:	7.6	xxxx	xxxxx	7.6	xxxx	xxxxx	11.7	xxxx	xxxxx	xxxxx	xxxx	9.3
LOS by Move:	A	*	*	A	*	*	B	*	*	*	*	A
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	847	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.3	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	A	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.1			9.3		
ApproachLOS:	*			*			B			A		

AM Existing Plus Project Fri Nov 5, 2010 11:33:04 Page 4-1

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

Intersection #2 Madison Street/Project Entrance

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[10.2]

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	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	0	186	0			0	186	0			0	0	0			0	0	0		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	186	0			0	186	0			0	0	0			0	0	0		
Added Vol:	4	0	0			0	0	4			10	0	10			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	4	186	0			0	186	4			10	0	10			0	0	0		
User Adj:	1.05	1.05	1.05			1.05	1.05	1.05			1.05	1.05	1.05			1.05	1.05	1.05		
PHF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Volume:	4	195	0			0	195	4			11	0	11			0	0	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	4	195	0			0	195	4			11	0	11			0	0	0		
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4	xxxx		6.2	xxxxx	xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	xxxx		3.3	xxxxx	xxxx	xxxxx			
Capacity Module:																				
Cnflict Vol:	200	xxxx	xxxxx	xxxx	xxxx	xxxxx					401	xxxx		197	xxxx	xxxx	xxxxx			
Potent Cap.:	1385	xxxx	xxxxx	xxxx	xxxx	xxxxx					609	xxxx		849	xxxx	xxxx	xxxxx			
Move Cap.:	1385	xxxx	xxxxx	xxxx	xxxx	xxxxx					607	xxxx		849	xxxx	xxxx	xxxxx			
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx					0.02	xxxx		0.01	xxxx	xxxx	xxxx			
Level Of Service Module:																				
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx					0.1	xxxx		0.0	xxxxx	xxxx	xxxxx			
Stopped Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx					11.0	xxxx		9.3	xxxxx	xxxx	xxxxx			
LOS by Move:	A	*	*	*	*	*					B	*		A	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*					*	*	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx							10.2			xxxxxx						
ApproachLOS:	*			*							B			*						

Scenario Report

Scenario:	PM Existing Plus Project
Command:	PM Existing Plus Project
Volume:	PM Peak Hour
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak Hour
Trip Distribution:	Project
Paths:	Default Paths
Routes:	Default Routes
Configuration:	PM Existing Plus Project

PM Existing Plus Project Fri Nov 5, 2010 11:33:42 Page 2-1

Trip Generation Report

Forecast for PM Peak Hour

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Tract 36279	1.00	Tract 36279	7.00	4.00	7	4	11	100.0
	Zone 1 Subtotal					7	4	11	100.0
TOTAL						7	4	11	100.0

PM Existing Plus Project Fri Nov 5, 2010 11:33:42 Page 3-1

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

Intersection #1 Madison Street/Avenue 51

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

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0 0		0 0 1!	0 0		1 0	0 1	0	0 0 1!	0 0	
Volume Module:												
Base Vol:	0	269	0	8	186	4	1	0	2	4	0	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	269	0	8	186	4	1	0	2	4	0	10
Added Vol:	0	2	0	0	4	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	271	0	8	190	4	1	0	2	4	0	10
User Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	285	0	8	200	4	1	0	2	4	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	285	0	8	200	4	1	0	2	4	0	11
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	xxxx	6.2	7.1	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	3.3	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	285	xxxx	xxxxx	508	xxxx	202	504	xxxx	285
Potent Cap.:	xxxx	xxxx	xxxxx	1289	xxxx	xxxxx	478	xxxx	844	482	xxxx	759
Move Cap.:	xxxx	xxxx	xxxxx	1289	xxxx	xxxxx	469	xxxx	844	478	xxxx	759
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	0.00	xxxx	0.00	0.01	xxxx	0.01
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	12.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	844	xxxx	650	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	0.1	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.3	xxxxx	10.7	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	A	*	B	*
ApproachDel:	xxxxxx			xxxxxx			10.4			10.7		
ApproachLOS:	*			*			B			B		

```
PM Existing Plus Project   Fri Nov 5, 2010 11:33:42                  Page 4-1
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Madison Street/Project Entrance
********************************************************************************
Average Delay (sec/veh):      0.2   Worst Case Level Of Service:       B[ 10.5]
********************************************************************************
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  1  0  0  0    0  0  0  1  0    1  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  270    0     0  192    0     0    0    0     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0  270    0     0  192    0     0    0    0     0    0    0
Added Vol:      4    0    0     0    0    4     2    0    2     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    4  270    0     0  192    4     2    0    2     0    0    0
User Adj:    1.05 1.05 1.05  1.05 1.05 1.05  1.05 1.05 1.05  1.05 1.05 1.05
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     4  284    0     0  202    4     2    0    2     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Final Vol.:     4  284    0     0  202    4     2    0    2     0    0    0
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4 xxxx   6.2 xxxxx xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5 xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  206 xxxx xxxxx  xxxx xxxx xxxxx   496 xxxx   204  xxxx xxxx xxxxx
Potent Cap.: 1378 xxxx xxxxx  xxxx xxxx xxxxx   537 xxxx   842  xxxx xxxx xxxxx
Move Cap.:   1378 xxxx xxxxx  xxxx xxxx xxxxx   536 xxxx   842  xxxx xxxx xxxxx
Volume/Cap:  0.00 xxxx  xxxx  xxxx xxxx  xxxx  0.00 xxxx  0.00  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:        0.0 xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx   0.0 xxxxx xxxx xxxxx
Stopped Del:  7.6 xxxx xxxxx xxxxx xxxx xxxxx  11.7 xxxx   9.3 xxxxx xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     B    *     A     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.0 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:  7.6 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:       xxxxxx           xxxxxx           10.5           xxxxxx
ApproachLOS:         *                *              B              *

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Scenario Report

Scenario:	AM Year 2014 Plus Project
Command:	AM Year 2014 Plus Project
Volume:	AM Peak Hour
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	AM Peak Hour
Trip Distribution:	Project
Paths:	Default Paths
Routes:	Default Routes
Configuration:	AM Year 2014 Plus Project

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Trip Generation Report

Forecast for AM Peak Hour

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Tract 36279	1.00	Tract 36279	7.00	20.00	7	20	27	100.0
	Zone 1 Subtotal					7	20	27	100.0
TOTAL						7	20	27	100.0

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                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
*******************************************************************************
Intersection #1 Madison Street/Avenue 51
*******************************************************************************
Average Delay (sec/veh):      0.3   Worst Case Level Of Service:       B[ 11.2]
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled     Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:       0  0  1! 0  0    0  0  1! 0  0    1  0  0  1  0    0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        2  183    1     6  185    1     3    0    1     0    0    1
Growth Adj:   1.04 1.04 1.04  1.04 1.04 1.04  1.04 1.04 1.04  1.04 1.04 1.04
Initial Bse:     2  190    1     6  192    1     3    0    1     0    0    1
Added Vol:       0   10    0     0    4    0     0    0    0     0    0    0
PasserByVol:     0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:     2  200    1     6  196    1     3    0    1     0    0    1
User Adj:     1.05 1.05 1.05  1.05 1.05 1.05  1.05 1.05 1.05  1.05 1.05 1.05
PHF Adj:      1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:      2  210    1     7  206    1     3    0    1     0    0    1
Reduct Vol:      0    0    0     0    0    0     0    0    0     0    0    0
Final Vol.:      2  210    1     7  206    1     3    0    1     0    0    1
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx   4.1 xxxx xxxxx   7.1 xxxx   6.2 xxxxx xxxx   6.2
FollowUpTim:  2.2 xxxx xxxxx   2.2 xxxx xxxxx   3.5 xxxx   3.3 xxxxx xxxx   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  207 xxxx xxxxx   211 xxxx xxxxx   436 xxxx   207  xxxx xxxx   211
Potent Cap.: 1376 xxxx xxxxx  1371 xxxx xxxxx   534 xxxx   839  xxxx xxxx   834
Move Cap.:   1376 xxxx xxxxx  1371 xxxx xxxxx   531 xxxx   839  xxxx xxxx   834
Volume/Cap:  0.00 xxxx  xxxx  0.00 xxxx  xxxx  0.01 xxxx  0.00  xxxx xxxx  0.00
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:         0.0 xxxx xxxxx   0.0 xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx   0.0
Stopped Del:   7.6 xxxx xxxxx   7.6 xxxx xxxxx  11.8 xxxx xxxxx xxxxx xxxx   9.3
LOS by Move:     A    *    *     A    *    *     B    *    *     *    *     A
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   839  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   0.0 xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   9.3 xxxxx xxxx xxxxx
Shared LOS:    *    *    *     *    *    *     *    *     A     *    *     *
ApproachDel:      xxxxxx            xxxxxx            11.2             9.3
ApproachLOS:         *                 *               B               A


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

Intersection #2 Madison Street/Project Entrance

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[10.2]

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 1	0 0	0	0 0	0 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	186	0	0	186	0	0	0	0	0	0	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	193	0	0	193	0	0	0	0	0	0	0
Added Vol:	4	0	0	0	0	4	10	0	10	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	193	0	0	193	4	10	0	10	0	0	0
User Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	203	0	0	203	4	11	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	203	0	0	203	4	11	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	207	xxxx	xxxxx	xxxx	xxxx	xxxxx	417	xxxx	205	xxxx	xxxx	xxxxx
Potent Cap.:	1376	xxxx	xxxxx	xxxx	xxxx	xxxxx	596	xxxx	840	xxxx	xxxx	xxxxx
Move Cap.:	1376	xxxx	xxxxx	xxxx	xxxx	xxxxx	595	xxxx	840	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	0.0	xxxxx	xxxx	xxxxx
Stopped Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.2	xxxx	9.3	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	B	*	A	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.2			xxxxxx		
ApproachLOS:	*			*			B			*		

Scenario Report

Scenario:	PM Year 2014 Plus Project
Command:	PM Year 2014 Plus Project
Volume:	PM Peak Hour
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak Hour
Trip Distribution:	Project
Paths:	Default Paths
Routes:	Default Routes
Configuration:	PM Year 2014 Plus Project

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Trip Generation Report

Forecast for PM Peak Hour

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Tract 36279	1.00	Tract 36279	7.00	4.00	7	4	11	100.0
	Zone 1 Subtotal					7	4	11	100.0
TOTAL						7	4	11	100.0

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

Intersection #1 Madison Street/Avenue 51

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[10.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 1!	0	0	1	0 0 1	0	0 0 1!	0	0
Volume Module:												
Base Vol:	0	269	0	8	186	4	1	0	2	4	0	10
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	280	0	8	193	4	1	0	2	4	0	10
Added Vol:	0	2	0	0	4	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	282	0	8	197	4	1	0	2	4	0	10
User Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	296	0	9	207	4	1	0	2	4	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	296	0	9	207	4	1	0	2	4	0	11
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	xxxx	6.2	7.1	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	3.3	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	296	xxxx	xxxxx	528	xxxx	209	524	xxxx	296
Potent Cap.:	xxxx	xxxx	xxxxx	1277	xxxx	xxxxx	464	xxxx	836	467	xxxx	748
Move Cap.:	xxxx	xxxx	xxxxx	1277	xxxx	xxxxx	455	xxxx	836	463	xxxx	748
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	0.00	xxxx	0.00	0.01	xxxx	0.01

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	12.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	836	xxxx	637	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	0.1	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.3	xxxxx	10.8	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	A	*	B	*
ApproachDel:	xxxxxx			xxxxxx			10.5			10.8		
ApproachLOS:	*			*			B			B		

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

Intersection #2 Madison Street/Project Entrance

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[10.6]

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 1	0 0	0	0 0	0 1	0	1 0	0 0	0 1	0 0	0 0	0
Volume Module:												
Base Vol:	0	270	0	0	192	0	0	0	0	0	0	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	281	0	0	200	0	0	0	0	0	0	0
Added Vol:	4	0	0	0	0	4	2	0	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	281	0	0	200	4	2	0	2	0	0	0
User Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	295	0	0	210	4	2	0	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	295	0	0	210	4	2	0	2	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	214	xxxx	xxxxx	xxxx	xxxx	xxxxx	515	xxxx	212	xxxx	xxxx	xxxxx
Potent Cap.:	1368	xxxx	xxxxx	xxxx	xxxx	xxxxx	523	xxxx	833	xxxx	xxxx	xxxxx
Move Cap.:	1368	xxxx	xxxxx	xxxx	xxxx	xxxxx	522	xxxx	833	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	0.00	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	0.0	xxxxx	xxxx	xxxxx
Stopped Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.9	xxxx	9.3	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	B	*	A	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.6			xxxxxx		
ApproachLOS:	*			*			B			*		