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JAN 25 2008

CITY OF LA QUINTA
PLANNING DEPARTMENT

January 24, 2008

Mr. Thomas Middleton
REGENCY CENTERS
36 Executive Park, Suite 100
Irvine, CA 92614

Subject: Jefferson Square – Trip Generation Comparison

Dear Mr. Middleton:

The firm of Urban Crossroads, Inc. is pleased to submit the following trip generation evaluation for the proposed Jefferson Square. The site is located on the southeast corner of Fred Waring Drive and Jefferson Street in the City of La Quinta. The project is currently proposed of approximately 16,500 square feet of retail shops, 13,928 square feet of supermarket uses, a 42,500 square foot hardware store, a 4,500 square foot drive thru bank, and a 13,013 square foot drug store. Previously an evaluation was conducted for the same site with a different set of land use assumptions. The former assumptions consisted of 103,970 square feet of shopping center uses and a gas station with 16 fueling positions. Therefore, the purpose of this trip generation evaluation is to compare the amount of trips generated by the previous study assumption to the currently proposed uses.

PROPOSED DEVELOPMENT

The project site is located on the southeast corner of Fred Waring Drive and Jefferson Street in the City of La Quinta, as shown on Exhibit A. The site is currently vacant and does not generate a significant amount of traffic. The project was previously proposed to comprise of 103,970 square feet of shopping center uses and a gas station with 16 fueling positions as shown in Exhibit B. Exhibit C illustrates the currently proposed site plan. As indicated in the site plan, the project will continue to have access to both Jefferson Street and Fred Waring Drive.

Mr. Thomas Middleton
REGENCY CENTERS
January 24, 2008
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TRAFFIC GENERATION

The traffic generation rates for the previous and proposed uses are shown in Table 1. The traffic generation rates are based on the most current edition of the ITE (Institute of Transportation Engineers) Trip Generation Manual, 7th Edition, 2003.

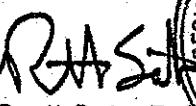
The anticipated traffic generation of the site is shown in Table 2. Based on the previous uses, it is estimated that the project would have generated 9,664 trip ends per day, with 353 trips in the AM peak hour and 865 trips in the PM peak hour. The currently proposed site is now expected to generate 7,961 trip ends per day, with 235 trips during the AM peak hour and 858 trips during the PM peak hour. It should be noted that these are total trip generation estimates without pass-by or internal capture reductions.

DISCUSSION

Since the project is now comprised of a decrease in the overall building square footage and the elimination of the gas station, it is anticipated that the site will generate 1,703 fewer trip ends per day with 118 fewer trips during the AM peak hour and 7 fewer trips during the PM peak hour. Therefore, since the change in the amount of trips will be nominal, it is anticipated that no new significant traffic impacts will occur on the street system due to the proposed project.

Please call me at (760) 931-0664, if you have questions or require any additional information in regards to this letter.

Respectfully submitted,

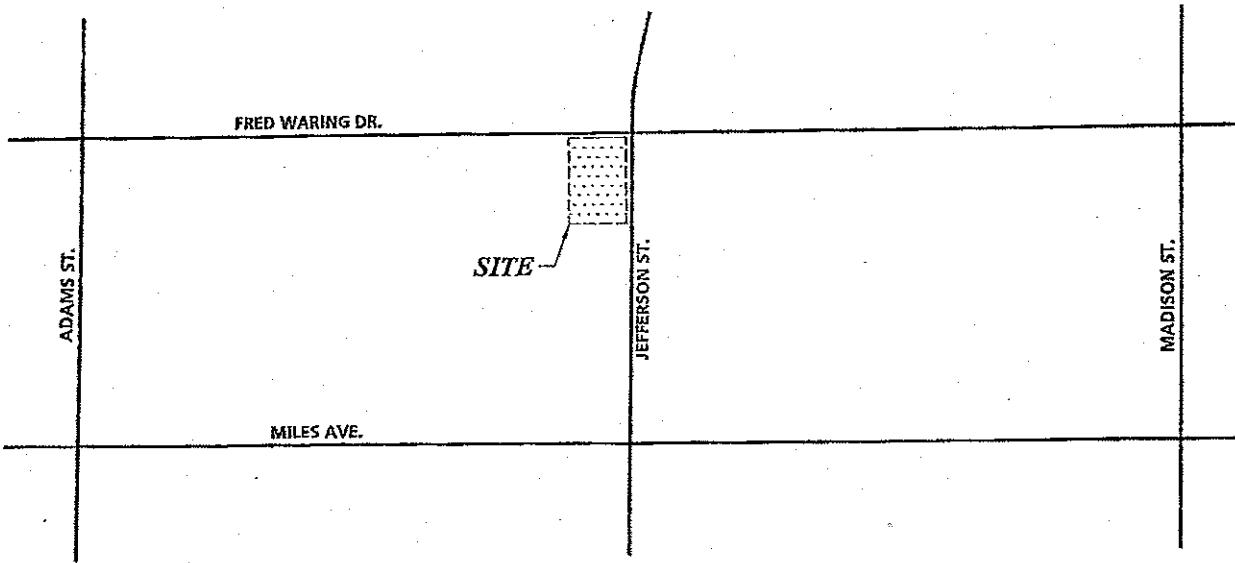
URBAN CROSSROADS, INC.

No. C 60277
Exp. 06/30/08
CIVIL
STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER

Scott Sato, P. E.
Principal

SS:JCS:ms
JN: 5599-02

Attachments

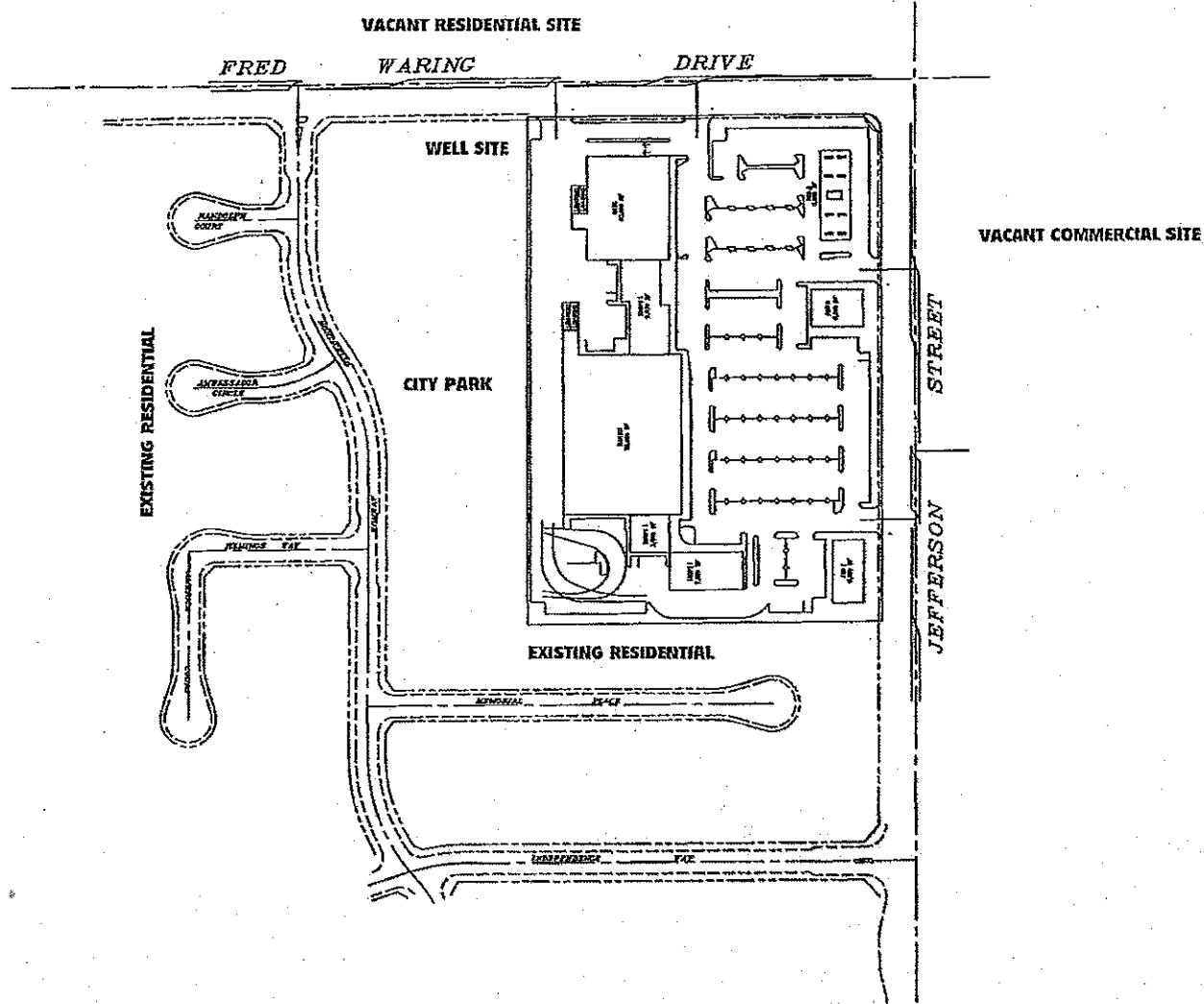
EXHIBIT A
LOCATION MAP



JEFFERSON SQUARE, La Quinta, California - 05599; 01



EXHIBIT B
PREVIOUS SITE PLAN



JEFFERSON SQUARE, La Quinta, California - 05599:02



EXHIBIT C
CURRENTLY PROPOSED SITE PLAN

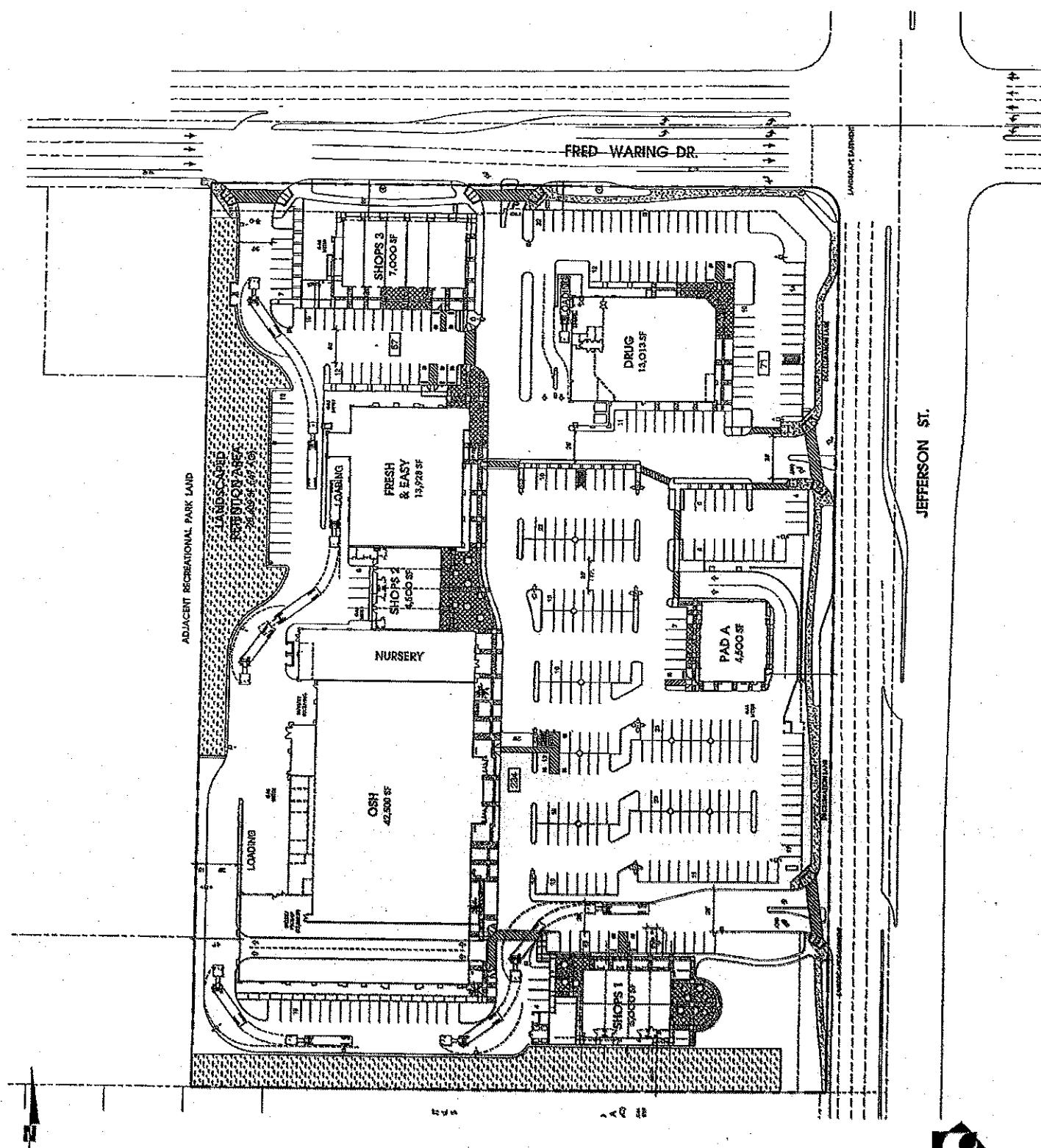


TABLE 1
TRIP GENERATION RATES¹

PREVIOUSLY PROPOSED

LAND USE	ITE CODE	UNITS ²	PEAK HOUR TRIP RATES						DAILY	
			AM			PM				
			IN	OUT	TOTAL	IN	OUT	TOTAL		
Shopping Center	820	TSF	0.94	0.60	1.54	2.97	3.21	6.18	66.99	
Gas Service Station	944	VEH. FUELING POS.	6.04	6.04	12.08	6.93	6.93	13.86	168.56	

NEWLY PROPOSED

LAND USE	ITE CODE	UNITS ²	PEAK HOUR TRIP RATES						DAILY	
			AM			PM				
			IN	OUT	TOTAL	IN	OUT	TOTAL		
Hardware Store	816	TSF	0.65	0.43	1.08	2.27	2.57	4.84	51.29	
Supermarket	850	TSF	1.98	1.27	3.25	5.33	5.12	10.45	102.24	
Drug Store w/drive-thru	881	TSF	1.52	1.14	2.66	4.22	4.4	8.62	88.16	
Retail Shops	820	TSF	1.96	1.25	3.21	5.54	6.01	11.55	127.59	
Drive-thru Bank	912	TSF	6.91	5.43	12.34	22.87	22.87	45.74	246.49	

¹ Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 7th Edition, 2003.

² TSF = Thousand Square Feet

VEH. FUELING POS. = Vehicle Fueling Positions

TABLE 2
TRIP GENERATION SUMMARY

PREVIOUSLY PROPOSED

LAND USE	QUANTITY	UNITS ¹	PEAK HOUR						DAILY
			AM			PM			
			IN	OUT	TOTAL	IN	OUT	TOTAL	
Shopping Center	104	TSF	98	62	160	309	334	643	6,967
Gas Service Station	16	VEH. FUELING POS.	97	97	193	111	111	222	2,697
TOTAL			195	159	353	420	445	865	9,664

CURRENTLY PROPOSED

LAND USE	QUANTITY	UNITS ¹	PEAK HOUR						DAILY
			AM			PM			
			IN	OUT	TOTAL	IN	OUT	TOTAL	
Hardware Store	42.5	TSF	28	18	46	96	109	205	2,180
Supermarket	13.9	TSF	28	18	46	74	71	145	1,421
Drug Store w/drive-thru	13.0	TSF	20	15	35	55	57	112	1,146
Retail Shops	16.5	TSF	32	21	53	91	99	190	2,105
Drive-thru Bank	4.5	TSF	31	24	55	103	103	206	1,109
TOTAL			139	96	235	419	439	858	7,961

DIFFERENCE (Currently Proposed - Previously Proposed)	-56	-63	-118	-1	-6	-7	-4,703
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¹ TSF = Thousand Square Feet

VEH. FUELING POS. = Vehicle Fueling Positions.

T:\Carlsbad_Jobs\05500\05599\Excel\05599-01.xls\Table 2



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MAR 04 2003

DUDEK & ASSOC.
PALM DESERT

February 28, 2003

Mr. Ross Canon
MARINITA DEVELOPMENT COMPANY
3835 Birch Street
Newport Beach, CA 92660

Subject: Jefferson Street / Fred Waring Drive Intersection Analysis

Dear Mr. Canon:

The firm of Urban Crossroads, Inc. is pleased to submit this traffic analysis for the intersection of Jefferson Street and Fred Waring Drive in the City of La Quinta. Exhibit A illustrates the location of the intersection and the surrounding roadway system.

INTRODUCTION

The purpose of this letter report is to determine the appropriate Long Range (Year 2020) intersection geometry of the Jefferson Street / Fred Waring Drive intersection in conjunction with the proposed Jefferson Square development. Due to the close proximity of the proposed Jefferson Square Development, located on the southwest corner of the intersection, the trips generated by this development will be incorporated into the analysis. Exhibit B illustrates the site plan for the Jefferson Square development.

Currently, Fred Waring Drive is classified as a Primary Arterial (4D) on the City of La Quinta's General Plan Circulation Element. However, the Riverside County Integrated Plan and the City of Indio General Plan classifies Fred Waring Drive as an Urban Arterial and an Augmented Major (A), respectively.

Mr. Ross Canon
MARINITA DEVELOPMENT COMPANY
February 28, 2003
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For this assessment, Urban Crossroads, Inc. has performed the following:

1. Obtained recent AM and PM peak hour counts for the intersection of Jefferson Street and Fred Waring Drive.
2. Developed trip generation estimates for the Jefferson Square development.
3. Developed trip distribution assumptions for the Jefferson Square development.
4. Forecasted future long range volumes for the intersection of Jefferson Street and Fred Waring Drive.
5. Recommended lane geometry for the intersection based on achieving acceptable peak hour service levels.

EXISTING CONDITIONS

Existing AM and PM peak hour traffic counts were collected for the intersection of Jefferson Street and Fred Waring Drive during the winter season, which is historically considered to represent the peak volumes for the year. (See Appendix "A") The existing AM and PM peak hour intersection volumes are shown on Exhibit C.

The current technical guide to the evaluation of traffic operations is the 2000 Highway Capacity Manual (HCM) (Transportation Research Board Special Report 209). 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 which can traverse the point. Queues form behind such locations.

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 determined using the HCM methodology.

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

The study area intersections, which are stop sign controlled with stop control on the minor street, only have been analyzed using the unsignalized intersection methodology of the HCM. For these intersections, the calculation of level of service is dependent on the occurrence of gaps occurring in the traffic flow of the main street. Using data collected describing the intersection configuration and traffic volumes at the study area locations; the level of service has been calculated. The level of service criteria for this type of intersection analysis is based on average total delay per vehicle for the worst minor street movement(s).

For all way stop (AWS) controlled intersections, the ability of vehicles to enter the intersection is not controlled by the occurrence of gaps in the flow of the main street. The AWS controlled intersections have been evaluated using the HCM methodology for this type of multi-way stop controlled intersection configuration. The level of service criteria for this type of intersection analysis is based on average total delay per vehicle.

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

LEVEL OF SERVICE	AVERAGE TOTAL DELAY PER VEHICLE (SECONDS)	
	SIGNALIZED	UNSIGNALIZED
A	0 to 10.00	0 to 10.00
B	10.01 to 20.00	10.01 to 15.00
C	20.01 to 35.00	15.01 to 25.00
D	35.01 to 55.00	25.01 to 35.00
E	55.01 to 80.00	35.01 to 50.00
F	80.01 and up	50.01 and up

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The LOS analysis for signalized intersections has been performed using optimized signal timing. This analysis has included an assumed lost time of three seconds per phase in accordance with HCM recommended default values. Signal timing optimization has considered pedestrian safety and signal coordination requirements. Appropriate times for pedestrian crossings have also been considered in the signalized intersection analysis.

Saturation flow rates of 1,900 vehicles per hour of green (vphg) have been assumed for all capacity analysis.

Exhibit D identifies the existing roadway conditions for the intersection of Jefferson Street and Fred Waring Drive. The existing number of through traffic lanes and intersection controls are identified. The existing level of service for the intersection is shown in Table 3. As indicated in Table 3, the intersection currently operates at an acceptable level of service (LOS "D" or better) during the peak hours.

FUTURE YEAR CONDITIONS

To assess Long Range traffic conditions, the Jefferson Square development traffic is combined with existing traffic and areawide growth. The study year (Long Range) for analysis purposes in this report is 2020.

To account for areawide growth on roadways, Long Range traffic volumes have been calculated based on a 4 percent annual growth rate of existing traffic volumes over a 17 year period. Areawide growth has been derived from the City of La Quinta General Plan Update Traffic Study (Revised), dated September 28, 2000. In this study, the growth rate was calculated to be 4 percent per year.

Due to the close proximity of the Jefferson Square development to the intersection, the trips generated by the project have been added to the areawide growth in order to develop a "worst case" scenario. The project will consist of a 103,970 square foot shopping center

Mr. Ross Canon
MARINITA DEVELOPMENT COMPANY
February 28, 2003
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and a gas service station with 16 fueling positions. The trip distribution patterns for the development are illustrated on Exhibit E. The trips generated by the Jefferson Square project are shown on Table 2. Exhibit F shows the AM and PM peak hour intersection volumes in the year 2020 with project traffic conditions.

FUTURE YEAR TRAFFIC ANALYSIS

For Long Range (2020) with project conditions, the study intersection is projected to operate at an acceptable level of service (Level of Service "D" or better) during the peak hours with the alternative improvements shown in Table 4. The Long Range (2020) level of service worksheets are provided in Appendix "B".

CONCLUSION

In this report, Urban Crossroads, Inc. has collected existing AM and PM traffic counts for the study area intersection, forecasted future (2020) traffic volumes, calculated existing and long range AM and PM peak hour volumes and levels of services.

Urban Crossroads, Inc. has considered the following three alternatives for the eastbound approach lane configuration of the intersection of Jefferson Street and Fred Waring Drive:

1. A single (375 feet minimum) left turn lane, two through lanes, and a dedicated right turn lane on eastbound Fred Waring at Jefferson Street. This configuration currently exists but the left turn pocket would need to be lengthened in the future to accommodate additional queues.
 - This alternative would not allow for a westbound left turn pocket into the site from Fred Waring Drive.

Mr. Ross Canon
MARINITA DEVELOPMENT COMPANY
February 28, 2003
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2. Dual left turn lanes (one of which being a trap left turn lane the other 250 feet in length), two through lanes, and a dedicated right turn lane on eastbound Fred Waring at Jefferson Street.

- This alternative would allow for a 150 foot westbound left turn pocket into the site from Fred Waring Drive.
- The trap left turn lane could cause potential vehicular conflicts due to vehicles proceeding straight across the intersection from the trap left turn lane.

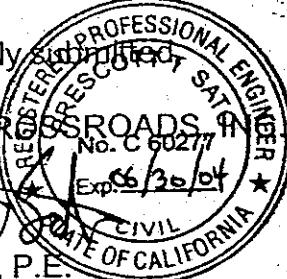
3. Dual left turn lanes (250 feet) and three through lanes on eastbound Fred Waring at Jefferson Street.

- This alternative would allow for a 150 foot westbound left turn pocket into the site from Fred Waring Drive.
- The outside through lane should be constructed to accommodate a minimum distance of 300 feet before of the intersection with a 90 foot transition.
- This alternative would correspond with the City's plan for three through lanes on eastbound Fred Waring Drive. However, as shown in Alternative 2, two through lanes are sufficient at this location to accommodate the Long Range (2020) volumes.

Based on the analysis presented in this study for the intersection of Jefferson Street/Fred Waring, the alternatives listed above will allow the intersection to operate at an acceptable Level of Service during the peak hour. However, Alternative 2 is not recommended due to the potential vehicular conflicts that may occur.

Mr. Ross Canon
MARINITA DEVELOPMENT COMPANY
February 28, 2003
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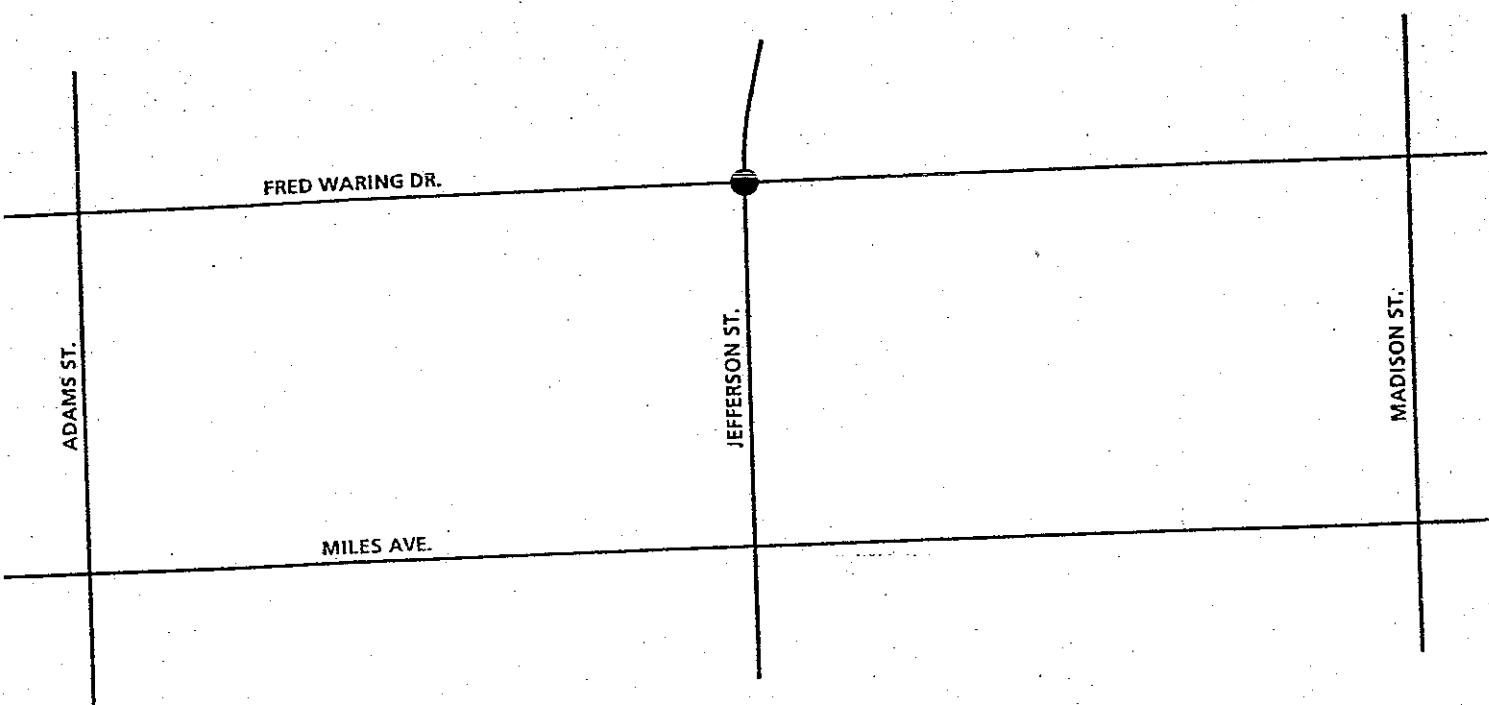
If you have any questions or require clarification on the issues discussed in this study,
please do not hesitate to call at (949) 660-1994.

Respectfully submitted,

URBAN CROSSROADS, INC.
Scott Sato, P.E.
Associate Principal

SS:jt
JN: 01017-04

Attachments

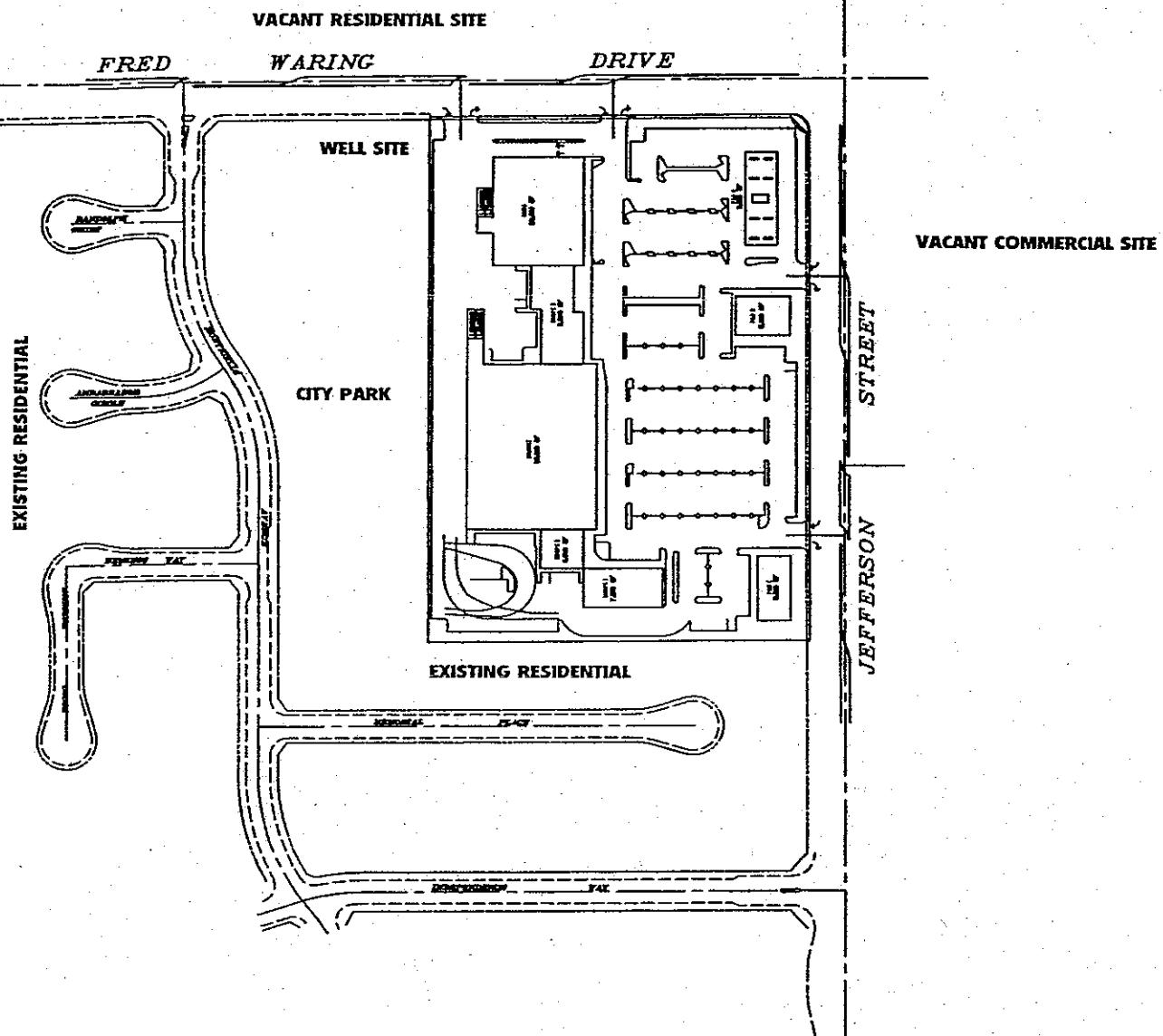
EXHIBIT A
LOCATION MAP



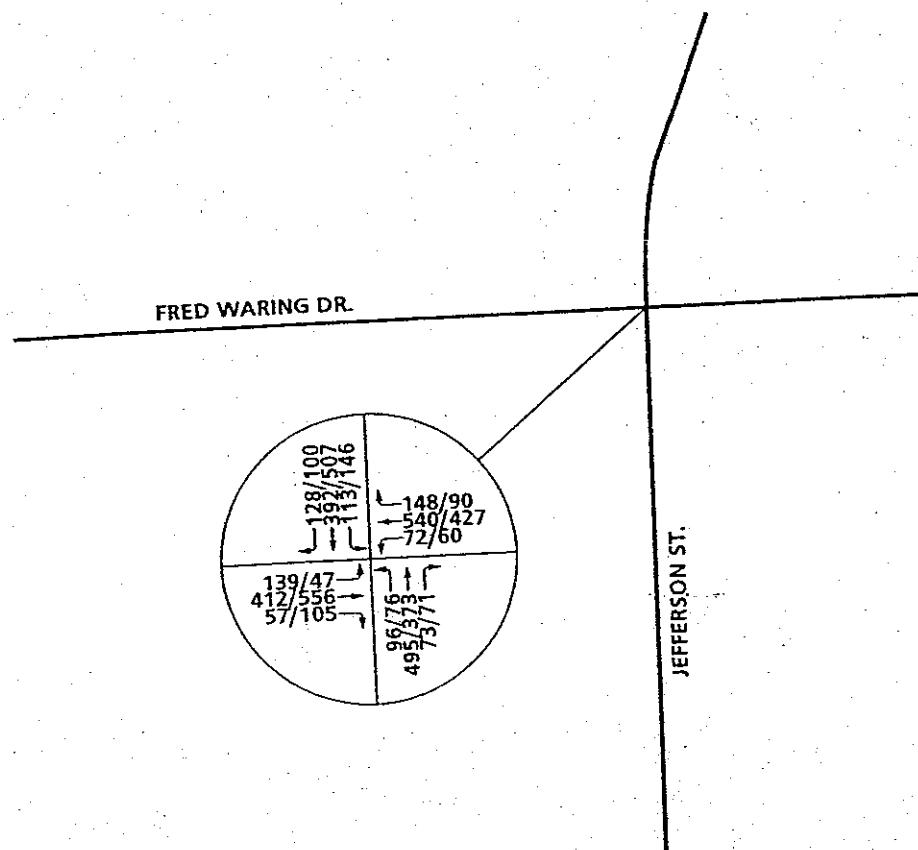
LEGEND:

● = INTERSECTION ANALYSIS LOCATION

EXHIBIT B
SITE PLAN

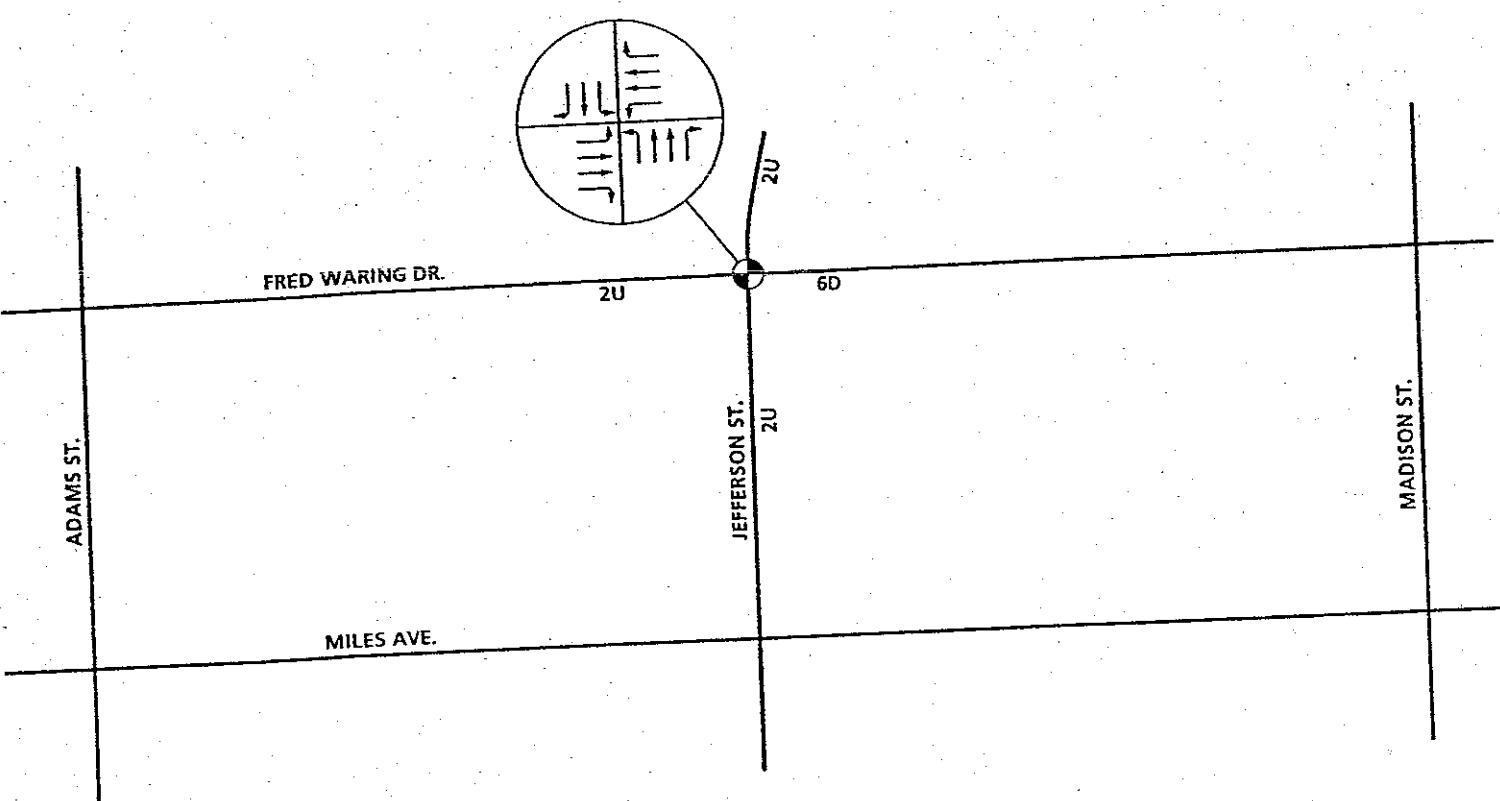


EXISTING AM/PM PEAK HOUR INTERSECTION VOLUMES

**LEGEND:**

96/76 = AM/PM PEAK HOUR INTERSECTION VOLUMES

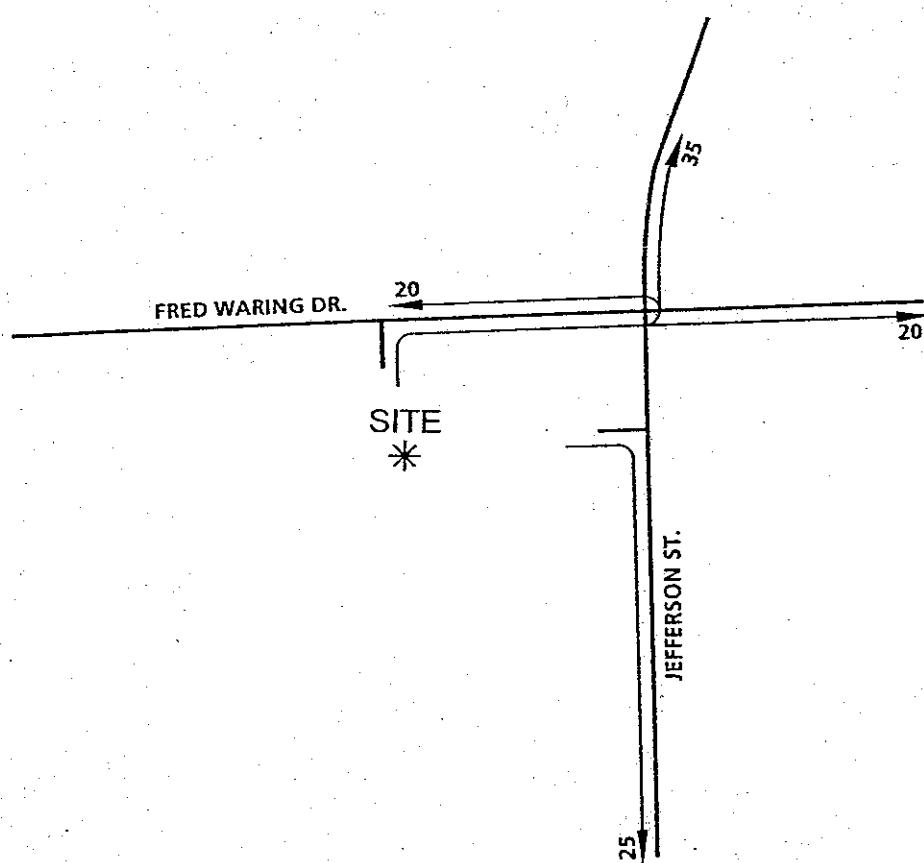
EXHIBIT D
**EXISTING NUMBER OF THROUGH LANES
AND INTERSECTION CONTROLS**



LEGEND:

- = TRAFFIC SIGNAL
- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED

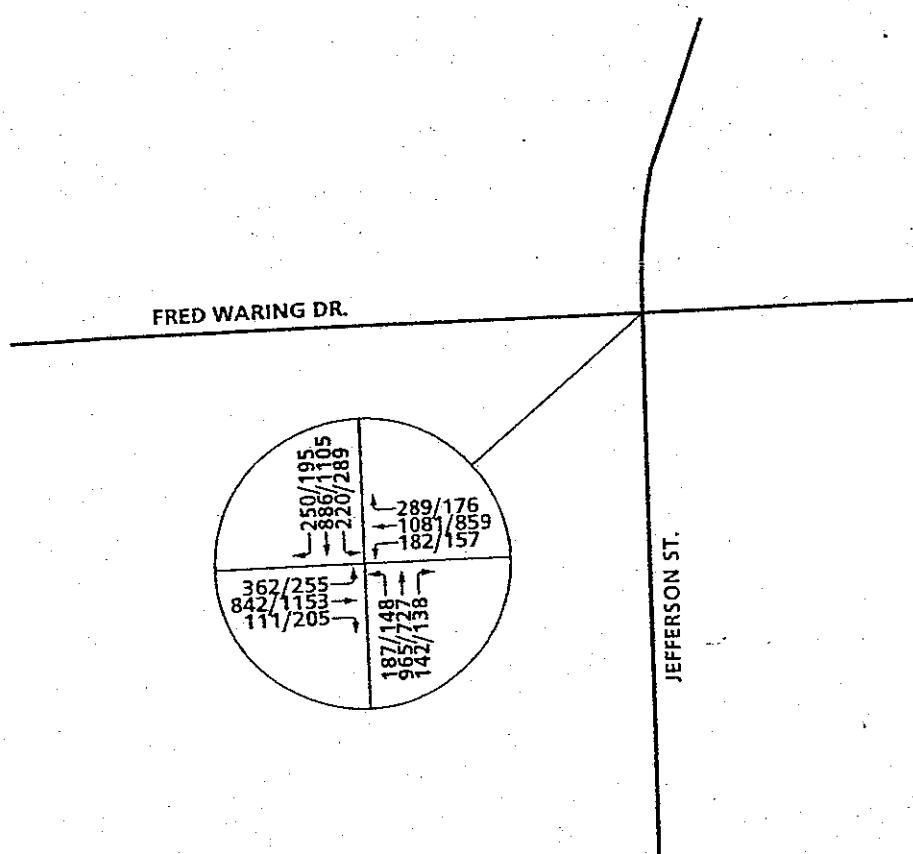
EXHIBIT E
PROJECT TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

EXHIBIT F
**LONG RANGE (2020)
AM/PM PEAK HOUR INTERSECTION VOLUMES**



LEGEND:

187/148 = AM/PM PEAK HOUR INTERSECTION VOLUMES

TABLE 1
TRIP GENERATION RATES¹

LAND USE	ITE CODE	QUANTITY	UNITS ²	PEAK HOUR TRIP RATES				DAILY	
				AM		PM			
				IN	OUT	IN	OUT		
Shopping Center	820	103.97	TSF	3.11	1.99	3.10	3.36	8.85	
Gas Service Station	844	16	VFP	6.26	6.01	7.43	7.13	168.56	

¹ Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 6th Edition, 1997.

² VFP = Vehicle Fueling Positions

TSF = Thousand Square Feet

TABLE 2
TRIP GENERATION SUMMARY

LAND USE	QUANTITY	UNITS ¹	PEAK HOUR				DAILY	
			AM		PM			
			IN	OUT	IN	OUT		
Shopping Center	104	TSF	323	207	322	349	920	
Gas Service Station	16	VFP	100.16	96.16	118.88	114.08	2696.96	
Pass-By Trips (25%)			-76	-110	-110	-116	-904	
TOTAL			348	193	331	347	2,713	

¹ DU = Dwelling Units

VFP = Vehicle Fueling Positions

TABLE 3
INTERSECTION ANALYSIS FOR EXISTING CONDITIONS

INTERSECTION	TRAFFIC CONTROL ³	INTERSECTION APPROACH LANES ¹								DELAY ² (SECS.)		LEVEL OF SERVICE					
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Jefferson Street (NS) at: • Fred Waring Drive (EW)	TS	1	2	1	1	1	1	1	2	1	1	2	1	20.1	19.4	C	B

¹ When a right turn 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.

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

² Delay and level of service calculated using the following analysis software: Traffix, Version 7.5.1015 (2000). 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 worst individual movement (or movements sharing a single lane) are shown.

³ TS = Traffic Signal

AWS = All Way Stop

CCS = Cross Street Stop

⁴ -- = Delay High, Intersection Unstable, Level of Service "F".

TABLE 4

INTERSECTION ANALYSIS FOR LONG RANGE CONDITIONS (2020) WITH PROJECT

INTERSECTION	TRAFFIC CONTROL ³	INTERSECTION APPROACH LANES ¹								DELAY ² (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND		
		L	T	R	L	T	R	L	T	R	L	T	R
Jefferson Street (NS) at:													
• Fred Waring Drive (EW)	TS	1	2	1	1	1	1	1	2	1	1	2	1
- Without Improvements													
- With Improvements													
Alternative 1	TS	1	3	0	1	3	0	1	2	1	1	2	1
Alternative 2	TS	1	3	0	1	3	0	2	2	1	1	2	1
Alternative 3	TS	1	3	0	1	3	0	2	3	0	1	2	1

¹ When a right turn 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.

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

² Delay and level of service calculated using the following analysis software: Traffix, Version 7.5.1015 (2000). 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 worst individual movement (or movements sharing a single lane) are shown.

³ TS = Traffic Signal

AWS = All Way Stop

CCS = Cross Street Stop

⁴ — = Delay High, Intersection Unstable, Level of Service "F".

APPENDIX A

PEAK HOUR TRAFFIC COUNTS

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Jefferson St. DATE: 2/11/2003 LOCATION: City of La Quinta

E-W STREET: Fred Waring Dr. DAY: TUESDAY PROJECT# 03-0201-001 A

LANES:	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL			

6:00 AM																
6:15 AM																
6:30 AM																
6:45 AM																
7:00 AM	10	87	24	34	121	26	24	71	12	12	111	45	577			
7:15 AM	24	117	22	34	118	48	28	90	14	15	115	36	661			
7:30 AM	31	124	19	28	79	31	41	123	7	17	155	46	701			
7:45 AM	25	142	18	26	100	27	40	116	18	17	156	30	715			
8:00 AM	16	112	14	25	95	22	30	83	18	23	114	36	588			
8:15 AM	20	101	15	23	108	16	26	72	21	20	100	43	565			
8:30 AM	19	98	11	15	84	20	21	73	17	16	109	29	512			
8:45 AM	20	87	16	23	81	18	26	80	31	8	122	27	539			
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 165	NT 868	NR 139	SL 208	ST 786	SR 208	EL 236	ET 708	ER 138	WL 128	WT 982	WR 292	TOTAL 4858
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AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	96	495	73	113	392	128	139	412	57	72	540	148	2665
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CONTROL: signalized

A2

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Jefferson St. DATE: 2/11/2003 LOCATION: City of La Quinta

E-W STREET: Fred Waring Dr. DAY: TUESDAY PROJECT# 03-0201-001 P

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	
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	14	84	18	32	113	21	22	134	27	15	102	20	602
4:15 PM	16	93	16	35	120	18	27	156	34	20	117	31	683
4:30 PM	17	117	16	41	134	21	12	165	30	13	96	21	683
4:45 PM	23	71	15	35	112	15	10	105	22	14	108	18	548
5:00 PM	19	86	22	38	128	32	12	125	26	13	108	24	633
5:15 PM	17	99	18	32	133	32	13	161	27	20	115	27	694
5:30 PM	15	79	11	36	144	29	11	132	38	11	114	31	651
5:45 PM	21	82	12	22	116	18	10	113	35	13	101	23	566
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL 142	NT 711	NR 128	SL 271	ST 1000	SR 186	EL 117	ET 1091	ER 239	WL 119	WT 861	WR 195	TOTAL 5060
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PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	76	373	71	146	507	100	47	556	105	60	427	90	2558
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CONTROL: signalized

APPENDIX B
LEVEL OF SERVICE WORKSHEETS

Jefferson Square Development
Existing Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Jefferson St (NS)/Fred Waring Dr. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.608
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	20.1
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R

Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 0 1	1 0 1 0 1	1 0 2 0 1	1 0 2 0 1

Volume Module:

Base Vol:	96	495	73	113	392	128	139	412	57	72	540	148
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:	96	495	73	113	392	128	139	412	57	72	540	148
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	495	73	113	392	128	139	412	57	72	540	148
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	495	73	113	392	128	139	412	57	72	540	148
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	495	73	113	392	128	139	412	57	72	540	148
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 Vol.:	96	495	73	113	392	128	139	412	57	72	540	148

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1805	3610	1615	1805	1900	1615	1805	3610	1615	1805	3610

Capacity Analysis Module:

Vol/Sat:	0.05	0.14	0.05	0.06	0.21	0.08	0.08	0.11	0.04	0.04	0.15	0.09
Crit Moves:	****		****		****		****		****		****	
Green/Cycle:	0.09	0.29	0.29	0.13	0.34	0.34	0.13	0.28	0.28	0.10	0.25	0.25
Volume/Cap:	0.61	0.47	0.15	0.47	0.61	0.23	0.61	0.41	0.13	0.41	0.61	0.37
Delay/Veh:	33.0	17.7	15.8	25.4	18.2	14.4	29.4	18.0	16.4	27.1	21.3	19.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.0	17.7	15.8	25.4	18.2	14.4	29.4	18.0	16.4	27.1	21.3	19.4
DesignQueue:	3	12	2	3	9	3	4	10	1	2	14	4

Jefferson Square Development
Existing Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Jefferson St (NS)/Fred Waring Dr. (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.620

Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 19.4

Optimal Cycle: 60 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound

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

-----|-----|-----|-----|-----|-----|-----|-----|

Control: Protected Protected Protected Protected

Rights: Include Include Include Include

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

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

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Volume Module:

Base Vol.: 76 373 71 146 507 100 47 556 105 60 427 90

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: 76 373 71 146 507 100 47 556 105 60 427 90

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

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

Initial Fut: 76 373 71 146 507 100 47 556 105 60 427 90

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

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

PHF Volume: 76 373 71 146 507 100 47 556 105 60 427 90

Reducet Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 76 373 71 146 507 100 47 556 105 60 427 90

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 Vol.: 76 373 71 146 507 100 47 556 105 60 427 90

-----|-----|-----|-----|-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 0.95 0.85 0.95 1.00 0.85 0.95 0.95 0.85 0.95 0.95 0.85

Lanes: 1.00 2.00 1.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00

Final Sat.: 1805 3610 1615 1805 1900 1615 1805 3610 1615 1805 3610 1615

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Capacity Analysis Module:

Vol/Sat: 0.04 0.10 0.04 0.08 0.27 0.06 0.03 0.15 0.07 0.03 0.12 0.06

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

Green/Cycle: 0.07 0.28 0.28 0.22 0.43 0.43 0.05 0.25 0.25 0.05 0.25 0.25

Volume/Cap: 0.62 0.37 0.16 0.37 0.62 0.14 0.48 0.62 0.26 0.62 0.48 0.23

Delay/Veh: 36.6 17.6 16.5 20.5 14.8 10.5 31.2 21.4 18.5 39.5 19.7 18.3

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 36.6 17.6 16.5 20.5 14.8 10.5 31.2 21.4 18.5 39.5 19.7 18.3

DesignQueue: 2 9 2 4 10 2 1 14 3 2 11 2

Jefferson Square Development
Long Range (2020) - No Improvements
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Jefferson St (NS)/Fred Waring Dr. (EW)

Cycle (sec): 85 Critical Vol./Cap. (X): 1.256

Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 93.2

Optimal Cycle: 180 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound

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

Control: Protected Protected Protected Protected

Rights: Include Include Include Include

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

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

Volume Module:

Base Vol: 96 495 73 113 392 128 139 412 57 72 540 148

Growth Adj: 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95

Initial Bse: 187 965 142 220 764 250 271 803 111 140 1053 289

Added Vol: 0 0 0 0 122 0 106 39 0 42 28 0

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

Initial Fut: 187 965 142 220 886 250 377 842 111 182 1081 289

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

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

PHF Volume: 187 965 142 220 886 250 377 842 111 182 1081 289

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 187 965 142 220 886 250 377 842 111 182 1081 289

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 Vol.: 187 965 142 220 886 250 377 842 111 182 1081 289

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 0.95 0.85 0.95 1.00 0.85 0.95 0.95 0.85 0.95 0.95 0.85

Lanes: 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00

Final Sat.: 1805 3610 1615 1805 1900 1615 1805 3610 1615 1805 3610 1615

Capacity Analysis Module:

Vol/Sat: 0.10 0.27 0.09 0.12 0.47 0.15 0.21 0.23 0.07 0.10 0.30 0.18

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

Green/Cycle: 0.08 0.31 0.31 0.14 0.37 0.37 0.17 0.28 0.28 0.12 0.24 0.24

Volume/Cap: 1.26 0.86 0.28 0.86 1.26 0.42 1.26 0.83 0.24 0.83 1.26 0.75

Delay/Veh: 197.3 34.2 22.4 59.4 153 20.3 174.9 34.2 23.8 58.3 157 38.0

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 197.3 34.2 22.4 59.4 153 20.3 174.9 34.2 23.8 58.3 157 38.0

DesignQueue: 8 34 5 9 30 3 16 30 4 8 42 11

Jefferson Square Development
Long Range (2020) - No Improvements
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Jefferson St (NS)/Fred Waring Dr. (EW)

Cycle (sec): 65 Critical Vol./Cap. (X): 1.312

Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 125.3

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R

Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 0 1	1 0 1 0 1	1 0 2 0 1	1 0 2 0 1

Volume Module:

Base Vol:	76	373	71	146	507	100	47	556	105	60	427	90
Growth Adj:	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Initial Bse:	148	727	138	285	989	195	92	1084	205	117	833	176
Added Vol:	0	0	0	0	116	0	191	69	0	40	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	148	727	138	285	1105	195	283	1153	205	157	859	176
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	148	727	138	285	1105	195	283	1153	205	157	859	176
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	727	138	285	1105	195	283	1153	205	157	859	176
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 Vol.:	148	727	138	285	1105	195	283	1153	205	157	859	176

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1805	3610	1615	1805	1900	1615	1805	3610	1615	1805	3610

Capacity Analysis Module:

Vol/Sat:	0.08	0.20	0.09	0.16	0.58	0.12	0.16	0.32	0.13	0.09	0.24	0.11
Crit Moves:	****		****		****		****		****		****	
Green/Cycle:	0.06	0.28	0.28	0.22	0.44	0.44	0.12	0.24	0.24	0.07	0.19	0.19
Volume/Cap:	1.31	0.71	0.30	0.71	1.31	0.27	1.27	1.31	0.52	1.31	1.27	0.58
Delay/Veh:	220.5	23.2	18.6	29.2	167	11.7	181.9	173	22.6	218.1	161	27.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	220.5	23.2	18.6	29.2	167	11.7	181.9	173	22.6	218.1	161	27.0
DesignQueue:	5	20	4	8	26	4	9	34	6	5	27	5

Jefferson Square Development
Long Range (2020) - Alt 1 (no left turn into site from F.W.)
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Jefferson St (NS)/Fred Waring Dr. (EW)

Cycle (sec): 85 Critical Vol./Cap. (X): 0.978

Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 49.3

Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R

Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include

Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 1 0	1 0 2 1 0	1 0 2 0 1	1 0 2 0 1

Volume Module:

Base Vol:	96 495	73 113	392 128	139 412	57 72	540 148
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Growth Adj:	1.95 1.95	1.95 1.95	1.95 1.95	1.95 1.95	1.95 1.95	1.95 1.95
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Initial Bse:	187 965	142 220	764 250	271 803	111 140	1053 289
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Added Vol:	0 0 0	0 122	0 106	39 0	70 0	0 0
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PasserByVol:	0 0 0	0 0	0 0	0 0	0 0	0 0
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Initial Fut:	187 965	142 220	886 250	377 842	111 210	1053 289
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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
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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
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PHF Volume:	187 965	142 220	886 250	377 842	111 210	1053 289
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Reducet Vol:	0 0 0	0 0	0 0	0 0	0 0	0 0
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Reduced Vol:	187 965	142 220	886 250	377 842	111 210	1053 289
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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
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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
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Final Vol.:	187 965	142 220	886 250	377 842	111 210	1053 289
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Saturation Flow Module:

Sat/Lane:	1900 1900	1900 1900	1900 1900	1900 1900	1900 1900	1900 1900
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Adjustment:	0.95 0.89	0.89 0.95	0.88 0.95	0.85 0.95	0.95 0.95	0.85 0.85
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Lanes:	1.00 2.61	0.39 1.00	2.34 0.66	2.00 1.00	1.00 1.00	2.00 1.00
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Final Sat.:	1805 4434	654 1805	3914 1102	3610 1805	3610 1615	1805 3610
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Capacity Analysis Module:

Vol/Sat:	0.10 0.22	0.22 0.22	0.12 0.23	0.23 0.21	0.23 0.21	0.07 0.23	0.07 0.12	0.29 0.29	0.18 0.18
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Crit Moves:	****	****	****	****	****	****	****	****	****
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Green/Cycle:	0.11 0.22	0.22 0.22	0.12 0.24	0.24 0.21	0.34 0.34	0.34 0.17	0.30 0.30	0.30 0.30
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Volume/Cap:	0.95 0.98	0.98 0.98	0.95 0.95	0.95 0.98	0.68 0.68	0.20 0.68	0.98 0.98	0.60 0.60
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Delay/Veh:	87.7 54.4	54.4 90.7	47.6 47.6	47.6 73.2	25.7 25.7	20.0 20.0	39.3 39.3	51.8 51.8	27.6 27.6
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User DelAdj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
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AdjDel/Veh:	87.7 54.4	54.4 90.7	47.6 47.6	47.6 73.2	25.7 25.7	20.0 20.0	39.3 39.3	51.8 51.8	27.6 27.6
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DesignQueue:	8 37	6 9	34 9	9 15	28 4	4 8	38 38	10 10
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Jefferson Square Development
Long Range (2020) - Alt 1 (no left turn into site from F.W.)
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Jefferson St (NS)/Fred Waring Dr. (EW)

Cycle (sec): 65 Critical Vol./Cap. (X): 0.931
 Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 37.0
 Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R

Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 1 0	1 0 2 1 0	1 0 2 0 1	1 0 2 0 1

Volume Module:

Base Vol:	76	373	71	146	507	100	47	556	105	60	427	90
Growth Adj:	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Initial Bse:	148	727	138	285	989	195	92	1084	205	117	833	176
Added Vol:	0	0	0	0	116	0	191	69	0	66	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	148	727	138	285	1105	195	283	1153	205	183	833	176
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	148	727	138	285	1105	195	283	1153	205	183	833	176
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	727	138	285	1105	195	283	1153	205	183	833	176
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 Vol.:	148	727	138	285	1105	195	283	1153	205	183	833	176

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.89	0.89	0.95	0.89	0.89	0.95	0.95	0.85	0.95	0.95	0.85
Lanes:	1.00	2.52	0.48	1.00	2.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1805	4253	810	1805	4312	761	1805	3610	1615	1805	3610	1615

Capacity Analysis Module:

Vol/Sat:	0.08	0.17	0.17	0.16	0.26	0.26	0.16	0.32	0.13	0.10	0.23	0.11
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.09	0.19	0.19	0.17	0.28	0.28	0.18	0.34	0.34	0.11	0.27	0.27
Volume/Cap:	0.93	0.90	0.90	0.90	0.93	0.93	0.86	0.93	0.37	0.93	0.86	0.40
Delay/Veh:	80.7	37.6	37.6	54.2	34.3	34.3	45.1	33.1	16.5	73.6	30.2	20.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	80.7	37.6	37.6	54.2	34.3	34.3	45.1	33.1	16.5	73.6	30.2	20.1
DesignQueue:	5	22	4	9	31	5	9	30	5	6	23	5

Jefferson Square Development
Long Range (2020) - Alt 2 (trap left turn on EB Fred Waring)
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Jefferson St (NS) / Fred Waring Dr. (EW)

Cycle (sec):	85	Critical Vol./Cap. (X):	0.870
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	36.4
Optimal Cycle:	90	Level Of Service:	D

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R

Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 1 0	1 0 2 1 0	2 0 2 0 1	1 0 2 0 1

Volume Module:

Base Vol:	96	495	73	113	392	128	139	412	57	72	540	148
Growth Adj:	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Initial Bse:	187	965	142	220	764	250	271	803	111	140	1053	289
Added Vol:	0	0	0	0	122	0	106	39	0	42	28	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	187	965	142	220	886	250	377	842	111	182	1081	289
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	187	965	142	220	986	250	377	842	111	182	1081	289
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	187	965	142	220	986	250	377	842	111	182	1081	289
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 Vol.:	187	965	142	220	986	250	377	842	111	182	1081	289

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.89	0.89	0.95	0.88	0.88	0.92	0.95	0.85	0.95	0.95	0.85
Lanes:	1.00	2.61	0.39	1.00	2.34	0.66	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1805	4434	654	1805	3914	1102	3502	3610	1615	1805	3610	1615

Capacity Analysis Module:

Vol/Satt:	0.10	0.22	0.22	0.12	0.23	0.23	0.11	0.23	0.07	0.10	0.30	0.18
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.12	0.25	0.25	0.14	0.27	0.27	0.12	0.33	0.33	0.14	0.34	0.34
Volume/Cap:	0.85	0.87	0.87	0.87	0.85	0.85	0.87	0.71	0.21	0.71	0.87	0.52
Delay/Veh:	61.1	37.2	37.2	61.8	34.6	34.6	53.6	27.2	20.9	44.1	32.9	23.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.1	37.2	37.2	61.8	34.6	34.6	53.6	27.2	20.9	44.1	32.9	23.1
DesignQueue:	8	36	5	9	32	9	16	28	4	8	36	9

Jefferson Square Development
Long Range (2020) - Alt 2 (trap left turn on Fred Waring)
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Jefferson St (NS)/Fred Waring Dr. (EW)

Cycle (sec): 65 Critical Vol./Cap. (X): 0.913
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.9

Optimal Cycle: 89 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 1 0	1 0 2 1 0	2 0 2 0 1	1 1 0 2 0 1

Volume Module:

Base Vol:	76	373	71	146	507	100	47	556	105	60	427	90
Growth Adj:	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Initial Bse:	148	727	138	285	989	195	92	1084	205	117	833	176
Added Vol:	0	0	0	0	116	0	191	69	0	40	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	148	727	138	285	1105	195	283	1153	205	157	859	176
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	148	727	138	285	1105	195	283	1153	205	157	859	176
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	727	138	285	1105	195	283	1153	205	157	859	176
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 Vol.:	148	727	138	285	1105	195	283	1153	205	157	859	176

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.89	0.95	0.89	0.89	0.92	0.95	0.85	0.95	0.95	0.85
Lanes:	1.00	2.52	0.48	1.00	2.55	0.45	2.00	2.00	1.00	1.00	2.00
Final Sat.:	1805	4253	810	1805	4312	761	3502	3610	1615	1805	3610

Capacity Analysis Module:

Vol/Sat:	0.08	0.17	0.17	0.16	0.26	0.26	0.08	0.32	0.13	0.09	0.24	0.11
Crit Moves:	****		****		****		****		****		****	
Green/Cycle:	0.09	0.19	0.19	0.18	0.28	0.28	0.11	0.35	0.35	0.10	0.33	0.33
Volume/Cap:	0.91	0.89	0.89	0.89	0.91	0.91	0.72	0.91	0.36	0.91	0.72	0.33
Delay/Veh:	75.5	35.5	35.5	50.6	31.9	31.9	34.0	30.4	16.1	73.6	21.1	16.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	75.5	35.5	35.5	50.6	31.9	31.9	34.0	30.4	16.1	73.6	21.1	16.6
DesignQueue:	5	22	4	9	31	5	9	29	5	5	22	4

Jefferson Square Development
Long Range (2020) - Alt 3 (dual left turn on EB Fred Waring, 3 thru, no rt)
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Jefferson St (NS)/Fred Waring Dr. (EW)*****
Cycle (sec): 85 Critical Vol./Cap. (X): 0.870

Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 36.1

Optimal Cycle: 90 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound

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

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Control: Protected Protected Protected Protected

Rights: Include Include Include Include

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

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

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Volume Module:

Base Vol: 96 495 73 113 392 128 139 412 57 72 540 148

Growth Adj: 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95

Initial Bse: 187 965 142 220 764 250 271 803 111 140 1053 289

Added Vol: 0 0 0 0 122 0 106 39 0 42 28 0

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

Initial Fut: 187 965 142 220 886 250 377 842 111 182 1081 289

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

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

PHF Volume: 187 965 142 220 886 250 377 842 111 182 1081 289

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 187 965 142 220 886 250 377 842 111 182 1081 289

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 Vol.: 187 965 142 220 886 250 377 842 111 182 1081 289

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Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 0.89 0.89 0.95 0.88 0.88 0.92 0.89 0.89 0.95 0.95 0.85

Lanes: 1.00 2.61 0.39 1.00 2.34 0.66 2.00 2.65 0.35 1.00 2.00 1.00

Final Sat.: 1805 4434 654 1805 3914 1102 3502 4500 594 1805 3610 1615

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Capacity Analysis Module:

Vol/Sat: 0.10 0.22 0.22 0.12 0.23 0.23 0.11 0.19 0.19 0.10 0.30 0.18

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

Green/Cycle: 0.12 0.25 0.25 0.14 0.27 0.27 0.12 0.30 0.30 0.16 0.34 0.34

Volume/Cap: 0.85 0.87 0.87 0.87 0.85 0.85 0.87 0.62 0.62 0.62 0.87 0.52

Delay/Veh: 61.1 37.2 37.2 61.8 34.6 34.6 53.6 26.1 26.1 36.9 32.9 23.1

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 61.1 37.2 37.2 61.8 34.6 34.6 53.6 26.1 26.1 36.9 32.9 23.1

DesignQueue: 8 36 5 9 32 9 16 29 4 7 36 9

Jefferson Square Development
 Long Range (2020) - Alt 3 (dual left turns on Fred Waring, 3 thru, no rt)
 PM Peak Hour

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

 Intersection #1 Jefferson St (NS)/Fred Waring Dr. (EW)

Cycle (sec):	65	Critical Vol./Cap. (X):	0.850
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	29.0
Optimal Cycle:	74	Level Of Service:	C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 1 0	1 0 2 1 0	2 0 2 1 0	1 0 2 0 1

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Volume Module:												
Base Vol:	76	373	71	146	507	100	47	556	105	60	427	90
Growth Adj:	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Initial Bse:	148	727	138	285	989	195	92	1084	205	117	833	176
Added Vol:	0	0	0	0	116	0	191	69	0	40	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	148	727	138	285	1105	195	283	1153	205	157	859	176
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	148	727	138	285	1105	195	283	1153	205	157	859	176
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	727	138	285	1105	195	283	1153	205	157	859	176
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 Vol.:	148	727	138	285	1105	195	283	1153	205	157	859	176

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Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.89	0.89	0.95	0.89	0.89	0.92	0.89	0.89	0.95	0.95	0.85
Lanes:	1.00	2.52	0.48	1.00	2.55	0.45	2.00	2.55	0.45	1.00	2.00	1.00
Final Sat.:	1805	4253	810	1805	4312	761	3502	4304	764	1905	3610	1615

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Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.17	0.16	0.26	0.26	0.08	0.27	0.27	0.09	0.24	0.11
Crit Moves:	****			****			****			****		
Green/Cycle:	0.10	0.21	0.21	0.19	0.30	0.30	0.11	0.32	0.32	0.10	0.31	0.31
Volume/Cap:	0.85	0.83	0.83	0.83	0.85	0.85	0.76	0.85	0.85	0.85	0.76	0.35
Delay/Veh:	59.5	30.2	30.2	40.3	26.1	26.1	37.3	25.4	25.4	59.0	23.3	17.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	59.5	30.2	30.2	40.3	26.1	26.1	37.3	25.4	25.4	59.0	23.3	17.7
DesignQueue:	5	22	4	9	30	5	9	30	5	5	23	4
