



CITY OF KIRKLAND

Department of Public Works

123 Fifth Avenue, Kirkland, WA 98033 425.587.3800

www.kirklandwa.gov

MEMORANDUM

To: Planning Department

From: Thang Nguyen, Transportation Engineer

Date: May 19, 2015

Subject: Firwood Plat Traffic Concurrency Test Notice, Tran15-00817.

The purpose of this memo is to inform you that the proposed Firwood Plat residential development has passed traffic concurrency.

Project Description

The applicant proposed to replace the 31 existing mobile homes with 19 single-family homes. One driveway off NE 124th Street will project access to the project site. The project is located at 12342 93rd Lane NE. The proposed project is anticipated to be completely built and occupied by the end of 2017. The project is forecasted to generate 26 net new daily trips, one net new PM peak hour trips and zero net new AM peak hour trips.

This memo will serve as the concurrency test notice for the proposed project. Per *Section 25.10.020 Procedures* of the KMC (Kirkland Municipal Code), this Concurrency Test Notice will expire in one year (May 20, 2016) unless a development permit and certificate of concurrency are issued or an extension is granted.

EXPIRATION

The concurrency test notice shall expire and a new concurrency test application is required unless:

1. A complete SEPA checklist, traffic impact analysis and all required documentation are submitted to the City within 90 calendar days of the concurrency test notice (August 19, 2015).
2. A Certificate of Concurrency is issued or an extension is requested and granted by the Public Works Department within one year of issuance of the concurrency test notice. (A Certificate of Concurrency is issued at the same time a development permit or building permit is issued if the applicant holds a valid concurrency test notice.)
3. A Certificate of Concurrency shall expire six years from the date of issuance of the concurrency test notice unless all building permits are issued for buildings approved under the concurrency test notice.

Memorandum to Planning Department

May 19, 2015

Page 2 of 2

APPEALS

The concurrency test notice may be appealed by the public or agency with jurisdiction. The concurrency test notice is subject to an appeal until the SEPA review process is complete and the appeal deadline has passed. Concurrency appeals are heard before the Hearing Examiner along with any applicable SEPA appeal. For more information, refer to the Kirkland Municipal Code, Title 25. If you have any questions, please call me at x3869.

cc: Vincent J. Geglia, TraffEx
John Burkhalter, Senior Development Engineer

**FIRWOOD PLAT
TRAFFIC IMPACT ANALYSIS**

CITY OF KIRKLAND

Prepared for

**Mr. Ben Rutkowski
PSW Real Estate
218 Main Street, #109
Kirkland, WA 98033**

Prepared by



**11410 NE 124th St., #590
Kirkland, Washington 98034
Telephone: 425.522.4118**

June 17, 2015

June 17, 2015

Mr. Ben Rutkowski
PSW Real Estate
218 Main Street, #109
Kirkland, WA 98033

Re: Firwood Plat – City of Kirkland
Traffic Impact Analysis

Dear Mr. Rutkowski:

We are pleased to submit this traffic impact analysis for the proposed 19 lot Firwood Plat located at located at 12342 93rd Lane NE in the City of Kirkland. Preliminary trip generation and project information was submitted to the City in a letter report dated May 12, 2015. The project passed the traffic concurrency test per the May 19, 2015 memo attached in the technical appendix.

This TIA was prepared based on the City of Kirkland's current Traffic Impact Analysis Guidelines, the concurrency traffic model data provided by the City and discussions with Thang Nguyen a Transportation Engineer on the City's staff.

PROJECT DESCRIPTION

Figure 1 is a vicinity map showing the location of the site and the surrounding major street network. The proposed 19 lot Firwood Plat is located at 12342 93rd Lane NE on the south side of NE 124th St. in the City of Kirkland. The parcel # is 9194100015 and is approximately 3.42 acres.

Figure 2 shows a preliminary site plan. The project consists of 19 single family homes. The proposed access street connects to NE 124th Street. The site access will be moved from its current location to the east and will be aligned with 94th Ave. NE forming a 4 leg intersection.

The site currently is a mobile home park occupied by a 31 mobile homes that will be removed with the development.

The anticipated build out and occupancy year of the Firwood Plat is 2017

TRIP GENERATION

The net increase in trips generated by the site was determined by subtracting the existing trips generated by the 31 existing mobile homes from the number of trips generated by the new 19 single family homes. The Firwood plat is expected to

generate the vehicular trips during an average weekday and during the street traffic peak hours as shown in the following tables:

TRIP GENERATION FOR 19 SINGLE FAMILY HOMES OF THE FIRWOOD PLAT

<i>Time Period</i>	<i>Trip Rate</i>	<i>Trips Entering</i>	<i>Trips Exiting</i>	<i>Net New Trips Total</i>
Average Weekday	$\ln(t)=0.92\ln(x)+2.72$	121 50%	121 50%	242
AM Peak Hour	$t=0.7x+9.74$	6 25%	17 75%	23
PM Peak Hour	$\ln(t)=0.90\ln(x)+0.51$	15 63%	9 37%	24

MINUS TRIP GENERATION FOR 31 EXISTING MOBILE HOMES

<i>Time Period</i>	<i>Trip Rate</i>	<i>Trips Entering</i>	<i>Trips Exiting</i>	<i>Net New Trips Total</i>
Average Weekday	$t=3.52x+277.51$	-193 50%	-193 50%	-386
AM Peak Hour	$\ln(t)=0.64\ln(x)+0.96$	-5 20%	-19 80%	-24
PM Peak Hour	$t=0.57x+2.06$	-12 62%	-8 38%	-20

NET INCREASE IN TRIPS AFTER DEVELOPMENT

<i>Time Period</i>	<i>Trip Rate</i>	<i>Trips Entering</i>	<i>Trips Exiting</i>	<i>Net New Trips Total</i>
Average Weekday		-72	-72	-144
AM Peak Hour		1	-2	-1
PM Peak Hour		3	1	4

t= number of trips x=number of units

A vehicle trip is defined as a single or one direction vehicle movement with either the origin or destination (exiting or entering) inside the study site.

The trip generation for the 19 new homes of the proposed Firwood Plat was calculated using the regression equations in the Institute of Transportation Engineers (ITE) Trip Generation – 9th Edition, for Single Family Detached Housing (ITE Land Use Code 210). The trip generation for the 31 existing mobile homes was calculated using the regression equations for Mobile Home Park (ITE Land Use Code 240). These trip generation values account for all site trips made by all vehicles for all purposes, including resident, visitor, and service and delivery vehicle trips.

To summarize, there will be an increase of 4 PM peak hour trips as a result of this development.

TRIP DISTRIBUTION AND ASSIGNMENT

Figure 3 shows the PM peak hour site generated traffic volumes and distribution at the site access/NE 124th St./94th Ave NE intersection. The trip distribution is based on the traffic counts and existing traffic patterns in the area. The City requested LOS calculations for these this intersection.

EXISTING PHYSICAL CONDITIONS

Street Facilities

The primary roads in the study area are classified per the City of Kirkland, are as follows:

NE 124 th St. (west of 100 th Ave)	Local Street
94 th Ave. NE	Local Street

NE 124th St. in the vicinity of the project has a posted speed limit of 25 mph and generally consists of two lanes with curb gutter and sidewalk on both sides of the street.

Sight Distance

NE 124th St. at the site access is essentially straight and flat. The sight distance meets current City of Kirkland's recommended sight distance requirement of 280 feet looking in both the east and west directions from the side street. The sight distance requirement is for a posted speed limit of 25 mph with stop sign controlled side streets.

Accident History

State and City crash data records show three accidents were reported on or in the vicinity of NE 124th St. west of 100th Ave NE during the four year period from 1/12011 through 12/31/2014. One accident was due to driver inattention, one was due to operating defective equipment and one was due to driver operating a handheld device. The crash data is attached in the technical appendix.

We have field reviewed the site and surrounding street system. Based on our field observations, the lack of accident activity and the excellent sight distance, we conclude there are no readily apparent safety issues.

EXISTING TRAFFIC CONDITIONS

Traffic Volumes

PM peak hour turning movement counts was performed at the 93rd Lane NE/NE 124th St./94th Ave NE intersection June 9, 2015. The traffic volume turning movement count sheets are included in the technical appendix. Figure 3 shows existing PM peak hour traffic volumes at the study intersection.

Level of Service Analysis

LOS is a qualitative measure describing operational conditions within a traffic flow, and the perception of these conditions by drivers or passengers. These conditions include factors such as speed, delay, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. Levels of service are given letter designations, from A to F, with LOS A representing the best operating conditions (free flow, little delay) and LOS F the worst (congestion, long delays). Generally, LOS A and B are high, LOS C and D are moderate and LOS E and F are low.

Table 1 shows calculated levels of service (LOS) for existing conditions at the study intersection. The LOS's were calculated using the procedures in the Transportation Research Board Highway Capacity Manual. The LOS shown indicates overall intersection operation. At intersections, LOS is determined by the calculated average control delay per vehicle. The LOS and corresponding average control delay in seconds are as follows:

TYPE OF INTERSECTION	A	B	C	D	E	F
Signalized	≤ 10.0	>10.0 and ≤20.0	>20.0 and ≤35.0	>35.0 and ≤55.0	>55.0 and ≤80.0	>80.0
Stop Sign Control	≤10.0	>10 and ≤15	>15 and ≤25	>25 and ≤35	>35 and ≤50	>50

FUTURE TRAFFIC CONDITIONS WITHOUT THE PROJECT

Figure 3 shows projected future PM peak hour traffic volumes without the project. These volumes include the existing traffic volumes plus background traffic growth.

The City of Kirkland requires a 2.0% per year annual background growth factor be applied to existing traffic volumes to estimate future traffic volumes. The background growth rate factor includes traffic volumes generated from other approved but unbuilt developments (pipeline projects), other planned developments, and general growth in traffic traveling through the area.

These 2015 volumes were increased by 2% per year (for a total of 4%) to estimate 2017 horizon year traffic volumes without the Firwood project.

FUTURE TRAFFIC CONDITIONS WITH PROJECT

Figure 3 shows the projected PM peak hour traffic volumes with the proposed project. The site-generated peak hour traffic volumes were added to the projected future traffic volumes without project.

The site access/NE 124th St./94th Ave. NE intersection is calculated to operate at LOS B for future conditions in the PM peak hour including project traffic which meets the LOS requirements of the City.

TRAFFIC MITIGATION

The City of Kirkland, per the Transportation Impact Fee Schedule , requires a fee of \$3,942 per each detached single family residential unit. There is no fee listed for a mobile home in the fee schedule. As noted, the 31 mobile home units will be replaced with 19 detached single family units. This will result in a net increase of 4 PM peak hour trips. Since a detached single family unit generates one trip in the PM peak hour, the 4 net PM trips resulting from the development is equivalent to a net increase of 4 detached single family units. Therefore, the transportation impact fee is estimated to be 4 units X \$3,942 = \$15,768.

Full width street improvements are required on all internal plat streets and half street improvements to NE 124th St. frontage to City of Kirkland Standards including curb, gutter and sidewalk.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

We recommend that the Firwood plat be constructed as shown on the site plan with the following traffic impact mitigation measures:

- Construct the full width street improvements on all internal plat streets and half street improvements to the NE 124th St. frontage to City of Kirkland Standards including curb, gutter and sidewalk.
- Contribute the road impact fee to the City of Kirkland estimated to be \$15,768 using the current fee for a single family unit.

No other traffic mitigation should be necessary. If you have any questions, please call 425-522-4118. You may also contact us via e-mail at vince@nwtraffex.com or larry@nwtraffex.com.

Very truly yours,



Vincent J. Gaglia
Principal
TraffEx



Larry D. Hobbs, P.E.
Principal
TraffEx

TABLE 1			
PM PEAK HOUR LEVEL OF SERVICE SUMMARY			
<i>INTERSECTION</i>	<i>EXISTING</i>	<i>2017 WITHOUT PROJECT</i>	<i>2017 WITH PROJECT</i>
Site Access/NE 124 th St./ 94 th Ave NE	B 10.1 SB	B 10.2 SB	B 10.3 SB

XX Number shown is the average control delay in seconds per vehicle for the minor approach for unsignalized intersections, which determines the LOS for intersections per the Transportation Research Board Highway Capacity Manual

A Indicates calculated level of service

SB (southbound) Indicates direction of the minor approach for the unsignalized intersection



**Firwood Plat
Vicinity Map**

**Figure
1**

NE 124th St.

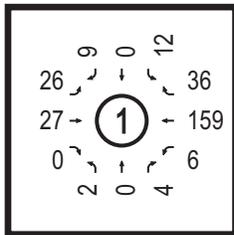


Firwood Plat
Site Plan

Figure
2

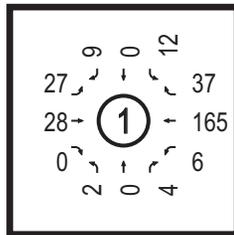


Existing Traffic Volumes



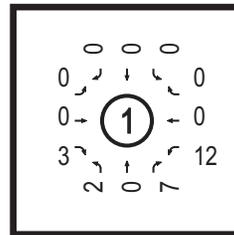
Site//94th Av /NE 124th

Future Without Project Traffic Volumes



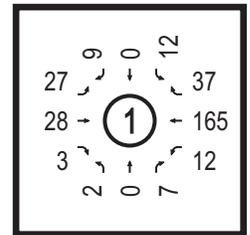
Site//94th Av /NE 124th

Project Generated Traffic Volumes



Site//94th Av /NE 124th

Future With Project Traffic Volumes



Site//94th Av /NE 124th

Legend

- 15% Percentage of Project Traffic -PM Peak
- ←15 Peak Hour Volume and Direction

PM Peak Hour Project Volumes

- 15 Enter
- 9 Exit
- 24 Total

Firwood Plat

PM Peak Hour Traffic Volumes and Trip Distribution.

Figure 3

TECHNICAL APPENDIX



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Department of Public Works

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cc: Vincent J. Geglia, TraffEx
John Burkhalter, Senior Development Engineer



Prepared for: **Traffex**
Traffic Count Consultants, Inc.

Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 94th Ave NE/93rd Ln NE & NE 124th St
Location: Kirkland, Washington

Date of Count: Tues 6/09/2015
Checked By: Jess

Time Interval Ending at	From North on (SB) 94th Ave NE				From South on (NB) 93rd Ln NE				From East on (WB) NE 124th St				From West on (EB) NE 124th St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	4	0	3	0	0	1	1	1	1	31	5	0	6	12	1	65
4:30 P	0	0	1	4	0	0	0	5	0	0	23	3	0	4	15	3	58
4:45 P	0	7	0	3	0	0	3	0	1	1	31	7	0	6	18	2	78
5:00 P	0	4	1	1	0	0	1	2	0	1	24	4	0	7	10	1	56
5:15 P	0	1	0	4	0	0	0	1	0	1	42	8	0	9	9	0	75
5:30 P	0	3	0	2	0	0	0	1	0	1	38	10	0	7	6	0	68
5:45 P	0	3	0	1	0	2	0	1	0	1	32	12	0	6	4	0	62
6:00 P	0	5	0	2	0	0	0	1	0	3	47	6	0	4	8	0	76
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Survey	0	27	2	20	0	2	5	12	2	9	268	55	0	49	82	7	538
--------------	---	----	---	----	---	---	---	----	---	---	-----	----	---	----	----	---	-----

Peak Hour: 5:00 PM to 6:00 PM

Total	0	12	0	9	0	2	0	4	0	6	159	36	0	26	27	0	281
Approach	21				6				201				53				281
%HV	n/a				n/a				n/a				n/a				0.0%
PHF	0.75				0.50				0.90				0.74				0.92

94th Ave NE
83

NE 124th St
9 0 12

NE 124th St
2 Ped

93rd Ln NE
10 2 0 4

312 1.0 PHF Peak Hour Volume

PHF %HV	EB	0.74	n/a	
Check	WB	0.90	n/a	
In:	281	NB	0.50	n/a
Out:	281	SB	0.75	n/a
T Int.	0.92		0.0%	

Conditions:

PEDS Across:

	N	S	E	W
INT 01		1		
INT 02				
INT 03				
INT 04	2	2		
INT 05		2		
INT 06	1	3		
INT 07		3		2
INT 08	1	2	1	1
INT 09				
INT 10				
INT 11				
INT 12				
Total	4	13	1	3

21

Bicycles From:

	N	S	E	W
INT 01				
INT 02				
INT 03				
INT 04				1
INT 05				1
INT 06			1	
INT 07			1	
INT 08				
INT 09				
INT 10				
INT 11				
INT 12				
Total	0	0	2	2

Special Notes
 The trucks were school buses; they all went thru.

EXISTING PM PEAK

3: SITE ACCESS/94TH AVE NE & NE124TH ST/NE 124T ST

6/16/2015

Intersection

Int Delay, s/veh 1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	26	27	0	6	159	36	2	0	4	12	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	28	29	0	7	173	39	2	0	4	13	0	10

Major/Minor	Major1	Major2	Minor1	Minor2								
Conflicting Flow All	212	0	0	29	0	0	296	311	29	293	291	192
Stage 1	-	-	-	-	-	-	86	86	-	205	205	-
Stage 2	-	-	-	-	-	-	210	225	-	88	86	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1370	-	-	1597	-	-	660	607	1052	663	623	855
Stage 1	-	-	-	-	-	-	927	827	-	802	736	-
Stage 2	-	-	-	-	-	-	797	721	-	925	827	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1370	-	-	1597	-	-	640	591	1052	647	607	855
Mov Cap-2 Maneuver	-	-	-	-	-	-	640	591	-	647	607	-
Stage 1	-	-	-	-	-	-	908	810	-	785	732	-
Stage 2	-	-	-	-	-	-	784	717	-	902	810	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.8	0.2	9.2	10.1
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	866	1370	-	-	1597	-	-	722
HCM Lane V/C Ratio	0.008	0.021	-	-	0.004	-	-	0.032
HCM Control Delay (s)	9.2	7.7	0	-	7.3	0	-	10.1
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

FUTURE WITHOUT PROJECT PM PEAK
 3: SITE ACCESS/94TH AVE NE & NE124TH ST/NE 124T ST

6/16/2015

Intersection												
Int Delay, s/veh	1.8											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	27	28	0	6	165	37	2	0	4	12	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	29	30	0	7	179	40	2	0	4	13	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	220	0	0	30	0	0	306	322	30	304	302	199
Stage 1	-	-	-	-	-	-	89	89	-	213	213	-
Stage 2	-	-	-	-	-	-	217	233	-	91	89	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1361	-	-	1596	-	-	650	599	1050	652	614	847
Stage 1	-	-	-	-	-	-	923	825	-	794	730	-
Stage 2	-	-	-	-	-	-	790	716	-	921	825	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1361	-	-	1596	-	-	629	583	1050	636	597	847
Mov Cap-2 Maneuver	-	-	-	-	-	-	629	583	-	636	597	-
Stage 1	-	-	-	-	-	-	903	807	-	777	726	-
Stage 2	-	-	-	-	-	-	777	712	-	897	807	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.8			0.2			9.2			10.2		
HCM LOS							A			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	858	1361	-	-	1596	-	-	712
HCM Lane V/C Ratio	0.008	0.022	-	-	0.004	-	-	0.032
HCM Control Delay (s)	9.2	7.7	0	-	7.3	0	-	10.2
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

FUTURE WITH PROJECT PM PEAK
 3: SITE ACCESS/94TH AVE NE & NE124TH ST/NE 124T ST

6/16/2015

Intersection												
Int Delay, s/veh	2											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	27	28	3	12	165	37	2	0	7	12	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	29	30	3	13	179	40	2	0	8	13	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	220	0	0	34	0	0	321	337	32	321	318	199
Stage 1	-	-	-	-	-	-	91	91	-	226	226	-
Stage 2	-	-	-	-	-	-	230	246	-	95	92	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1361	-	-	1591	-	-	636	587	1048	636	602	847
Stage 1	-	-	-	-	-	-	921	823	-	781	721	-
Stage 2	-	-	-	-	-	-	777	706	-	917	823	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1361	-	-	1591	-	-	614	569	1048	617	583	847
Mov Cap-2 Maneuver	-	-	-	-	-	-	614	569	-	617	583	-
Stage 1	-	-	-	-	-	-	901	805	-	764	715	-
Stage 2	-	-	-	-	-	-	761	700	-	890	805	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.6	0.4	9	10.3
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	906	1361	-	-	1591	-	-	698
HCM Lane V/C Ratio	0.011	0.022	-	-	0.008	-	-	0.033
HCM Control Delay (s)	9	7.7	0	-	7.3	0	-	10.3
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1