APPENDIX A

Terms of Reference

MEMO

DATE: September 17, 2024
PROJECT NO: 04-24-0040
PROJECT: Living East Village
SUBJECT: Terms of Reference for Transportation Assessment & Management Study

TO: Danny Ross
Westbank Projects Corp.

PREPARED BY: Hana Stoer, EIT
REVIEWED BY: Christephen Cheng, P.Eng., M.Eng.

1. INTRODUCTION

Westbank is proposing to rezone and redevelop three sites along East Hastings Street in Vancouver, BC into rental and social housing. The three sites are located at the 1000-1100 block of East Hastings Street: 1030-1070 East Hastings Street (East 1), 1115-1127 East Hastings Street (East 2), and 1168-1180 East Hastings Street (East 3). East 1 and East 2 are proposed to be secured market rental housing with approximately 380 units each. East 3 is proposed to be seniors social housing with approximately 160 units. The project is collectively known as Living East Village.

The City of Vancouver has requested that a Transportation Assessment & Management Study (TAMS) be completed for the proposed project. Bunt provided an initial Terms of Reference (ToR) in August 2024.

The City provided comments on Version 1 of the ToR in September 2024. Based on the comments, our updated proposed study scope is presented in the following sections.

2. EXISTING CONDITIONS

The traffic study will review the following existing conditions:

a. Existing multi-modal transportation network.
b. Current relevant policies and plans.
c. Assemble or collect new data (if not available) for the following study intersections:
    i. East Hastings Street & Glen Drive.
    ii. East Hastings Street & Vernon Drive.

iii. East Hastings Street & Clark Drive.
iv. East Cordova Street & Glen Drive.
v. Laneway (N of East Hastings Street) & Glen Drive.
vi. Laneway (N of East Hastings Street) & Vernon Drive.
vii. Laneway (S of East Hastings Street) & Glen Drive.
viii. Laneway (S of East Hastings Street) & Vernon Drive.

d. Obtain traffic signal timing plans for the signalized intersections within the proposed study area.
e. Review existing traffic operations at the study intersections listed above using Synchro 11 and HCM 6th edition for the AM and PM peak hours.

3. FUTURE TRAFFIC CONDITIONS

The traffic study will review the following future conditions:

a. Estimate site vehicle trip generation using ITE 11th Edition rates. Proposed unadjusted rates are shown in **Table 1** and unadjusted estimated vehicle trips are shown in **Table 2**.

Table 1: Unadjusted Trip Rates

LAND USE	UNIT	AM			PM		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Multifamily Housing (High-Rise) *LUC 222* Dense Multi-Use Urban	Dwelling Units	25%	75%	0.24	73%	27%	0.20
Shopping Centre *LUC 820* General Urban/Suburban	1000 SF	62%	38%	0.84	48%	52%	3.40

Table 2: Unadjusted Estimated Vehicle Site Trips

SITE	DENSITY	AM			PM		
		IN	OUT	TOTAL	IN	OUT	TOTAL
East 1	382 DU 4,973 SF	26	70	96	64	29	93
East 2	385 DU 7,952 SF	27	72	99	69	35	104
East 3	157 DU 2,289 SF	11	29	40	27	13	39
TOTAL		64	171	235	160	77	236

b. Estimate multi-modal site trip generation based on CoV's Transportation 2040 plan mode split targets.

c. Determine a linear growth rate for background traffic estimations using Bunt data from 2019 and 2024 at nearby intersections.
d. Evaluate future traffic conditions for the following scenarios:
    i. Opening Day.
    ii. Opening Day + 5 Years.
e. Conduct TAC signal warrants at the following intersections for the horizon years:
    i. East Hastings Street & Glen Drive.
    ii. East Hastings Street & Vernon Drive.

4. ACCESS, PARKING, LOADING, & SERVICING

The TAMS report will address the following design elements for each of the three sites:

a. Access for all modes of transport including loading and service vehicles.
b. Review of facilities supporting active transportation.
c. Bylaw vehicle parking, bicycle parking, passenger loading, and goods loading requirements.
d. Vehicle manoeuvrability within the site.
e. Loading/servicing space provision and design compliance with the bylaw.

As the three sites are located beyond 800 metres of a transit station, they are not located in a Transit Oriented Area and would not be required to provide Transportation Demand Management plans.

The attached information is provided to support the agency's review process and shall not be distributed to other parties without written consent from Bunt & Associates Engineering Ltd.

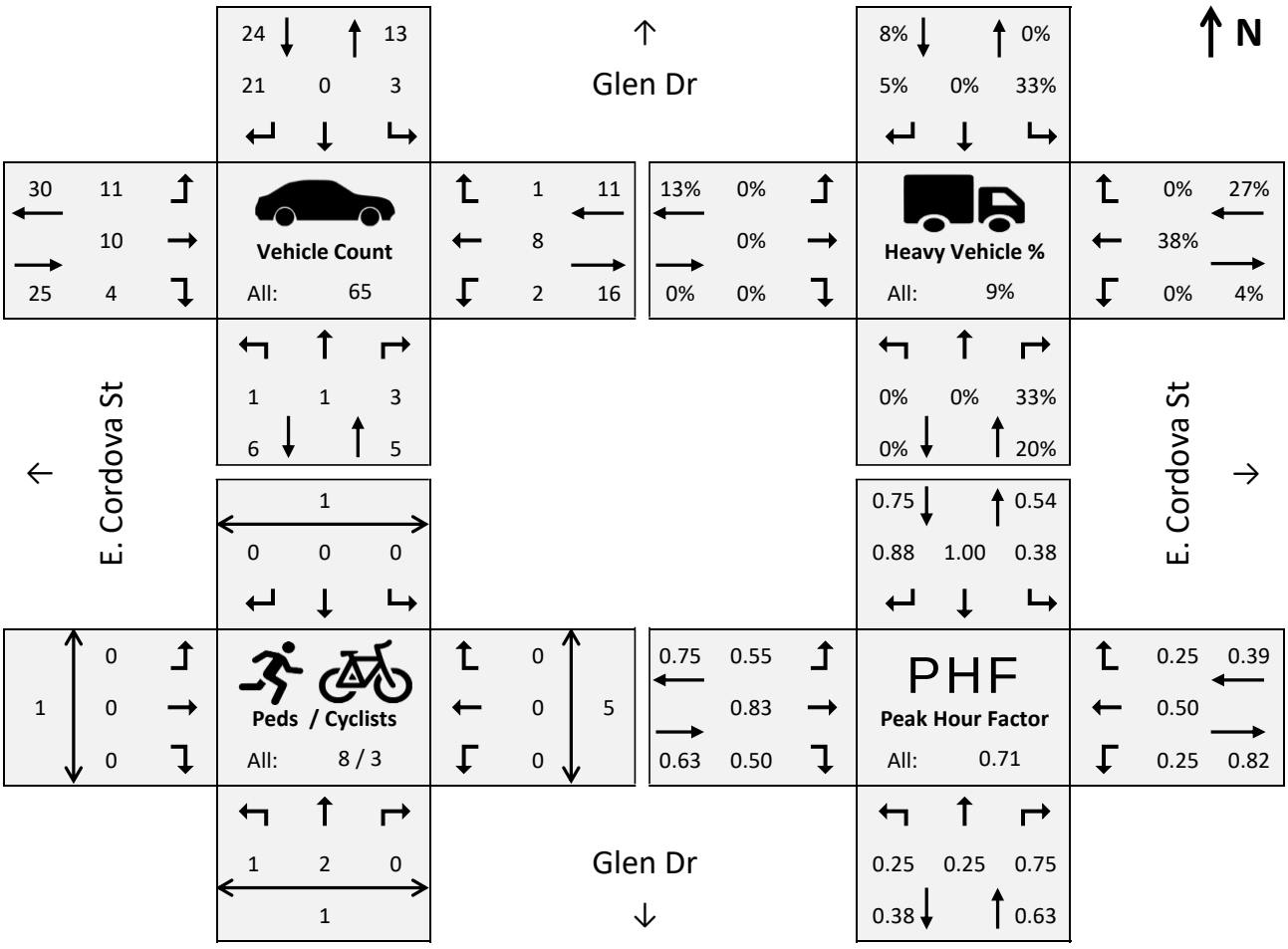
APPENDIX B

Traffic Data

Glen Dr @ E. Cordova St – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	8:00 - 9:00
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	7:00 - 8:00
Notes:					

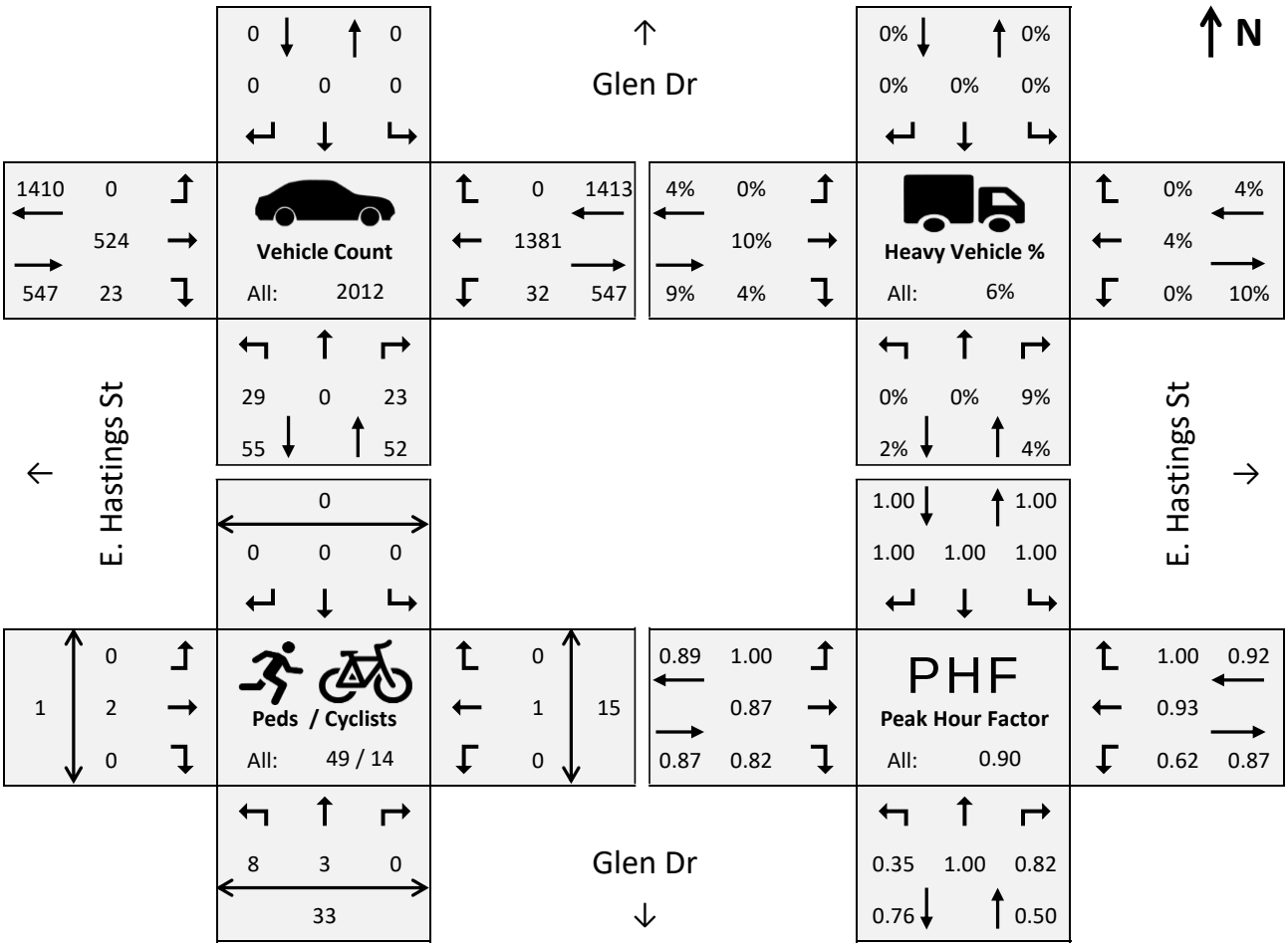
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7:00 - 7:15	0	1	0	0	0	6	4	2	1	0	7	1	0	3	2	1
7:15 - 7:30	0	0	0	0	0	4	4	0	0	1	2	0	2	1	1	4
7:30 - 7:45	0	0	0	0	1	8	6	3	1	0	4	0	1	1	1	1
7:45 - 8:00	2	1	0	0	0	3	7	1	0	1	2	1	0	1	1	1
8:00 - 8:15	1	0	0	0	0	6	2	2	0	0	1	0	0	0	0	0
8:15 - 8:30	0	1	1	1	0	4	5	3	2	0	0	0	0	0	0	1
8:30 - 8:45	0	0	1	0	0	5	2	2	0	0	3	0	0	1	0	0
8:45 - 9:00	0	0	1	2	0	6	2	3	2	2	4	1	1	0	5	0
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Glen Dr @ E. Hastings St – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	8:00 - 9:00
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	8:00 - 9:00
Notes:					

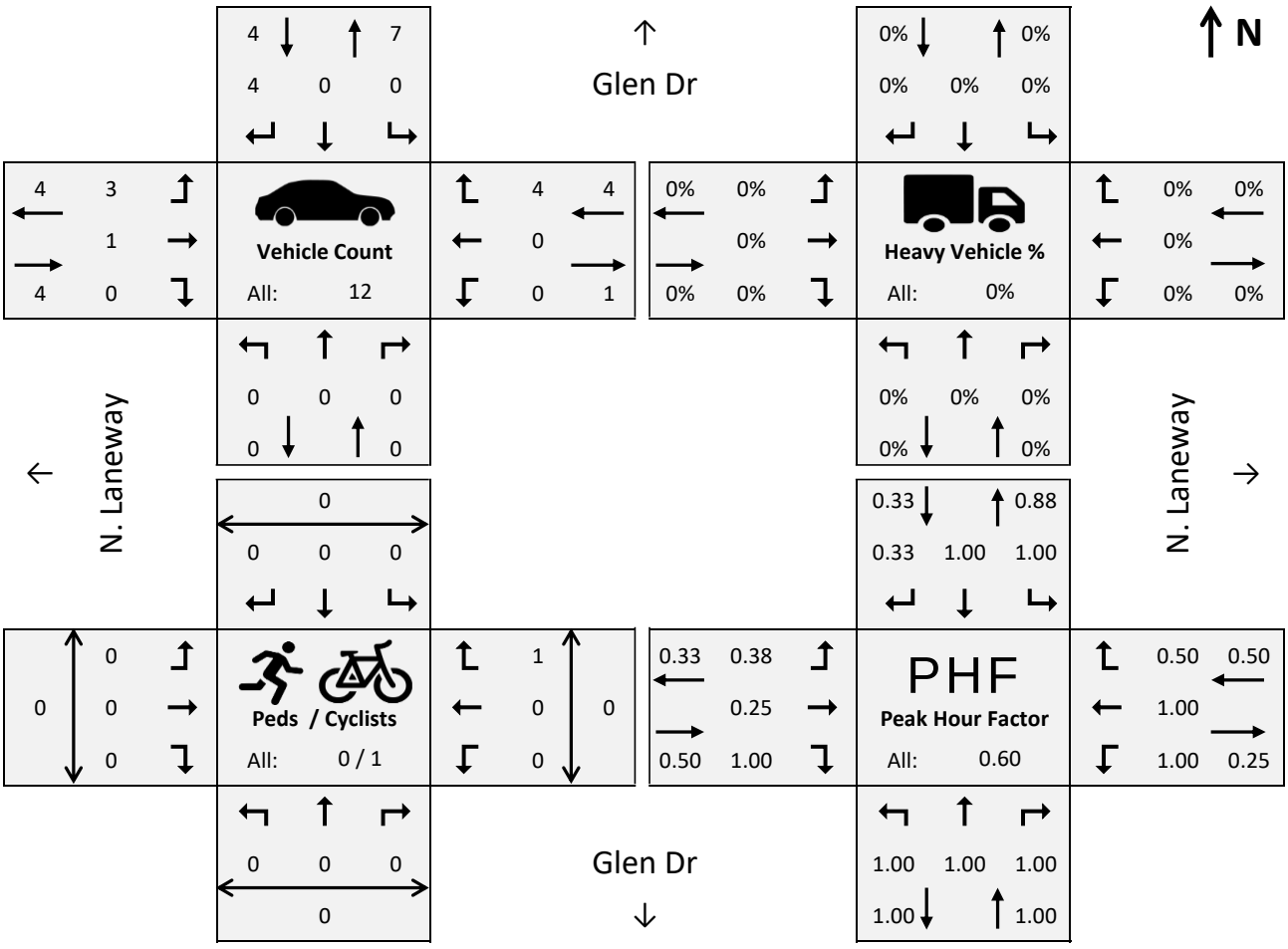
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7:00 - 7:15	2	0	4	0	0	0	0	70	2	2	238	0	0	4	8	0
7:15 - 7:30	3	0	2	0	0	0	0	73	5	4	272	0	0	6	4	0
7:30 - 7:45	2	0	3	0	0	0	0	97	3	5	280	0	0	5	6	0
7:45 - 8:00	2	0	9	0	0	0	0	104	2	12	313	0	0	6	6	0
8:00 - 8:15	1	0	7	0	0	0	0	101	7	6	326	0	0	11	2	0
8:15 - 8:30	1	0	5	0	0	0	0	128	5	6	332	0	0	6	4	0
8:30 - 8:45	6	0	6	0	0	0	0	151	6	7	350	0	0	10	3	0
8:45 - 9:00	21	0	5	0	0	0	0	144	5	13	373	0	0	6	6	1
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Glen Dr @ N. Laneway – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	8:00 - 9:00
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	7:00 - 8:00
Notes:	South Leg was closed due to construction				

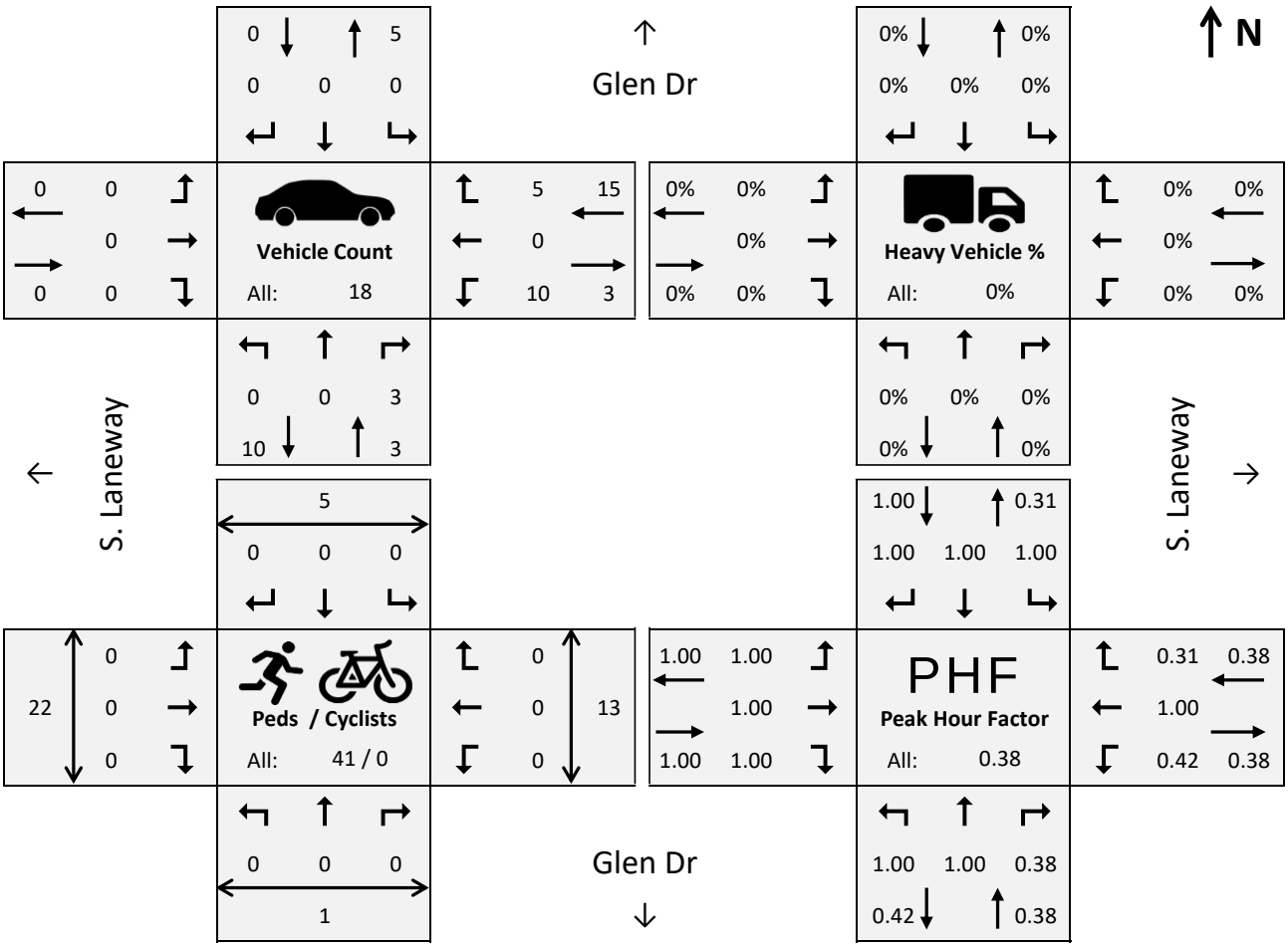
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7:00 - 7:15	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0
7:15 - 7:30	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0
7:30 - 7:45	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
7:45 - 8:00	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0
8:00 - 8:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
8:15 - 8:30	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0
8:30 - 8:45	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
8:45 - 9:00	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0
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Glen Dr @ S. Laneway – Vancouver, BC

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Notes:	TM only				

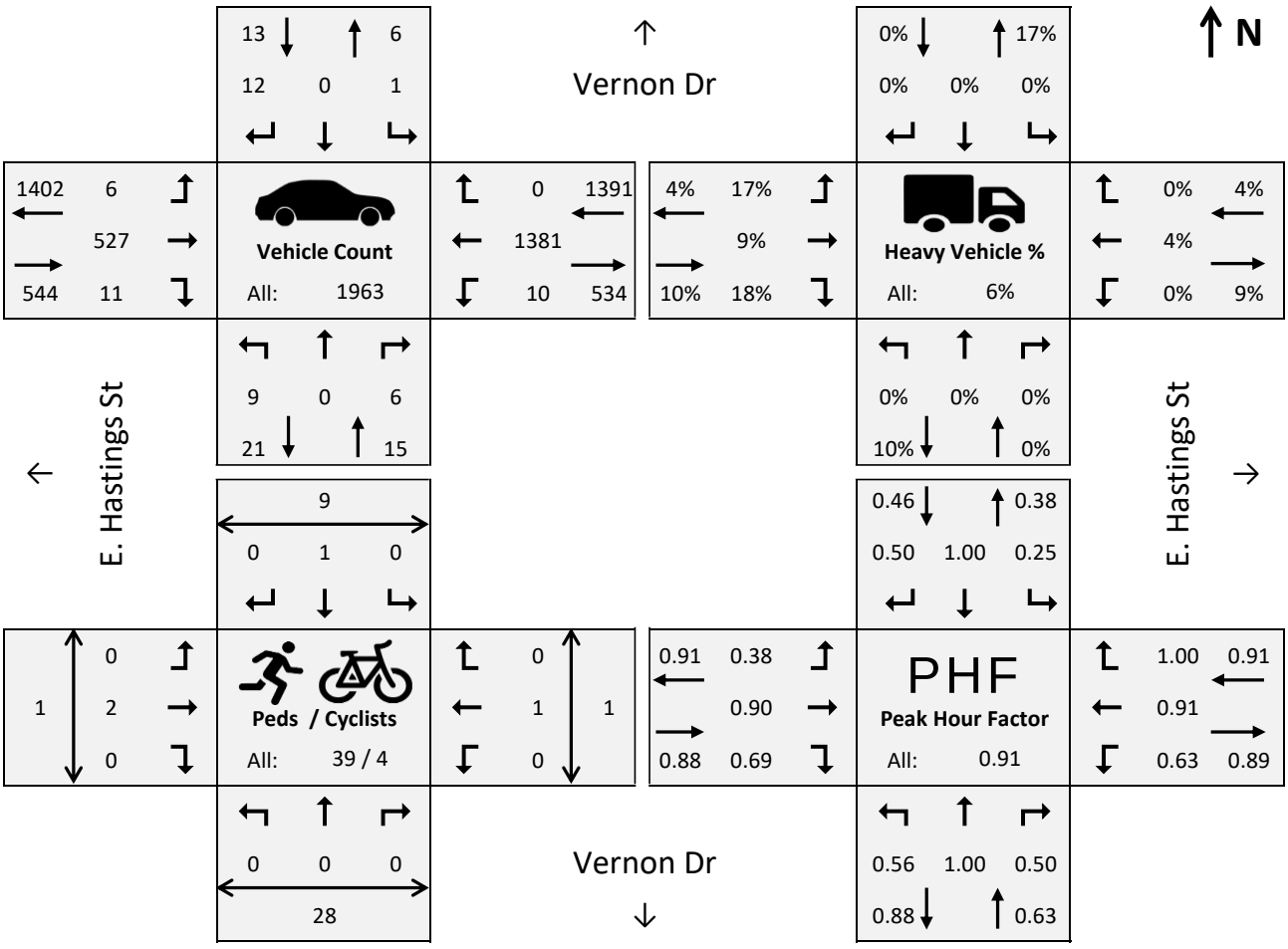
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7:00 - 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
7:15 - 7:30	0	0	0	1	0	0	0	0	0	0	0	2	0	0	2	1
7:30 - 7:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	2
7:45 - 8:00	0	0	0	2	0	0	0	0	0	1	0	1	2	0	2	0
8:00 - 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
8:15 - 8:30	0	0	1	0	0	0	0	0	0	3	0	0	5	0	3	6
8:30 - 8:45	0	0	0	0	0	0	0	0	0	1	0	1	0	1	5	6
8:45 - 9:00	0	0	2	0	0	0	0	0	0	6	0	4	0	0	4	8
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Vernon Dr @ E. Hastings St – Vancouver, BC

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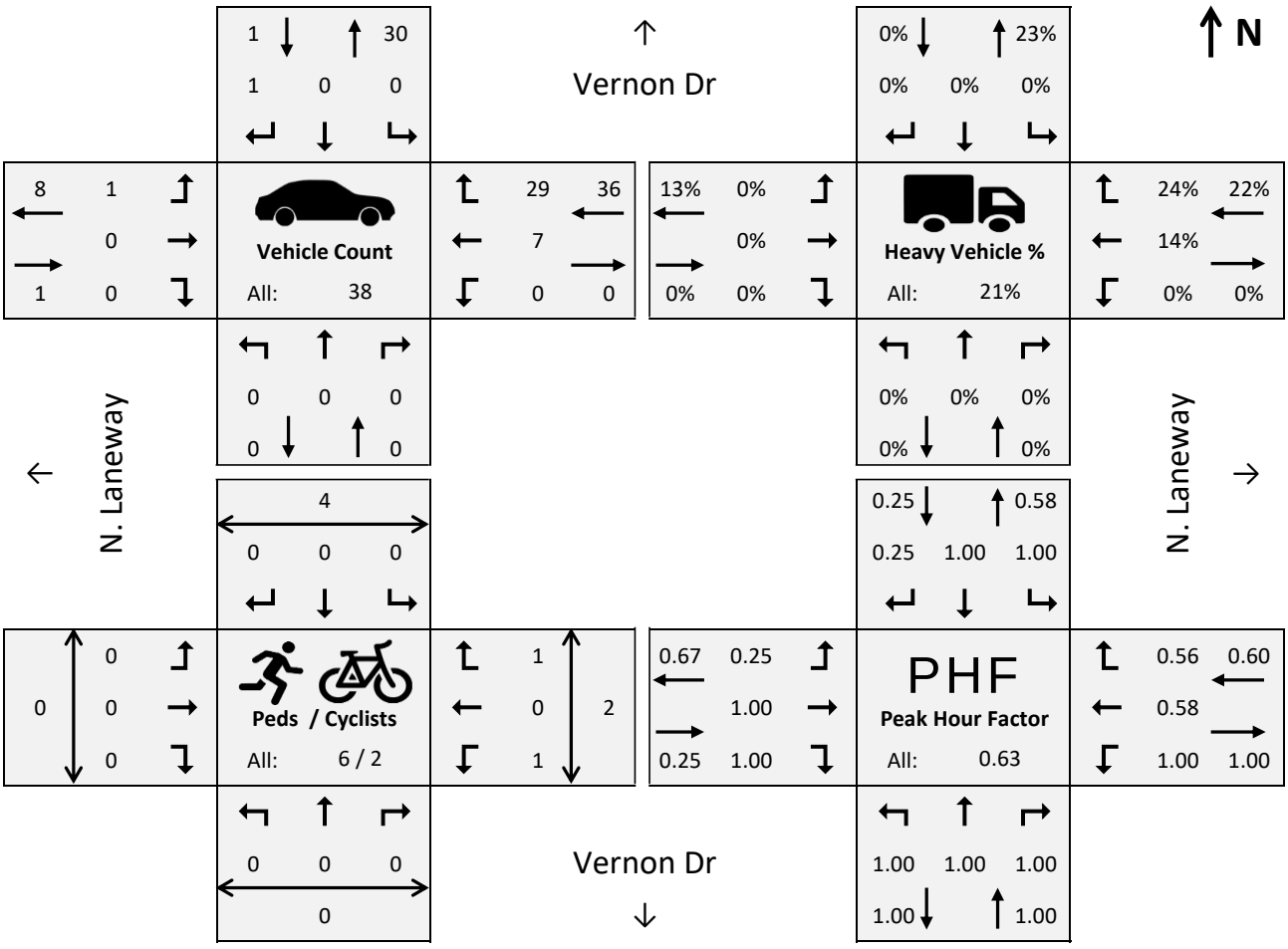
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7:15 - 7:30	2	0	0	0	1	0	0	69	2	2	279	0	0	2	0	0
7:30 - 7:45	0	1	4	0	1	4	2	93	2	0	274	0	0	1	0	1
7:45 - 8:00	2	1	1	2	0	1	0	108	4	1	321	0	0	3	0	0
8:00 - 8:15	1	0	2	0	0	2	1	107	4	2	321	0	2	8	1	0
8:15 - 8:30	4	0	1	0	0	3	0	127	1	4	329	0	0	7	0	0
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Vernon Dr @ N. Laneway – Vancouver, BC

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Notes:	TM only				

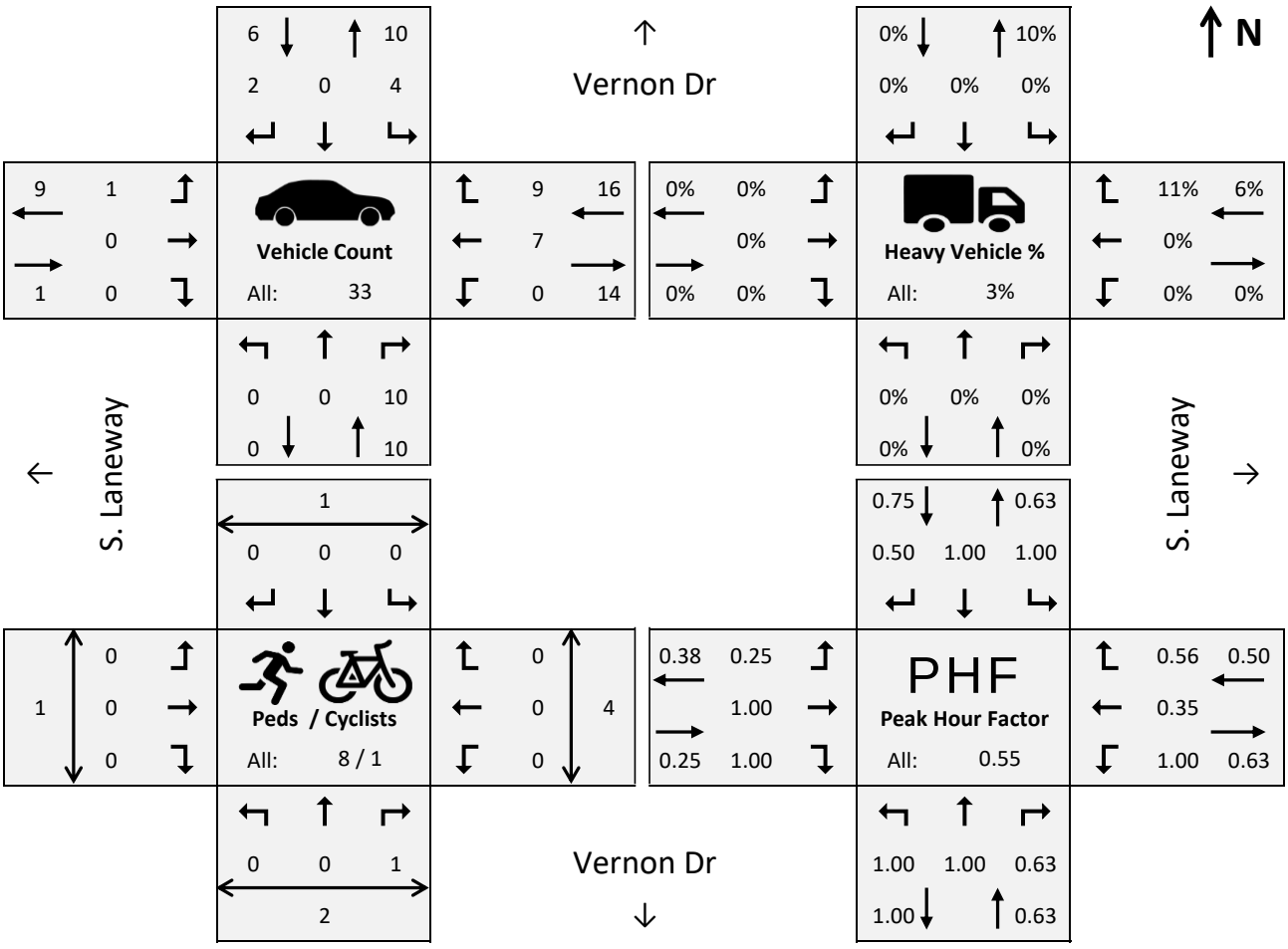
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7:15 - 7:30	0	0	0	0	0	0	0	0	0	1	3	10	5	0	0	0
7:30 - 7:45	0	0	0	0	0	0	0	0	0	0	1	9	1	0	0	0
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Vernon Dr @ S. Laneway – Vancouver, BC

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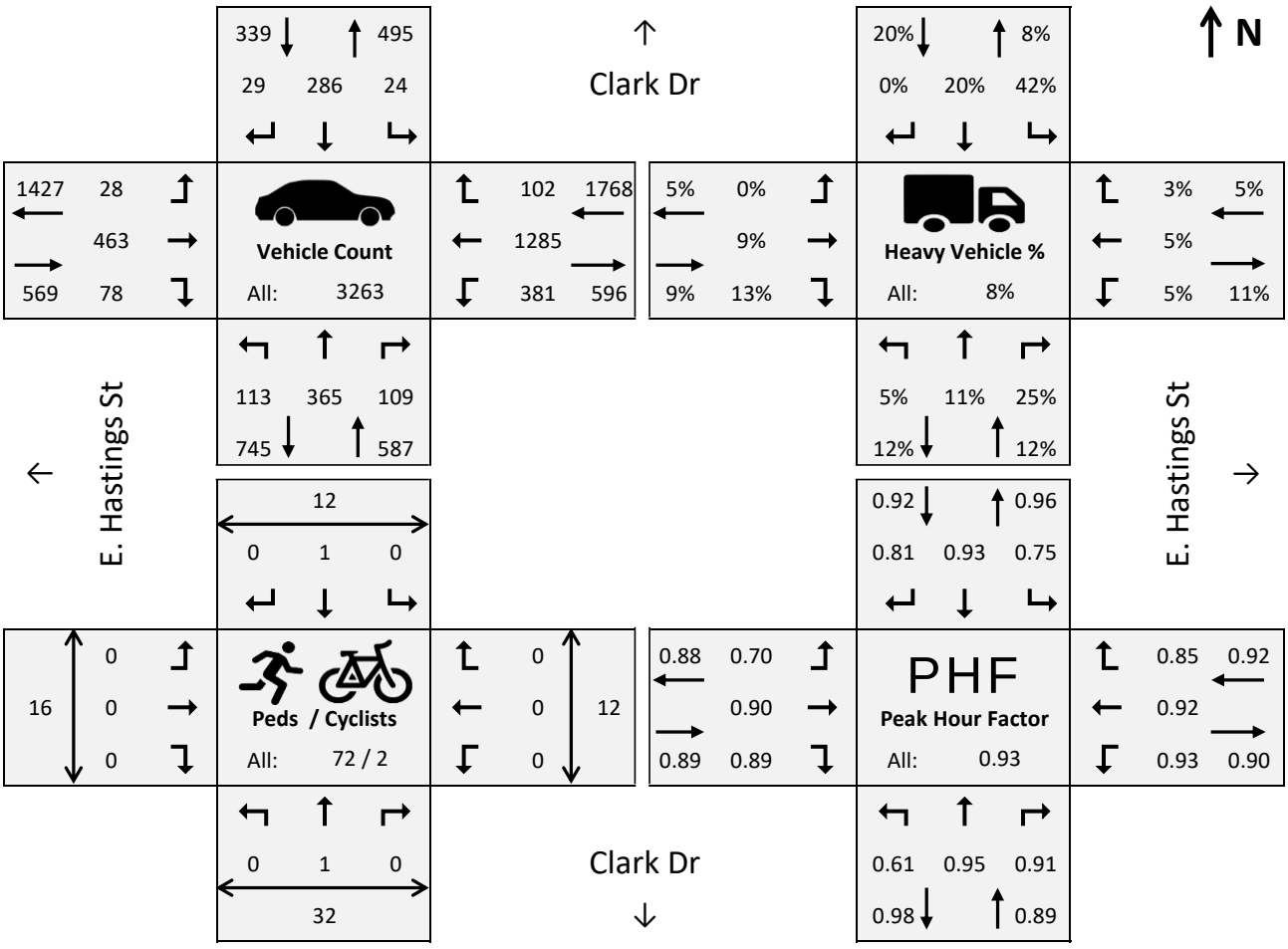
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7:00 - 7:15	0	0	4	2	0	0	0	0	0	0	0	4	1	1	0	1
7:15 - 7:30	0	0	1	2	0	0	0	0	0	0	2	4	0	0	5	0
7:30 - 7:45	0	0	1	0	0	0	0	0	0	0	0	3	1	1	2	0
7:45 - 8:00	0	0	2	1	0	0	0	0	0	0	2	2	0	0	0	0
8:00 - 8:15	0	0	3	1	0	1	0	0	0	0	0	1	0	0	1	0
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8:30 - 8:45	0	0	3	1	0	0	0	0	0	0	1	1	0	1	0	0
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Clark Dr @ E. Hastings St – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	8:00 - 9:00
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	8:00 - 9:00
Notes:					

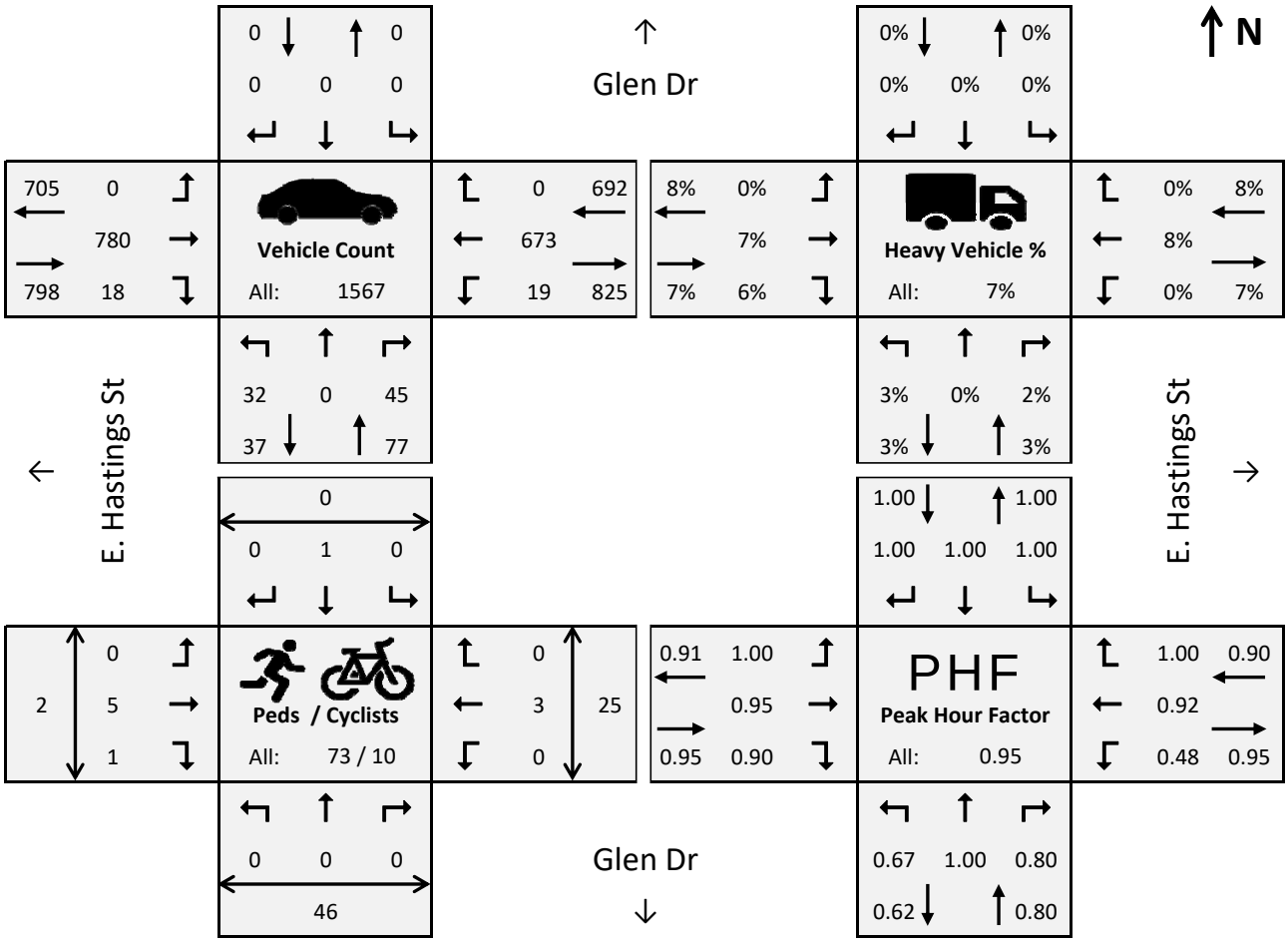
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7:00 - 7:15	15	73	25	4	65	7	6	62	10	106	218	61	1	6	2	8
7:15 - 7:30	28	78	22	1	69	3	4	62	12	92	255	43	2	3	1	3
7:30 - 7:45	25	91	38	5	73	8	12	74	15	95	247	28	0	0	1	5
7:45 - 8:00	26	111	27	6	82	8	11	84	20	110	293	26	2	6	3	3
8:00 - 8:15	21	94	20	4	73	4	5	93	19	92	303	20	6	11	5	7
8:15 - 8:30	17	87	30	8	73	8	5	112	16	95	313	30	2	6	2	4
8:30 - 8:45	29	96	29	7	77	8	8	129	22	92	318	25	2	7	1	2
8:45 - 9:00	46	88	30	5	63	9	10	129	21	102	351	27	2	8	4	3
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Glen Dr @ E. Hastings St – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	12:00 - 13:00
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	12:00 - 13:00
Notes:					

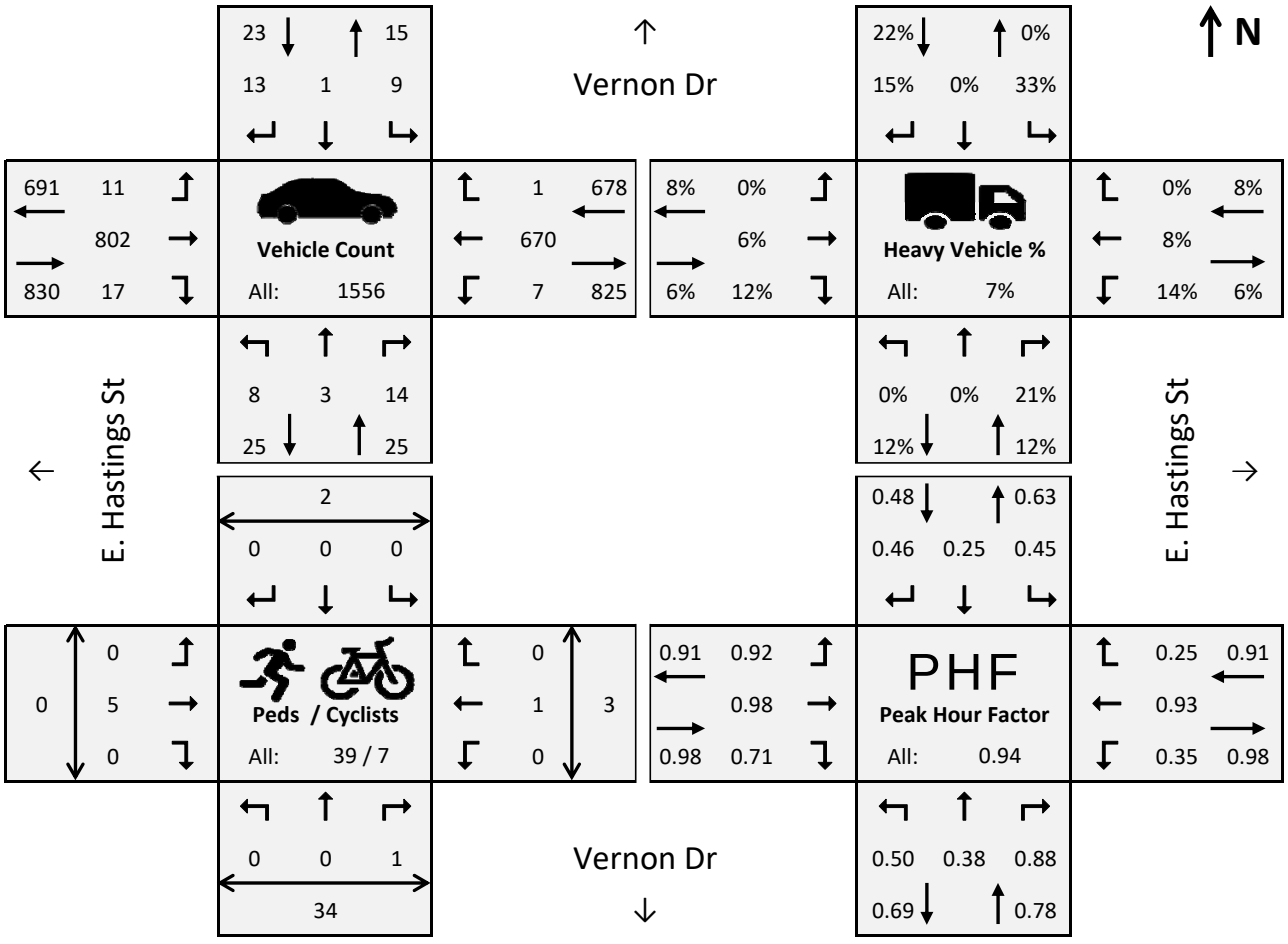
TIME INTERVAL	AUTOMOBILE COUNT												PEDESTRIANS			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W
11:00 - 11:15	10	0	5	0	0	0	0	147	3	9	144	0	0	13	4	1
11:15 - 11:30	2	0	10	0	0	0	0	170	2	19	165	0	0	13	1	0
11:30 - 11:45	4	0	6	0	0	0	0	156	3	15	169	0	0	8	6	1
11:45 - 12:00	5	0	4	0	0	0	0	158	4	11	174	0	0	15	11	0
12:00 - 12:15	12	0	9	0	0	0	0	195	5	10	182	0	0	19	6	0
12:15 - 12:30	10	0	14	0	0	0	0	205	4	3	136	0	0	13	5	2
12:30 - 12:45	8	0	12	0	0	0	0	189	4	5	174	0	0	6	4	0
12:45 - 13:00	2	0	10	0	0	0	0	191	5	1	181	0	0	8	10	0
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Vernon Dr @ E. Hastings St – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	12:00 - 13:00
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	12:00 - 13:00
Notes:					

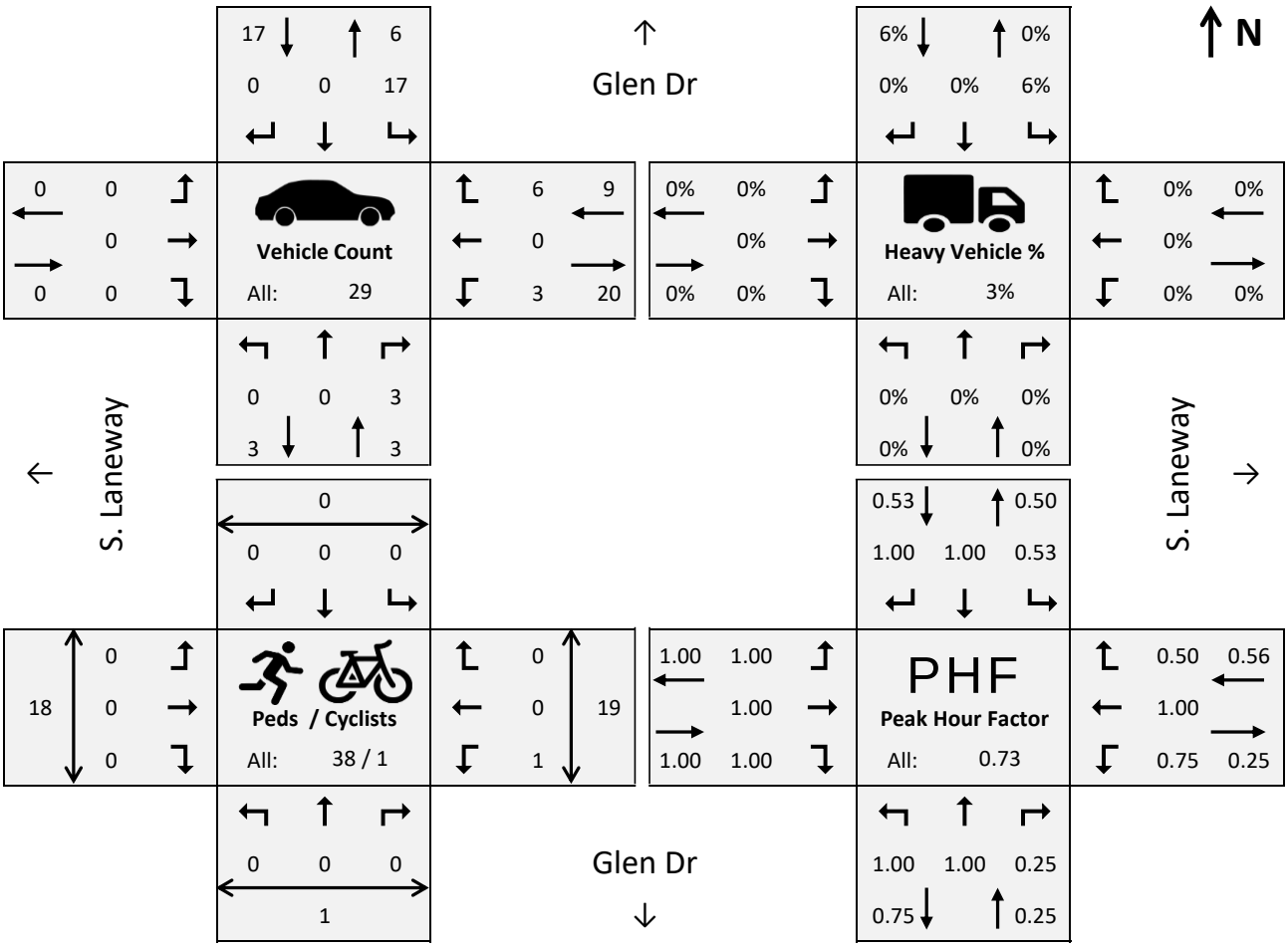
TIME INTERVAL	AUTOMOBILE COUNT												PEDESTRIANS			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W
11:00 - 11:15	1	0	4	3	0	2	2	147	3	1	149	0	2	5	0	1
11:15 - 11:30	2	0	3	4	0	3	2	177	5	3	180	0	1	17	0	0
11:30 - 11:45	5	0	3	2	0	3	3	153	11	2	178	0	2	11	0	0
11:45 - 12:00	4	1	1	3	0	7	1	159	5	6	178	1	2	13	0	0
12:00 - 12:15	2	2	4	5	0	7	3	203	4	5	180	1	0	11	0	0
12:15 - 12:30	4	0	2	1	0	1	3	202	6	1	133	0	0	9	0	0
12:30 - 12:45	1	0	4	1	0	3	3	204	2	1	181	0	0	9	2	0
12:45 - 13:00	1	1	4	2	1	2	2	193	5	0	176	0	2	5	1	0
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Glen Dr @ S. Laneway – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	16:45 - 17:45
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	16:30 - 17:30
Notes:	TM only				

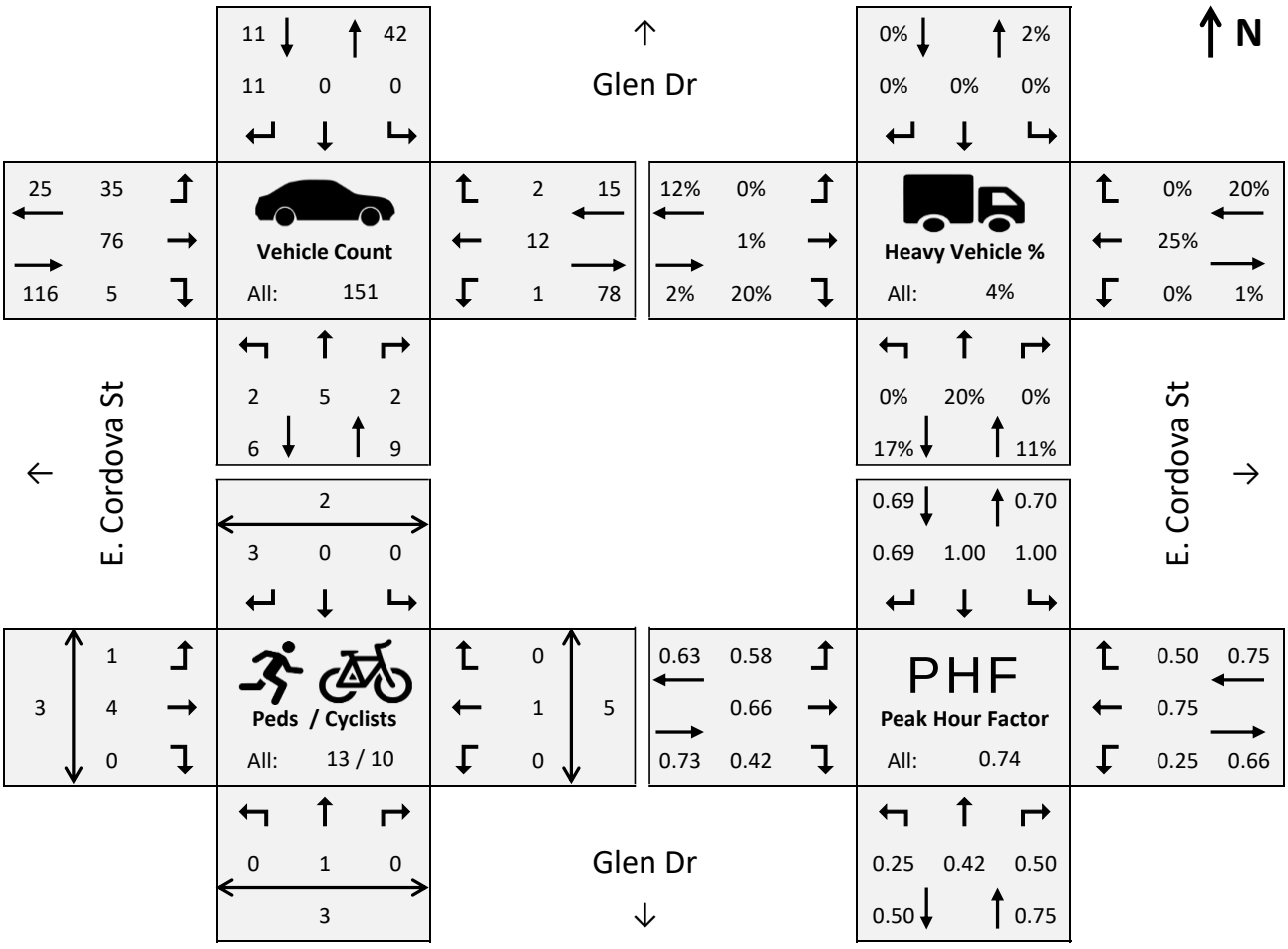
TIME INTERVAL	AUTOMOBILE COUNT												PEDESTRIANS			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W
15:00 - 15:15	0	0	0	0	0	0	0	0	0	3	0	2	2	0	9	2
15:15 - 15:30	0	0	0	0	0	0	0	0	0	2	0	2	1	0	2	2
15:30 - 15:45	0	0	1	0	0	0	0	0	0	3	0	2	0	0	5	1
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
16:00 - 16:15	0	0	0	1	0	0	0	0	0	0	0	1	0	0	5	2
16:15 - 16:30	1	0	0	0	0	0	0	0	0	2	0	1	0	0	5	2
16:30 - 16:45	0	0	0	1	0	0	0	0	0	2	0	2	0	0	2	2
16:45 - 17:00	0	0	3	3	0	0	0	0	0	1	0	3	0	0	4	2
17:00 - 17:15	0	0	0	8	0	0	0	0	0	1	0	1	0	0	1	8
17:15 - 17:30	0	0	0	4	0	0	0	0	0	1	0	0	0	1	4	5
17:30 - 17:45	0	0	0	2	0	0	0	0	0	0	0	2	0	0	10	3
17:45 - 18:00	0	0	1	5	0	0	0	0	0	0	0	0	0	0	3	3
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Glen Dr @ E. Cordova St – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	16:45 - 17:45
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	16:45 - 17:45
Notes:					

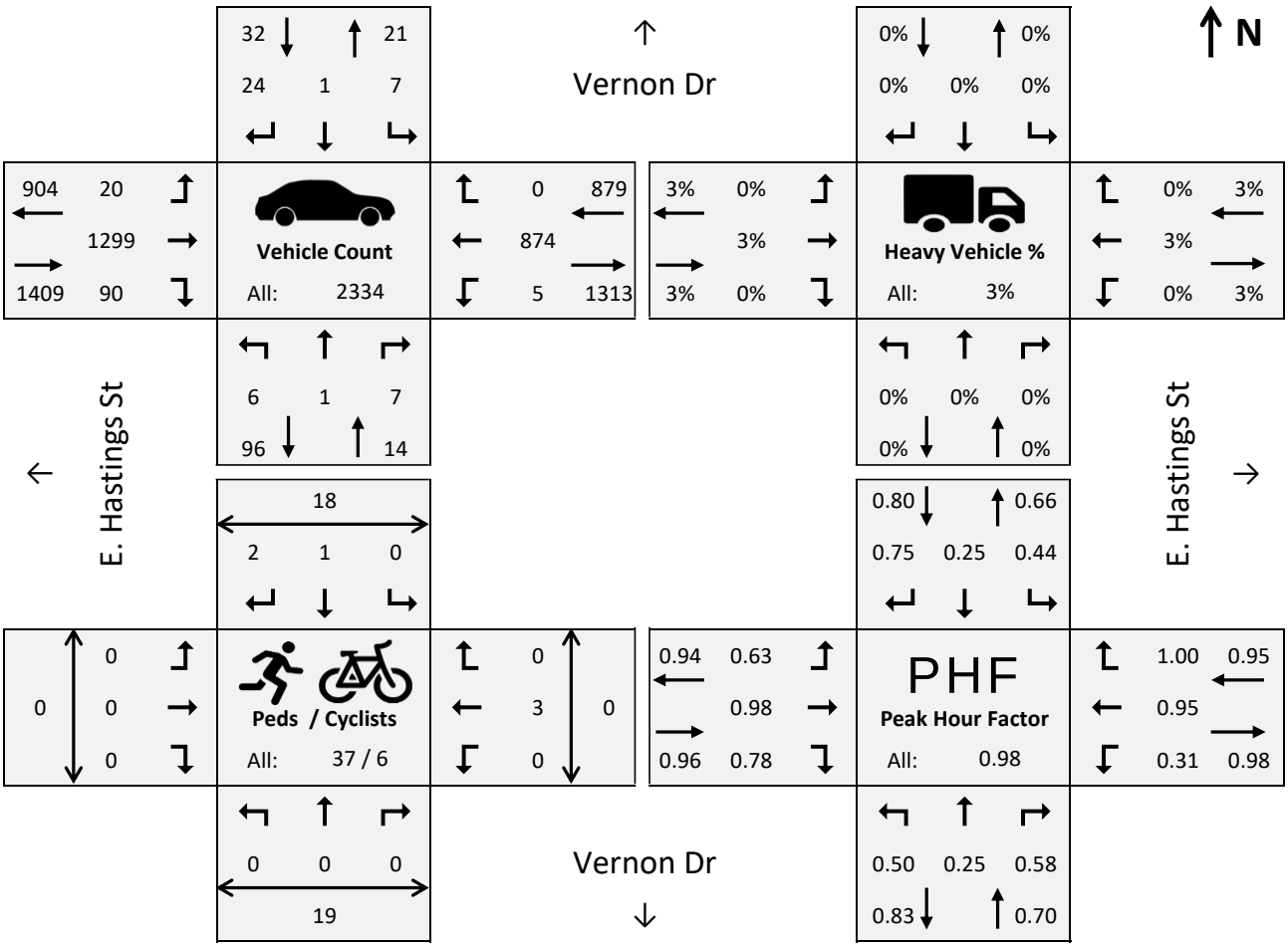
TIME INTERVAL	AUTOMOBILE COUNT												PEDESTRIANS			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W
15:00 - 15:15	0	0	0	0	1	2	8	5	1	0	1	0	0	0	2	0
15:15 - 15:30	0	1	1	0	0	4	6	6	1	0	2	0	0	2	2	1
15:30 - 15:45	1	1	0	0	0	3	10	6	0	0	7	0	0	3	2	1
15:45 - 16:00	1	0	0	0	0	3	7	4	0	0	3	0	0	2	1	1
16:00 - 16:15	0	2	0	2	0	7	7	8	0	0	5	0	0	3	2	1
16:15 - 16:30	0	1	0	1	0	4	7	2	0	0	1	0	0	0	3	0
16:30 - 16:45	0	1	2	0	0	4	7	2	0	0	3	0	1	9	11	2
16:45 - 17:00	0	1	0	0	0	1	6	12	3	0	2	1	1	0	1	0
17:00 - 17:15	2	0	1	0	0	4	15	20	2	0	4	0	0	0	1	0
17:15 - 17:30	0	3	0	0	0	3	11	29	0	1	4	0	0	2	2	1
17:30 - 17:45	0	1	1	0	0	3	3	15	0	0	2	1	1	1	1	2
17:45 - 18:00	0	0	1	0	0	4	6	8	0	0	3	0	0	0	2	0
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Vernon Dr @ E. Hastings St – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	16:45 - 17:45
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	16:45 - 17:45
Notes:					

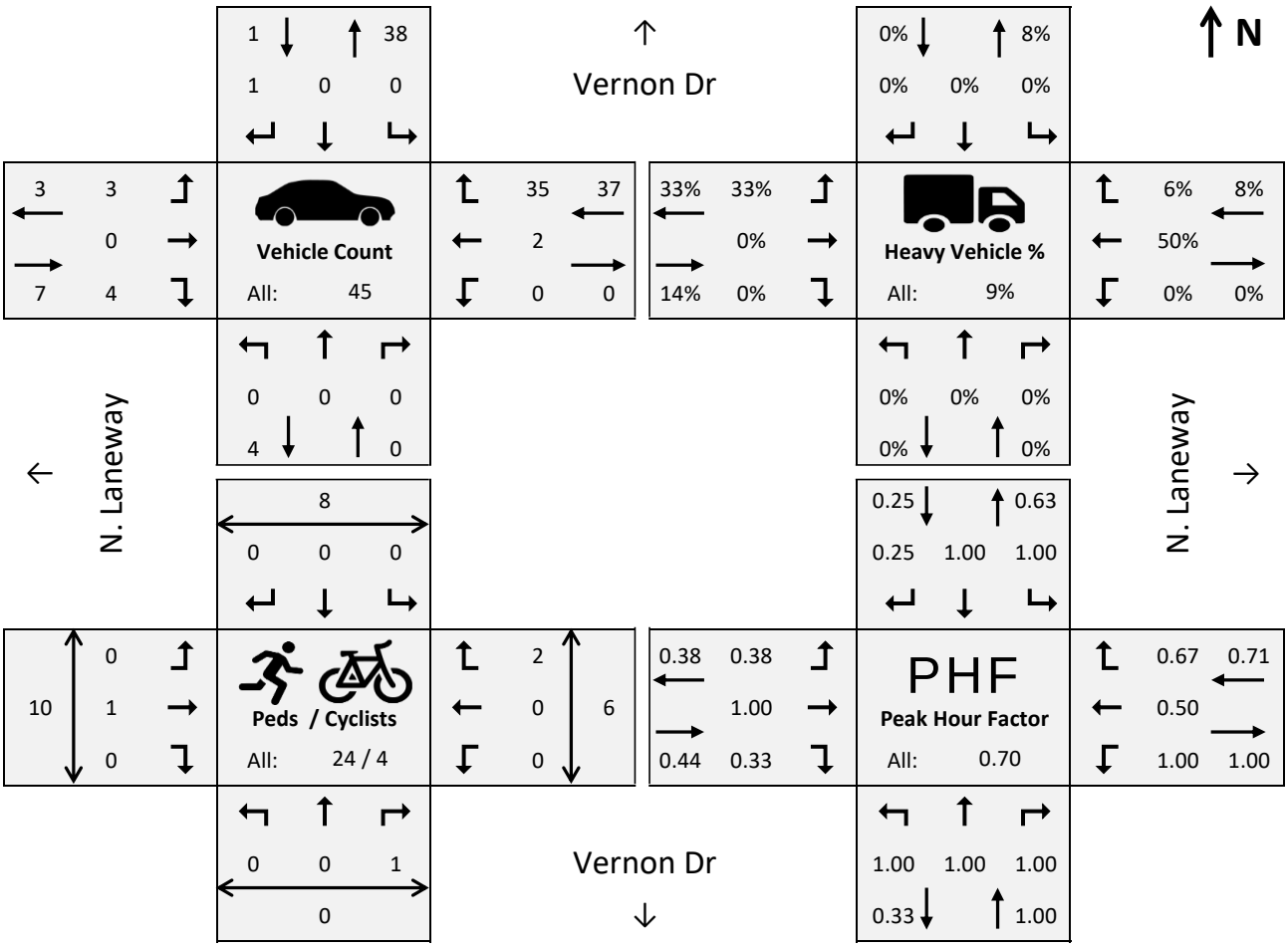
TIME INTERVAL	AUTOMOBILE COUNT												PEDESTRIANS			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W
15:00 - 15:15	1	0	1	2	0	2	4	297	14	2	137	1	1	9	0	0
15:15 - 15:30	0	0	2	3	1	3	4	334	14	2	140	0	4	11	3	0
15:30 - 15:45	1	0	1	0	1	3	0	324	19	4	172	0	1	3	0	0
15:45 - 16:00	0	0	3	0	0	3	2	310	16	2	137	0	1	7	0	0
16:00 - 16:15	1	0	3	4	0	3	2	266	12	0	176	1	1	9	0	0
16:15 - 16:30	3	0	1	1	2	2	5	296	16	0	164	0	1	1	0	0
16:30 - 16:45	1	0	5	0	1	5	3	323	17	2	199	0	2	3	1	0
16:45 - 17:00	1	0	1	0	1	8	2	316	24	4	215	0	7	2	0	0
17:00 - 17:15	1	0	3	1	0	4	8	329	29	0	222	0	4	3	0	0
17:15 - 17:30	1	0	2	4	0	4	5	330	17	0	207	0	7	6	0	0
17:30 - 17:45	3	1	1	2	0	8	5	324	20	1	230	0	0	8	0	0
17:45 - 18:00	0	0	4	1	2	4	5	305	24	1	203	2	2	3	0	0
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Vernon Dr @ N. Laneway – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	16:45 - 17:45
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	16:30 - 17:30
Notes:	TM only				

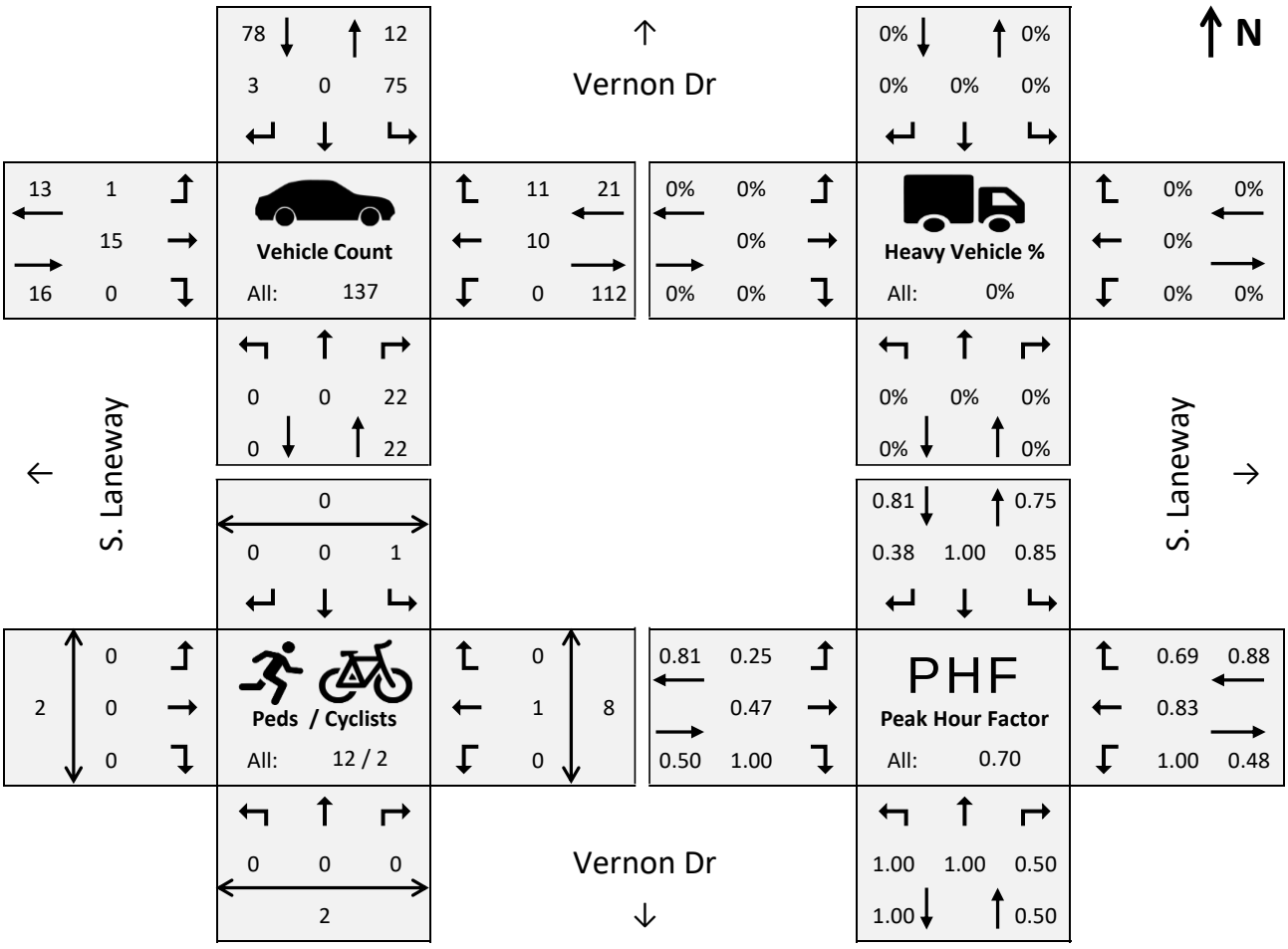
TIME INTERVAL	AUTOMOBILE COUNT												PEDESTRIANS			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W
15:00 - 15:15	1	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0
15:15 - 15:30	2	0	0	0	0	1	0	0	0	0	2	6	3	0	1	0
15:30 - 15:45	0	0	0	0	0	0	2	0	0	0	0	8	3	0	2	0
15:45 - 16:00	0	0	0	0	0	1	0	0	0	0	1	9	6	0	0	1
16:00 - 16:15	0	0	0	0	0	0	0	0	0	0	1	8	1	0	0	0
16:15 - 16:30	0	0	0	0	0	0	1	0	1	0	2	5	3	0	1	0
16:30 - 16:45	0	0	0	0	0	0	2	0	0	0	2	7	5	0	2	0
16:45 - 17:00	0	0	0	0	0	1	1	0	3	0	1	7	3	0	3	1
17:00 - 17:15	0	0	0	0	0	0	0	0	0	0	0	11	1	0	1	2
17:15 - 17:30	0	0	0	0	0	0	2	0	1	0	0	13	2	0	2	3
17:30 - 17:45	0	0	0	0	0	0	0	0	0	0	1	4	2	0	0	4
17:45 - 18:00	0	0	0	0	0	0	0	0	1	0	1	6	1	0	0	3
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Vernon Dr @ S. Laneway – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	16:45 - 17:45
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	16:45 - 17:45
Notes:	TM only				

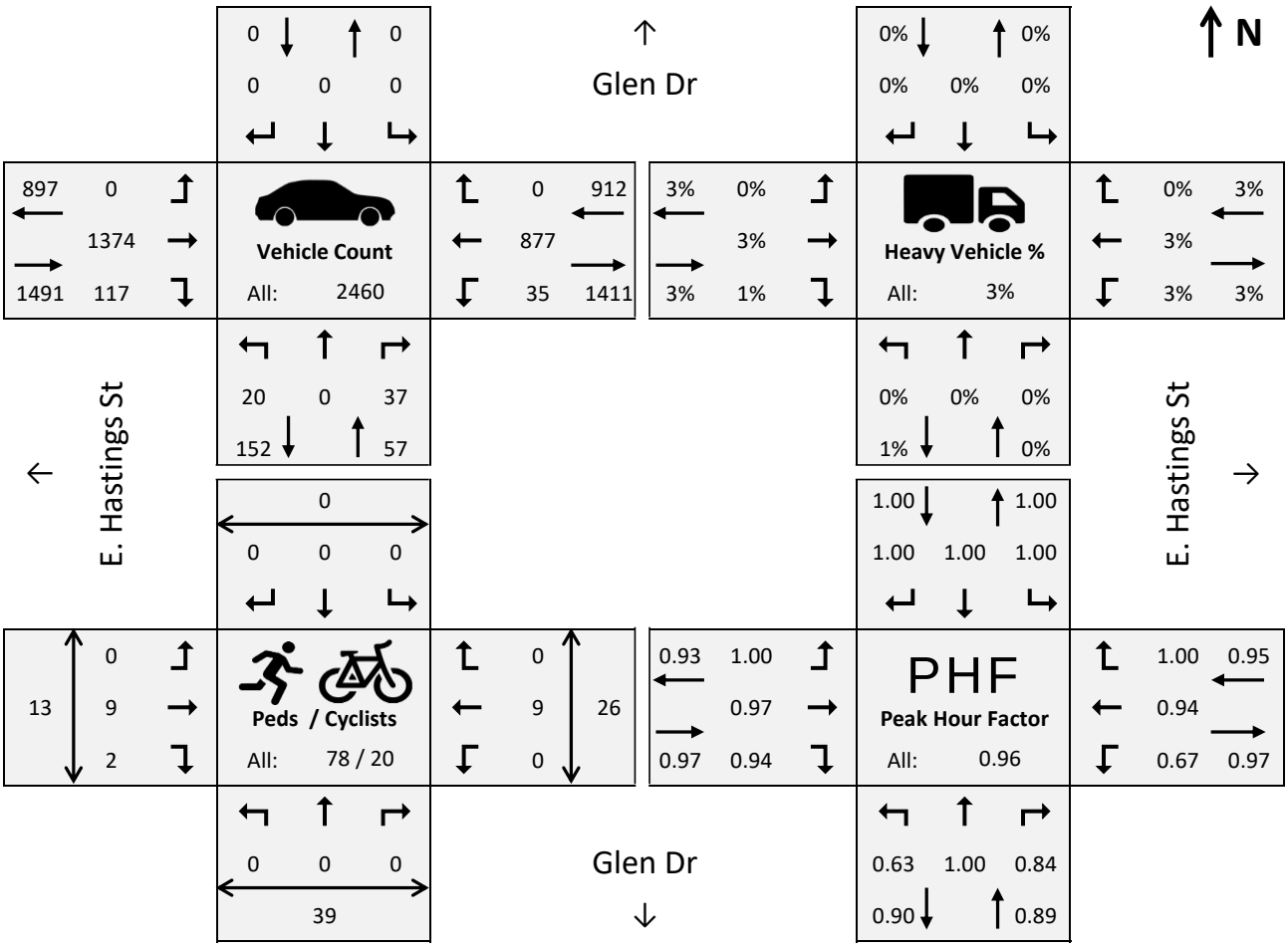
TIME INTERVAL	AUTOMOBILE COUNT												PEDESTRIANS			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W
15:00 - 15:15	0	0	3	6	0	1	0	1	0	0	2	6	1	2	4	1
15:15 - 15:30	0	0	1	7	0	0	0	1	0	0	2	2	2	0	2	0
15:30 - 15:45	0	0	4	15	0	0	0	1	0	0	2	4	3	1	3	3
15:45 - 16:00	0	0	4	16	0	0	0	0	0	0	0	2	1	1	3	0
16:00 - 16:15	0	0	1	7	0	0	0	0	0	0	0	1	0	0	5	0
16:15 - 16:30	0	0	3	11	0	1	0	0	0	0	3	5	3	0	1	0
16:30 - 16:45	0	0	6	16	0	1	1	2	0	0	2	2	2	1	2	0
16:45 - 17:00	0	0	2	22	0	0	0	1	0	0	3	1	0	0	1	0
17:00 - 17:15	0	0	11	22	0	2	0	8	0	0	2	4	0	0	4	0
17:15 - 17:30	0	0	4	16	0	0	1	2	0	0	2	3	0	2	2	2
17:30 - 17:45	0	0	5	15	0	1	0	4	0	0	3	3	0	0	1	0
17:45 - 18:00	0	0	4	17	0	0	1	2	0	0	0	2	1	1	0	0
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Glen Dr @ E. Hastings St – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	16:45 - 17:45
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	16:45 - 17:45
Notes:					

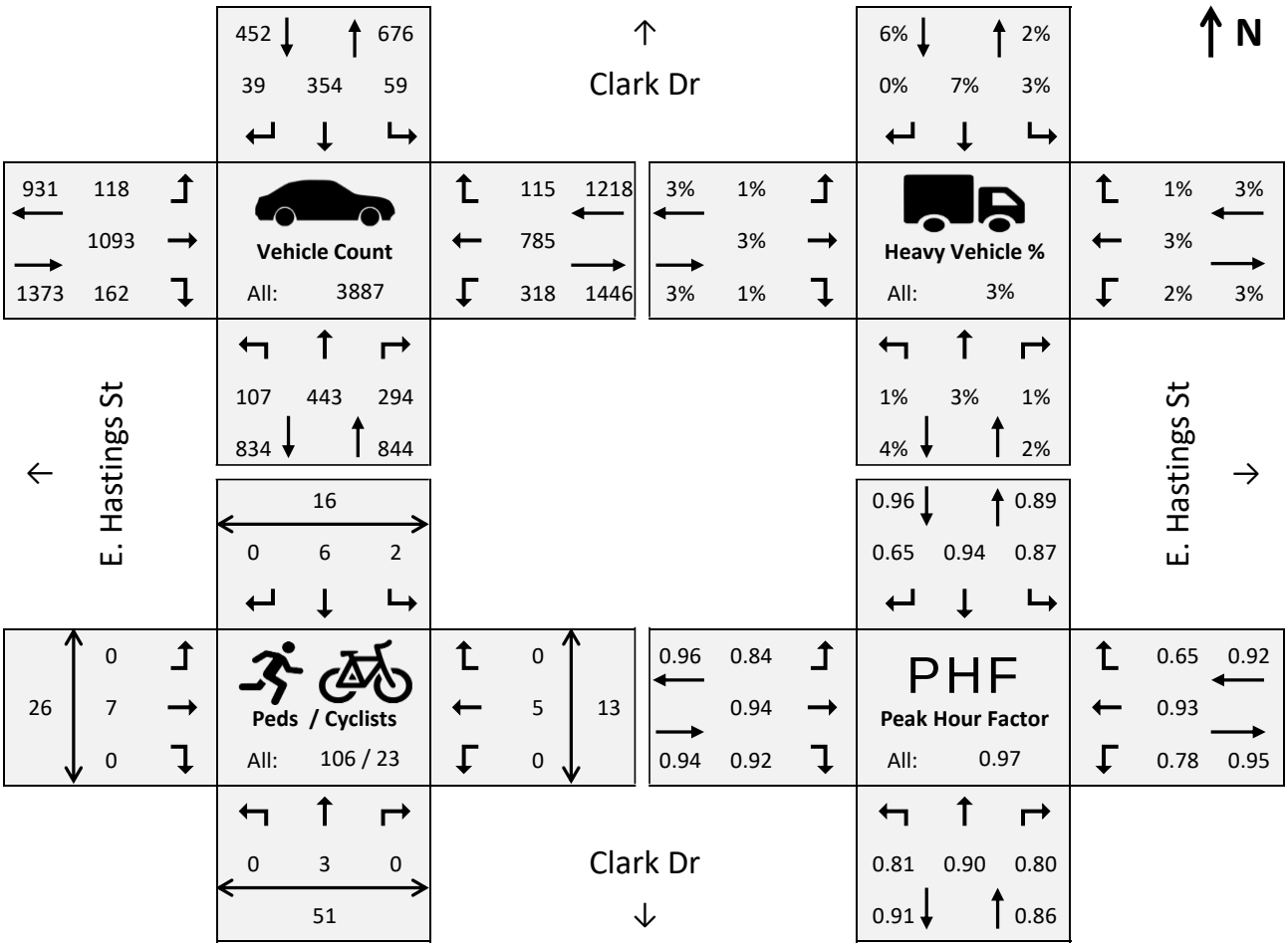
TIME INTERVAL	AUTOMOBILE COUNT												PEDESTRIANS			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W
15:00 - 15:15	10	0	17	0	0	0	0	310	4	4	133	0	0	17	13	0
15:15 - 15:30	8	0	12	0	0	0	0	336	5	7	141	0	0	16	9	1
15:30 - 15:45	4	0	7	0	0	0	0	339	4	8	169	0	0	13	18	0
15:45 - 16:00	1	0	11	0	0	0	0	298	8	8	132	0	0	12	9	0
16:00 - 16:15	5	0	4	0	0	0	0	277	5	7	168	0	0	11	7	0
16:15 - 16:30	3	0	9	0	0	0	0	316	1	5	161	0	0	4	6	0
16:30 - 16:45	5	0	15	0	0	0	0	338	8	17	192	0	0	8	18	0
16:45 - 17:00	5	0	11	0	0	0	0	332	29	13	222	0	0	12	6	1
17:00 - 17:15	3	0	10	0	0	0	0	346	31	7	223	0	0	10	5	2
17:15 - 17:30	4	0	9	0	0	0	0	341	28	8	199	0	0	9	9	8
17:30 - 17:45	8	0	7	0	0	0	0	355	29	7	233	0	0	8	6	2
17:45 - 18:00	5	0	11	0	0	0	0	322	10	11	211	0	0	5	5	0
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Clark Dr @ E. Hastings St – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	16:45 - 17:45
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	16:30 - 17:30
Notes:					

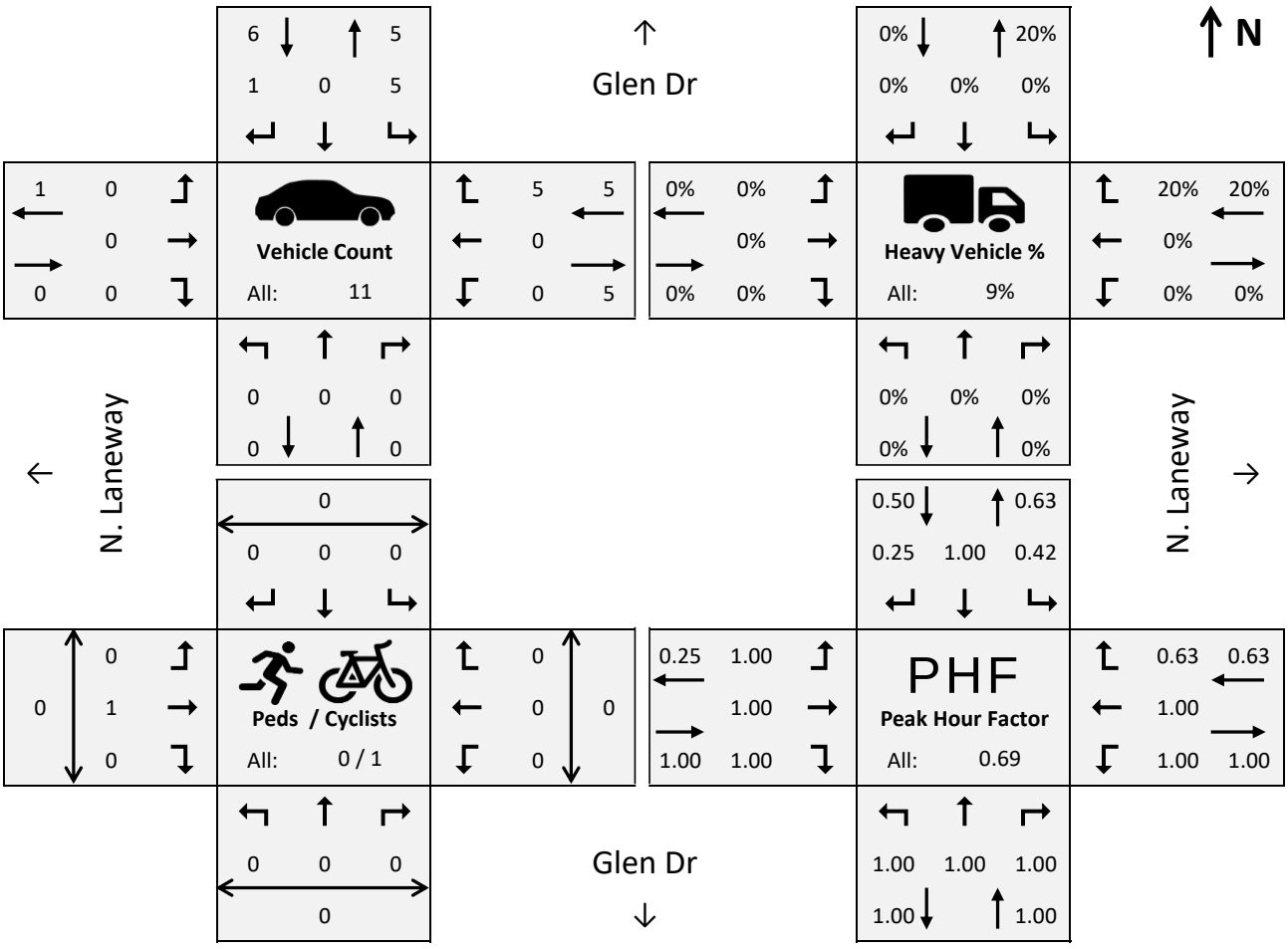
TIME INTERVAL	AUTOMOBILE COUNT												PEDESTRIANS			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W
15:00 - 15:15	22	112	54	10	76	10	19	232	40	68	113	49	6	12	3	9
15:15 - 15:30	21	113	82	14	99	6	29	288	51	58	109	79	7	21	7	11
15:30 - 15:45	17	125	65	14	89	6	19	284	17	63	157	47	7	17	4	13
15:45 - 16:00	21	142	65	12	79	7	14	275	34	67	119	33	8	14	8	6
16:00 - 16:15	19	114	69	15	95	11	20	241	30	69	149	29	3	18	5	10
16:15 - 16:30	24	91	77	14	116	11	17	254	25	72	142	46	11	6	14	2
16:30 - 16:45	33	116	80	8	102	8	15	284	23	102	164	36	8	11	7	21
16:45 - 17:00	33	120	92	13	88	15	25	251	37	102	185	44	6	10	5	10
17:00 - 17:15	32	102	75	17	94	7	27	286	38	98	204	22	6	13	2	11
17:15 - 17:30	21	123	69	16	88	8	31	292	44	59	186	22	4	18	3	4
17:30 - 17:45	21	98	58	13	84	9	35	264	43	59	210	27	0	10	3	1
17:45 - 18:00	32	119	53	12	56	10	30	256	43	64	174	16	4	7	1	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Glen Dr @ N. Laneway – Vancouver, BC

Project#:	04-24-0040	**Weather:**	Sunny	**Analysis Period:**	16:45 - 17:45
Date:	Oct 09, 2024 (Wed)	**Road Cond:**	Dry	**Intersection Peak:**	16:30 - 17:30
Notes:	South Leg was closed due to construction				

TIME INTERVAL	AUTOMOBILE COUNT												PEDESTRIANS			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W
15:00 - 15:15	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
16:00 - 16:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
16:15 - 16:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
16:45 - 17:00	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0
17:00 - 17:15	0	0	0	1	0	1	0	0	0	0	0	2	0	0	0	0
17:15 - 17:30	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



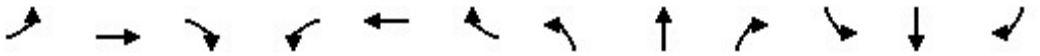
The attached information is provided to support the agency's review process and shall not be distributed to other parties without written consent from Bunt & Associates Engineering Ltd.

APPENDIX C

Synchro Reports

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	609	1589	60	30
v/c Ratio	0.16	0.42	0.37	0.16
Control Delay	2.3	3.2	26.6	8.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	2.3	3.2	26.6	8.7
Queue Length 50th (m)	6.8	24.2	4.8	0.0
Queue Length 95th (m)	12.2	39.5	15.0	5.2
Internal Link Dist (m)	199.6	132.9	31.4	29.9
Turn Bay Length (m)				
Base Capacity (vph)	3697	3823	333	372
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.42	0.18	0.08

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	524	23	32	1381	17	29	2	23	17	0	10
Future Volume (veh/h)	1	524	23	32	1381	17	29	2	23	17	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.96		0.94	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1752	1841	1900	1841	1870	1900	1870	1767	1870	1870	1870
Adj Flow Rate, veh/h	1	582	26	36	1534	19	32	2	26	19	0	11
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	10	4	0	4	2	0	2	9	2	2	2
Cap, veh/h	49	3410	151	96	3623	44	135	25	66	161	16	57
Arrive On Green	0.75	0.75	0.75	0.75	0.75	0.75	0.10	0.10	0.10	0.10	0.00	0.10
Sat Flow, veh/h	1	4545	201	60	4827	59	594	242	640	801	160	556
Grp Volume(v), veh/h	224	185	200	567	489	533	60	0	0	30	0	0
Grp Sat Flow(s),veh/h/ln	1749	1451	1547	1761	1524	1661	1476	0	0	1517	0	0
Q Serve(g_s), s	0.0	2.7	2.8	0.0	8.8	8.8	1.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.7	2.7	2.8	8.3	8.8	8.8	2.6	0.0	0.0	1.2	0.0	0.0
Prop In Lane	0.00		0.13	0.06		0.04	0.53		0.43	0.63		0.37
Lane Grp Cap(c), veh/h	1360	1089	1161	1373	1144	1247	225	0	0	235	0	0
V/C Ratio(X)	0.16	0.17	0.17	0.41	0.43	0.43	0.27	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1360	1089	1161	1373	1144	1247	401	0	0	407	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.7	2.7	2.7	3.4	3.4	3.4	31.3	0.0	0.0	30.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.3	0.3	0.9	1.2	1.1	0.6	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.4	0.4	0.4	0.7	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.9	3.0	3.0	4.3	4.6	4.5	31.9	0.0	0.0	31.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		609			1589			60			30	
Approach Delay, s/veh		3.0			4.5			31.9			31.0	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	62.3	12.7	62.3	12.7
Change Period (Y+Rc), s	6.0	5.0	6.0	5.0
Max Green Setting (Gmax), s	47.0	17.0	47.0	17.0
Max Q Clear Time (g_c+I1), s	10.8	4.6	4.8	3.2
Green Ext Time (p_c), s	17.8	0.2	5.2	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.1
HCM 6th LOS	A

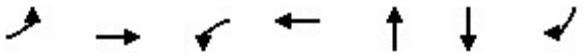
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	527	11	10	1381	0	9	0	6	1	0	12
Future Vol, veh/h	6	527	11	10	1381	0	9	0	6	1	0	12
Conflicting Peds, #/hr	9	0	28	28	0	9	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	10	-	-	10	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	17	9	18	0	4	0	0	0	0	0	0	0
Mvmt Flow	7	579	12	11	1518	0	10	0	7	1	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1527	0	0	607	0	0	1251	2170	319	1796	2170	769
Stage 1	-	-	-	-	-	-	621	621	-	1549	1549	-
Stage 2	-	-	-	-	-	-	630	1549	-	247	621	-
Critical Hdwy	5.64	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.27	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	186	-	-	610	-	0	185	47	582	87	47	299
Stage 1	-	-	-	-	-	0	367	482	-	83	177	-
Stage 2	-	-	-	-	-	0	402	177	-	680	482	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	185	-	-	596	-	-	150	38	568	74	38	296
Mov Cap-2 Maneuver	-	-	-	-	-	-	150	38	-	74	38	-
Stage 1	-	-	-	-	-	-	338	444	-	78	155	-
Stage 2	-	-	-	-	-	-	338	155	-	634	444	-

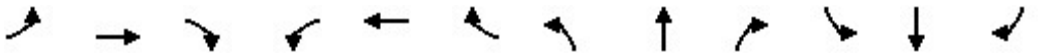
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.5	23	20.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	150	568	185	-	-	596	-	74	296
HCM Lane V/C Ratio	0.066	0.012	0.036	-	-	0.018	-	0.015	0.045
HCM Control Delay (s)	30.7	11.4	25.2	0.5	-	11.2	0.4	54.4	17.7
HCM Lane LOS	D	B	D	A	-	B	A	F	C
HCM 95th %tile Q(veh)	0.2	0	0.1	-	-	0.1	-	0	0.1



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	30	582	410	1492	631	334	31
v/c Ratio	0.12	0.46	0.68	0.60	0.58	0.31	0.06
Control Delay	9.9	22.6	15.5	15.2	22.2	21.4	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.9	22.6	15.5	15.2	22.2	21.4	0.2
Queue Length 50th (m)	1.7	24.3	30.5	45.7	25.5	14.0	0.0
Queue Length 95th (m)	5.1	34.6	52.5	82.7	36.6	21.2	0.0
Internal Link Dist (m)		60.7		194.6	289.0	169.1	
Turn Bay Length (m)	40.0		95.0				20.0
Base Capacity (vph)	515	1257	605	2490	1158	1153	551
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.46	0.68	0.60	0.54	0.29	0.06

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	463	78	381	1285	102	113	365	109	24	286	29
Future Volume (veh/h)	28	463	78	381	1285	102	113	365	109	24	286	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.98	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1767	1707	1826	1826	1856	1826	1737	1530	1278	1604	1900
Adj Flow Rate, veh/h	30	498	84	410	1382	110	122	392	117	26	308	31
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	9	13	5	5	3	5	11	25	42	20	0
Cap, veh/h	247	1189	196	641	2266	180	245	739	219	109	1065	459
Arrive On Green	0.03	0.29	0.29	0.23	0.48	0.48	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1810	4148	683	1739	4699	374	568	2520	747	167	3630	1564
Grp Volume(v), veh/h	30	383	199	410	977	515	191	218	222	109	225	31
Grp Sat Flow(s),veh/h/ln	1810	1608	1616	1739	1662	1750	977	1438	1420	1141	1328	1564
Q Serve(g_s), s	0.9	7.2	7.5	10.6	16.2	16.2	9.5	9.5	9.8	0.4	4.9	1.1
Cycle Q Clear(g_c), s	0.9	7.2	7.5	10.6	16.2	16.2	14.5	9.5	9.8	10.2	4.9	1.1
Prop In Lane	1.00		0.42	1.00		0.21	0.64		0.53	0.24		1.00
Lane Grp Cap(c), veh/h	247	922	463	641	1603	844	365	422	417	394	779	459
V/C Ratio(X)	0.12	0.42	0.43	0.64	0.61	0.61	0.52	0.52	0.53	0.28	0.29	0.07
Avail Cap(c_a), veh/h	601	922	463	641	1603	844	388	451	445	420	832	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	21.7	21.8	11.6	14.2	14.2	24.8	22.1	22.2	20.2	20.5	19.1
Incr Delay (d2), s/veh	0.2	1.4	2.9	4.9	1.7	3.3	1.2	1.0	1.1	0.4	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.7	1.9	1.7	2.4	2.8	1.9	1.9	1.9	0.8	0.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.0	23.0	24.6	16.5	16.0	17.5	26.0	23.1	23.3	20.6	20.7	19.2
LnGrp LOS	B	C	C	B	B	B	C	C	C	C	C	B
Approach Vol, veh/h		612			1902			631			365	
Approach Delay, s/veh		23.3			16.5			24.0			20.5	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	41.2		27.5	21.0	26.5		27.5				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	17.0	20.0		23.5	17.0	20.0		23.5				
Max Q Clear Time (g_c+I1), s	2.9	18.2		16.5	12.6	9.5		12.2				
Green Ext Time (p_c), s	0.0	1.5		2.7	0.8	3.2		2.0				

Intersection Summary	
HCM 6th Ctrl Delay	19.5
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	10	4	6	8	1	4	19	4	3	21	1
Future Vol, veh/h	11	10	4	6	8	1	4	19	4	3	21	1
Conflicting Peds, #/hr	1	0	1	1	0	1	1	0	5	5	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	71	71	71	71	71	71	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	38	0	0	0	33	33	0	5
Mvmt Flow	15	14	6	8	11	1	6	27	6	4	30	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	89	90	33	97	87	36	32	0	0	38	0	0
Stage 1	40	40	-	47	47	-	-	-	-	-	-	-
Stage 2	49	50	-	50	40	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.88	6.2	4.1	-	-	4.43	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.88	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.88	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.342	3.3	2.2	-	-	2.497	-	-
Pot Cap-1 Maneuver	901	804	1046	890	740	1042	1593	-	-	1394	-	-
Stage 1	980	866	-	972	790	-	-	-	-	-	-	-
Stage 2	969	857	-	968	796	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	883	794	1044	864	731	1037	1592	-	-	1388	-	-
Mov Cap-2 Maneuver	883	794	-	864	731	-	-	-	-	-	-	-
Stage 1	975	863	-	964	784	-	-	-	-	-	-	-
Stage 2	949	850	-	943	793	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	9.6	1.1	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1592	-	-	866	796	1388	-	-
HCM Lane V/C Ratio	0.004	-	-	0.041	0.027	0.003	-	-
HCM Control Delay (s)	7.3	0	-	9.3	9.6	7.6	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	1	0	0	0	4	0	20	0	0	27	4
Future Vol, veh/h	3	1	0	0	0	4	0	20	0	0	27	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,#	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	60	60	60	60	60	60	60	60	60
Heavy Vehicles, %	0	0	2	2	0	0	2	2	2	0	2	0
Mvmt Flow	5	2	0	0	0	7	0	33	0	0	45	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	86	82	49	83	85	33	52	0	0	33	0	0
Stage 1	49	49	-	33	33	-	-	-	-	-	-	-
Stage 2	37	33	-	50	52	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.12	6.5	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.518	4	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	905	812	1020	904	809	1046	1554	-	-	1592	-	-
Stage 1	969	858	-	983	872	-	-	-	-	-	-	-
Stage 2	984	872	-	963	856	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	900	812	1020	902	809	1046	1554	-	-	1592	-	-
Mov Cap-2 Maneuver	900	812	-	902	809	-	-	-	-	-	-	-
Stage 1	969	858	-	983	872	-	-	-	-	-	-	-
Stage 2	978	872	-	961	856	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	8.5	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1554	-	-	876	1046	1592	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.006	-	-	-
HCM Control Delay (s)	0	-	-	9.1	8.5	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	7	29	0	6	0	0	13	1
Future Vol, veh/h	1	0	0	0	7	29	0	6	0	0	13	1
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,#	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	14	24	0	0	0	0	0	0
Mvmt Flow	2	0	0	0	11	46	0	10	0	0	21	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	65	32	22	32	33	14	23	0	-	-	-	0
Stage 1	22	22	-	10	10	-	-	-	-	-	-	-
Stage 2	43	10	-	22	23	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.64	6.44	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.126	3.516	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	934	865	1061	981	837	1005	1605	-	0	0	-	-
Stage 1	1002	881	-	1016	864	-	-	-	0	0	-	-
Stage 2	976	891	-	1002	853	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	879	865	1061	981	837	1002	1605	-	-	-	-	-
Mov Cap-2 Maneuver	879	865	-	981	837	-	-	-	-	-	-	-
Stage 1	1002	881	-	1016	864	-	-	-	-	-	-	-
Stage 2	916	891	-	1002	853	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	9	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1605	-	879	965	-	-
HCM Lane V/C Ratio	-	-	0.002	0.059	-	-
HCM Control Delay (s)	0	-	9.1	9	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0.2	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	10	0	5	0	49	3	0	55	0
Future Vol, veh/h	0	0	0	10	0	5	0	49	3	0	55	0
Conflicting Peds, #/hr	5	0	1	1	0	5	22	0	13	13	0	22
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	38	38	38	38	38	38	38	38	38	38	38	38
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	26	0	13	0	129	8	0	145	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	312	317	168	292	313	151	167	0	0	150	0	0
Stage 1	167	167	-	146	146	-	-	-	-	-	-	-
Stage 2	145	150	-	146	167	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	644	602	881	664	606	901	1423	-	-	1444	-	-
Stage 1	840	764	-	861	780	-	-	-	-	-	-	-
Stage 2	863	777	-	861	764	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	620	584	864	656	588	887	1396	-	-	1428	-	-
Mov Cap-2 Maneuver	620	584	-	656	588	-	-	-	-	-	-	-
Stage 1	824	749	-	852	771	-	-	-	-	-	-	-
Stage 2	847	768	-	860	749	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	10.3	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1396	-	-	-	718	1428	-	-
HCM Lane V/C Ratio	-	-	-	-	0.055	-	-	-
HCM Control Delay (s)	0	-	-	0	10.3	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-	-

Intersection	
Intersection Delay, s/veh	6.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	0	0	7	14	0	0	10	14	0	7
Future Vol, veh/h	2	0	0	0	7	14	0	0	10	14	0	7
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	0	0	0	0	0	11	0	0	0	0	0	0
Mvmt Flow	4	0	0	0	13	25	0	0	18	25	0	13
Number of Lanes	0	1	0	0	1	0	0	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	6.8	6.5	7.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	0%	67%
Vol Thru, %	0%	0%	33%	0%
Vol Right, %	100%	0%	67%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	10	2	21	21
LT Vol	0	2	0	14
Through Vol	0	0	7	0
RT Vol	10	0	14	7
Lane Flow Rate	18	4	38	38
Geometry Grp	1	1	1	1
Degree of Util (X)	0.017	0.004	0.038	0.042
Departure Headway (Hd)	3.401	4.227	3.6	3.919
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1054	848	996	917
Service Time	1.417	2.248	1.618	1.93
HCM Lane V/C Ratio	0.017	0.005	0.038	0.041
HCM Control Delay	6.5	7.3	6.8	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0	0.1	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

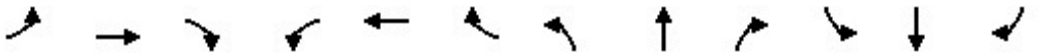
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	1022	895	1084	1022	895	-	1622	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	895	1084	1022	895	-	1622	-	-	-	-	-
Mov Cap-2 Maneuver	-	895	-	1022	895	-	-	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	1562	967	61	34
v/c Ratio	0.40	0.27	0.37	0.23
Control Delay	2.8	2.4	23.2	31.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	2.8	2.4	23.2	31.5
Queue Length 50th (m)	22.1	12.0	3.3	4.1
Queue Length 95th (m)	35.3	20.1	14.1	12.1
Internal Link Dist (m)	199.6	132.9	31.4	29.9
Turn Bay Length (m)				
Base Capacity (vph)	3949	3559	340	338
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.40	0.27	0.18	0.10

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	1374	117	35	877	16	20	1	37	23	3	7
Future Volume (veh/h)	9	1374	117	35	877	16	20	1	37	23	3	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	0.94		0.94	0.95		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1885	1856	1856	1870	1900	1870	1900	1870	1870	1870
Adj Flow Rate, veh/h	9	1431	122	36	914	17	21	1	39	24	3	7
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	3	1	3	3	2	0	2	0	2	2	2
Cap, veh/h	51	3373	286	133	3211	59	101	26	119	194	29	38
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	8	4574	388	111	4354	81	328	209	952	937	234	304
Grp Volume(v), veh/h	578	483	501	292	323	352	61	0	0	34	0	0
Grp Sat Flow(s),veh/h/ln	1839	1537	1594	1340	1537	1669	1489	0	0	1476	0	0
Q Serve(g_s), s	0.0	9.6	9.6	0.0	5.6	5.6	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.5	9.6	9.6	3.9	5.6	5.6	2.8	0.0	0.0	1.4	0.0	0.0
Prop In Lane	0.02		0.24	0.12		0.05	0.34		0.64	0.71		0.21
Lane Grp Cap(c), veh/h	1402	1133	1176	1039	1133	1231	247	0	0	261	0	0
V/C Ratio(X)	0.41	0.43	0.43	0.28	0.29	0.29	0.25	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1402	1133	1176	1039	1133	1231	372	0	0	381	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.0	4.0	4.0	3.3	3.5	3.5	31.8	0.0	0.0	31.2	0.0	0.0
Incr Delay (d2), s/veh	0.9	1.2	1.1	0.7	0.6	0.6	0.5	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.4	0.2	0.2	0.2	0.8	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.9	5.2	5.2	3.9	4.1	4.1	32.3	0.0	0.0	31.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		1562			967			61			34	
Approach Delay, s/veh		5.1			4.1			32.3			31.4	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	65.0		15.0		65.0		15.0					
Change Period (Y+Rc), s	6.0		5.0		6.0		5.0					
Max Green Setting (Gmax), s	52.0		17.0		52.0		17.0					
Max Q Clear Time (g_c+I1), s	7.6		4.8		11.6		3.4					
Green Ext Time (p_c), s	10.3		0.2		18.3		0.1					

Intersection Summary		
HCM 6th Ctrl Delay	5.7	
HCM 6th LOS	A	

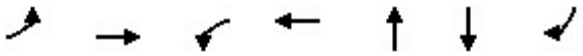
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	1299	90	5	874	0	6	1	7	7	1	24
Future Vol, veh/h	20	1299	90	5	874	0	6	1	7	7	1	24
Conflicting Peds, #/hr	18	0	19	19	0	18	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	10	-	-	10	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	3	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	20	1326	92	5	892	0	6	1	7	7	1	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	910	0	0	1345	0	0	1752	2305	682	1491	2305	464
Stage 1	-	-	-	-	-	-	1385	1385	-	920	920	-
Stage 2	-	-	-	-	-	-	367	920	-	571	1385	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	739	-	-	271	-	0	92	39	340	133	39	470
Stage 1	-	-	-	-	-	0	109	213	-	229	352	-
Stage 2	-	-	-	-	-	0	577	352	-	436	213	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	432	-	-	267	-	-	67	28	335	100	28	463
Mov Cap-2 Maneuver	-	-	-	-	-	-	67	28	-	100	28	-
Stage 1	-	-	-	-	-	-	83	162	-	174	334	-
Stage 2	-	-	-	-	-	-	525	334	-	327	162	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	0.3	45.8	24.3
HCM LOS			E	C

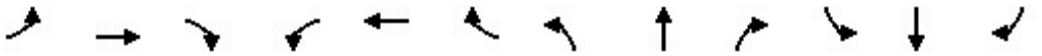
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	67	141	432	-	-	267	-	100	286
HCM Lane V/C Ratio	0.091	0.058	0.047	-	-	0.019	-	0.071	0.089
HCM Control Delay (s)	64.1	32.1	13.7	1	-	18.7	0.2	43.8	18.8
HCM Lane LOS	F	D	B	A	-	C	A	E	C
HCM 95th %tile Q(veh)	0.3	0.2	0.1	-	-	0.1	-	0.2	0.3



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	122	1294	328	928	870	426	40
v/c Ratio	0.34	0.83	0.67	0.40	0.72	0.43	0.08
Control Delay	11.2	30.6	21.6	15.3	24.3	24.9	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.2	30.6	21.6	15.3	24.3	24.9	0.3
Queue Length 50th (m)	7.5	67.9	28.8	34.2	37.1	20.5	0.0
Queue Length 95th (m)	15.1	85.6	#59.8	49.2	50.4	29.1	0.0
Internal Link Dist (m)		60.7		194.6	289.0	169.1	
Turn Bay Length (m)	40.0		95.0				20.0
Base Capacity (vph)	668	1556	491	2294	1253	1028	536
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.83	0.67	0.40	0.69	0.41	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	1093	162	318	785	115	107	443	294	59	354	39
Future Volume (veh/h)	118	1093	162	318	785	115	107	443	294	59	354	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	1.00		0.97	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1856	1885	1870	1856	1885	1885	1856	1885	1900	1796	1856
Adj Flow Rate, veh/h	122	1127	167	328	809	119	110	457	303	61	365	40
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	3	1	2	3	1	1	3	1	0	7	3
Cap, veh/h	403	1378	204	501	2021	295	178	650	403	153	874	442
Arrive On Green	0.07	0.31	0.31	0.21	0.46	0.46	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1795	4409	653	1781	4441	648	385	2214	1373	215	2975	1506
Grp Volume(v), veh/h	122	863	431	328	614	314	249	318	303	61	365	40
Grp Sat Flow(s),veh/h/ln	1795	1689	1685	1781	1689	1712	1063	1537	1373	215	1487	1506
Q Serve(g_s), s	3.6	18.9	18.9	8.1	9.7	9.8	10.9	14.7	16.0	7.2	7.9	1.5
Cycle Q Clear(g_c), s	3.6	18.9	18.9	8.1	9.7	9.8	18.8	14.7	16.0	23.2	7.9	1.5
Prop In Lane	1.00		0.39	1.00		0.38	0.44		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	1055	527	501	1537	779	377	451	403	153	874	442
V/C Ratio(X)	0.30	0.82	0.82	0.65	0.40	0.40	0.66	0.70	0.75	0.40	0.42	0.09
Avail Cap(c_a), veh/h	771	1055	527	501	1537	779	377	451	403	153	874	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	25.4	25.4	14.2	14.5	14.5	27.6	25.2	25.6	36.1	22.7	20.5
Incr Delay (d2), s/veh	0.4	7.0	13.3	6.5	0.8	1.6	4.2	4.9	7.7	1.7	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.3	6.2	1.7	1.7	1.9	3.2	3.7	3.9	0.9	1.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.8	32.4	38.7	20.7	15.3	16.1	31.8	30.1	33.3	37.8	23.1	20.6
LnGrp LOS	B	C	D	C	B	B	C	C	C	D	C	C
Approach Vol, veh/h		1416			1256			870			466	
Approach Delay, s/veh		33.0			16.9			31.7			24.8	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	41.4		29.0	21.0	30.0		29.0				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	22.0	20.0		23.5	17.0	25.0		23.5				
Max Q Clear Time (g_c+I1), s	5.6	11.8		20.8	10.1	20.9		25.2				
Green Ext Time (p_c), s	0.4	4.3		1.6	0.8	3.1		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	26.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	76	20	1	12	2	17	10	4	1	18	11
Future Vol, veh/h	35	76	20	1	12	2	17	10	4	1	18	11
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	5	5	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	0	1	2	0	25	0	0	2	0	0	0	0
Mvmt Flow	47	103	27	1	16	3	23	14	5	1	24	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	111	107	38	170	112	24	42	0	0	24	0	0
Stage 1	37	37	-	68	68	-	-	-	-	-	-	-
Stage 2	74	70	-	102	44	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.51	6.22	7.1	6.75	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.51	-	6.1	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.51	-	6.1	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.009	3.318	3.5	4.225	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	872	785	1034	798	737	1058	1580	-	-	1604	-	-
Stage 1	984	866	-	947	795	-	-	-	-	-	-	-
Stage 2	940	839	-	909	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	841	767	1029	685	720	1052	1576	-	-	1597	-	-
Mov Cap-2 Maneuver	841	767	-	685	720	-	-	-	-	-	-	-
Stage 1	966	863	-	929	780	-	-	-	-	-	-	-
Stage 2	903	823	-	777	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	9.9	4	0.2
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1576	-	-	818	749	1597	-	-
HCM Lane V/C Ratio	0.015	-	-	0.216	0.027	0.001	-	-
HCM Control Delay (s)	7.3	0	-	10.6	9.9	7.3	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	5	0	26	0	5	33	1
Future Vol, veh/h	0	0	0	0	0	5	0	26	0	5	33	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	0	0	2	2	0	20	2	2	2	0	2	0
Mvmt Flow	0	0	0	0	0	7	0	38	0	7	48	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	105	101	49	101	101	38	49	0	0	38	0	0
Stage 1	63	63	-	38	38	-	-	-	-	-	-	-
Stage 2	42	38	-	63	63	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.12	6.5	6.4	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.518	4	3.48	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	880	793	1020	880	793	985	1558	-	-	1585	-	-
Stage 1	953	846	-	977	867	-	-	-	-	-	-	-
Stage 2	978	867	-	948	846	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	870	789	1020	876	789	985	1558	-	-	1585	-	-
Mov Cap-2 Maneuver	870	789	-	876	789	-	-	-	-	-	-	-
Stage 1	953	842	-	977	867	-	-	-	-	-	-	-
Stage 2	971	867	-	943	842	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.7	0	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1558	-	-	-	985	1585	-	-
HCM Lane V/C Ratio	-	-	-	-	0.007	0.005	-	-
HCM Control Delay (s)	0	-	-	0	8.7	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	4	0	2	35	0	21	0	0	28	1
Future Vol, veh/h	3	0	4	0	2	35	0	21	0	0	28	1
Conflicting Peds, #/hr	8	0	0	0	0	8	10	0	6	6	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	33	0	0	0	50	6	0	0	0	0	0	0
Mvmt Flow	4	0	6	0	3	50	0	30	0	0	40	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	116	81	51	74	81	38	51	0	-	-	-	0
Stage 1	51	51	-	30	30	-	-	-	-	-	-	-
Stage 2	65	30	-	44	51	-	-	-	-	-	-	-
Critical Hdwy	7.43	6.5	6.2	7.1	7	6.26	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.43	5.5	-	6.1	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.43	5.5	-	6.1	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.797	4	3.3	3.5	4.45	3.354	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	793	813	1023	921	726	1023	1568	-	0	0	-	-
Stage 1	889	856	-	992	784	-	-	-	0	0	-	-
Stage 2	873	874	-	975	767	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	741	806	1014	915	720	1016	1555	-	-	-	-	-
Mov Cap-2 Maneuver	741	806	-	915	720	-	-	-	-	-	-	-
Stage 1	882	849	-	992	784	-	-	-	-	-	-	-
Stage 2	821	874	-	970	761	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	8.8	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1555	-	876	994	-	-
HCM Lane V/C Ratio	-	-	0.011	0.053	-	-
HCM Control Delay (s)	0	-	9.2	8.8	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0.2	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	3	0	6	0	52	3	17	138	0
Future Vol, veh/h	0	0	0	3	0	6	0	52	3	17	138	0
Conflicting Peds, #/hr	0	0	1	1	0	0	18	0	19	19	0	18
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	73	73	73	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	6	0	0
Mvmt Flow	0	0	0	4	0	8	0	71	4	23	189	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	330	347	208	328	345	92	207	0	0	94	0	0
Stage 1	253	253	-	92	92	-	-	-	-	-	-	-
Stage 2	77	94	-	236	253	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.16	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	627	580	837	629	581	971	1376	-	-	1475	-	-
Stage 1	756	701	-	920	823	-	-	-	-	-	-	-
Stage 2	937	821	-	772	701	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	604	552	824	610	553	955	1355	-	-	1451	-	-
Mov Cap-2 Maneuver	604	552	-	610	553	-	-	-	-	-	-	-
Stage 1	745	678	-	905	810	-	-	-	-	-	-	-
Stage 2	929	808	-	757	678	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.5	0	0.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1355	-	-	-	804	1451	-	-
HCM Lane V/C Ratio	-	-	-	-	0.015	0.016	-	-
HCM Control Delay (s)	0	-	-	0	9.5	7.5	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	15	0	0	10	13	0	0	22	92	0	4
Future Vol, veh/h	1	15	0	0	10	13	0	0	22	92	0	4
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	0	0	0	0	0	11	0	0	0	0	0	0
Mvmt Flow	1	21	0	0	14	19	0	0	31	131	0	6
Number of Lanes	0	1	0	0	1	0	0	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.4	7.1	6.7	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	6%	0%	96%
Vol Thru, %	0%	94%	43%	0%
Vol Right, %	100%	0%	57%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	16	23	96
LT Vol	0	1	0	92
Through Vol	0	15	10	0
RT Vol	22	0	13	4
Lane Flow Rate	31	23	33	137
Geometry Grp	1	1	1	1
Degree of Util (X)	0.031	0.027	0.035	0.159
Departure Headway (Hd)	3.499	4.23	3.87	4.186
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1013	835	911	856
Service Time	1.556	2.314	1.953	2.214
HCM Lane V/C Ratio	0.031	0.028	0.036	0.16
HCM Control Delay	6.7	7.4	7.1	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.1	0.6

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	1022	895	1084	1022	895	-	1622	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	895	1084	1022	895	-	1622	-	-	-	-	-
Mov Cap-2 Maneuver	-	895	-	1022	895	-	-	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	625	1629	62	30
v/c Ratio	0.17	0.43	0.38	0.16
Control Delay	2.3	3.3	26.6	8.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	2.3	3.3	26.6	8.6
Queue Length 50th (m)	6.9	25.2	4.9	0.0
Queue Length 95th (m)	12.6	41.1	15.5	5.2
Internal Link Dist (m)	199.6	132.9	31.4	29.9
Turn Bay Length (m)				
Base Capacity (vph)	3694	3818	352	395
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.17	0.43	0.18	0.08

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	537	24	33	1416	17	30	2	24	17	0	10
Future Volume (veh/h)	1	537	24	33	1416	17	30	2	24	17	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.96		0.94	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1752	1841	1900	1841	1870	1900	1870	1767	1870	1870	1870
Adj Flow Rate, veh/h	1	597	27	37	1573	19	33	2	27	19	0	11
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	10	4	0	4	2	0	2	9	2	2	2
Cap, veh/h	49	3407	153	96	3621	43	135	25	66	161	16	58
Arrive On Green	0.75	0.75	0.75	0.75	0.75	0.75	0.10	0.10	0.10	0.10	0.00	0.10
Sat Flow, veh/h	1	4542	204	60	4827	58	593	240	643	804	160	558
Grp Volume(v), veh/h	230	190	205	581	502	547	62	0	0	30	0	0
Grp Sat Flow(s),veh/h/ln	1749	1451	1547	1759	1524	1662	1476	0	0	1522	0	0
Q Serve(g_s), s	0.0	2.8	2.9	0.0	9.2	9.2	1.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.8	2.8	2.9	8.6	9.2	9.2	2.7	0.0	0.0	1.2	0.0	0.0
Prop In Lane	0.00		0.13	0.06		0.03	0.53		0.44	0.63		0.37
Lane Grp Cap(c), veh/h	1360	1088	1160	1370	1143	1246	226	0	0	235	0	0
V/C Ratio(X)	0.17	0.17	0.18	0.42	0.44	0.44	0.27	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1360	1088	1160	1370	1143	1246	420	0	0	426	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.7	2.7	2.7	3.4	3.5	3.5	31.3	0.0	0.0	30.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.3	1.0	1.2	1.1	0.7	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.4	0.4	0.4	0.7	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.0	3.0	3.0	4.4	4.7	4.6	32.0	0.0	0.0	30.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		625			1629			62			30	
Approach Delay, s/veh		3.0			4.6			32.0			30.9	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	62.3	12.7	62.3	12.7
Change Period (Y+Rc), s	6.0	5.0	6.0	5.0
Max Green Setting (Gmax), s	46.0	18.0	46.0	18.0
Max Q Clear Time (g_c+I1), s	11.2	4.7	4.9	3.2
Green Ext Time (p_c), s	18.1	0.2	5.4	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.2
HCM 6th LOS	A

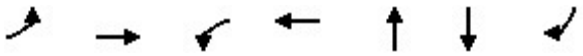
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	540	11	10	1416	0	9	0	6	1	0	12
Future Vol, veh/h	6	540	11	10	1416	0	9	0	6	1	0	12
Conflicting Peds, #/hr	9	0	28	28	0	9	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	10	-	-	10	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	17	9	18	0	4	0	0	0	0	0	0	0
Mvmt Flow	7	593	12	11	1556	0	10	0	7	1	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1565	0	0	621	0	0	1280	2222	326	1839	2222	788
Stage 1	-	-	-	-	-	-	635	635	-	1587	1587	-
Stage 2	-	-	-	-	-	-	645	1587	-	252	635	-
Critical Hdwy	5.64	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.27	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	178	-	-	601	-	0	177	44	576	82	44	290
Stage 1	-	-	-	-	-	0	359	476	-	78	170	-
Stage 2	-	-	-	-	-	0	393	170	-	675	476	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	177	-	-	587	-	-	141	35	562	69	35	288
Mov Cap-2 Maneuver	-	-	-	-	-	-	141	35	-	69	35	-
Stage 1	-	-	-	-	-	-	330	436	-	73	145	-
Stage 2	-	-	-	-	-	-	323	145	-	627	436	-

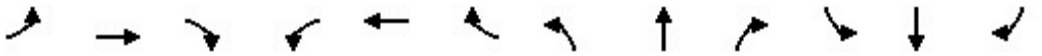
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.6	24	21.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	141	562	177	-	-	587	-	69	288
HCM Lane V/C Ratio	0.07	0.012	0.037	-	-	0.019	-	0.016	0.046
HCM Control Delay (s)	32.4	11.5	26.1	0.5	-	11.2	0.5	58	18.1
HCM Lane LOS	D	B	D	A	-	B	A	F	C
HCM 95th %tile Q(veh)	0.2	0	0.1	-	-	0.1	-	0	0.1



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	31	597	420	1529	647	342	32
v/c Ratio	0.14	0.49	0.69	0.60	0.60	0.32	0.06
Control Delay	10.6	23.5	16.1	14.5	22.7	21.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.6	23.5	16.1	14.5	22.7	21.6	0.2
Queue Length 50th (m)	1.8	25.5	31.5	47.2	26.5	14.4	0.0
Queue Length 95th (m)	5.1	36.1	55.9	79.9	38.2	22.0	0.0
Internal Link Dist (m)		60.7		194.6	289.0	169.1	
Turn Bay Length (m)	40.0		95.0				20.0
Base Capacity (vph)	228	1220	609	2540	1091	1079	564
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.49	0.69	0.60	0.59	0.32	0.06

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	475	80	391	1317	105	116	374	112	25	293	30
Future Volume (veh/h)	29	475	80	391	1317	105	116	374	112	25	293	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.98	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1767	1707	1826	1826	1856	1826	1737	1530	1278	1604	1900
Adj Flow Rate, veh/h	31	511	86	420	1416	113	125	402	120	27	315	32
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	9	13	5	5	3	5	11	25	42	20	0
Cap, veh/h	242	1078	177	658	2262	181	244	736	218	109	1051	459
Arrive On Green	0.03	0.26	0.26	0.25	0.48	0.48	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1810	4147	681	1739	4698	375	563	2507	744	167	3582	1564
Grp Volume(v), veh/h	31	393	204	420	1002	527	193	225	229	109	233	32
Grp Sat Flow(s),veh/h/ln	1810	1608	1613	1739	1662	1749	955	1438	1421	1092	1328	1564
Q Serve(g_s), s	0.9	7.7	8.0	11.0	16.8	16.8	9.9	9.8	10.2	0.4	5.1	1.1
Cycle Q Clear(g_c), s	0.9	7.7	8.0	11.0	16.8	16.8	15.0	9.8	10.2	10.6	5.1	1.1
Prop In Lane	1.00		0.42	1.00		0.21	0.65		0.52	0.25		1.00
Lane Grp Cap(c), veh/h	242	836	419	658	1600	843	359	422	417	380	779	459
V/C Ratio(X)	0.13	0.47	0.49	0.64	0.63	0.63	0.54	0.53	0.55	0.29	0.30	0.07
Avail Cap(c_a), veh/h	305	836	419	658	1600	843	361	424	419	382	783	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	23.4	23.5	11.9	14.4	14.4	25.1	22.2	22.3	20.2	20.5	19.1
Incr Delay (d2), s/veh	0.2	1.9	4.0	4.7	1.9	3.5	1.6	1.3	1.5	0.4	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.9	2.2	1.7	2.5	3.0	2.0	2.0	2.0	0.8	0.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	25.3	27.5	16.6	16.3	17.9	26.7	23.5	23.9	20.6	20.7	19.2
LnGrp LOS	B	C	C	B	B	B	C	C	C	C	C	B
Approach Vol, veh/h		628			1949			647			374	
Approach Delay, s/veh		25.7			16.8			24.6			20.6	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	41.1		27.5	23.0	24.5		27.5				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	5.0	33.4		22.1	19.0	19.4		22.1				
Max Q Clear Time (g_c+I1), s	2.9	18.8		17.0	13.0	10.0		12.6				
Green Ext Time (p_c), s	0.0	10.0		2.1	1.1	3.1		1.9				

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	10	4	6	8	1	4	19	4	3	22	1
Future Vol, veh/h	11	10	4	6	8	1	4	19	4	3	22	1
Conflicting Peds, #/hr	1	0	1	1	0	1	1	0	5	5	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	71	71	71	71	71	71	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	38	0	0	0	33	33	0	5
Mvmt Flow	15	14	6	8	11	1	6	27	6	4	31	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	90	91	34	98	88	36	33	0	0	38	0	0
Stage 1	41	41	-	47	47	-	-	-	-	-	-	-
Stage 2	49	50	-	51	41	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.88	6.2	4.1	-	-	4.43	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.88	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.88	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.342	3.3	2.2	-	-	2.497	-	-
Pot Cap-1 Maneuver	900	803	1045	889	739	1042	1592	-	-	1394	-	-
Stage 1	979	865	-	972	790	-	-	-	-	-	-	-
Stage 2	969	857	-	967	795	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	882	793	1043	863	730	1037	1591	-	-	1388	-	-
Mov Cap-2 Maneuver	882	793	-	863	730	-	-	-	-	-	-	-
Stage 1	974	862	-	964	784	-	-	-	-	-	-	-
Stage 2	949	850	-	942	792	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	9.7	1.1	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1591	-	-	865	795	1388	-	-
HCM Lane V/C Ratio	0.004	-	-	0.041	0.027	0.003	-	-
HCM Control Delay (s)	7.3	0	-	9.3	9.7	7.6	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	1	0	0	0	4	0	21	0	0	28	4
Future Vol, veh/h	3	1	0	0	0	4	0	21	0	0	28	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,#	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	60	60	60	60	60	60	60	60	60
Heavy Vehicles, %	0	0	2	2	0	0	2	2	2	0	2	0
Mvmt Flow	5	2	0	0	0	7	0	35	0	0	47	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	90	86	51	87	89	35	54	0	0	35	0	0
Stage 1	51	51	-	35	35	-	-	-	-	-	-	-
Stage 2	39	35	-	52	54	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.12	6.5	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.518	4	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	900	808	1017	899	805	1044	1551	-	-	1589	-	-
Stage 1	967	856	-	981	870	-	-	-	-	-	-	-
Stage 2	981	870	-	961	854	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	895	808	1017	897	805	1044	1551	-	-	1589	-	-
Mov Cap-2 Maneuver	895	808	-	897	805	-	-	-	-	-	-	-
Stage 1	967	856	-	981	870	-	-	-	-	-	-	-
Stage 2	975	870	-	959	854	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	8.5	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1551	-	-	872	1044	1589	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.006	-	-	-
HCM Control Delay (s)	0	-	-	9.2	8.5	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	7	30	0	6	0	0	13	1
Future Vol, veh/h	1	0	0	0	7	30	0	6	0	0	13	1
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,#	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	14	24	0	0	0	0	0	0
Mvmt Flow	2	0	0	0	11	48	0	10	0	0	21	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	66	32	22	32	33	14	23	0	-	-	-	0
Stage 1	22	22	-	10	10	-	-	-	-	-	-	-
Stage 2	44	10	-	22	23	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.64	6.44	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.126	3.516	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	932	865	1061	981	837	1005	1605	-	0	0	-	-
Stage 1	1002	881	-	1016	864	-	-	-	0	0	-	-
Stage 2	975	891	-	1002	853	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	876	865	1061	981	837	1002	1605	-	-	-	-	-
Mov Cap-2 Maneuver	876	865	-	981	837	-	-	-	-	-	-	-
Stage 1	1002	881	-	1016	864	-	-	-	-	-	-	-
Stage 2	914	891	-	1002	853	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	9	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1605	-	876	966	-	-
HCM Lane V/C Ratio	-	-	0.002	0.061	-	-
HCM Control Delay (s)	0	-	9.1	9	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0.2	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	10	0	5	0	50	3	0	56	0
Future Vol, veh/h	0	0	0	10	0	5	0	50	3	0	56	0
Conflicting Peds, #/hr	5	0	1	1	0	5	22	0	13	13	0	22
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	38	38	38	38	38	38	38	38	38	38	38	38
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	26	0	13	0	132	8	0	147	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	317	322	170	297	318	154	169	0	0	153	0	0
Stage 1	169	169	-	149	149	-	-	-	-	-	-	-
Stage 2	148	153	-	148	169	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	640	599	879	659	602	897	1421	-	-	1440	-	-
Stage 1	838	763	-	858	778	-	-	-	-	-	-	-
Stage 2	859	775	-	859	763	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	616	581	862	651	584	883	1395	-	-	1424	-	-
Mov Cap-2 Maneuver	616	581	-	651	584	-	-	-	-	-	-	-
Stage 1	822	749	-	849	769	-	-	-	-	-	-	-
Stage 2	843	766	-	858	749	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	10.3	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1395	-	-	-	713	1424	-	-
HCM Lane V/C Ratio	-	-	-	-	0.055	-	-	-
HCM Control Delay (s)	0	-	-	0	10.3	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-	-

Intersection	
Intersection Delay, s/veh	6.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	0	0	7	14	0	0	10	14	0	7
Future Vol, veh/h	2	0	0	0	7	14	0	0	10	14	0	7
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	0	0	0	0	0	11	0	0	0	0	0	0
Mvmt Flow	4	0	0	0	13	25	0	0	18	25	0	13
Number of Lanes	0	1	0	0	1	0	0	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	6.8	6.5	7.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	0%	67%
Vol Thru, %	0%	0%	33%	0%
Vol Right, %	100%	0%	67%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	10	2	21	21
LT Vol	0	2	0	14
Through Vol	0	0	7	0
RT Vol	10	0	14	7
Lane Flow Rate	18	4	38	38
Geometry Grp	1	1	1	1
Degree of Util (X)	0.017	0.004	0.038	0.042
Departure Headway (Hd)	3.401	4.227	3.6	3.919
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1054	848	996	917
Service Time	1.417	2.248	1.618	1.93
HCM Lane V/C Ratio	0.017	0.005	0.038	0.041
HCM Control Delay	6.5	7.3	6.8	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0	0.1	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

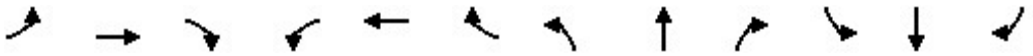
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	1022	895	1084	1022	895	-	1622	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	895	1084	1022	895	-	1622	-	-	-	-	-
Mov Cap-2 Maneuver	-	895	-	1022	895	-	-	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	1601	991	63	35
v/c Ratio	0.43	0.30	0.37	0.24
Control Delay	3.3	2.9	23.2	32.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.3	2.9	23.2	32.0
Queue Length 50th (m)	23.1	12.6	3.5	4.3
Queue Length 95th (m)	36.9	21.0	14.6	12.5
Internal Link Dist (m)	199.6	132.9	31.4	29.9
Turn Bay Length (m)				
Base Capacity (vph)	3754	3350	358	347
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.43	0.30	0.18	0.10

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	1408	120	36	899	16	21	1	38	24	3	7
Future Volume (veh/h)	9	1408	120	36	899	16	21	1	38	24	3	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	0.94		0.94	0.95		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1885	1856	1856	1870	1900	1870	1900	1870	1870	1870
Adj Flow Rate, veh/h	9	1467	125	38	936	17	22	1	40	25	3	7
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	3	1	3	3	2	0	2	0	2	2	2
Cap, veh/h	51	3370	286	135	3177	57	103	26	119	197	29	37
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	8	4574	388	115	4313	78	336	207	945	954	227	295
Grp Volume(v), veh/h	593	495	514	293	334	364	63	0	0	35	0	0
Grp Sat Flow(s),veh/h/ln	1839	1537	1594	1299	1537	1670	1488	0	0	1476	0	0
Q Serve(g_s), s	0.0	10.0	10.0	0.0	5.9	5.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.9	10.0	10.0	3.9	5.9	5.9	2.9	0.0	0.0	1.4	0.0	0.0
Prop In Lane	0.02		0.24	0.13		0.05	0.35		0.63	0.71		0.20
Lane Grp Cap(c), veh/h	1400	1132	1174	1008	1132	1230	248	0	0	263	0	0
V/C Ratio(X)	0.42	0.44	0.44	0.29	0.30	0.30	0.25	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1400	1132	1174	1008	1132	1230	390	0	0	399	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.1	4.1	4.1	3.3	3.5	3.5	31.8	0.0	0.0	31.2	0.0	0.0
Incr Delay (d2), s/veh	0.9	1.2	1.2	0.7	0.7	0.6	0.5	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.4	0.2	0.2	0.2	0.8	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.0	5.3	5.3	4.0	4.2	4.2	32.3	0.0	0.0	31.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		1601			991			63			35	
Approach Delay, s/veh		5.2			4.1			32.3			31.4	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	64.9	15.1	64.9	15.1
Change Period (Y+Rc), s	6.0	5.0	6.0	5.0
Max Green Setting (Gmax), s	51.0	18.0	51.0	18.0
Max Q Clear Time (g_c+I1), s	7.9	4.9	12.0	3.4
Green Ext Time (p_c), s	10.7	0.2	18.7	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.8
HCM 6th LOS	A

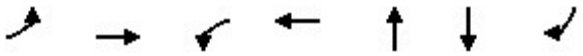
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	1331	92	5	896	0	6	1	7	7	1	25
Future Vol, veh/h	21	1331	92	5	896	0	6	1	7	7	1	25
Conflicting Peds, #/hr	18	0	19	19	0	18	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	10	-	-	10	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	3	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	21	1358	94	5	914	0	6	1	7	7	1	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	932	0	0	1377	0	0	1795	2361	698	1528	2361	475
Stage 1	-	-	-	-	-	-	1419	1419	-	942	942	-
Stage 2	-	-	-	-	-	-	376	942	-	586	1419	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	428	-	-	261	-	0	87	36	332	126	36	463
Stage 1	-	-	-	-	-	0	103	205	-	221	344	-
Stage 2	-	-	-	-	-	0	570	344	-	427	205	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	421	-	-	257	-	-	60	24	327	90	24	456
Mov Cap-2 Maneuver	-	-	-	-	-	-	60	24	-	90	24	-
Stage 1	-	-	-	-	-	-	74	147	-	158	325	-
Stage 2	-	-	-	-	-	-	515	325	-	302	147	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.4	50.9	25.9
HCM LOS			F	D

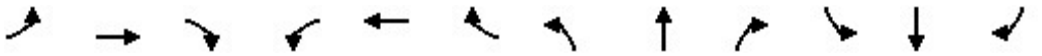
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	60	127	421	-	-	257	-	90	269
HCM Lane V/C Ratio	0.102	0.064	0.051	-	-	0.02	-	0.079	0.099
HCM Control Delay (s)	71.7	35.3	14	1.2	-	19.3	0.3	48.4	19.8
HCM Lane LOS	F	E	B	A	-	C	A	E	C
HCM 95th %tile Q(veh)	0.3	0.2	0.2	-	-	0.1	-	0.3	0.3



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	125	1326	336	952	891	436	41
v/c Ratio	0.38	0.79	0.74	0.39	0.75	0.45	0.08
Control Delay	12.1	27.4	26.6	13.4	25.9	25.7	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.1	27.4	26.6	13.4	25.9	25.7	0.3
Queue Length 50th (m)	7.6	67.4	32.0	33.5	38.8	21.1	0.0
Queue Length 95th (m)	14.8	84.7	#70.9	43.8	53.5	30.4	0.0
Internal Link Dist (m)		60.7		194.6	289.0	169.1	
Turn Bay Length (m)	40.0		95.0				20.0
Base Capacity (vph)	326	1678	456	2433	1199	973	519
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.79	0.74	0.39	0.74	0.45	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	1120	166	326	805	118	110	454	301	60	363	40
Future Volume (veh/h)	121	1120	166	326	805	118	110	454	301	60	363	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	1.00		0.97	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1856	1885	1870	1856	1885	1885	1856	1885	1900	1796	1856
Adj Flow Rate, veh/h	125	1155	171	336	830	122	113	468	310	62	374	41
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	3	1	2	3	1	1	3	1	0	7	3
Cap, veh/h	406	1489	220	489	2096	306	171	605	386	137	837	423
Arrive On Green	0.07	0.34	0.34	0.20	0.47	0.47	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1795	4412	653	1781	4442	648	374	2152	1372	168	2975	1504
Grp Volume(v), veh/h	125	884	442	336	630	322	247	334	310	62	374	41
Grp Sat Flow(s),veh/h/ln	1795	1689	1688	1781	1689	1713	990	1537	1372	168	1487	1504
Q Serve(g_s), s	3.6	18.8	18.8	8.1	9.7	9.8	11.8	16.0	16.8	5.7	8.3	1.6
Cycle Q Clear(g_c), s	3.6	18.8	18.8	8.1	9.7	9.8	20.1	16.0	16.8	22.5	8.3	1.6
Prop In Lane	1.00		0.39	1.00		0.38	0.46		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	406	1140	570	489	1594	809	344	432	386	137	837	423
V/C Ratio(X)	0.31	0.78	0.78	0.69	0.40	0.40	0.72	0.77	0.80	0.45	0.45	0.10
Avail Cap(c_a), veh/h	423	1140	570	489	1594	809	344	432	386	137	837	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	23.8	23.8	14.2	13.7	13.7	29.3	26.4	26.7	37.8	23.6	21.2
Incr Delay (d2), s/veh	0.4	5.2	10.0	7.7	0.7	1.5	7.0	8.4	11.7	2.3	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.9	5.6	1.8	1.6	1.8	3.6	4.4	4.5	1.0	1.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	29.0	33.7	21.9	14.4	15.2	36.4	34.8	38.4	40.1	24.0	21.3
LnGrp LOS	B	C	C	C	B	B	D	C	D	D	C	C
Approach Vol, veh/h		1451			1288			891			477	
Approach Delay, s/veh		29.3			16.6			36.5			25.9	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	42.8		28.0	20.0	32.0		28.0				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	5.0	37.0		22.5	16.0	27.0		22.5				
Max Q Clear Time (g_c+I1), s	5.6	11.8		22.1	10.1	20.8		24.5				
Green Ext Time (p_c), s	0.0	8.4		0.3	0.8	4.5		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	26.5
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	36	78	21	1	12	2	17	10	4	1	18	11
Future Vol, veh/h	36	78	21	1	12	2	17	10	4	1	18	11
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	5	5	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	0	1	2	0	25	0	0	2	0	0	0	0
Mvmt Flow	49	105	28	1	16	3	23	14	5	1	24	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	111	107	38	171	112	24	42	0	0	24	0	0
Stage 1	37	37	-	68	68	-	-	-	-	-	-	-
Stage 2	74	70	-	103	44	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.51	6.22	7.1	6.75	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.51	-	6.1	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.51	-	6.1	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.009	3.318	3.5	4.225	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	872	785	1034	797	737	1058	1580	-	-	1604	-	-
Stage 1	984	866	-	947	795	-	-	-	-	-	-	-
Stage 2	940	839	-	908	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	841	767	1029	681	720	1052	1576	-	-	1597	-	-
Mov Cap-2 Maneuver	841	767	-	681	720	-	-	-	-	-	-	-
Stage 1	966	863	-	929	780	-	-	-	-	-	-	-
Stage 2	903	823	-	772	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	9.9	4	0.2
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1576	-	-	819	749	1597	-	-
HCM Lane V/C Ratio	0.015	-	-	0.223	0.027	0.001	-	-
HCM Control Delay (s)	7.3	0	-	10.7	9.9	7.3	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	5	0	27	0	5	34	1
Future Vol, veh/h	0	0	0	0	0	5	0	27	0	5	34	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	0	0	2	2	0	20	2	2	2	0	2	0
Mvmt Flow	0	0	0	0	0	7	0	39	0	7	49	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	107	103	50	103	103	39	50	0	0	39	0	0
Stage 1	64	64	-	39	39	-	-	-	-	-	-	-
Stage 2	43	39	-	64	64	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.12	6.5	6.4	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.518	4	3.48	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	877	791	1018	877	791	983	1557	-	-	1584	-	-
Stage 1	952	846	-	976	866	-	-	-	-	-	-	-
Stage 2	976	866	-	947	846	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	867	787	1018	873	787	983	1557	-	-	1584	-	-
Mov Cap-2 Maneuver	867	787	-	873	787	-	-	-	-	-	-	-
Stage 1	952	842	-	976	866	-	-	-	-	-	-	-
Stage 2	969	866	-	942	842	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.7	0	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1557	-	-	-	983	1584	-	-
HCM Lane V/C Ratio	-	-	-	-	0.007	0.005	-	-
HCM Control Delay (s)	0	-	-	0	8.7	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	4	0	2	36	0	22	0	0	29	1
Future Vol, veh/h	3	0	4	0	2	36	0	22	0	0	29	1
Conflicting Peds, #/hr	8	0	0	0	0	8	10	0	6	6	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	33	0	0	0	50	6	0	0	0	0	0	0
Mvmt Flow	4	0	6	0	3	51	0	31	0	0	41	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	118	83	52	76	83	39	52	0	-	-	-	0
Stage 1	52	52	-	31	31	-	-	-	-	-	-	-
Stage 2	66	31	-	45	52	-	-	-	-	-	-	-
Critical Hdwy	7.43	6.5	6.2	7.1	7	6.26	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.43	5.5	-	6.1	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.43	5.5	-	6.1	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.797	4	3.3	3.5	4.45	3.354	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	790	811	1021	919	724	1021	1567	-	0	0	-	-
Stage 1	888	856	-	991	783	-	-	-	0	0	-	-
Stage 2	872	873	-	974	766	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	736	805	1012	913	718	1014	1554	-	-	-	-	-
Mov Cap-2 Maneuver	736	805	-	913	718	-	-	-	-	-	-	-
Stage 1	881	849	-	991	783	-	-	-	-	-	-	-
Stage 2	819	873	-	969	760	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	8.8	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1554	-	872	992	-	-
HCM Lane V/C Ratio	-	-	0.011	0.055	-	-
HCM Control Delay (s)	0	-	9.2	8.8	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0.2	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	3	0	6	0	53	3	17	141	0
Future Vol, veh/h	0	0	0	3	0	6	0	53	3	17	141	0
Conflicting Peds, #/hr	0	0	1	1	0	0	18	0	19	19	0	18
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	73	73	73	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	6	0	0
Mvmt Flow	0	0	0	4	0	8	0	73	4	23	193	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	336	353	212	334	351	94	211	0	0	96	0	0
Stage 1	257	257	-	94	94	-	-	-	-	-	-	-
Stage 2	79	96	-	240	257	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.16	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	622	575	833	623	577	968	1372	-	-	1473	-	-
Stage 1	752	699	-	918	821	-	-	-	-	-	-	-
Stage 2	935	819	-	768	699	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	599	547	820	604	549	952	1351	-	-	1449	-	-
Mov Cap-2 Maneuver	599	547	-	604	549	-	-	-	-	-	-	-
Stage 1	741	676	-	903	808	-	-	-	-	-	-	-
Stage 2	927	806	-	754	676	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.6	0	0.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1351	-	-	-	799	1449	-	-
HCM Lane V/C Ratio	-	-	-	-	0.015	0.016	-	-
HCM Control Delay (s)	0	-	-	0	9.6	7.5	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	15	0	0	10	13	0	0	23	94	0	4
Future Vol, veh/h	1	15	0	0	10	13	0	0	23	94	0	4
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	0	0	0	0	0	11	0	0	0	0	0	0
Mvmt Flow	1	21	0	0	14	19	0	0	33	134	0	6
Number of Lanes	0	1	0	0	1	0	0	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.4	7.1	6.7	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	6%	0%	96%
Vol Thru, %	0%	94%	43%	0%
Vol Right, %	100%	0%	57%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	16	23	98
LT Vol	0	1	0	94
Through Vol	0	15	10	0
RT Vol	23	0	13	4
Lane Flow Rate	33	23	33	140
Geometry Grp	1	1	1	1
Degree of Util (X)	0.032	0.027	0.035	0.163
Departure Headway (Hd)	3.5	4.236	3.875	4.188
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1012	833	909	855
Service Time	1.56	2.323	1.963	2.216
HCM Lane V/C Ratio	0.033	0.028	0.036	0.164
HCM Control Delay	6.7	7.4	7.1	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.1	0.6

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

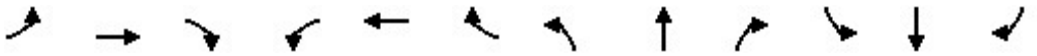
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	1022	895	1084	1022	895	-	1622	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	895	1084	1022	895	-	1622	-	-	-	-	-
Mov Cap-2 Maneuver	-	895	-	1022	895	-	-	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	639	1669	62	32
v/c Ratio	0.17	0.44	0.38	0.17
Control Delay	2.3	3.4	26.6	9.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	2.3	3.4	26.6	9.4
Queue Length 50th (m)	7.2	26.2	4.9	0.0
Queue Length 95th (m)	12.9	42.8	15.5	5.6
Internal Link Dist (m)	199.6	132.9	31.4	29.9
Turn Bay Length (m)				
Base Capacity (vph)	3694	3813	351	395
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.17	0.44	0.18	0.08

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	550	24	34	1450	18	30	2	24	18	0	11
Future Volume (veh/h)	1	550	24	34	1450	18	30	2	24	18	0	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.96		0.94	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1752	1841	1900	1841	1870	1900	1870	1767	1870	1870	1870
Adj Flow Rate, veh/h	1	611	27	38	1611	20	33	2	27	20	0	12
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	10	4	0	4	2	0	2	9	2	2	2
Cap, veh/h	49	3409	150	97	3616	44	135	25	67	160	17	59
Arrive On Green	0.75	0.75	0.75	0.75	0.75	0.75	0.10	0.10	0.10	0.10	0.00	0.10
Sat Flow, veh/h	1	4547	199	61	4822	59	593	240	643	789	162	571
Grp Volume(v), veh/h	235	195	210	595	514	560	62	0	0	32	0	0
Grp Sat Flow(s),veh/h/ln	1749	1451	1548	1757	1524	1661	1475	0	0	1522	0	0
Q Serve(g_s), s	0.0	2.9	2.9	0.0	9.5	9.6	1.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.9	2.9	2.9	9.0	9.5	9.6	2.7	0.0	0.0	1.3	0.0	0.0
Prop In Lane	0.00		0.13	0.06		0.04	0.53		0.44	0.62		0.37
Lane Grp Cap(c), veh/h	1359	1088	1161	1368	1143	1246	226	0	0	236	0	0
V/C Ratio(X)	0.17	0.18	0.18	0.43	0.45	0.45	0.27	0.00	0.00	0.14	0.00	0.00
Avail Cap(c_a), veh/h	1359	1088	1161	1368	1143	1246	420	0	0	426	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.7	2.7	2.7	3.5	3.5	3.5	31.3	0.0	0.0	30.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.3	1.0	1.3	1.2	0.6	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.4	0.4	0.4	0.7	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.0	3.1	3.1	4.5	4.8	4.7	32.0	0.0	0.0	31.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		639			1669			62			32	
Approach Delay, s/veh		3.0			4.7			32.0			31.0	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	62.2		12.8		62.2		12.8					
Change Period (Y+Rc), s	6.0		5.0		6.0		5.0					
Max Green Setting (Gmax), s	46.0		18.0		46.0		18.0					
Max Q Clear Time (g_c+I1), s	11.6		4.7		4.9		3.3					
Green Ext Time (p_c), s	18.6		0.2		5.5		0.1					

Intersection Summary												
HCM 6th Ctrl Delay		5.3										
HCM 6th LOS		A										

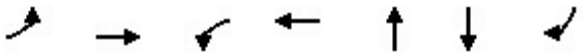
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	553	12	11	1450	0	9	0	6	1	0	13
Future Vol, veh/h	6	553	12	11	1450	0	9	0	6	1	0	13
Conflicting Peds, #/hr	9	0	28	28	0	9	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	10	-	-	10	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	17	9	18	0	4	0	0	0	0	0	0	0
Mvmt Flow	7	608	13	12	1593	0	10	0	7	1	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1602	0	0	636	0	0	1312	2276	333	1884	2276	807
Stage 1	-	-	-	-	-	-	650	650	-	1626	1626	-
Stage 2	-	-	-	-	-	-	662	1626	-	258	650	-
Critical Hdwy	5.64	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.27	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	170	-	-	591	-	0	170	41	570	77	41	282
Stage 1	-	-	-	-	-	0	350	468	-	73	162	-
Stage 2	-	-	-	-	-	0	384	162	-	670	468	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	169	-	-	577	-	-	129	30	556	62	30	280
Mov Cap-2 Maneuver	-	-	-	-	-	-	129	30	-	62	30	-
Stage 1	-	-	-	-	-	-	320	428	-	68	132	-
Stage 2	-	-	-	-	-	-	298	132	-	620	428	-

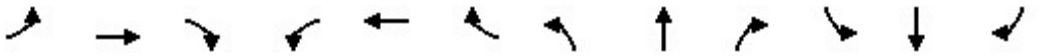
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.8	25.8	21.8
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	129	556	169	-	-	577	-	62	280
HCM Lane V/C Ratio	0.077	0.012	0.039	-	-	0.021	-	0.018	0.051
HCM Control Delay (s)	35.2	11.6	27.2	0.6	-	11.4	0.7	64.1	18.5
HCM Lane LOS	E	B	D	A	-	B	A	F	C
HCM 95th %tile Q(veh)	0.2	0	0.1	-	-	0.1	-	0.1	0.2



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	31	611	430	1566	663	350	32
v/c Ratio	0.14	0.50	0.71	0.62	0.61	0.33	0.06
Control Delay	10.6	23.6	17.2	14.7	23.1	21.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.6	23.6	17.2	14.7	23.1	21.7	0.2
Queue Length 50th (m)	1.8	26.2	32.6	48.9	27.5	14.7	0.0
Queue Length 95th (m)	5.1	36.9	59.3	82.6	39.4	22.4	0.0
Internal Link Dist (m)		60.7		194.6	289.0	169.1	
Turn Bay Length (m)	40.0		95.0				20.0
Base Capacity (vph)	228	1220	605	2540	1088	1079	564
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.50	0.71	0.62	0.61	0.32	0.06

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	486	82	400	1349	107	119	383	114	25	300	30
Future Volume (veh/h)	29	486	82	400	1349	107	119	383	114	25	300	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.98	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1767	1707	1826	1826	1856	1826	1737	1530	1278	1604	1900
Adj Flow Rate, veh/h	31	523	88	430	1451	115	128	412	123	27	323	32
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	9	13	5	5	3	5	11	25	42	20	0
Cap, veh/h	236	1078	177	654	2264	179	243	732	217	107	1048	459
Arrive On Green	0.03	0.26	0.26	0.25	0.48	0.48	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1810	4147	682	1739	4701	372	558	2496	741	159	3573	1564
Grp Volume(v), veh/h	31	403	208	430	1026	540	195	232	236	110	240	32
Grp Sat Flow(s),veh/h/ln	1810	1608	1613	1739	1662	1750	936	1438	1421	1077	1328	1564
Q Serve(g_s), s	0.9	7.9	8.2	11.3	17.4	17.4	10.3	10.2	10.5	0.5	5.3	1.1
Cycle Q Clear(g_c), s	0.9	7.9	8.2	11.3	17.4	17.4	15.6	10.2	10.5	11.0	5.3	1.1
Prop In Lane	1.00		0.42	1.00		0.21	0.65		0.52	0.25		1.00
Lane Grp Cap(c), veh/h	236	836	419	654	1600	843	354	422	417	376	779	459
V/C Ratio(X)	0.13	0.48	0.50	0.66	0.64	0.64	0.55	0.55	0.57	0.29	0.31	0.07
Avail Cap(c_a), veh/h	300	836	419	654	1600	843	355	424	419	377	783	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	23.5	23.6	12.1	14.6	14.6	25.4	22.3	22.5	20.3	20.6	19.1
Incr Delay (d2), s/veh	0.2	2.0	4.2	5.1	2.0	3.7	1.8	1.5	1.8	0.4	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.9	2.3	1.8	2.5	3.1	2.0	2.0	2.1	0.8	0.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	25.5	27.7	17.2	16.6	18.3	27.2	23.8	24.2	20.7	20.8	19.2
LnGrp LOS	B	C	C	B	B	B	C	C	C	C	C	B
Approach Vol, veh/h		642			1996			663			382	
Approach Delay, s/veh		25.9			17.2			25.0			20.6	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	41.1		27.5	23.0	24.5		27.5				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	5.0	33.4		22.1	19.0	19.4		22.1				
Max Q Clear Time (g_c+I1), s	2.9	19.4		17.6	13.3	10.2		13.0				
Green Ext Time (p_c), s	0.0	9.9		2.0	1.1	3.1		1.9				

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	11	4	6	8	1	4	20	4	3	22	1
Future Vol, veh/h	12	11	4	6	8	1	4	20	4	3	22	1
Conflicting Peds, #/hr	1	0	1	1	0	1	1	0	5	5	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	71	71	71	71	71	71	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	38	0	0	0	33	33	0	5
Mvmt Flow	17	15	6	8	11	1	6	28	6	4	31	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	91	92	34	99	89	37	33	0	0	39	0	0
Stage 1	41	41	-	48	48	-	-	-	-	-	-	-
Stage 2	50	51	-	51	41	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.88	6.2	4.1	-	-	4.43	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.88	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.88	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.342	3.3	2.2	-	-	2.497	-	-
Pot Cap-1 Maneuver	898	802	1045	888	738	1041	1592	-	-	1393	-	-
Stage 1	979	865	-	971	789	-	-	-	-	-	-	-
Stage 2	968	856	-	967	795	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	880	792	1043	861	729	1036	1591	-	-	1387	-	-
Mov Cap-2 Maneuver	880	792	-	861	729	-	-	-	-	-	-	-
Stage 1	974	862	-	963	783	-	-	-	-	-	-	-
Stage 2	948	849	-	941	792	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	9.7	1	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1591	-	-	861	793	1387	-	-
HCM Lane V/C Ratio	0.004	-	-	0.044	0.027	0.003	-	-
HCM Control Delay (s)	7.3	0	-	9.4	9.7	7.6	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	1	0	0	0	4	0	21	0	0	28	4
Future Vol, veh/h	3	1	0	0	0	4	0	21	0	0	28	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	60	60	60	60	60	60	60	60	60
Heavy Vehicles, %	0	0	2	2	0	0	2	2	2	0	2	0
Mvmt Flow	5	2	0	0	0	7	0	35	0	0	47	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	90	86	51	87	89	35	54	0	0	35	0	0
Stage 1	51	51	-	35	35	-	-	-	-	-	-	-
Stage 2	39	35	-	52	54	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.12	6.5	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.518	4	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	900	808	1017	899	805	1044	1551	-	-	1589	-	-
Stage 1	967	856	-	981	870	-	-	-	-	-	-	-
Stage 2	981	870	-	961	854	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	895	808	1017	897	805	1044	1551	-	-	1589	-	-
Mov Cap-2 Maneuver	895	808	-	897	805	-	-	-	-	-	-	-
Stage 1	967	856	-	981	870	-	-	-	-	-	-	-
Stage 2	975	870	-	959	854	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	8.5	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1551	-	-	872	1044	1589	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.006	-	-	-
HCM Control Delay (s)	0	-	-	9.2	8.5	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	7	30	0	6	0	0	14	1
Future Vol, veh/h	1	0	0	0	7	30	0	6	0	0	14	1
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,#	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	14	24	0	0	0	0	0	0
Mvmt Flow	2	0	0	0	11	48	0	10	0	0	22	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	67	33	23	33	34	14	24	0	-	-	-	0
Stage 1	23	23	-	10	10	-	-	-	-	-	-	-
Stage 2	44	10	-	23	24	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.64	6.44	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.126	3.516	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	931	864	1060	979	836	1005	1604	-	0	0	-	-
Stage 1	1000	880	-	1016	864	-	-	-	0	0	-	-
Stage 2	975	891	-	1000	852	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	875	864	1060	979	836	1002	1604	-	-	-	-	-
Mov Cap-2 Maneuver	875	864	-	979	836	-	-	-	-	-	-	-
Stage 1	1000	880	-	1016	864	-	-	-	-	-	-	-
Stage 2	914	891	-	1000	852	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	9	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1604	-	875	966	-	-
HCM Lane V/C Ratio	-	-	0.002	0.061	-	-
HCM Control Delay (s)	0	-	9.1	9	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0.2	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	11	0	5	0	51	3	0	58	0
Future Vol, veh/h	0	0	0	11	0	5	0	51	3	0	58	0
Conflicting Peds, #/hr	5	0	1	1	0	5	22	0	13	13	0	22
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	38	38	38	38	38	38	38	38	38	38	38	38
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	29	0	13	0	134	8	0	153	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	325	330	176	305	326	156	175	0	0	155	0	0
Stage 1	175	175	-	151	151	-	-	-	-	-	-	-
Stage 2	150	155	-	154	175	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	632	592	872	651	596	895	1414	-	-	1438	-	-
Stage 1	832	758	-	856	776	-	-	-	-	-	-	-
Stage 2	857	773	-	853	758	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	609	574	855	643	578	881	1388	-	-	1422	-	-
Mov Cap-2 Maneuver	609	574	-	643	578	-	-	-	-	-	-	-
Stage 1	816	744	-	847	767	-	-	-	-	-	-	-
Stage 2	841	764	-	852	744	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	10.5	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1388	-	-	-	702	1422	-	-
HCM Lane V/C Ratio	-	-	-	-	0.06	-	-	-
HCM Control Delay (s)	0	-	-	0	10.5	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-	-

Intersection	
Intersection Delay, s/veh	6.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	0	0	7	15	0	0	11	15	0	7
Future Vol, veh/h	2	0	0	0	7	15	0	0	11	15	0	7
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	0	0	0	0	0	11	0	0	0	0	0	0
Mvmt Flow	4	0	0	0	13	27	0	0	20	27	0	13
Number of Lanes	0	1	0	0	1	0	0	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	6.8	6.5	7.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	0%	68%
Vol Thru, %	0%	0%	32%	0%
Vol Right, %	100%	0%	68%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	2	22	22
LT Vol	0	2	0	15
Through Vol	0	0	7	0
RT Vol	11	0	15	7
Lane Flow Rate	20	4	40	40
Geometry Grp	1	1	1	1
Degree of Util (X)	0.019	0.004	0.04	0.044
Departure Headway (Hd)	3.406	4.236	3.598	3.937
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1052	846	996	912
Service Time	1.423	2.258	1.617	1.948
HCM Lane V/C Ratio	0.019	0.005	0.04	0.044
HCM Control Delay	6.5	7.3	6.8	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0	0.1	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

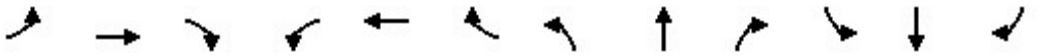
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	1022	895	1084	1022	895	-	1622	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	895	1084	1022	895	-	1622	-	-	-	-	-
Mov Cap-2 Maneuver	-	895	-	1022	895	-	-	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	1640	1016	64	35
v/c Ratio	0.44	0.31	0.38	0.24
Control Delay	3.4	2.9	23.7	31.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.4	2.9	23.7	31.9
Queue Length 50th (m)	24.1	13.1	3.8	4.3
Queue Length 95th (m)	38.7	21.9	14.8	12.4
Internal Link Dist (m)	199.6	132.9	31.4	29.9
Turn Bay Length (m)				
Base Capacity (vph)	3750	3326	358	346
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.44	0.31	0.18	0.10

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	1443	123	37	921	17	21	1	39	24	3	7
Future Volume (veh/h)	9	1443	123	37	921	17	21	1	39	24	3	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	0.94		0.94	0.95		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1885	1856	1856	1870	1900	1870	1900	1870	1870	1870
Adj Flow Rate, veh/h	9	1503	128	39	959	18	22	1	41	25	3	7
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	3	1	3	3	2	0	2	0	2	2	2
Cap, veh/h	51	3368	285	135	3156	59	102	26	121	198	29	37
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	7	4575	388	114	4287	80	328	207	954	955	227	296
Grp Volume(v), veh/h	607	507	526	296	345	375	64	0	0	35	0	0
Grp Sat Flow(s),veh/h/ln	1839	1537	1594	1276	1537	1669	1489	0	0	1478	0	0
Q Serve(g_s), s	0.0	10.4	10.4	0.0	6.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.3	10.4	10.4	4.0	6.1	6.1	2.9	0.0	0.0	1.4	0.0	0.0
Prop In Lane	0.01		0.24	0.13		0.05	0.34		0.64	0.71		0.20
Lane Grp Cap(c), veh/h	1399	1131	1174	990	1131	1229	249	0	0	264	0	0
V/C Ratio(X)	0.43	0.45	0.45	0.30	0.30	0.31	0.26	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1399	1131	1174	990	1131	1229	390	0	0	399	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.1	4.2	4.2	3.3	3.6	3.6	31.8	0.0	0.0	31.1	0.0	0.0
Incr Delay (d2), s/veh	1.0	1.3	1.2	0.8	0.7	0.6	0.5	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.4	0.2	0.2	0.2	0.8	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.1	5.4	5.4	4.1	4.3	4.2	32.3	0.0	0.0	31.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		1640			1016			64			35	
Approach Delay, s/veh		5.3			4.2			32.3			31.4	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	64.9	15.1	64.9	15.1
Change Period (Y+Rc), s	6.0	5.0	6.0	5.0
Max Green Setting (Gmax), s	51.0	18.0	51.0	18.0
Max Q Clear Time (g_c+I1), s	8.1	4.9	12.4	3.4
Green Ext Time (p_c), s	11.1	0.2	19.3	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.9
HCM 6th LOS	A

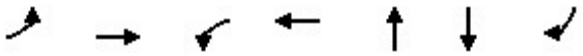
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	1364	95	5	918	0	6	1	7	7	1	25
Future Vol, veh/h	21	1364	95	5	918	0	6	1	7	7	1	25
Conflicting Peds, #/hr	18	0	19	19	0	18	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	10	-	-	10	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	3	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	21	1392	97	5	937	0	6	1	7	7	1	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	955	0	0	1411	0	0	1838	2418	715	1564	2418	487
Stage 1	-	-	-	-	-	-	1453	1453	-	965	965	-
Stage 2	-	-	-	-	-	-	385	965	-	599	1453	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	718	-	-	251	-	0	82	33	324	120	33	455
Stage 1	-	-	-	-	-	0	97	197	-	213	336	-
Stage 2	-	-	-	-	-	0	563	336	-	419	197	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	712	-	-	247	-	-	54	21	319	82	21	448
Mov Cap-2 Maneuver	-	-	-	-	-	-	54	21	-	82	21	-
Stage 1	-	-	-	-	-	-	65	133	-	144	317	-
Stage 2	-	-	-	-	-	-	507	317	-	279	133	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.4	56.4	27.8
HCM LOS			F	D

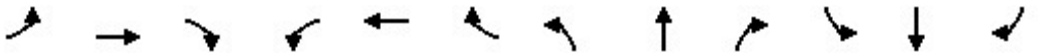
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	54	115	412	-	-	247	-	82	251
HCM Lane V/C Ratio	0.113	0.071	0.052	-	-	0.021	-	0.087	0.106
HCM Control Delay (s)	80	38.7	14.2	1.4	-	19.9	0.3	53.1	21
HCM Lane LOS	F	E	B	A	-	C	A	F	C
HCM 95th %tile Q(veh)	0.4	0.2	0.2	-	-	0.1	-	0.3	0.3



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	128	1359	344	974	913	448	42
v/c Ratio	0.40	0.81	0.75	0.40	0.77	0.47	0.08
Control Delay	12.4	28.1	27.7	13.5	26.7	25.9	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.4	28.1	27.7	13.5	26.7	25.9	0.3
Queue Length 50th (m)	7.8	69.7	33.4	34.6	40.2	21.8	0.0
Queue Length 95th (m)	15.1	87.5	#74.2	44.9	55.2	31.3	0.0
Internal Link Dist (m)		60.7		194.6	289.0	169.1	
Turn Bay Length (m)	40.0		95.0				20.0
Base Capacity (vph)	322	1678	457	2433	1195	963	519
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.81	0.75	0.40	0.76	0.47	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	1148	170	334	824	121	112	465	309	62	372	41
Future Volume (veh/h)	124	1148	170	334	824	121	112	465	309	62	372	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	1.00		0.97	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1856	1885	1870	1856	1885	1885	1856	1885	1900	1796	1856
Adj Flow Rate, veh/h	128	1184	175	344	849	125	115	479	319	64	384	42
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	3	1	2	3	1	1	3	1	0	7	3
Cap, veh/h	404	1490	220	484	2090	306	169	599	386	131	837	423
Arrive On Green	0.07	0.34	0.34	0.20	0.47	0.47	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1795	4413	652	1781	4440	650	368	2129	1372	147	2975	1504
Grp Volume(v), veh/h	128	906	453	344	644	330	248	346	319	64	384	42
Grp Sat Flow(s),veh/h/ln	1795	1689	1688	1781	1689	1713	960	1537	1372	147	1487	1504
Q Serve(g_s), s	3.7	19.4	19.4	8.4	10.0	10.1	12.3	16.7	17.4	5.1	8.5	1.7
Cycle Q Clear(g_c), s	3.7	19.4	19.4	8.4	10.0	10.1	20.8	16.7	17.4	22.5	8.5	1.7
Prop In Lane	1.00		0.39	1.00		0.38	0.46		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	404	1140	570	484	1590	806	336	432	386	131	837	423
V/C Ratio(X)	0.32	0.79	0.80	0.71	0.41	0.41	0.74	0.80	0.83	0.49	0.46	0.10
Avail Cap(c_a), veh/h	419	1140	570	484	1590	806	336	432	386	131	837	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	24.0	24.0	14.3	13.8	13.9	29.8	26.7	26.9	38.4	23.7	21.3
Incr Delay (d2), s/veh	0.4	5.8	11.0	8.6	0.8	1.5	8.4	10.2	13.8	2.8	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.1	5.9	1.9	1.7	1.9	3.7	4.8	4.8	1.0	1.8	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	29.8	35.0	22.9	14.6	15.4	38.2	36.9	40.7	41.1	24.1	21.4
LnGrp LOS	B	C	C	C	B	B	D	D	D	D	C	C
Approach Vol, veh/h		1487			1318			913			490	
Approach Delay, s/veh		30.1			17.0			38.6			26.1	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	42.7		28.0	20.0	32.0		28.0				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	6.0	37.0		22.5	16.0	27.0		22.5				
Max Q Clear Time (g_c+I1), s	5.7	12.1		22.8	10.4	21.4		24.5				
Green Ext Time (p_c), s	0.0	8.6		0.0	0.8	4.2		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	27.4
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	37	80	21	1	13	2	18	11	4	1	19	12
Future Vol, veh/h	37	80	21	1	13	2	18	11	4	1	19	12
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	5	5	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	0	1	2	0	25	0	0	2	0	0	0	0
Mvmt Flow	50	108	28	1	18	3	24	15	5	1	26	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	117	112	40	178	118	25	45	0	0	25	0	0
Stage 1	39	39	-	71	71	-	-	-	-	-	-	-
Stage 2	78	73	-	107	47	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.51	6.22	7.1	6.75	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.51	-	6.1	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.51	-	6.1	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.009	3.318	3.5	4.225	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	864	780	1031	789	731	1057	1576	-	-	1603	-	-
Stage 1	981	864	-	944	793	-	-	-	-	-	-	-
Stage 2	936	836	-	903	812	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	832	762	1026	671	714	1051	1572	-	-	1596	-	-
Mov Cap-2 Maneuver	832	762	-	671	714	-	-	-	-	-	-	-
Stage 1	963	861	-	926	778	-	-	-	-	-	-	-
Stage 2	897	820	-	765	809	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	10	4	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1572	-	-	812	741	1596	-	-
HCM Lane V/C Ratio	0.015	-	-	0.23	0.029	0.001	-	-
HCM Control Delay (s)	7.3	0	-	10.8	10	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	5	0	27	0	5	35	1
Future Vol, veh/h	0	0	0	0	0	5	0	27	0	5	35	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	0	0	2	2	0	20	2	2	2	0	2	0
Mvmt Flow	0	0	0	0	0	7	0	39	0	7	51	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	109	105	52	105	105	39	52	0	0	39	0	0
Stage 1	66	66	-	39	39	-	-	-	-	-	-	-
Stage 2	43	39	-	66	66	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.12	6.5	6.4	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.518	4	3.48	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	874	789	1016	875	789	983	1554	-	-	1584	-	-
Stage 1	950	844	-	976	866	-	-	-	-	-	-	-
Stage 2	976	866	-	945	844	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	864	785	1016	872	785	983	1554	-	-	1584	-	-
Mov Cap-2 Maneuver	864	785	-	872	785	-	-	-	-	-	-	-
Stage 1	950	840	-	976	866	-	-	-	-	-	-	-
Stage 2	969	866	-	940	840	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.7	0	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1554	-	-	-	983	1584	-	-
HCM Lane V/C Ratio	-	-	-	-	0.007	0.005	-	-
HCM Control Delay (s)	0	-	-	0	8.7	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	4	0	2	37	0	22	0	0	29	1
Future Vol, veh/h	3	0	4	0	2	37	0	22	0	0	29	1
Conflicting Peds, #/hr	8	0	0	0	0	8	10	0	6	6	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	33	0	0	0	50	6	0	0	0	0	0	0
Mvmt Flow	4	0	6	0	3	53	0	31	0	0	41	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	119	83	52	76	83	39	52	0	-	-	-	0
Stage 1	52	52	-	31	31	-	-	-	-	-	-	-
Stage 2	67	31	-	45	52	-	-	-	-	-	-	-
Critical Hdwy	7.43	6.5	6.2	7.1	7	6.26	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.43	5.5	-	6.1	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.43	5.5	-	6.1	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.797	4	3.3	3.5	4.45	3.354	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	789	811	1021	919	724	1021	1567	-	0	0	-	-
Stage 1	888	856	-	991	783	-	-	-	0	0	-	-
Stage 2	871	873	-	974	766	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	735	805	1012	913	718	1014	1554	-	-	-	-	-
Mov Cap-2 Maneuver	735	805	-	913	718	-	-	-	-	-	-	-
Stage 1	881	849	-	991	783	-	-	-	-	-	-	-
Stage 2	817	873	-	969	760	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	8.8	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1554	-	871	993	-	-
HCM Lane V/C Ratio	-	-	0.011	0.056	-	-
HCM Control Delay (s)	0	-	9.2	8.8	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0.2	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	3	0	6	0	55	3	18	145	0
Future Vol, veh/h	0	0	0	3	0	6	0	55	3	18	145	0
Conflicting Peds, #/hr	0	0	1	1	0	0	18	0	19	19	0	18
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	73	73	73	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	6	0	0
Mvmt Flow	0	0	0	4	0	8	0	75	4	25	199	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	348	365	218	346	363	96	217	0	0	98	0	0
Stage 1	267	267	-	96	96	-	-	-	-	-	-	-
Stage 2	81	98	-	250	267	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.16	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	610	566	827	612	568	966	1365	-	-	1470	-	-
Stage 1	743	692	-	916	819	-	-	-	-	-	-	-
Stage 2	932	818	-	759	692	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	587	538	814	593	540	950	1344	-	-	1446	-	-
Mov Cap-2 Maneuver	587	538	-	593	540	-	-	-	-	-	-	-
Stage 1	732	668	-	901	806	-	-	-	-	-	-	-
Stage 2	924	805	-	744	668	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.6	0	0.8
HCM LOS		A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1344	-	-	-	791	1446	-	-
HCM Lane V/C Ratio	-	-	-	-	0.016	0.017	-	-
HCM Control Delay (s)	0	-	-	0	9.6	7.5	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	16	0	0	11	14	0	0	23	97	0	4
Future Vol, veh/h	1	16	0	0	11	14	0	0	23	97	0	4
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	0	0	0	0	0	11	0	0	0	0	0	0
Mvmt Flow	1	23	0	0	16	20	0	0	33	139	0	6
Number of Lanes	0	1	0	0	1	0	0	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.5	7.1	6.7	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	6%	0%	96%
Vol Thru, %	0%	94%	44%	0%
Vol Right, %	100%	0%	56%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	17	25	101
LT Vol	0	1	0	97
Through Vol	0	16	11	0
RT Vol	23	0	14	4
Lane Flow Rate	33	24	36	144
Geometry Grp	1	1	1	1
Degree of Util (X)	0.032	0.029	0.039	0.168
Departure Headway (Hd)	3.514	4.246	3.888	4.199
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1007	831	905	853
Service Time	1.576	2.336	1.978	2.229
HCM Lane V/C Ratio	0.033	0.029	0.04	0.169
HCM Control Delay	6.7	7.5	7.1	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.1	0.6

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	1022	895	1084	1022	895	-	1622	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	895	1084	1022	895	-	1622	-	-	-	-	-
Mov Cap-2 Maneuver	-	895	-	1022	895	-	-	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	632	1647	99	66
v/c Ratio	0.19	0.47	0.48	0.33
Control Delay	3.2	4.7	27.1	22.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.2	4.7	27.1	22.3
Queue Length 50th (m)	7.9	28.9	8.4	4.8
Queue Length 95th (m)	14.9	49.2	21.0	15.0
Internal Link Dist (m)	199.6	132.9	31.4	29.9
Turn Bay Length (m)				
Base Capacity (vph)	3381	3503	376	367
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.19	0.47	0.26	0.18

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	538	27	39	1419	24	51	3	35	30	2	28
Future Volume (veh/h)	4	538	27	39	1419	24	51	3	35	30	2	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.97		0.95	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1752	1841	1900	1841	1870	1900	1870	1767	1870	1870	1870
Adj Flow Rate, veh/h	4	598	30	43	1577	27	57	3	39	33	2	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	10	4	0	4	2	0	2	9	2	2	2
Cap, veh/h	53	3270	162	105	3474	59	164	25	74	149	28	92
Arrive On Green	0.73	0.73	0.73	0.73	0.73	0.73	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	6	4487	223	73	4767	81	713	198	592	615	222	741
Grp Volume(v), veh/h	231	193	208	584	509	554	99	0	0	66	0	0
Grp Sat Flow(s),veh/h/ln	1723	1451	1542	1741	1524	1656	1502	0	0	1577	0	0
Q Serve(g_s), s	0.0	3.1	3.2	0.0	10.2	10.2	1.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	3.1	3.2	9.5	10.2	10.2	4.3	0.0	0.0	2.6	0.0	0.0
Prop In Lane	0.02		0.14	0.07		0.05	0.58		0.39	0.50		0.47
Lane Grp Cap(c), veh/h	1304	1057	1124	1320	1111	1207	263	0	0	269	0	0
V/C Ratio(X)	0.18	0.18	0.18	0.44	0.46	0.46	0.38	0.00	0.00	0.25	0.00	0.00
Avail Cap(c_a), veh/h	1304	1057	1124	1320	1111	1207	425	0	0	433	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.2	3.2	3.2	4.0	4.1	4.1	30.5	0.0	0.0	29.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.4	1.1	1.4	1.3	0.9	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.4	0.4	0.4	1.1	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.5	3.6	3.6	5.1	5.5	5.4	31.4	0.0	0.0	30.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		632			1647			99			66	
Approach Delay, s/veh		3.5			5.3			31.4			30.4	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.7	14.3	60.7	14.3
Change Period (Y+Rc), s	6.0	5.0	6.0	5.0
Max Green Setting (Gmax), s	46.0	18.0	46.0	18.0
Max Q Clear Time (g_c+I1), s	12.2	6.3	5.2	4.6
Green Ext Time (p_c), s	18.2	0.4	5.5	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

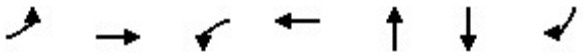
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	564	12	22	1429	0	13	0	28	13	0	12
Future Vol, veh/h	6	564	12	22	1429	0	13	0	28	13	0	12
Conflicting Peds, #/hr	9	0	28	28	0	9	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	-	10	-	-	10	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	17	9	18	0	4	0	0	0	0	0	0	0
Mvmt Flow	7	620	13	24	1570	0	14	0	31	14	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1579	0	0	661	0	0	1339	2289	339	1890	2302	795
Stage 1	-	-	-	-	-	-	662	662	-	1627	1627	-
Stage 2	-	-	-	-	-	-	677	1627	-	263	675	-
Critical Hdwy	5.64	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.27	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	175	-	-	576	-	0	164	40	565	76	39	287
Stage 1	-	-	-	-	-	0	344	462	-	73	162	-
Stage 2	-	-	-	-	-	0	376	162	-	665	456	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	174	-	-	562	-	-	108	24	551	50	24	285
Mov Cap-2 Maneuver	-	-	-	-	-	-	108	24	-	50	24	-
Stage 1	-	-	-	-	-	-	315	423	-	68	107	-
Stage 2	-	-	-	-	-	-	238	107	-	588	417	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	1.4	21.9	62.6
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	108	551	174	-	-	562	-	50	285
HCM Lane V/C Ratio	0.132	0.056	0.038	-	-	0.043	-	0.286	0.046
HCM Control Delay (s)	43.4	11.9	26.5	0.5	-	11.7	1.2	103.6	18.2
HCM Lane LOS	E	B	D	A	-	B	A	F	C
HCM 95th %tile Q(veh)	0.4	0.2	0.1	-	-	0.1	-	1	0.1



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	47	642	420	1551	655	342	37
v/c Ratio	0.21	0.52	0.71	0.64	0.60	0.32	0.07
Control Delay	11.7	23.5	17.3	16.2	23.0	21.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.7	23.5	17.3	16.2	23.0	21.6	0.2
Queue Length 50th (m)	2.7	27.1	31.5	64.8	27.1	14.4	0.0
Queue Length 95th (m)	6.9	38.3	59.4	81.5	39.0	22.0	0.0
Internal Link Dist (m)		60.7		194.6	289.0	169.1	
Turn Bay Length (m)	40.0		95.0				20.0
Base Capacity (vph)	228	1224	595	2422	1086	1078	564
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.52	0.71	0.64	0.60	0.32	0.07

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	496	101	391	1337	105	124	374	112	25	293	34
Future Volume (veh/h)	44	496	101	391	1337	105	124	374	112	25	293	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.98	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1767	1707	1826	1826	1856	1826	1737	1530	1278	1604	1900
Adj Flow Rate, veh/h	47	533	109	420	1438	113	133	402	120	27	315	37
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	9	13	5	5	3	5	11	25	42	20	0
Cap, veh/h	252	1041	207	645	2219	174	252	723	215	109	1046	459
Arrive On Green	0.04	0.26	0.26	0.25	0.47	0.47	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1810	4004	798	1739	4704	370	583	2463	732	165	3565	1564
Grp Volume(v), veh/h	47	425	217	420	1016	535	193	229	233	107	235	37
Grp Sat Flow(s),veh/h/ln	1810	1608	1587	1739	1662	1750	917	1438	1423	1074	1328	1564
Q Serve(g_s), s	1.4	8.5	8.8	11.0	17.4	17.4	10.6	10.0	10.4	0.4	5.1	1.3
Cycle Q Clear(g_c), s	1.4	8.5	8.8	11.0	17.4	17.4	15.7	10.0	10.4	10.8	5.1	1.3
Prop In Lane	1.00		0.50	1.00		0.21	0.69		0.51	0.25		1.00
Lane Grp Cap(c), veh/h	252	836	413	645	1568	826	350	422	418	375	779	459
V/C Ratio(X)	0.19	0.51	0.53	0.65	0.65	0.65	0.55	0.54	0.56	0.29	0.30	0.08
Avail Cap(c_a), veh/h	297	836	413	645	1568	826	351	424	419	377	783	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	23.7	23.8	12.2	15.1	15.1	25.6	22.3	22.4	20.2	20.5	19.2
Incr Delay (d2), s/veh	0.4	2.2	4.7	5.0	2.1	3.9	1.8	1.4	1.7	0.4	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.1	2.4	1.8	2.7	3.3	2.0	2.0	2.1	0.8	0.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	25.9	28.5	17.2	17.2	19.0	27.4	23.7	24.1	20.6	20.8	19.3
LnGrp LOS	B	C	C	B	B	B	C	C	C	C	C	B
Approach Vol, veh/h		689			1971			655			379	
Approach Delay, s/veh		26.2			17.7			24.9			20.6	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	40.4		27.5	23.0	24.5		27.5				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	5.0	33.4		22.1	19.0	19.4		22.1				
Max Q Clear Time (g_c+I1), s	3.4	19.4		17.7	13.0	10.8		12.8				
Green Ext Time (p_c), s	0.0	9.8		1.9	1.1	3.1		1.9				

Intersection Summary	
HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	10	4	6	8	1	4	19	4	3	22	1
Future Vol, veh/h	11	10	4	6	8	1	4	19	4	3	22	1
Conflicting Peds, #/hr	1	0	1	1	0	1	1	0	5	5	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,#	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	71	71	71	71	71	71	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	38	0	0	0	33	33	0	5
Mvmt Flow	15	14	6	8	11	1	6	27	6	4	31	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	90	91	34	98	88	36	33	0	0	38	0	0
Stage 1	41	41	-	47	47	-	-	-	-	-	-	-
Stage 2	49	50	-	51	41	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.88	6.2	4.1	-	-	4.43	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.88	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.88	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.342	3.3	2.2	-	-	2.497	-	-
Pot Cap-1 Maneuver	900	803	1045	889	739	1042	1592	-	-	1394	-	-
Stage 1	979	865	-	972	790	-	-	-	-	-	-	-
Stage 2	969	857	-	967	795	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	882	793	1043	863	730	1037	1591	-	-	1388	-	-
Mov Cap-2 Maneuver	882	793	-	863	730	-	-	-	-	-	-	-
Stage 1	974	862	-	964	784	-	-	-	-	-	-	-
Stage 2	949	850	-	942	792	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	9.7	1.1	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1591	-	-	865	795	1388	-	-
HCM Lane V/C Ratio	0.004	-	-	0.041	0.027	0.003	-	-
HCM Control Delay (s)	7.3	0	-	9.3	9.7	7.6	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	1	0	32	0	4	0	21	10	0	28	4
Future Vol, veh/h	3	1	0	32	0	4	0	21	10	0	28	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	60	60	60	60	60	60	60	60	60
Heavy Vehicles, %	0	0	2	2	0	0	2	2	2	0	2	0
Mvmt Flow	5	2	0	53	0	7	0	35	17	0	47	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	98	103	51	96	98	44	54	0	0	52	0	0
Stage 1	51	51	-	44	44	-	-	-	-	-	-	-
Stage 2	47	52	-	52	54	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.12	6.5	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.518	4	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	889	791	1017	887	796	1032	1551	-	-	1567	-	-
Stage 1	967	856	-	970	862	-	-	-	-	-	-	-
Stage 2	972	856	-	961	854	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	884	791	1017	885	796	1032	1551	-	-	1567	-	-
Mov Cap-2 Maneuver	884	791	-	885	796	-	-	-	-	-	-	-
Stage 1	967	856	-	970	862	-	-	-	-	-	-	-
Stage 2	966	856	-	959	854	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	9.3	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1551	-	-	859	899	1567	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.067	-	-	-
HCM Control Delay (s)	0	-	-	9.2	9.3	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	12	0	14	30	0	6	0	0	13	1
Future Vol, veh/h	1	0	12	0	14	30	0	6	0	0	13	1
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	14	24	0	0	0	0	0	0
Mvmt Flow	2	0	19	0	22	48	0	10	0	0	21	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	71	32	22	42	33	14	23	0	-	-	-	0
Stage 1	22	22	-	10	10	-	-	-	-	-	-	-
Stage 2	49	10	-	32	23	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.64	6.44	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.126	3.516	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	925	865	1061	966	837	1005	1605	-	0	0	-	-
Stage 1	1002	881	-	1016	864	-	-	-	0	0	-	-
Stage 2	969	891	-	990	853	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	860	865	1061	949	837	1002	1605	-	-	-	-	-
Mov Cap-2 Maneuver	860	865	-	949	837	-	-	-	-	-	-	-
Stage 1	1002	881	-	1016	864	-	-	-	-	-	-	-
Stage 2	896	891	-	972	853	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.5	9.1	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1605	-	1042	943	-	-
HCM Lane V/C Ratio	-	-	0.02	0.074	-	-
HCM Control Delay (s)	0	-	8.5	9.1	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.2	-	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	12	2	11	7	9	1	51	3	1	59	9
Future Vol, veh/h	29	12	2	11	7	9	1	51	3	1	59	9
Conflicting Peds, #/hr	5	0	1	1	0	5	22	0	13	13	0	22
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	38	38	38	38	38	38	38	38	38	38	38	38
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	76	32	5	29	18	24	3	134	8	3	155	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	365	356	190	350	364	156	201	0	0	155	0	0
Stage 1	195	195	-	157	157	-	-	-	-	-	-	-
Stage 2	170	161	-	193	207	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	595	573	857	608	567	895	1383	-	-	1438	-	-
Stage 1	811	743	-	850	772	-	-	-	-	-	-	-
Stage 2	837	769	-	813	734	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	550	554	840	569	548	881	1357	-	-	1422	-	-
Mov Cap-2 Maneuver	550	554	-	569	548	-	-	-	-	-	-	-
Stage 1	794	727	-	839	762	-	-	-	-	-	-	-
Stage 2	790	759	-	771	719	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13	11.3	0.1	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1357	-	-	560	638	1422	-	-
HCM Lane V/C Ratio	0.002	-	-	0.202	0.111	0.002	-	-
HCM Control Delay (s)	7.7	0	-	13	11.3	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.4	0	-	-

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	0	0	0	7	14	0	0	10	14	0	20
Future Vol, veh/h	27	0	0	0	7	14	0	0	10	14	0	20
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	0	0	0	0	0	11	0	0	0	0	0	0
Mvmt Flow	49	0	0	0	13	25	0	0	18	25	0	36
Number of Lanes	0	1	0	0	1	0	0	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	6.9	6.6	7.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	0%	41%
Vol Thru, %	0%	0%	33%	0%
Vol Right, %	100%	0%	67%	59%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	10	27	21	34
LT Vol	0	27	0	14
Through Vol	0	0	7	0
RT Vol	10	0	14	20
Lane Flow Rate	18	49	38	62
Geometry Grp	1	1	1	1
Degree of Util (X)	0.018	0.058	0.039	0.065
Departure Headway (Hd)	3.498	4.268	3.676	3.795
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1016	839	971	940
Service Time	1.544	2.296	1.712	1.833
HCM Lane V/C Ratio	0.018	0.058	0.039	0.066
HCM Control Delay	6.6	7.6	6.9	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.2

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

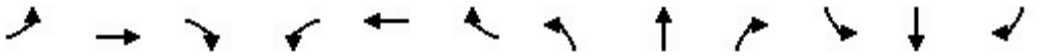
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	1022	895	1084	1022	895	-	1622	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	895	1084	1022	895	-	1622	-	-	-	-	-
Mov Cap-2 Maneuver	-	895	-	1022	895	-	-	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	1645	1022	83	59
v/c Ratio	0.46	0.33	0.44	0.37
Control Delay	3.9	3.3	26.4	32.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.9	3.3	26.4	32.2
Queue Length 50th (m)	26.4	14.3	6.4	6.7
Queue Length 95th (m)	43.3	24.4	18.9	17.3
Internal Link Dist (m)	199.6	132.9	31.4	29.9
Turn Bay Length (m)				
Base Capacity (vph)	3587	3128	368	336
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.46	0.33	0.23	0.18

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	1412	140	50	900	31	28	3	49	35	8	14
Future Volume (veh/h)	27	1412	140	50	900	31	28	3	49	35	8	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	0.95		0.94	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1885	1856	1856	1870	1900	1870	1900	1870	1870	1870
Adj Flow Rate, veh/h	28	1471	146	52	938	32	29	3	51	36	8	15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	3	1	3	3	2	0	2	0	2	2	2
Cap, veh/h	76	3210	316	166	2824	96	108	31	124	181	45	52
Arrive On Green	0.73	0.73	0.73	0.73	0.73	0.73	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	40	4413	434	154	3883	132	346	230	918	805	333	388
Grp Volume(v), veh/h	596	517	533	249	372	402	83	0	0	59	0	0
Grp Sat Flow(s),veh/h/ln	1767	1537	1583	976	1537	1656	1494	0	0	1525	0	0
Q Serve(g_s), s	0.0	11.0	11.1	1.3	7.0	7.0	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.3	11.0	11.1	12.4	7.0	7.0	3.8	0.0	0.0	2.4	0.0	0.0
Prop In Lane	0.05		0.27	0.21		0.08	0.35		0.61	0.61		0.25
Lane Grp Cap(c), veh/h	1332	1118	1151	764	1118	1205	263	0	0	279	0	0
V/C Ratio(X)	0.45	0.46	0.46	0.33	0.33	0.33	0.32	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	1332	1118	1151	764	1118	1205	392	0	0	404	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.4	4.5	4.5	3.5	3.9	3.9	31.5	0.0	0.0	31.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	1.4	1.3	1.1	0.8	0.7	0.7	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.4	0.2	0.2	0.2	1.0	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.5	5.9	5.8	4.7	4.7	4.7	32.2	0.0	0.0	31.3	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		1645			1022			83			59	
Approach Delay, s/veh		5.7			4.7			32.2			31.3	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	64.2		15.8		64.2		15.8					
Change Period (Y+Rc), s	6.0		5.0		6.0		5.0					
Max Green Setting (Gmax), s	51.0		18.0		51.0		18.0					
Max Q Clear Time (g_c+I1), s	14.4		5.8		13.1		4.4					
Green Ext Time (p_c), s	11.2		0.3		19.5		0.2					

Intersection Summary		
HCM 6th Ctrl Delay	6.7	
HCM 6th LOS	A	

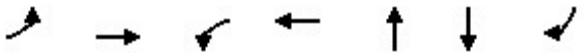
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	1354	96	31	925	0	7	1	27	19	1	25
Future Vol, veh/h	21	1354	96	31	925	0	7	1	27	19	1	25
Conflicting Peds, #/hr	18	0	19	19	0	18	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	-	10	-	-	10	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	3	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	21	1382	98	32	944	0	7	1	28	19	1	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	962	0	0	1499	0	0	1885	2469	710	1621	2567	490
Stage 1	-	-	-	-	-	-	1443	1443	-	1026	1026	-
Stage 2	-	-	-	-	-	-	442	1026	-	595	1541	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	714	-	-	228	-	0	77	31	326	111	26	453
Stage 1	-	-	-	-	-	0	99	199	-	194	315	-
Stage 2	-	-	-	-	-	0	521	315	-	422	179	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	408	-	-	224	-	-	40	15	321	56	12	446
Mov Cap-2 Maneuver	-	-	-	-	-	-	40	15	-	56	12	-
Stage 1	-	-	-	-	-	-	67	136	-	132	217	-
Stage 2	-	-	-	-	-	-	342	217	-	265	122	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	2.9	45	58.1
HCM LOS			E	F

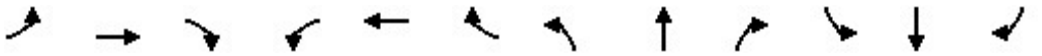
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	40	186	408	-	-	224	-	56	187
HCM Lane V/C Ratio	0.179	0.154	0.053	-	-	0.141	-	0.346	0.142
HCM Control Delay (s)	113.6	27.8	14.3	1.4	-	23.7	2.2	100.1	27.4
HCM Lane LOS	F	D	B	A	-	C	A	F	D
HCM 95th %tile Q(veh)	0.6	0.5	0.2	-	-	0.5	-	1.2	0.5



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	137	1372	336	988	915	436	54
v/c Ratio	0.39	0.82	0.74	0.44	0.78	0.46	0.10
Control Delay	11.8	28.4	26.6	15.5	27.4	25.7	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.8	28.4	26.6	15.5	27.4	25.7	0.4
Queue Length 50th (m)	8.5	70.5	32.2	37.2	40.8	20.9	0.0
Queue Length 95th (m)	16.0	88.6	#70.8	48.5	56.4	30.4	0.0
Internal Link Dist (m)		60.7		194.6	289.0	169.1	
Turn Bay Length (m)	40.0		95.0				20.0
Base Capacity (vph)	360	1677	455	2227	1178	968	519
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.82	0.74	0.44	0.78	0.45	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	1148	182	326	840	118	133	454	301	60	363	52
Future Volume (veh/h)	133	1148	182	326	840	118	133	454	301	60	363	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	1.00		0.97	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1856	1885	1870	1856	1885	1885	1856	1885	1900	1796	1856
Adj Flow Rate, veh/h	137	1184	188	336	866	122	137	468	310	62	374	54
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	3	1	2	3	1	1	3	1	0	7	3
Cap, veh/h	409	1472	234	482	2083	292	193	567	371	130	837	423
Arrive On Green	0.07	0.34	0.34	0.20	0.47	0.47	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1795	4363	693	1781	4469	626	434	2016	1318	142	2975	1504
Grp Volume(v), veh/h	137	916	456	336	653	335	237	352	326	62	374	54
Grp Sat Flow(s),veh/h/ln	1795	1689	1678	1781	1689	1718	848	1537	1384	142	1487	1504
Q Serve(g_s), s	3.9	19.7	19.7	8.1	10.2	10.3	14.1	17.1	17.7	4.8	8.3	2.1
Cycle Q Clear(g_c), s	3.9	19.7	19.7	8.1	10.2	10.3	22.4	17.1	17.7	22.5	8.3	2.1
Prop In Lane	1.00		0.41	1.00		0.36	0.58		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	409	1140	566	482	1574	801	309	432	389	130	837	423
V/C Ratio(X)	0.33	0.80	0.80	0.70	0.41	0.42	0.77	0.82	0.84	0.48	0.45	0.13
Avail Cap(c_a), veh/h	461	1140	566	482	1574	801	309	432	389	130	837	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	24.1	24.1	14.3	14.1	14.2	31.1	26.8	27.0	38.5	23.6	21.4
Incr Delay (d2), s/veh	0.5	6.1	11.6	8.1	0.8	1.6	10.9	11.5	14.7	2.7	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.2	6.0	1.8	1.8	2.0	3.8	5.1	5.0	1.0	1.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	30.2	35.6	22.4	14.9	15.8	42.1	38.3	41.7	41.2	24.0	21.6
LnGrp LOS	B	C	D	C	B	B	D	D	D	D	C	C
Approach Vol, veh/h		1509			1324			915			490	
Approach Delay, s/veh		30.5			17.0			40.5			25.9	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	42.3		28.0	20.0	32.0		28.0				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	8.0	35.0		22.5	16.0	27.0		22.5				
Max Q Clear Time (g_c+I1), s	5.9	12.3		24.4	10.1	21.7		24.5				
Green Ext Time (p_c), s	0.1	8.4		0.0	0.8	4.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	27.9
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	36	78	26	1	12	2	17	10	6	1	18	11
Future Vol, veh/h	36	78	26	1	12	2	17	10	6	1	18	11
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	5	5	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	0	1	2	0	25	0	0	2	0	0	0	0
Mvmt Flow	49	105	35	1	16	3	23	14	8	1	24	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	113	110	38	176	113	25	42	0	0	27	0	0
Stage 1	37	37	-	69	69	-	-	-	-	-	-	-
Stage 2	76	73	-	107	44	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.51	6.22	7.1	6.75	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.51	-	6.1	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.51	-	6.1	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.009	3.318	3.5	4.225	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	869	782	1034	791	736	1057	1580	-	-	1600	-	-
Stage 1	984	866	-	946	794	-	-	-	-	-	-	-
Stage 2	938	836	-	903	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	838	764	1029	671	719	1051	1576	-	-	1593	-	-
Mov Cap-2 Maneuver	838	764	-	671	719	-	-	-	-	-	-	-
Stage 1	966	863	-	928	779	-	-	-	-	-	-	-
Stage 2	901	820	-	763	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	10	3.8	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1576	-	-	822	747	1593	-	-
HCM Lane V/C Ratio	0.015	-	-	0.23	0.027	0.001	-	-
HCM Control Delay (s)	7.3	0	-	10.7	10	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	20	0	5	0	29	33	8	37	1
Future Vol, veh/h	0	0	0	20	0	5	0	29	33	8	37	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	0	0	2	2	0	20	2	2	2	0	2	0
Mvmt Flow	0	0	0	29	0	7	0	42	48	12	54	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	149	169	55	145	145	66	55	0	0	90	0	0
Stage 1	79	79	-	66	66	-	-	-	-	-	-	-
Stage 2	70	90	-	79	79	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.12	6.5	6.4	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.518	4	3.48	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	824	728	1012	824	750	950	1550	-	-	1518	-	-
Stage 1	935	833	-	945	844	-	-	-	-	-	-	-
Stage 2	945	824	-	930	833	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	812	722	1012	819	744	950	1550	-	-	1518	-	-
Mov Cap-2 Maneuver	812	722	-	819	744	-	-	-	-	-	-	-
Stage 1	935	826	-	945	844	-	-	-	-	-	-	-
Stage 2	938	824	-	923	826	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.5	0	1.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1550	-	-	-	842	1518	-	-
HCM Lane V/C Ratio	-	-	-	-	0.043	0.008	-	-
HCM Control Delay (s)	0	-	-	0	9.5	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	16	0	17	36	0	22	0	0	29	1
Future Vol, veh/h	5	0	16	0	17	36	0	22	0	0	29	1
Conflicting Peds, #/hr	8	0	0	0	0	8	10	0	6	6	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	33	0	0	0	50	6	0	0	0	0	0	0
Mvmt Flow	7	0	23	0	24	51	0	31	0	0	41	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	129	83	52	84	83	39	52	0	-	-	-	0
Stage 1	52	52	-	31	31	-	-	-	-	-	-	-
Stage 2	77	31	-	53	52	-	-	-	-	-	-	-
Critical Hdwy	7.43	6.5	6.2	7.1	7	6.26	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.43	5.5	-	6.1	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.43	5.5	-	6.1	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.797	4	3.3	3.5	4.45	3.354	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	777	811	1021	908	724	1021	1567	-	0	0	-	-
Stage 1	888	856	-	991	783	-	-	-	0	0	-	-
Stage 2	860	873	-	965	766	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	708	805	1012	887	718	1014	1554	-	-	-	-	-
Mov Cap-2 Maneuver	708	805	-	887	718	-	-	-	-	-	-	-
Stage 1	881	849	-	991	783	-	-	-	-	-	-	-
Stage 2	786	873	-	943	760	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	9.4	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1554	-	918	896	-	-
HCM Lane V/C Ratio	-	-	0.033	0.085	-	-
HCM Control Delay (s)	0	-	9.1	9.4	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.3	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	11	2	4	14	8	0	53	3	22	143	33
Future Vol, veh/h	19	11	2	4	14	8	0	53	3	22	143	33
Conflicting Peds, #/hr	0	0	1	1	0	0	18	0	19	19	0	18
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	73	73	73	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	6	0	0
Mvmt Flow	26	15	3	5	19	11	0	73	4	30	196	45

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	387	393	238	383	413	94	259	0	0	96	0	0
Stage 1	297	297	-	94	94	-	-	-	-	-	-	-
Stage 2	90	96	-	289	319	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.16	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	575	546	806	579	532	968	1317	-	-	1473	-	-
Stage 1	716	671	-	918	821	-	-	-	-	-	-	-
Stage 2	922	819	-	723	657	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	534	517	793	544	503	952	1297	-	-	1449	-	-
Mov Cap-2 Maneuver	534	517	-	544	503	-	-	-	-	-	-	-
Stage 1	705	645	-	903	808	-	-	-	-	-	-	-
Stage 2	890	806	-	686	631	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.3	11.4	0	0.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1297	-	-	539	596	1449	-	-
HCM Lane V/C Ratio	-	-	-	0.081	0.06	0.021	-	-
HCM Control Delay (s)	0	-	-	12.3	11.4	7.5	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	15	0	0	10	13	0	0	23	94	0	33
Future Vol, veh/h	22	15	0	0	10	13	0	0	23	94	0	33
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	0	0	0	0	0	11	0	0	0	0	0	0
Mvmt Flow	31	21	0	0	14	19	0	0	33	134	0	47
Number of Lanes	0	1	0	0	1	0	0	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7.2	6.8	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	59%	0%	74%
Vol Thru, %	0%	41%	43%	0%
Vol Right, %	100%	0%	57%	26%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	37	23	127
LT Vol	0	22	0	94
Through Vol	0	15	10	0
RT Vol	23	0	13	33
Lane Flow Rate	33	53	33	181
Geometry Grp	1	1	1	1
Degree of Util (X)	0.033	0.066	0.037	0.205
Departure Headway (Hd)	3.586	4.516	4.082	4.065
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	979	798	882	876
Service Time	1.678	2.516	2.083	2.121
HCM Lane V/C Ratio	0.034	0.066	0.037	0.207
HCM Control Delay	6.8	7.8	7.2	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.8

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

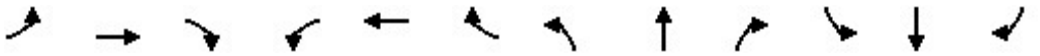
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	1022	895	1084	1022	895	-	1622	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	895	1084	1022	895	-	1622	-	-	-	-	-
Mov Cap-2 Maneuver	-	895	-	1022	895	-	-	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	646	1688	100	66
v/c Ratio	0.19	0.48	0.48	0.33
Control Delay	3.3	4.8	27.1	22.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.3	4.8	27.1	22.7
Queue Length 50th (m)	8.2	30.0	8.4	5.0
Queue Length 95th (m)	15.3	51.2	21.2	15.1
Internal Link Dist (m)	199.6	132.9	31.4	29.9
Turn Bay Length (m)				
Base Capacity (vph)	3381	3495	376	366
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.19	0.48	0.27	0.18

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	551	27	40	1454	25	51	3	36	30	2	28
Future Volume (veh/h)	4	551	27	40	1454	25	51	3	36	30	2	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.97		0.95	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1752	1841	1900	1841	1870	1900	1870	1767	1870	1870	1870
Adj Flow Rate, veh/h	4	612	30	44	1616	28	57	3	40	33	2	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	10	4	0	4	2	0	2	9	2	2	2
Cap, veh/h	53	3271	159	105	3468	59	163	25	75	149	28	93
Arrive On Green	0.73	0.73	0.73	0.73	0.73	0.73	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	6	4493	218	74	4763	82	703	198	601	616	221	741
Grp Volume(v), veh/h	236	198	212	598	522	568	100	0	0	66	0	0
Grp Sat Flow(s),veh/h/ln	1723	1451	1543	1738	1524	1656	1502	0	0	1579	0	0
Q Serve(g_s), s	0.0	3.2	3.3	0.0	10.6	10.6	1.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.2	3.2	3.3	9.8	10.6	10.6	4.3	0.0	0.0	2.6	0.0	0.0
Prop In Lane	0.02		0.14	0.07		0.05	0.57		0.40	0.50		0.47
Lane Grp Cap(c), veh/h	1303	1056	1124	1317	1110	1206	263	0	0	270	0	0
V/C Ratio(X)	0.18	0.19	0.19	0.45	0.47	0.47	0.38	0.00	0.00	0.24	0.00	0.00
Avail Cap(c_a), veh/h	1303	1056	1124	1317	1110	1206	425	0	0	434	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.2	3.2	3.2	4.1	4.2	4.2	30.5	0.0	0.0	29.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.4	1.1	1.4	1.3	0.9	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.4	0.4	0.4	1.2	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.5	3.6	3.6	5.2	5.6	5.5	31.4	0.0	0.0	30.3	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		646			1688			100			66	
Approach Delay, s/veh		3.6			5.5			31.4			30.3	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.6	14.4	60.6	14.4
Change Period (Y+Rc), s	6.0	5.0	6.0	5.0
Max Green Setting (Gmax), s	46.0	18.0	46.0	18.0
Max Q Clear Time (g_c+I1), s	12.6	6.3	5.3	4.6
Green Ext Time (p_c), s	18.6	0.4	5.7	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

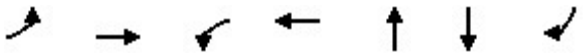
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	577	12	22	1463	0	13	0	28	13	0	13
Future Vol, veh/h	6	577	12	22	1463	0	13	0	28	13	0	13
Conflicting Peds, #/hr	9	0	28	28	0	9	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	-	10	-	-	10	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	17	9	18	0	4	0	0	0	0	0	0	0
Mvmt Flow	7	634	13	24	1608	0	14	0	31	14	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1617	0	0	675	0	0	1368	2341	346	1934	2354	814
Stage 1	-	-	-	-	-	-	676	676	-	1665	1665	-
Stage 2	-	-	-	-	-	-	692	1665	-	269	689	-
Critical Hdwy	5.64	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.27	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	167	-	-	567	-	0	157	37	559	71	36	279
Stage 1	-	-	-	-	-	0	336	456	-	69	155	-
Stage 2	-	-	-	-	-	0	368	155	-	660	450	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	166	-	-	554	-	-	95	20	545	43	19	277
Mov Cap-2 Maneuver	-	-	-	-	-	-	95	20	-	43	19	-
Stage 1	-	-	-	-	-	-	306	416	-	64	91	-
Stage 2	-	-	-	-	-	-	207	91	-	581	410	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	1.7	23.9	72.2
HCM LOS			C	F

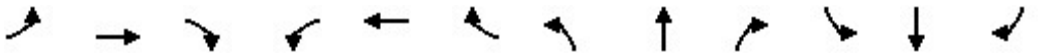
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	95	545	166	-	-	554	-	43	277
HCM Lane V/C Ratio	0.15	0.056	0.04	-	-	0.044	-	0.332	0.052
HCM Control Delay (s)	49.5	12	27.6	0.6	-	11.8	1.5	125.8	18.7
HCM Lane LOS	E	B	D	A	-	B	A	F	C
HCM 95th %tile Q(veh)	0.5	0.2	0.1	-	-	0.1	-	1.1	0.2



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	48	656	430	1587	672	350	37
v/c Ratio	0.21	0.54	0.73	0.66	0.62	0.33	0.07
Control Delay	11.8	23.7	18.7	16.4	23.4	21.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.8	23.7	18.7	16.4	23.4	21.7	0.2
Queue Length 50th (m)	2.8	27.9	32.6	67.0	28.1	14.8	0.0
Queue Length 95th (m)	6.9	39.2	#65.1	84.2	40.3	22.4	0.0
Internal Link Dist (m)		60.7		194.6	289.0	169.1	
Turn Bay Length (m)	40.0		95.0				20.0
Base Capacity (vph)	228	1224	591	2422	1084	1078	564
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.54	0.73	0.66	0.62	0.32	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	507	103	400	1369	107	127	383	114	25	300	34
Future Volume (veh/h)	45	507	103	400	1369	107	127	383	114	25	300	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.98	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1767	1707	1826	1826	1856	1826	1737	1530	1278	1604	1900
Adj Flow Rate, veh/h	48	545	111	430	1472	115	137	412	123	27	323	37
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	9	13	5	5	3	5	11	25	42	20	0
Cap, veh/h	247	1042	207	642	2218	173	252	718	214	106	1043	459
Arrive On Green	0.04	0.26	0.26	0.25	0.47	0.47	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1810	4007	796	1739	4706	368	580	2449	728	158	3554	1564
Grp Volume(v), veh/h	48	435	221	430	1039	548	195	236	241	109	241	37
Grp Sat Flow(s),veh/h/ln	1810	1608	1587	1739	1662	1751	894	1438	1424	1056	1328	1564
Q Serve(g_s), s	1.4	8.7	9.0	11.3	18.0	18.1	11.1	10.4	10.8	0.5	5.3	1.3
Cycle Q Clear(g_c), s	1.4	8.7	9.0	11.3	18.0	18.1	16.4	10.4	10.8	11.3	5.3	1.3
Prop In Lane	1.00		0.50	1.00		0.21	0.70		0.51	0.25		1.00
Lane Grp Cap(c), veh/h	247	836	413	642	1566	825	344	422	418	370	779	459
V/C Ratio(X)	0.19	0.52	0.54	0.67	0.66	0.66	0.57	0.56	0.58	0.29	0.31	0.08
Avail Cap(c_a), veh/h	292	836	413	642	1566	825	345	424	420	371	783	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	23.7	23.9	12.3	15.3	15.3	25.9	22.4	22.5	20.3	20.6	19.2
Incr Delay (d2), s/veh	0.4	2.3	4.9	5.5	2.2	4.2	2.2	1.6	1.9	0.4	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.1	2.5	1.9	2.8	3.4	2.1	2.1	2.2	0.8	0.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	26.1	28.8	17.8	17.5	19.5	28.1	24.0	24.5	20.7	20.8	19.3
LnGrp LOS	B	C	C	B	B	B	C	C	C	C	C	B
Approach Vol, veh/h		704			2017			672			387	
Approach Delay, s/veh		26.4			18.1			25.4			20.6	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	40.3		27.5	23.0	24.5		27.5				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	5.0	33.4		22.1	19.0	19.4		22.1				
Max Q Clear Time (g_c+I1), s	3.4	20.1		18.4	13.3	11.0		13.3				
Green Ext Time (p_c), s	0.0	9.6		1.7	1.1	3.2		1.9				

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	11	4	6	8	1	4	20	4	3	22	1
Future Vol, veh/h	12	11	4	6	8	1	4	20	4	3	22	1
Conflicting Peds, #/hr	1	0	1	1	0	1	1	0	5	5	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,#	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	71	71	71	71	71	71	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	38	0	0	0	33	33	0	5
Mvmt Flow	17	15	6	8	11	1	6	28	6	4	31	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	91	92	34	99	89	37	33	0	0	39	0	0
Stage 1	41	41	-	48	48	-	-	-	-	-	-	-
Stage 2	50	51	-	51	41	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.88	6.2	4.1	-	-	4.43	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.88	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.88	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.342	3.3	2.2	-	-	2.497	-	-
Pot Cap-1 Maneuver	898	802	1045	888	738	1041	1592	-	-	1393	-	-
Stage 1	979	865	-	971	789	-	-	-	-	-	-	-
Stage 2	968	856	-	967	795	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	880	792	1043	861	729	1036	1591	-	-	1387	-	-
Mov Cap-2 Maneuver	880	792	-	861	729	-	-	-	-	-	-	-
Stage 1	974	862	-	963	783	-	-	-	-	-	-	-
Stage 2	948	849	-	941	792	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	9.7	1	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1591	-	-	861	793	1387	-	-
HCM Lane V/C Ratio	0.004	-	-	0.044	0.027	0.003	-	-
HCM Control Delay (s)	7.3	0	-	9.4	9.7	7.6	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	1	0	32	0	4	0	21	10	0	28	4
Future Vol, veh/h	3	1	0	32	0	4	0	21	10	0	28	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,#	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	60	60	60	60	60	60	60	60	60
Heavy Vehicles, %	0	0	2	2	0	0	2	2	2	0	2	0
Mvmt Flow	5	2	0	53	0	7	0	35	17	0	47	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	98	103	51	96	98	44	54	0	0	52	0	0
Stage 1	51	51	-	44	44	-	-	-	-	-	-	-
Stage 2	47	52	-	52	54	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.12	6.5	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.518	4	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	889	791	1017	887	796	1032	1551	-	-	1567	-	-
Stage 1	967	856	-	970	862	-	-	-	-	-	-	-
Stage 2	972	856	-	961	854	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	884	791	1017	885	796	1032	1551	-	-	1567	-	-
Mov Cap-2 Maneuver	884	791	-	885	796	-	-	-	-	-	-	-
Stage 1	967	856	-	970	862	-	-	-	-	-	-	-
Stage 2	966	856	-	959	854	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	9.3	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1551	-	-	859	899	1567	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.067	-	-	-
HCM Control Delay (s)	0	-	-	9.2	9.3	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	12	0	14	30	0	6	0	0	14	1
Future Vol, veh/h	1	0	12	0	14	30	0	6	0	0	14	1
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	14	24	0	0	0	0	0	0
Mvmt Flow	2	0	19	0	22	48	0	10	0	0	22	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	72	33	23	43	34	14	24	0	-	-	-	0
Stage 1	23	23	-	10	10	-	-	-	-	-	-	-
Stage 2	49	10	-	33	24	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.64	6.44	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.126	3.516	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	924	864	1060	965	836	1005	1604	-	0	0	-	-
Stage 1	1000	880	-	1016	864	-	-	-	0	0	-	-
Stage 2	969	891	-	988	852	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	859	864	1060	948	836	1002	1604	-	-	-	-	-
Mov Cap-2 Maneuver	859	864	-	948	836	-	-	-	-	-	-	-
Stage 1	1000	880	-	1016	864	-	-	-	-	-	-	-
Stage 2	896	891	-	970	852	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.5	9.1	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1604	-	1041	942	-	-
HCM Lane V/C Ratio	-	-	0.02	0.074	-	-
HCM Control Delay (s)	0	-	8.5	9.1	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.2	-	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	12	2	11	7	9	1	52	3	1	60	9
Future Vol, veh/h	29	12	2	11	7	9	1	52	3	1	60	9
Conflicting Peds, #/hr	5	0	1	1	0	5	22	0	13	13	0	22
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	38	38	38	38	38	38	38	38	38	38	38	38
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	76	32	5	29	18	24	3	137	8	3	158	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	371	362	193	356	370	159	204	0	0	158	0	0
Stage 1	198	198	-	160	160	-	-	-	-	-	-	-
Stage 2	173	164	-	196	210	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	589	569	854	603	563	892	1380	-	-	1434	-	-
Stage 1	808	741	-	847	769	-	-	-	-	-	-	-
Stage 2	834	766	-	810	732	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	544	550	837	564	544	878	1354	-	-	1418	-	-
Mov Cap-2 Maneuver	544	550	-	564	544	-	-	-	-	-	-	-
Stage 1	791	725	-	836	759	-	-	-	-	-	-	-
Stage 2	787	756	-	768	717	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.1	11.4	0.1	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1354	-	-	555	633	1418	-	-
HCM Lane V/C Ratio	0.002	-	-	0.204	0.112	0.002	-	-
HCM Control Delay (s)	7.7	0	-	13.1	11.4	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.4	0	-	-

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	0	0	0	7	15	0	0	11	15	0	20
Future Vol, veh/h	27	0	0	0	7	15	0	0	11	15	0	20
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	0	0	0	0	0	11	0	0	0	0	0	0
Mvmt Flow	49	0	0	0	13	27	0	0	20	27	0	36
Number of Lanes	0	1	0	0	1	0	0	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	6.9	6.6	7.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	0%	43%
Vol Thru, %	0%	0%	32%	0%
Vol Right, %	100%	0%	68%	57%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	27	22	35
LT Vol	0	27	0	15
Through Vol	0	0	7	0
RT Vol	11	0	15	20
Lane Flow Rate	20	49	40	64
Geometry Grp	1	1	1	1
Degree of Util (X)	0.019	0.058	0.041	0.067
Departure Headway (Hd)	3.504	4.278	3.675	3.814
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1014	837	972	936
Service Time	1.55	2.304	1.708	1.851
HCM Lane V/C Ratio	0.02	0.059	0.041	0.068
HCM Control Delay	6.6	7.6	6.9	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.2

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

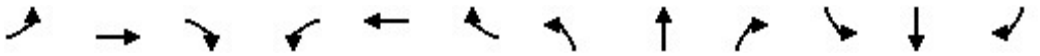
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	1022	895	1084	1022	895	-	1622	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	895	1084	1022	895	-	1622	-	-	-	-	-
Mov Cap-2 Maneuver	-	895	-	1022	895	-	-	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	1683	1046	84	61
v/c Ratio	0.47	0.34	0.44	0.38
Control Delay	4.0	3.4	27.6	32.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.0	3.4	27.6	32.6
Queue Length 50th (m)	27.6	14.9	7.0	7.0
Queue Length 95th (m)	45.7	25.7	19.4	17.5
Internal Link Dist (m)	199.6	132.9	31.4	29.9
Turn Bay Length (m)				
Base Capacity (vph)	3577	3107	367	334
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.47	0.34	0.23	0.18

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	1446	143	51	922	32	28	3	50	36	8	14
Future Volume (veh/h)	27	1446	143	51	922	32	28	3	50	36	8	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	0.95		0.94	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1885	1856	1856	1870	1900	1870	1900	1870	1870	1870
Adj Flow Rate, veh/h	28	1506	149	53	960	33	29	3	52	38	8	15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	3	1	3	3	2	0	2	0	2	2	2
Cap, veh/h	75	3209	314	165	2793	96	107	31	126	185	44	51
Arrive On Green	0.73	0.73	0.73	0.73	0.73	0.73	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	39	4415	433	151	3842	132	341	229	926	827	322	375
Grp Volume(v), veh/h	609	528	545	245	385	416	84	0	0	61	0	0
Grp Sat Flow(s),veh/h/ln	1766	1537	1583	932	1537	1657	1495	0	0	1524	0	0
Q Serve(g_s), s	0.0	11.5	11.5	1.7	7.3	7.3	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.7	11.5	11.5	13.1	7.3	7.3	3.8	0.0	0.0	2.5	0.0	0.0
Prop In Lane	0.05		0.27	0.22		0.08	0.35		0.62	0.62		0.25
Lane Grp Cap(c), veh/h	1331	1117	1151	732	1117	1204	263	0	0	280	0	0
V/C Ratio(X)	0.46	0.47	0.47	0.34	0.34	0.35	0.32	0.00	0.00	0.22	0.00	0.00
Avail Cap(c_a), veh/h	1331	1117	1151	732	1117	1204	392	0	0	404	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.4	4.5	4.6	3.6	4.0	4.0	31.5	0.0	0.0	31.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	1.4	1.4	1.2	0.8	0.8	0.7	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.4	0.3	0.3	0.3	1.0	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.6	6.0	6.0	4.8	4.8	4.8	32.2	0.0	0.0	31.3	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		1683			1046			84			61	
Approach Delay, s/veh		5.8			4.8			32.2			31.3	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	64.1		15.9		64.1		15.9					
Change Period (Y+Rc), s	6.0		5.0		6.0		5.0					
Max Green Setting (Gmax), s	51.0		18.0		51.0		18.0					
Max Q Clear Time (g_c+I1), s	15.1		5.8		13.5		4.5					
Green Ext Time (p_c), s	11.6		0.3		20.0		0.2					

Intersection Summary												
HCM 6th Ctrl Delay		6.8										
HCM 6th LOS		A										

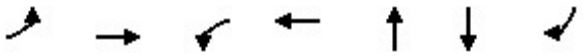
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	1387	98	31	947	0	8	1	27	19	1	25
Future Vol, veh/h	21	1387	98	31	947	0	8	1	27	19	1	25
Conflicting Peds, #/hr	18	0	19	19	0	18	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	-	10	-	-	10	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	3	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	21	1415	100	32	966	0	8	1	28	19	1	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	984	0	0	1534	0	0	1927	2524	727	1657	2624	501
Stage 1	-	-	-	-	-	-	1476	1476	-	1048	1048	-
Stage 2	-	-	-	-	-	-	451	1048	-	609	1576	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	704	-	-	219	-	0	72	28	318	105	24	445
Stage 1	-	-	-	-	-	0	94	192	-	187	307	-
Stage 2	-	-	-	-	-	0	514	307	-	413	172	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	398	-	-	215	-	-	34	12	313	49	10	438
Mov Cap-2 Maneuver	-	-	-	-	-	-	34	12	-	49	10	-
Stage 1	-	-	-	-	-	-	59	121	-	118	205	-
Stage 2	-	-	-	-	-	-	327	205	-	239	109	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	3.1	55.8	68.5
HCM LOS			F	F

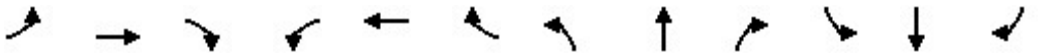
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	34	165	398	-	-	215	-	49	166
HCM Lane V/C Ratio	0.24	0.173	0.054	-	-	0.147	-	0.396	0.16
HCM Control Delay (s)	141.6	31.3	14.6	1.7	-	24.6	2.4	120.2	30.8
HCM Lane LOS	F	D	B	A	-	C	A	F	D
HCM 95th %tile Q(veh)	0.8	0.6	0.2	-	-	0.5	-	1.4	0.6



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	140	1403	344	1011	938	448	55
v/c Ratio	0.41	0.84	0.76	0.45	0.81	0.47	0.11
Control Delay	12.1	29.3	28.0	15.6	28.4	25.9	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.1	29.3	28.0	15.6	28.4	25.9	0.4
Queue Length 50th (m)	8.8	72.8	33.9	38.5	42.3	21.6	0.0
Queue Length 95th (m)	16.4	91.2	#74.2	49.8	58.3	31.4	0.0
Internal Link Dist (m)		60.7		194.6	289.0	169.1	
Turn Bay Length (m)	40.0		95.0				20.0
Base Capacity (vph)	356	1677	454	2225	1174	957	519
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.84	0.76	0.45	0.80	0.47	0.11

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	136	1175	186	334	859	121	136	465	309	62	372	53
Future Volume (veh/h)	136	1175	186	334	859	121	136	465	309	62	372	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	1.00		0.97	0.99		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1856	1885	1870	1856	1885	1885	1856	1885	1900	1796	1856
Adj Flow Rate, veh/h	140	1211	192	344	886	125	140	479	319	64	384	55
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	3	1	2	3	1	1	3	1	0	7	3
Cap, veh/h	405	1473	233	478	2077	291	192	561	370	123	837	423
Arrive On Green	0.07	0.34	0.34	0.20	0.46	0.46	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1795	4364	692	1781	4468	627	429	1994	1314	118	2975	1504
Grp Volume(v), veh/h	140	937	466	344	669	342	238	364	336	64	384	55
Grp Sat Flow(s),veh/h/ln	1795	1689	1678	1781	1689	1718	816	1537	1385	118	1487	1504
Q Serve(g_s), s	4.0	20.4	20.4	8.5	10.6	10.7	14.0	17.9	18.4	4.1	8.5	2.2
Cycle Q Clear(g_c), s	4.0	20.4	20.4	8.5	10.6	10.7	22.5	17.9	18.4	22.5	8.5	2.2
Prop In Lane	1.00		0.41	1.00		0.37	0.59		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	405	1140	566	478	1570	798	301	432	390	123	837	423
V/C Ratio(X)	0.35	0.82	0.82	0.72	0.43	0.43	0.79	0.84	0.86	0.52	0.46	0.13
Avail Cap(c_a), veh/h	454	1140	566	478	1570	798	301	432	390	123	837	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	24.3	24.3	14.8	14.3	14.3	31.7	27.1	27.3	38.9	23.7	21.4
Incr Delay (d2), s/veh	0.5	6.7	12.7	9.0	0.8	1.7	13.2	14.1	17.7	3.8	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.5	6.4	2.0	1.8	2.1	4.1	5.5	5.5	1.0	1.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	31.0	37.0	23.8	15.1	16.0	44.8	41.2	45.0	42.8	24.1	21.6
LnGrp LOS	B	C	D	C	B	B	D	D	D	D	C	C
Approach Vol, veh/h		1543			1355			938			503	
Approach Delay, s/veh		31.4			17.5			43.5			26.2	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	42.2		28.0	20.0	32.0		28.0				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	8.0	35.0		22.5	16.0	27.0		22.5				
Max Q Clear Time (g_c+I1), s	6.0	12.7		24.5	10.5	22.4		24.5				
Green Ext Time (p_c), s	0.1	8.6		0.0	0.8	3.6		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	37	80	27	1	13	2	18	11	6	1	19	12
Future Vol, veh/h	37	80	27	1	13	2	18	11	6	1	19	12
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	5	5	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	0	1	2	0	25	0	0	2	0	0	0	0
Mvmt Flow	50	108	36	1	18	3	24	15	8	1	26	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	119	115	40	183	119	26	45	0	0	28	0	0
Stage 1	39	39	-	72	72	-	-	-	-	-	-	-
Stage 2	80	76	-	111	47	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.51	6.22	7.1	6.75	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.51	-	6.1	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.51	-	6.1	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.009	3.318	3.5	4.225	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	861	777	1031	783	730	1056	1576	-	-	1599	-	-
Stage 1	981	864	-	943	792	-	-	-	-	-	-	-
Stage 2	934	834	-	899	812	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	829	759	1026	660	713	1050	1572	-	-	1592	-	-
Mov Cap-2 Maneuver	829	759	-	660	713	-	-	-	-	-	-	-
Stage 1	963	861	-	925	777	-	-	-	-	-	-	-
Stage 2	895	818	-	755	809	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	10	3.8	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1572	-	-	817	739	1592	-	-
HCM Lane V/C Ratio	0.015	-	-	0.238	0.029	0.001	-	-
HCM Control Delay (s)	7.3	0	-	10.8	10	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	20	0	5	0	29	33	8	38	1
Future Vol, veh/h	0	0	0	20	0	5	0	29	33	8	38	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	0	0	2	2	0	20	2	2	2	0	2	0
Mvmt Flow	0	0	0	29	0	7	0	42	48	12	55	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	150	170	56	146	146	66	56	0	0	90	0	0
Stage 1	80	80	-	66	66	-	-	-	-	-	-	-
Stage 2	70	90	-	80	80	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.12	6.5	6.4	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.518	4	3.48	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	822	727	1011	823	749	950	1549	-	-	1518	-	-
Stage 1	934	832	-	945	844	-	-	-	-	-	-	-
Stage 2	945	824	-	929	832	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	810	721	1011	818	743	950	1549	-	-	1518	-	-
Mov Cap-2 Maneuver	810	721	-	818	743	-	-	-	-	-	-	-
Stage 1	934	825	-	945	844	-	-	-	-	-	-	-
Stage 2	938	824	-	922	825	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.5	0	1.3
HCM LOS		A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1549	-	-	-	841	1518	-	-
HCM Lane V/C Ratio	-	-	-	-	0.043	0.008	-	-
HCM Control Delay (s)	0	-	-	0	9.5	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	16	0	17	37	0	22	0	0	29	1
Future Vol, veh/h	5	0	16	0	17	37	0	22	0	0	29	1
Conflicting Peds, #/hr	8	0	0	0	0	8	10	0	6	6	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	33	0	0	0	50	6	0	0	0	0	0	0
Mvmt Flow	7	0	23	0	24	53	0	31	0	0	41	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	130	83	52	84	83	39	52	0	-	-	-	0
Stage 1	52	52	-	31	31	-	-	-	-	-	-	-
Stage 2	78	31	-	53	52	-	-	-	-	-	-	-
Critical Hdwy	7.43	6.5	6.2	7.1	7	6.26	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.43	5.5	-	6.1	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.43	5.5	-	6.1	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.797	4	3.3	3.5	4.45	3.354	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	776	811	1021	908	724	1021	1567	-	0	0	-	-
Stage 1	888	856	-	991	783	-	-	-	0	0	-	-
Stage 2	859	873	-	965	766	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	705	805	1012	887	718	1014	1554	-	-	-	-	-
Mov Cap-2 Maneuver	705	805	-	887	718	-	-	-	-	-	-	-
Stage 1	881	849	-	991	783	-	-	-	-	-	-	-
Stage 2	784	873	-	943	760	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	9.4	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1554	-	917	898	-	-
HCM Lane V/C Ratio	-	-	0.033	0.086	-	-
HCM Control Delay (s)	0	-	9.1	9.4	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.3	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	11	2	4	14	8	0	55	3	22	147	33
Future Vol, veh/h	19	11	2	4	14	8	0	55	3	22	147	33
Conflicting Peds, #/hr	0	0	1	1	0	0	18	0	19	19	0	18
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	73	73	73	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	6	0	0
Mvmt Flow	26	15	3	5	19	11	0	75	4	30	201	45

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	394	400	243	390	420	96	264	0	0	98	0	0
Stage 1	302	302	-	96	96	-	-	-	-	-	-	-
Stage 2	92	98	-	294	324	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.16	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	569	541	801	573	528	966	1312	-	-	1470	-	-
Stage 1	712	668	-	916	819	-	-	-	-	-	-	-
Stage 2	920	818	-	719	653	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	528	512	788	539	499	950	1292	-	-	1446	-	-
Mov Cap-2 Maneuver	528	512	-	539	499	-	-	-	-	-	-	-
Stage 1	701	642	-	901	806	-	-	-	-	-	-	-
Stage 2	888	805	-	682	628	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.4	11.5	0	0.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1292	-	-	533	592	1446	-	-
HCM Lane V/C Ratio	-	-	-	0.082	0.06	0.021	-	-
HCM Control Delay (s)	0	-	-	12.4	11.5	7.5	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	16	0	0	11	14	0	0	23	97	0	33
Future Vol, veh/h	22	16	0	0	11	14	0	0	23	97	0	33
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	0	0	0	0	0	11	0	0	0	0	0	0
Mvmt Flow	31	23	0	0	16	20	0	0	33	139	0	47
Number of Lanes	0	1	0	0	1	0	0	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.3	6.8	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	58%	0%	75%
Vol Thru, %	0%	42%	44%	0%
Vol Right, %	100%	0%	56%	25%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	38	25	130
LT Vol	0	22	0	97
Through Vol	0	16	11	0
RT Vol	23	0	14	33
Lane Flow Rate	33	54	36	186
Geometry Grp	1	1	1	1
Degree of Util (X)	0.033	0.068	0.041	0.21
Departure Headway (Hd)	3.597	4.526	4.097	4.078
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	975	796	879	873
Service Time	1.695	2.527	2.098	2.138
HCM Lane V/C Ratio	0.034	0.068	0.041	0.213
HCM Control Delay	6.8	7.9	7.3	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.8

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	1022	895	1084	1022	895	-	1622	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	895	1084	1022	895	-	1622	-	-	-	-	-
Mov Cap-2 Maneuver	-	895	-	1022	895	-	-	-	-	-	-	-
Stage 1	1022	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

The attached information is provided to support the agency's review process and shall not be distributed to other parties without written consent from Bunt & Associates Engineering Ltd.

APPENDIX D

Traffic Signal Warrants

City of Vancouver - Traffic Signal Warrant Analysis

Main Street (name)	E Hastings Street	Direction (EW or NS)	EW
Side Street (name)	Glen Drive	Direction (EW or NS)	NS
Quadrant / Int #	1	Comments	Existing 2024
for Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET		

Road Authority:	City of Vancouver
City:	Vancouver
Analysis Date:	
Count Date:	2024 Oct 09, Wed
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
E Hastings Street	WB		1	1		1		250	3
E Hastings Street	EB		1	1		1		300	3
Glen Drive	NB				1				
Glen Drive	SB				1				
Are the Glen Drive NB right turns significantly impeded by through movements? (y/n)							y		
Are the Glen Drive SB right turns significantly impeded by through movements? (y/n)							y		

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	2,463,000
Central Business District	(y/n)	n

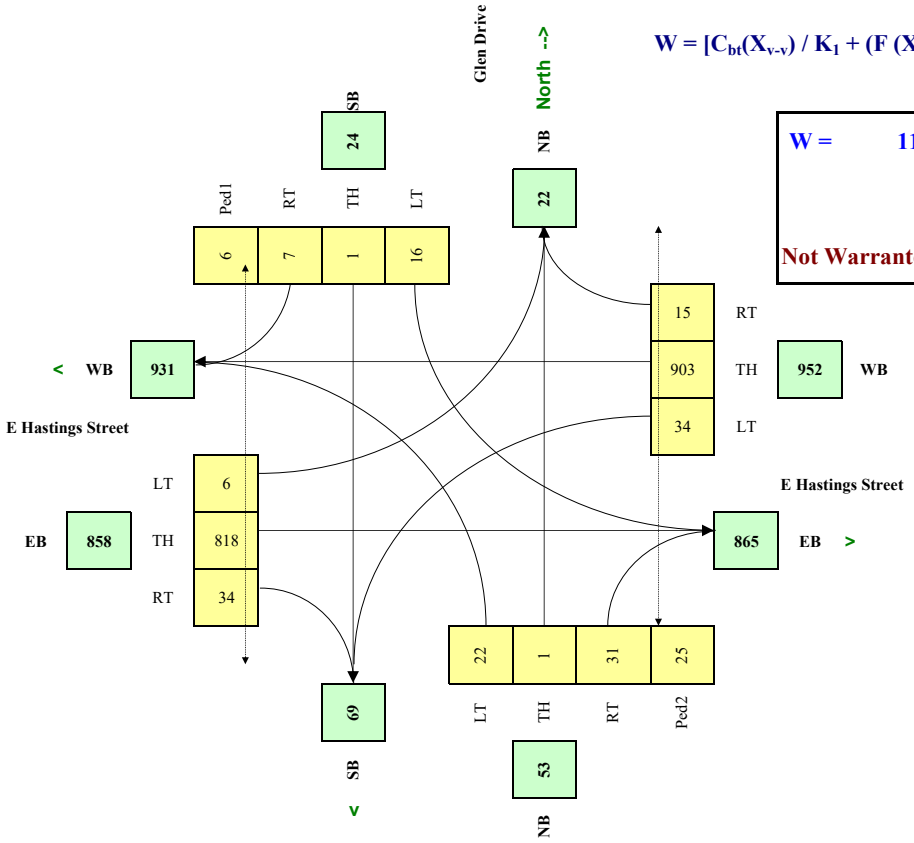
Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
E Hastings Street	EW	50	7.0%	y	
Glen Drive	NS		3.0%	n	

Set Peak Hours

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	9	0	18	8	0	5	23	1103	18	7	344	12	1	24	3	21
8:00 - 9:00	29	2	23	17	1	10	32	1381	17	1	524	23	17	15	8	6
11:00 - 12:00	21	0	25	13	0	6	54	652	11	6	631	12	2	22	6	49
12:00 - 13:00	32	1	45	16	2	5	19	673	11	6	780	18	2	25	8	46
16:00 - 17:00	18	0	39	19	0	8	42	743	15	8	1263	43	1	37	9	35
17:00 - 18:00	20	1	37	23	3	7	33	866	16	9	1364	98	12	25	11	32
Total (6-hour peak)	**129**	**4**	**187**	**96**	**6**	**41**	**203**	**5,418**	**88**	**37**	**4,906**	**206**	**35**	**148**	**45**	**189**
Average (6-hour peak)	**22**	**1**	**31**	**16**	**1**	**7**	**34**	**903**	**15**	**6**	**818**	**34**	**6**	**25**	**8**	**32**

Average 6-hour Peak Turning Movements

$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$



W =	112	57	55
		Veh	*Ped*

Not Warranted - Vs<75

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Traffic Signal Warrant Spreadsheet - v3H © 2007 Transportation Association of Canada

City of Vancouver - Traffic Signal Warrant Analysis

Main Street (name)	E Hastings Street	Direction (EW or NS)	EW
Side Street (name)	Glen Drive	Direction (EW or NS)	NS
Quadrant / Int #	1	Comments	Background 2029

for Warrant Calculation Results, please hit 'Page Down'

CHECK SHEET

Road Authority:	City of Vancouver
City:	Vancouver
Analysis Date:	
Count Date:	2024 Oct 09, Wed
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
E Hastings Street	WB		1	1		1		250	3
E Hastings Street	EB		1	1		1		300	3
Glen Drive	NB				1				
Glen Drive	SB				1				
Are the Glen Drive NB right turns significantly impeded by through movements? (y/n)							y		
Are the Glen Drive SB right turns significantly impeded by through movements? (y/n)							y		

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	2,463,000
Central Business District	(y/n)	n

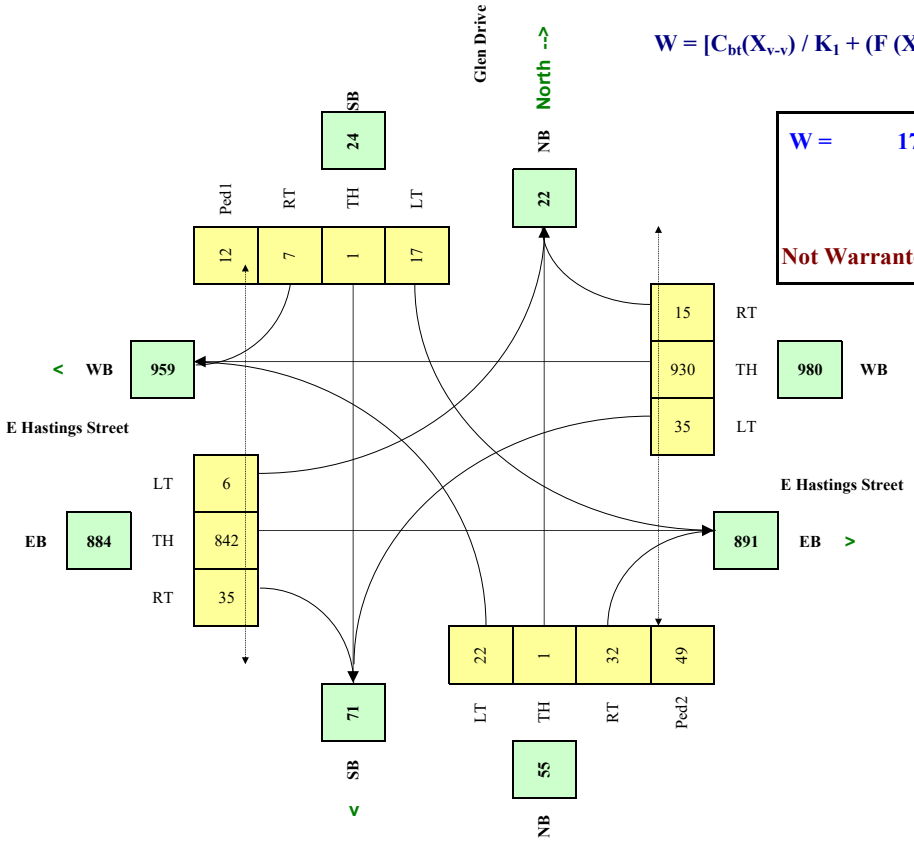
Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
E Hastings Street	EW	50	7.0%	y	
Glen Drive	NS		3.0%	n	

Set Peak Hours

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	9	0	19	8	0	5	24	1136	19	7	354	12	2	48	6	42
8:00 - 9:00	30	2	24	18	1	10	33	1422	18	1	540	24	34	30	16	12
11:00 - 12:00	22	0	26	13	0	6	56	672	11	6	650	12	4	44	12	98
12:00 - 13:00	33	1	46	16	2	5	20	693	11	6	803	19	4	50	16	92
16:00 - 17:00	19	0	40	20	0	8	43	765	15	8	1301	44	2	74	18	70
17:00 - 18:00	21	1	38	24	3	7	34	892	16	9	1405	101	24	50	22	64
Total (6-hour peak)	**134**	**4**	**193**	**99**	**6**	**41**	**210**	**5,580**	**90**	**37**	**5,053**	**212**	**70**	**296**	**90**	**378**
Average (6-hour peak)	**22**	**1**	**32**	**17**	**1**	**7**	**35**	**930**	**15**	**6**	**842**	**35**	**12**	**49**	**15**	**63**

Average 6-hour Peak Turning Movements

$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$



W =	174	61	113
		Veh	*Ped*

Not Warranted - Vs<75

RESET SHEET

Traffic Signal Warrant Spreadsheet - v3H © 2007 Transportation Association of Canada

City of Vancouver - Traffic Signal Warrant Analysis

Main Street (name)	E Hastings Street	Direction (EW or NS)	EW	Road Authority:	City of Vancouver
Side Street (name)	Glen Drive	Direction (EW or NS)	NS	City:	Vancouver
Quadrant / Int #	1	Comments	Background 2034	Analysis Date:	
for Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET			Count Date:	2024 Oct 09, Wed
				Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
E Hastings Street	WB		1	1		1		250	3
E Hastings Street	EB		1	1		1		300	3
Glen Drive	NB				1				
Glen Drive	SB				1				
Are the Glen Drive NB right turns significantly impeded by through movements? (y/n)							y		
Are the Glen Drive SB right turns significantly impeded by through movements? (y/n)							y		

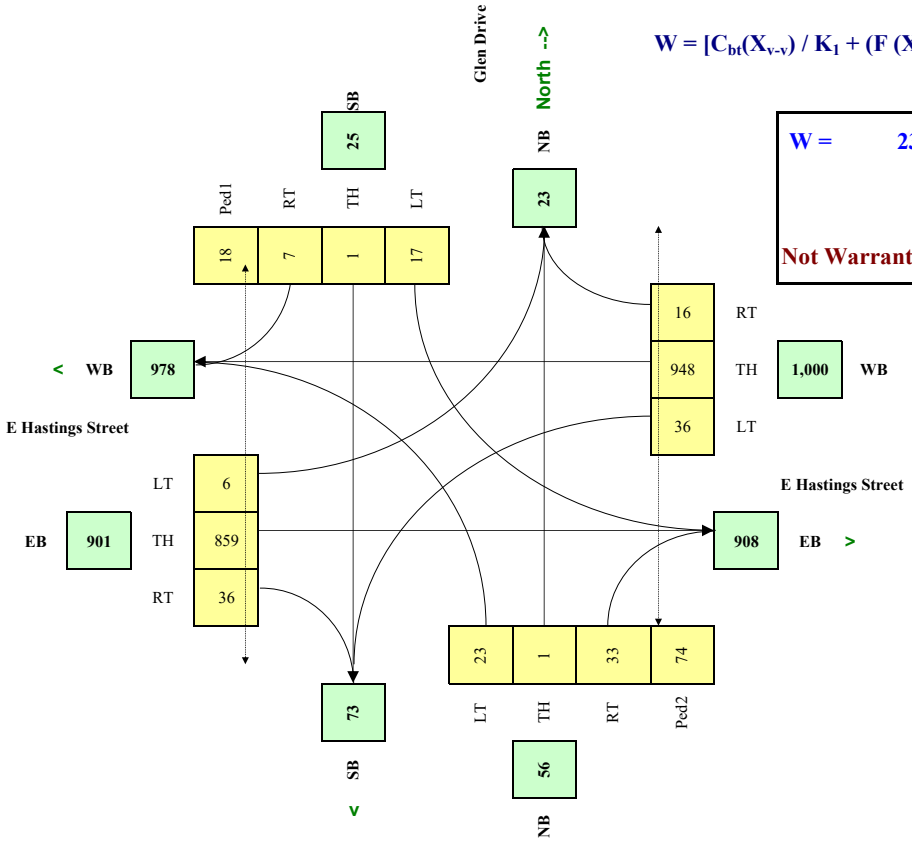
Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	2,463,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
E Hastings Street	EW	50	7.0%	y	
Glen Drive	NS		3.0%	n	

Set Peak Hours

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	9	0	19	8	0	5	24	1158	19	7	361	13	3	72	9	63
8:00 - 9:00	30	2	24	18	1	11	34	1450	18	1	550	24	51	45	24	18
11:00 - 12:00	22	0	26	14	0	6	57	685	12	6	663	13	6	66	18	147
12:00 - 13:00	34	1	47	17	2	5	20	707	12	6	819	19	6	75	24	138
16:00 - 17:00	19	0	41	20	0	8	44	780	16	8	1326	45	3	111	27	105
17:00 - 18:00	21	1	39	24	3	7	35	909	17	9	1432	103	36	75	33	96
Total (6-hour peak)	**135**	**4**	**196**	**101**	**6**	**42**	**214**	**5,689**	**94**	**37**	**5,151**	**217**	**105**	**444**	**135**	**567**
Average (6-hour peak)	**23**	**1**	**33**	**17**	**1**	**7**	**36**	**948**	**16**	**6**	**859**	**36**	**18**	**74**	**23**	**95**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$

W =	236	63	173
		Veh	*Ped*

Not Warranted - Vs<75

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Traffic Signal Warrant Spreadsheet - v3H © 2007 Transportation Association of Canada

City of Vancouver - Traffic Signal Warrant Analysis

Main Street (name)	E Hastings Street	Direction (EW or NS)	EW
Side Street (name)	Glen Drive	Direction (EW or NS)	NS
Quadrant / Int #	1	Comments	Total 2029

for Warrant Calculation Results, please hit 'Page Down'

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Road Authority:	City of Vancouver
City:	Vancouver
Analysis Date:	
Count Date:	2024 Oct 09, Wed
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
E Hastings Street	WB		1	1		1		250	3
E Hastings Street	EB		1	1		1		300	3
Glen Drive	NB				1				
Glen Drive	SB				1				
Are the Glen Drive NB right turns significantly impeded by through movements? (y/n)							y		
Are the Glen Drive SB right turns significantly impeded by through movements? (y/n)							y		

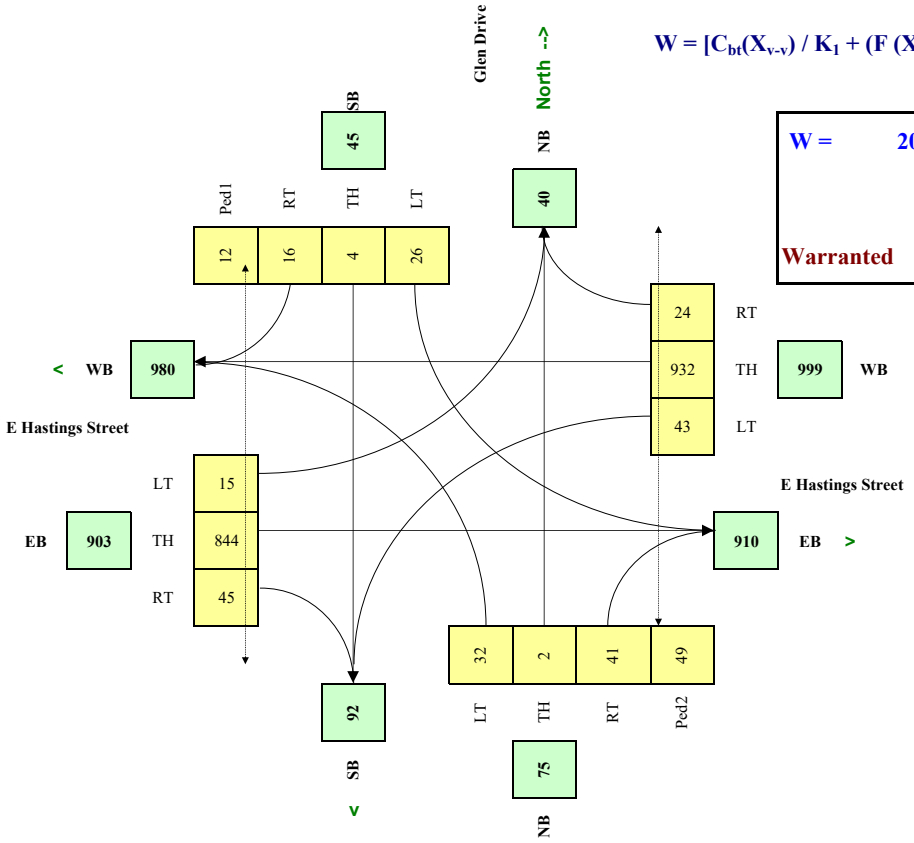
Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	2,463,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
E Hastings Street	EW	50	7.0%	y	
Glen Drive	NS		3.0%	n	

Set Peak Hours

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	30	1	31	20	2	23	31	1140	26	10	355	15	2	48	6	42
8:00 - 9:00	51	3	36	30	3	28	40	1426	25	4	541	27	34	30	16	12
11:00 - 12:00	24	1	30	17	2	8	61	672	16	12	651	19	4	44	12	98
12:00 - 13:00	36	2	51	21	4	8	26	693	17	14	804	27	4	50	16	92
16:00 - 17:00	24	2	48	29	4	13	54	766	26	22	1303	59	2	74	18	70
17:00 - 18:00	28	3	49	36	8	14	48	893	31	27	1408	121	24	50	22	64
Total (6-hour peak)	**193**	**12**	**245**	**153**	**23**	**94**	**260**	**5,590**	**141**	**89**	**5,062**	**268**	**70**	**296**	**90**	**378**
Average (6-hour peak)	**32**	**2**	**41**	**26**	**4**	**16**	**43**	**932**	**24**	**15**	**844**	**45**	**12**	**49**	**15**	**63**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$

W =	208	93	115
		Veh	*Ped*

Warranted

RESET SHEET

Traffic Signal Warrant Spreadsheet - v3H © 2007 Transportation Association of Canada

City of Vancouver - Traffic Signal Warrant Analysis

Main Street (name)	E Hastings Street	Direction (EW or NS)	EW	Road Authority:	City of Vancouver
Side Street (name)	Vernon Drive	Direction (EW or NS)	NS	City:	Vancouver
Quadrant / Int #	2	Comments	Existing 2024	Analysis Date:	
for Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET			Count Date:	2024 Oct 09, Wed
				Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
E Hastings Street	WB		1	2				150	3
E Hastings Street	EB		1	1		1		150	3
Vernon Drive	NB				1				
Vernon Drive	SB				1				
Are the Vernon Drive NB right turns significantly impeded by through movements? (y/n)							y		
Are the Vernon Drive SB right turns significantly impeded by through movements? (y/n)							y		

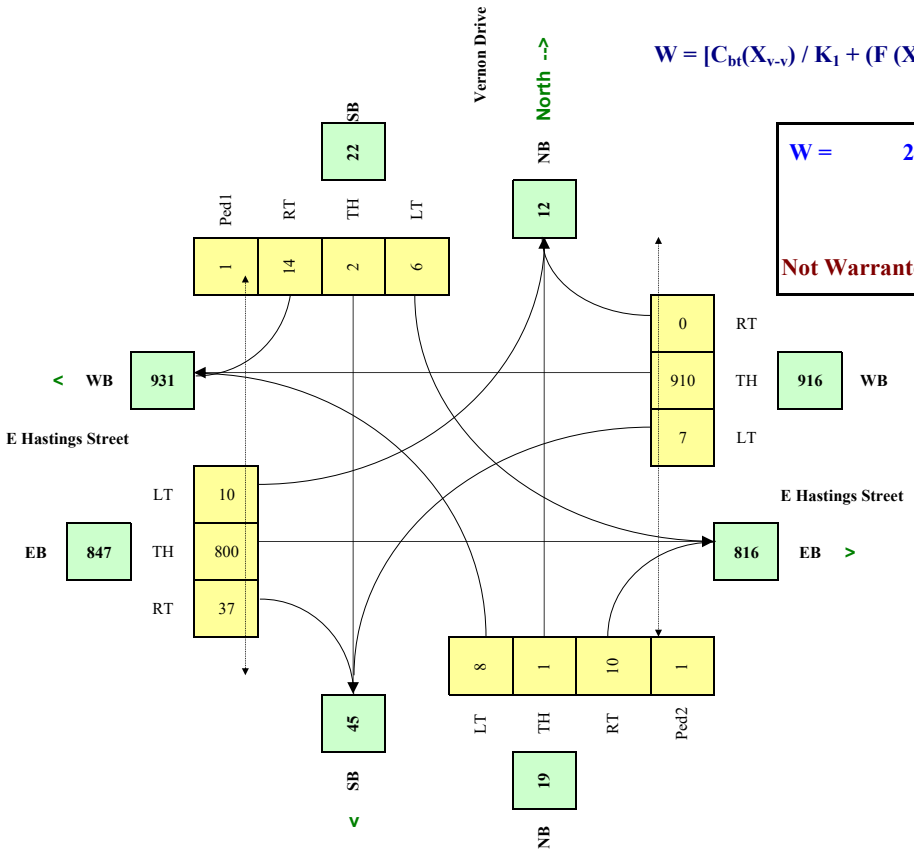
Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	2,463,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
E Hastings Street	EW	50	8.0%	y	
Vernon Drive	NS		2.0%	n	

Set Peak Hours

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	5	2	8	3	2	7	4	1105		2	344	11	2		1	17
8:00 - 9:00	9		6	1		12	10	1381		6	527	11	1	1	9	28
11:00 - 12:00	12	1	11	12		15	12	685		8	636	24	1		7	46
12:00 - 13:00	8	3	14	9	1	13	7	670		11	802	17		3	2	34
16:00 - 17:00	6		10	5	4	18	6	754		12	1201	69		1	11	15
17:00 - 18:00	5	1	10	8	2	20	2	862		23	1288	90			13	20
Total (6-hour peak)	**45**	**7**	**59**	**38**	**9**	**85**	**41**	**5,457**	**0**	**62**	**4,798**	**222**	**4**	**5**	**43**	**160**
Average (6-hour peak)	**8**	**1**	**10**	**6**	**2**	**14**	**7**	**910**	**0**	**10**	**800**	**37**	**1**	**1**	**7**	**27**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$

W =	29	27	2
		Veh	*Ped*

Not Warranted - Vs<75

RESET SHEET

Traffic Signal Warrant Spreadsheet - v3H © 2007 Transportation Association of Canada

City of Vancouver - Traffic Signal Warrant Analysis

Main Street (name)	E Hastings Street	Direction (EW or NS)	EW	Road Authority:	City of Vancouver
Side Street (name)	Vernon Drive	Direction (EW or NS)	NS	City:	Vancouver
Quadrant / Int #	2	Comments	Background 2029	Analysis Date:	
for Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET			Count Date:	2024 Oct 09, Wed
				Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
E Hastings Street	WB		1	2				150	3
E Hastings Street	EB		1	1		1		150	3
Vernon Drive	NB				1				
Vernon Drive	SB				1				
Are the Vernon Drive NB right turns significantly impeded by through movements? (y/n)							y		
Are the Vernon Drive SB right turns significantly impeded by through movements? (y/n)							y		

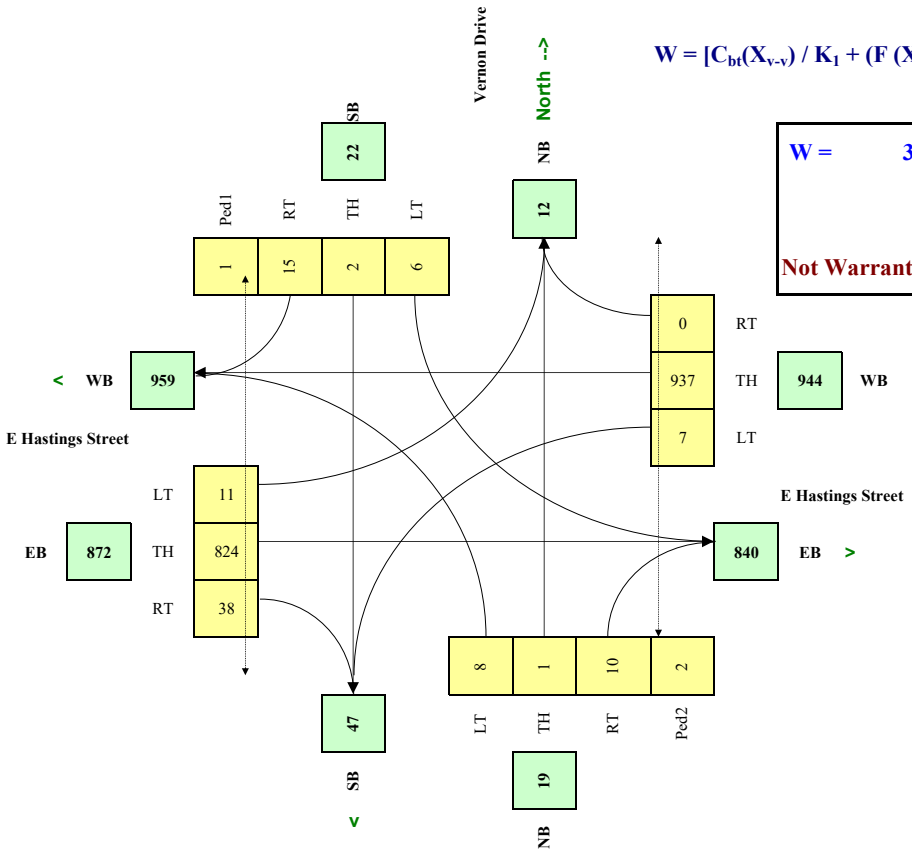
Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	2,463,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
E Hastings Street	EW	50	8.0%	y	
Vernon Drive	NS		2.0%	n	

Set Peak Hours

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	5	2	8	3	2	7	4	1138	0	2	354	11	3	0	2	26
8:00 - 9:00	9	0	6	1	0	12	10	1422	0	6	543	11	2	2	14	42
11:00 - 12:00	12	1	11	12	0	15	12	706	0	8	655	25	2	0	11	69
12:00 - 13:00	8	3	14	9	1	13	7	690	0	11	826	18	0	5	3	51
16:00 - 17:00	6	0	10	5	4	19	6	777	0	12	1237	71	0	2	17	23
17:00 - 18:00	5	1	10	8	2	21	2	888	0	24	1327	93	0	0	20	30
Total (6-hour peak)	**45**	**7**	**59**	**38**	**9**	**87**	**41**	**5,621**	**0**	**63**	**4,942**	**229**	**7**	**9**	**67**	**241**
Average (6-hour peak)	**8**	**1**	**10**	**6**	**2**	**15**	**7**	**937**	**0**	**11**	**824**	**38**	**1**	**2**	**11**	**40**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$

W =	32	28	4
		Veh	*Ped*

Not Warranted - Vs<75

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City of Vancouver - Traffic Signal Warrant Analysis

Main Street (name)	E Hastings Street	Direction (EW or NS)	EW	Road Authority:	City of Vancouver
Side Street (name)	Vernon Drive	Direction (EW or NS)	NS	City:	Vancouver
Quadrant / Int #	2	Comments	Background 2034	Analysis Date:	
for Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET			Count Date:	2024 Oct 09, Wed
				Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
E Hastings Street	WB		1	2				150	3
E Hastings Street	EB		1	1		1		150	3
Vernon Drive	NB				1				
Vernon Drive	SB				1				
Are the Vernon Drive NB right turns significantly impeded by through movements? (y/n)							y		
Are the Vernon Drive SB right turns significantly impeded by through movements? (y/n)							y		

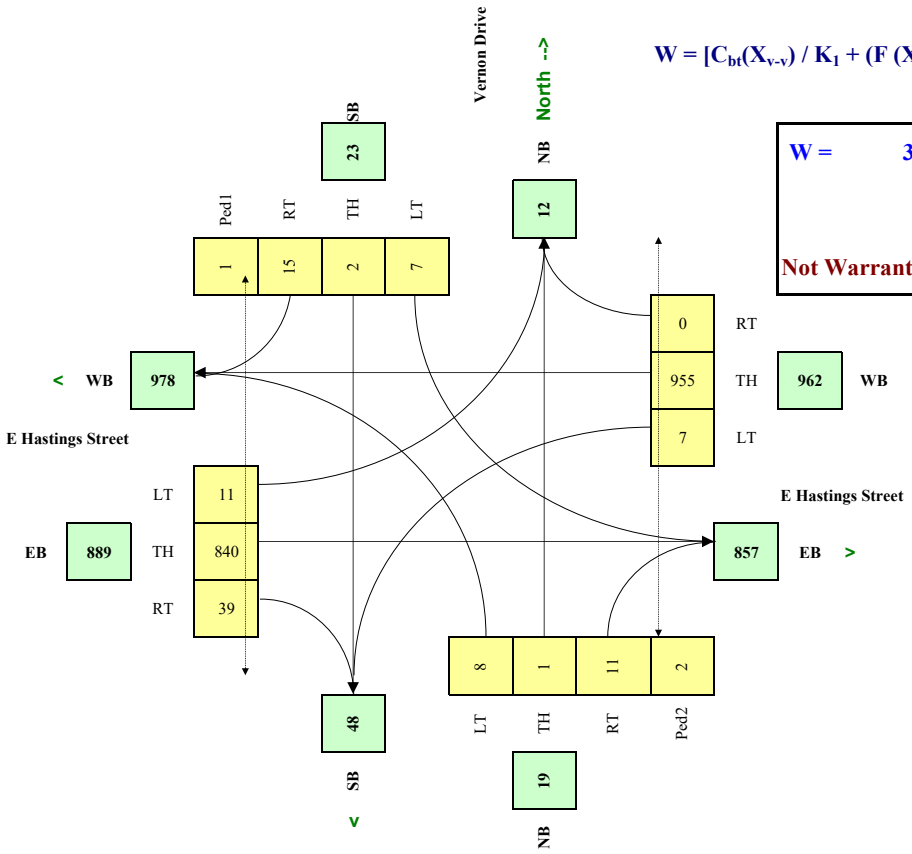
Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	2,463,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
E Hastings Street	EW	50	8.0%	y	
Vernon Drive	NS		2.0%	n	

Set Peak Hours

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	5	2	8	3	2	7	4	1160	0	2	361	12	3	0	2	27
8:00 - 9:00	9	0	6	1	0	13	11	1450	0	6	553	12	2	2	14	45
11:00 - 12:00	13	1	12	13	0	16	13	719	0	8	668	25	2	0	11	74
12:00 - 13:00	8	3	15	9	1	14	7	704	0	12	842	18	0	5	3	54
16:00 - 17:00	6	0	11	5	4	19	6	792	0	13	1261	72	0	2	18	24
17:00 - 18:00	5	1	11	8	2	21	2	905	0	24	1352	95	0	0	21	32
Total (6-hour peak)	**46**	**7**	**63**	**39**	**9**	**90**	**43**	**5,730**	**0**	**65**	**5,037**	**234**	**7**	**9**	**69**	**256**
Average (6-hour peak)	**8**	**1**	**11**	**7**	**2**	**15**	**7**	**955**	**0**	**11**	**840**	**39**	**1**	**2**	**12**	**43**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$

W =	34	29	5
		Veh	*Ped*

Not Warranted - Vs<75

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Traffic Signal Warrant Spreadsheet - v3H © 2007 Transportation Association of Canada

City of Vancouver - Traffic Signal Warrant Analysis

Main Street (name)	E Hastings Street	Direction (EW or NS)	EW
Side Street (name)	Vernon Drive	Direction (EW or NS)	NS
Quadrant / Int #	2	Comments	Total 2029
for Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET		

Road Authority:	City of Vancouver
City:	Vancouver
Analysis Date:	
Count Date:	2024 Oct 09, Wed
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
E Hastings Street	WB		1	2				150	3
E Hastings Street	EB		1	1		1		150	3
Vernon Drive	NB				1				
Vernon Drive	SB				1				
Are the Vernon Drive NB right turns significantly impeded by through movements? (y/n)							y		
Are the Vernon Drive SB right turns significantly impeded by through movements? (y/n)							y		

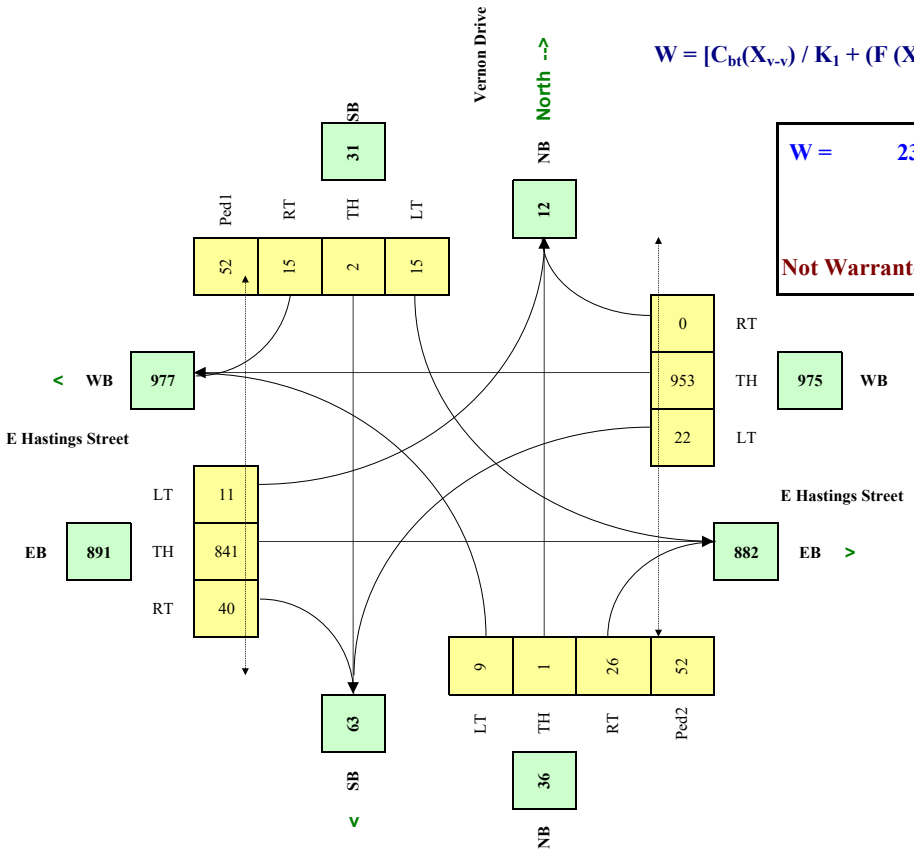
Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	2,463,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
E Hastings Street	EW	50	8.0%	y	
Vernon Drive	NS		2.0%	n	

Set Peak Hours

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	9	2	30	15	2	7	16	1151	0	2	377	12	59	56	58	82
8:00 - 9:00	13	0	28	13	0	12	22	1435	0	6	567	12	59	59	71	99
11:00 - 12:00	12	1	18	16	0	15	21	716	0	8	663	26	29	27	38	96
12:00 - 13:00	8	3	22	14	1	13	18	702	0	11	836	19	32	37	35	83
16:00 - 17:00	7	0	25	14	4	19	26	799	0	12	1254	73	57	59	74	80
17:00 - 18:00	6	1	30	20	2	21	28	917	0	24	1350	96	76	76	96	106
Total (6-hour peak)	**55**	**7**	**153**	**92**	**9**	**87**	**131**	**5,720**	**0**	**63**	**5,047**	**238**	**312**	**314**	**372**	**546**
Average (6-hour peak)	**9**	**1**	**26**	**15**	**2**	**15**	**22**	**953**	**0**	**11**	**841**	**40**	**52**	**52**	**62**	**91**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$

W =	238	47	191
		Veh	*Ped*

Not Warranted - Vs<75

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City of Vancouver - Traffic Signal Warrant Analysis

Main Street (name)	E Hastings Street	Direction (EW or NS)	EW	Road Authority:	City of Vancouver
Side Street (name)	Vernon Drive	Direction (EW or NS)	NS	City:	Vancouver
Quadrant / Int #	2	Comments	Total 2034	Analysis Date:	
for Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET			Count Date:	2024 Oct 09, Wed
				Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
E Hastings Street	WB		1	2				150	3
E Hastings Street	EB		1	1		1		150	3
Vernon Drive	NB				1				
Vernon Drive	SB				1				
Are the Vernon Drive NB right turns significantly impeded by through movements? (y/n)							y		
Are the Vernon Drive SB right turns significantly impeded by through movements? (y/n)							y		

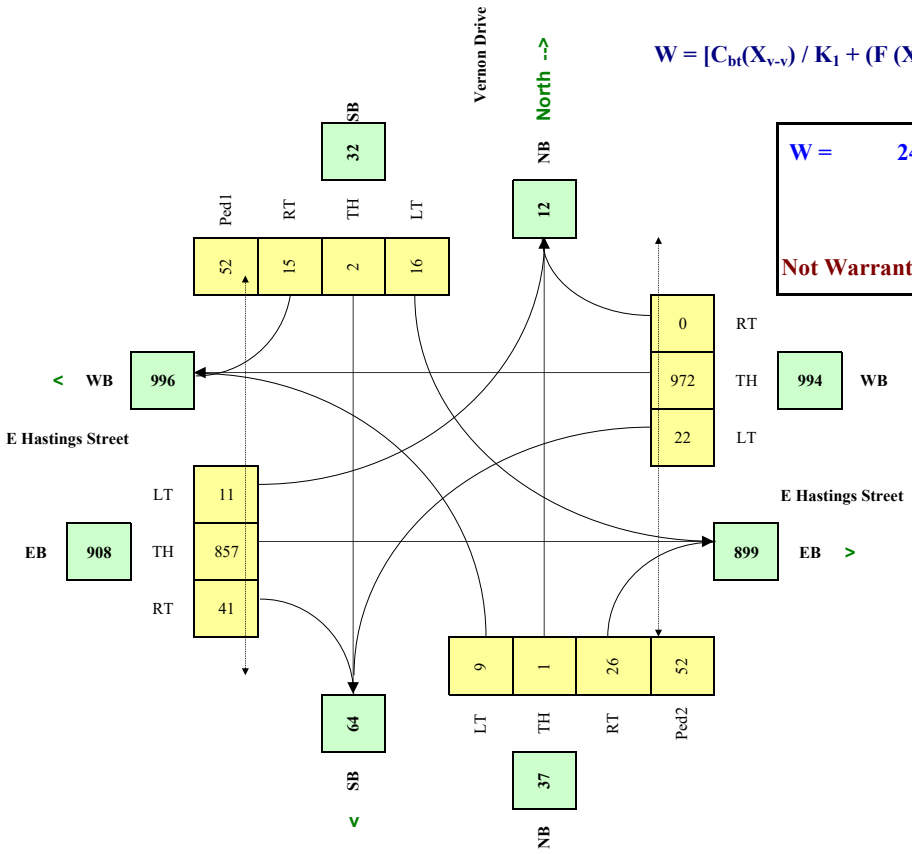
Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	2,463,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
E Hastings Street	EW	50	8.0%	y	
Vernon Drive	NS		2.0%	n	

Set Peak Hours

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	9	2	30	15	2	7	16	1173	0	2	384	13	59	56	58	83
8:00 - 9:00	13	0	28	13	0	13	23	1463	0	6	577	13	59	59	71	102
11:00 - 12:00	13	1	19	17	0	16	22	729	0	8	676	26	29	27	38	101
12:00 - 13:00	8	3	23	14	1	14	18	716	0	12	852	19	32	37	35	86
16:00 - 17:00	7	0	26	14	4	19	26	814	0	13	1278	74	57	59	75	81
17:00 - 18:00	6	1	31	20	2	21	28	934	0	24	1375	98	76	76	97	108
Total (6-hour peak)	**56**	**7**	**157**	**93**	**9**	**90**	**133**	**5,829**	**0**	**65**	**5,142**	**243**	**312**	**314**	**374**	**561**
Average (6-hour peak)	**9**	**1**	**26**	**16**	**2**	**15**	**22**	**972**	**0**	**11**	**857**	**41**	**52**	**52**	**62**	**94**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$

W =	244	49	195
		Veh	*Ped*

Not Warranted - Vs<75

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