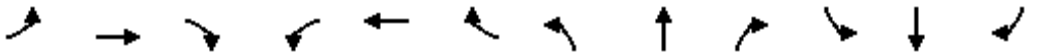


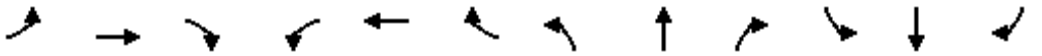
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	205	65	395	315	0	20	0	565	245	75	15
Future Volume (veh/h)	0	205	65	395	315	0	20	0	565	245	75	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	0	1758	1758	1744	1744	0	1772	0	1772	1744	1814	1744
Adj Flow Rate, veh/h	0	205	65	395	315	0	20	0	565	245	75	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	3	3	4	4	0	2	0	2	4	4	4
Cap, veh/h	0	691	308	2359	2793	0	26	0	0	428	107	
Arrive On Green	0.00	0.21	0.21	1.00	1.00	0.00	0.02	0.00	0.00	0.10	0.06	0.00
Sat Flow, veh/h	0	3428	1488	3222	3400	0	1688	20		3222	1814	1478
Grp Volume(v), veh/h	0	205	65	395	315	0	20	109.2		245	75	0
Grp Sat Flow(s),veh/h/ln	0	1670	1488	1611	1657	0	1688	F		1611	1814	1478
Q Serve(g_s), s	0.0	7.5	4.8	0.0	0.0	0.0	1.7			10.7	5.9	0.0
Cycle Q Clear(g_c), s	0.0	7.5	4.8	0.0	0.0	0.0	1.7			10.7	5.9	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00			1.00		1.00
Lane Grp Cap(c), veh/h	0	691	308	2359	2793	0	26			428	107	
V/C Ratio(X)	0.00	0.30	0.21	0.17	0.11	0.00	0.78			0.57	0.70	
Avail Cap(c_a), veh/h	0	691	308	2359	2793	0	140			544	725	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00			1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	48.6	39.6	0.0	0.0	0.0	71.1			63.2	67.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	1.6	0.0	0.0	0.0	38.1			1.2	8.0	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
%ile BackOfQ(95%),veh/ln	0.0	5.8	3.7	0.0	0.0	0.0	1.8			7.8	5.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	49.7	41.2	0.0	0.0	0.0	109.2			64.4	75.0	0.0
LnGrp LOS	A	D	D	A	A	A	F			E	E	
Approach Vol, veh/h		270			710						320	
Approach Delay, s/veh		47.6			0.0						66.9	
Approach LOS		D			A						E	

Timer - Assigned Phs	1	2	3	4		6	7					
Phs Duration (G+Y+Rc), s	92.2	34.0	6.2	12.6		126.2	18.8					
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0	4.0					
Max Green Setting (Gmax), s	29.0	30.0	12.0	58.0		63.0	20.0					
Max Q Clear Time (g_c+I1), s	2.0	9.5	3.7	7.9		2.0	12.7					
Green Ext Time (p_c), s	1.4	1.3	0.0	0.4		2.1	0.5					

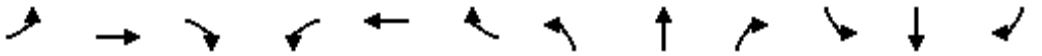
Intersection Summary			
HCM 6th Ctrl Delay		27.6	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

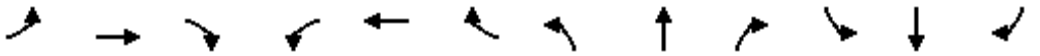


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	885	0	0	1725	335	55	10	1055	0	0	0
Future Volume (veh/h)	130	885	0	0	1725	335	55	10	1055	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1758	1758	0	0	1744	1744	1772	1772	1772			
Adj Flow Rate, veh/h	130	885	0	0	1725	335	55	10	1055			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	3	3	0	0	4	4	2	2	2			
Cap, veh/h	150	2096	0	0	1831	817	456	83	838			
Arrive On Green	0.09	1.00	0.00	0.00	0.73	0.73	0.32	0.32	0.32			
Sat Flow, veh/h	1674	3428	0	0	3400	1478	1438	262	2643			
Grp Volume(v), veh/h	130	885	0	0	1725	335	65	0	1055			
Grp Sat Flow(s),veh/h/ln	1674	1670	0	0	1657	1478	1700	0	1321			
Q Serve(g_s), s	4.9	0.0	0.0	0.0	65.1	12.5	3.9	0.0	46.0			
Cycle Q Clear(g_c), s	4.9	0.0	0.0	0.0	65.1	12.5	3.9	0.0	46.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.85		1.00			
Lane Grp Cap(c), veh/h	150	2096	0	0	1831	817	539	0	838			
V/C Ratio(X)	0.87	0.42	0.00	0.00	0.94	0.41	0.12	0.00	1.26			
Avail Cap(c_a), veh/h	163	2096	0	0	1831	817	539	0	838			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.25	0.25	1.00	0.00	1.00			
Uniform Delay (d), s/veh	32.1	0.0	0.0	0.0	17.2	10.3	35.1	0.0	49.5			
Incr Delay (d2), s/veh	34.0	0.6	0.0	0.0	3.5	0.4	0.1	0.0	125.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	6.9	0.3	0.0	0.0	21.9	5.0	2.9	0.0	43.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.0	0.6	0.0	0.0	20.8	10.6	35.2	0.0	175.4			
LnGrp LOS	E	A	A	A	C	B	D	A	F			
Approach Vol, veh/h		1015			2060			1120				
Approach Delay, s/veh		9.0			19.1			167.3				
Approach LOS		A			B			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		95.0			10.9	84.1		50.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		91.0			8.0	79.0		46.0				
Max Q Clear Time (g_c+I1), s		2.0			6.9	67.1		48.0				
Green Ext Time (p_c), s		7.2			0.0	9.3		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			56.2									
HCM 6th LOS			E									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	1650	160	145	1795	155	145	75	180	70	60	120
Future Volume (vph)	130	1650	160	145	1795	155	145	75	180	70	60	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.6	4.9	4.5	4.5	4.9		4.5	4.9	4.9	4.5	4.9	4.6
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1660	3320	1456	1644	3249		1660	1748	1450	1572	1667	1417
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.72	1.00	1.00	0.66	1.00	1.00
Satd. Flow (perm)	1660	3320	1456	1644	3249		1255	1748	1450	1098	1667	1417
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	130	1650	160	145	1795	155	145	75	180	70	60	120
RTOR Reduction (vph)	0	0	45	0	4	0	0	0	164	0	0	65
Lane Group Flow (vph)	130	1650	115	145	1946	0	145	75	16	70	60	55
Confl. Peds. (#/hr)									8	8		
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	3%	3%	3%	4%	4%	4%	3%	3%	3%	8%	8%	8%
Turn Type	Prot	NA	pm+ov	Prot	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6		3	4		3	4	5
Permitted Phases			2				4		4	4		4
Actuated Green, G (s)	20.2	89.1	92.6	20.5	89.3		16.6	13.1	13.1	16.6	13.1	33.3
Effective Green, g (s)	20.2	89.1	92.6	20.5	89.3		16.6	13.1	13.1	16.6	13.1	33.3
Actuated g/C Ratio	0.14	0.61	0.64	0.14	0.62		0.11	0.09	0.09	0.11	0.09	0.23
Clearance Time (s)	4.6	4.9	4.5	4.5	4.9		4.5	4.9	4.9	4.5	4.9	4.6
Vehicle Extension (s)	2.5	4.0	3.0	2.5	3.5		3.0	4.0	4.0	3.0	4.0	2.5
Lane Grp Cap (vph)	231	2040	929	232	2000		153	157	131	137	150	325
v/s Ratio Prot	0.08	c0.50	0.00	0.09	c0.60		c0.02	0.04		0.01	0.04	0.02
v/s Ratio Perm			0.08				c0.09		0.01	0.05		0.02
v/c Ratio	0.56	0.81	0.12	0.62	0.97		0.95	0.48	0.12	0.51	0.40	0.17
Uniform Delay, d1	58.3	21.4	10.3	58.6	26.7		63.3	62.7	60.7	60.0	62.2	44.7
Progression Factor	0.93	1.11	1.14	0.85	0.74		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.6	2.4	0.0	1.6	7.3		56.6	3.1	0.6	3.2	2.4	0.2
Delay (s)	55.6	26.2	11.8	51.6	27.2		119.9	65.8	61.3	63.2	64.6	44.9
Level of Service	E	C	B	D	C		F	E	E	E	E	D
Approach Delay (s)		27.0			28.9			83.4			54.8	
Approach LOS		C			C			F			D	

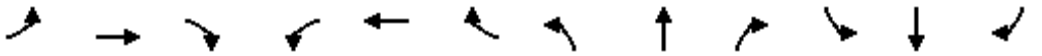
Intersection Summary			
HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	94.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	275	310	185	320	640	345	1310	200	615	1075	135
Future Volume (veh/h)	45	275	310	185	320	640	345	1310	200	615	1075	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
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	1786	1786	1786	1772	1772	1772	1758	1758	1758	1772	1772	1772
Adj Flow Rate, veh/h	45	275	310	185	320	640	345	1310	200	615	1075	135
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	2	2	2	3	3	3	2	2	2
Cap, veh/h	53	410	566	138	497	622	241	1363	613	449	1084	136
Arrive On Green	0.03	0.23	0.23	0.08	0.28	0.28	0.14	0.41	0.41	0.14	0.40	0.40
Sat Flow, veh/h	1701	1786	1514	1688	1772	1482	1674	3340	1489	3274	2701	339
Grp Volume(v), veh/h	45	275	310	185	320	640	345	1310	200	615	528	682
Grp Sat Flow(s),veh/h/ln	1701	1786	1514	1688	1772	1482	1674	1670	1489	1637	1329	1710
Q Serve(g_s), s	3.8	20.3	23.4	11.9	23.0	40.7	20.9	55.4	13.2	19.9	57.3	57.5
Cycle Q Clear(g_c), s	3.8	20.3	23.4	11.9	23.0	40.7	20.9	55.4	13.2	19.9	57.3	57.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	53	410	566	138	497	622	241	1363	613	449	533	686
V/C Ratio(X)	0.85	0.67	0.55	1.34	0.64	1.03	1.43	0.96	0.33	1.37	0.99	0.99
Avail Cap(c_a), veh/h	79	437	589	138	497	622	241	1363	613	449	533	686
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	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.9	50.8	35.7	66.6	45.8	42.3	62.0	41.8	29.0	62.6	43.2	43.2
Incr Delay (d2), s/veh	35.3	3.3	0.8	191.8	2.6	43.6	195.6	2.6	0.1	179.7	36.8	32.7
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(95%),veh/ln	3.9	14.5	13.6	20.1	15.8	38.9	28.7	24.9	5.9	30.1	31.7	38.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.2	54.1	36.5	258.4	48.4	85.9	257.6	44.3	29.1	242.2	80.0	75.9
LnGrp LOS	F	D	D	F	D	F	F	D	C	F	E	E
Approach Vol, veh/h		630			1145			1855			1825	
Approach Delay, s/veh		49.1			103.3			82.4			133.1	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	63.6	9.6	45.8	25.0	64.6	17.0	38.4
Change Period (Y+Rc), s	4.6	4.9	4.6	4.6	4.6	4.9	4.6	4.6
Max Green Setting (Gmax), s	21.4	56.5	7.2	41.2	20.4	57.5	12.4	36.0
Max Q Clear Time (g_c+I1), s	22.9	59.5	5.8	42.7	21.9	57.4	13.9	25.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.5

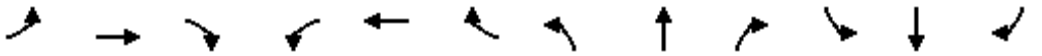
Intersection Summary	
HCM 6th Ctrl Delay	99.9
HCM 6th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	110	10	50	105	400	15	1210	105	360	870	300
Future Volume (veh/h)	300	110	10	50	105	400	15	1210	105	360	870	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1772	1772	1772	1772	1772	1772	1758	1758	1758	1772	1772	1772
Adj Flow Rate, veh/h	300	110	10	50	105	400	15	1210	105	360	870	300
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	330	312	28	115	241	301	32	924	80	272	1202	675
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.02	0.30	0.30	0.16	0.45	0.45
Sat Flow, veh/h	1688	1600	145	563	1181	1499	1674	3030	262	1688	2693	1500
Grp Volume(v), veh/h	300	0	120	155	0	400	15	631	684	360	870	300
Grp Sat Flow(s),veh/h/ln	1688	0	1745	1744	0	1499	1674	1582	1710	1688	1347	1500
Q Serve(g_s), s	24.7	0.0	8.4	11.0	0.0	28.5	1.3	43.3	43.3	22.9	37.5	19.5
Cycle Q Clear(g_c), s	24.7	0.0	8.4	11.0	0.0	28.5	1.3	43.3	43.3	22.9	37.5	19.5
Prop In Lane	1.00		0.08	0.32		1.00	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	330	0	341	356	0	301	32	482	521	272	1202	675
V/C Ratio(X)	0.91	0.00	0.35	0.44	0.00	1.33	0.47	1.31	1.31	1.32	0.72	0.44
Avail Cap(c_a), veh/h	392	0	406	356	0	301	71	482	521	272	1202	675
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	0.00	1.00	1.00	0.00	1.00	0.55	0.55	0.55	0.09	0.09	0.09
Uniform Delay (d), s/veh	55.9	0.0	49.4	49.4	0.0	56.7	69.0	49.3	49.4	59.6	32.1	26.9
Incr Delay (d2), s/veh	22.5	0.0	0.6	0.8	0.0	169.3	6.0	146.7	148.0	148.4	0.4	0.2
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(95%),veh/ln	18.5	0.0	6.8	8.6	0.0	38.0	1.1	51.3	55.5	26.8	13.6	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.4	0.0	50.0	50.3	0.0	226.0	74.9	196.0	197.3	208.0	32.5	27.0
LnGrp LOS	E	A	D	D	A	F	E	F	F	F	C	C
Approach Vol, veh/h		420			555			1330			1530	
Approach Delay, s/veh		70.3			176.9			195.3			72.7	
Approach LOS		E			F			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	68.8		32.3	28.3	47.8		33.6				
Change Period (Y+Rc), s	4.6	4.9		4.6	4.9	4.0		4.6				
Max Green Setting (Gmax), s	6.0	55.3		33.0	18.1	43.8		29.0				
Max Q Clear Time (g_c+I1), s	3.3	39.5		26.7	24.9	45.3		30.5				
Green Ext Time (p_c), s	0.0	4.8		0.9	0.0	0.0		0.0				

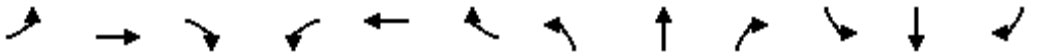
Intersection Summary												
HCM 6th Ctrl Delay			130.1									
HCM 6th LOS			F									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	230	125	65	170	85	150	1095	95	80	780	145
Future Volume (veh/h)	205	230	125	65	170	85	150	1095	95	80	780	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
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	1772	1772	1772	1786	1786	1786	1758	1758	1758	1772	1772	1772
Adj Flow Rate, veh/h	205	230	125	65	170	85	150	1095	95	80	780	145
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	1	1	1	3	3	3	2	2	2
Cap, veh/h	219	259	146	80	215	111	431	1013	88	365	736	445
Arrive On Green	0.19	0.19	0.19	0.12	0.12	0.12	0.52	0.68	0.68	0.22	0.30	0.30
Sat Flow, veh/h	1174	1387	780	665	1778	922	1674	2998	260	1688	2481	1500
Grp Volume(v), veh/h	299	0	261	171	0	149	150	565	625	80	780	145
Grp Sat Flow(s),veh/h/ln	1713	0	1627	1753	0	1612	1674	1547	1711	1688	1240	1500
Q Serve(g_s), s	24.9	0.0	22.5	13.8	0.0	12.9	7.7	49.0	49.0	5.7	43.0	10.9
Cycle Q Clear(g_c), s	24.9	0.0	22.5	13.8	0.0	12.9	7.7	49.0	49.0	5.7	43.0	10.9
Prop In Lane	0.69		0.48	0.38		0.57	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	320	0	304	212	0	195	431	523	578	365	736	445
V/C Ratio(X)	0.93	0.00	0.86	0.81	0.00	0.76	0.35	1.08	1.08	0.22	1.06	0.33
Avail Cap(c_a), veh/h	337	0	320	502	0	461	431	523	578	365	736	445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.41	0.41	0.41	0.73	0.73	0.73
Uniform Delay (d), s/veh	58.1	0.0	57.0	62.1	0.0	61.6	27.9	23.5	23.5	46.7	51.0	39.7
Incr Delay (d2), s/veh	31.8	0.0	19.5	7.2	0.0	6.1	0.2	49.8	49.3	0.2	45.8	1.4
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(95%),veh/ln	19.8	0.0	16.4	10.9	0.0	9.6	4.5	23.1	25.3	4.3	24.6	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.8	0.0	76.4	69.3	0.0	67.7	28.1	73.3	72.8	47.0	96.8	41.1
LnGrp LOS	F	A	E	E	A	E	C	F	F	D	F	D
Approach Vol, veh/h		560			320			1340			1005	
Approach Delay, s/veh		83.6			68.5			68.0			84.8	
Approach LOS		F			E			E			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	42.4	48.0		32.1	36.4	54.0		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	12.5	43.5		29.0	6.5	49.5		42.0				
Max Q Clear Time (g_c+I1), s	9.7	45.0		26.9	7.7	51.0		15.8				
Green Ext Time (p_c), s	0.1	0.0		0.6	0.0	0.0		1.3				

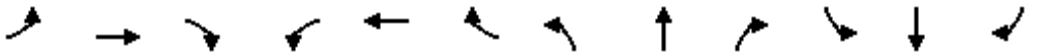
Intersection Summary												
HCM 6th Ctrl Delay			76.0									
HCM 6th LOS			E									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	395	115	155	245	245	110	1025	135	180	700	70
Future Volume (veh/h)	60	395	115	155	245	245	110	1025	135	180	700	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		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	1786	1786	1786	1772	1772	1772	1758	1758	1758	1772	1772	1772
Adj Flow Rate, veh/h	60	395	115	155	245	245	110	1025	135	180	700	70
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	2	2	2	3	3	3	2	2	2
Cap, veh/h	70	411	346	171	514	439	126	1159	152	194	1268	127
Arrive On Green	0.04	0.23	0.23	0.10	0.29	0.29	0.08	0.41	0.41	0.23	0.90	0.90
Sat Flow, veh/h	1701	1786	1504	1688	1772	1494	1674	2819	371	1688	2813	281
Grp Volume(v), veh/h	60	395	115	155	245	245	110	549	611	180	344	426
Grp Sat Flow(s),veh/h/ln	1701	1786	1504	1688	1772	1494	1674	1512	1678	1688	1382	1712
Q Serve(g_s), s	5.1	31.7	9.2	13.2	16.5	20.1	9.4	48.7	48.9	15.1	7.1	7.1
Cycle Q Clear(g_c), s	5.1	31.7	9.2	13.2	16.5	20.1	9.4	48.7	48.9	15.1	7.1	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.16
Lane Grp Cap(c), veh/h	70	411	346	171	514	439	126	621	690	194	623	771
V/C Ratio(X)	0.85	0.96	0.33	0.91	0.48	0.56	0.87	0.88	0.89	0.93	0.55	0.55
Avail Cap(c_a), veh/h	128	418	352	173	514	439	202	621	690	199	623	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.85	0.85	0.85	0.63	0.63	0.63	0.68	0.68	0.68
Uniform Delay (d), s/veh	69.1	55.2	46.5	64.5	42.4	43.3	66.4	39.5	39.5	55.3	4.3	4.3
Incr Delay (d2), s/veh	18.8	33.7	0.6	38.3	0.6	1.4	12.0	11.4	10.6	33.9	2.4	1.9
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(95%),veh/ln	4.7	25.2	6.4	11.7	11.6	11.9	7.1	25.3	27.6	11.1	2.9	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.9	88.8	47.1	102.8	43.0	44.6	78.4	50.9	50.1	89.2	6.7	6.2
LnGrp LOS	F	F	D	F	D	D	E	D	D	F	A	A
Approach Vol, veh/h		570			645			1270			950	
Approach Delay, s/veh		80.3			58.0			52.9			22.1	
Approach LOS		F			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	70.7	11.1	47.2	21.8	65.0	19.8	38.5
Change Period (Y+Rc), s	4.6	4.9	4.6	4.6	4.6	4.9	4.6	4.6
Max Green Setting (Gmax), s	18.0	58.5	11.4	38.4	17.6	58.9	15.4	34.4
Max Q Clear Time (g_c+I1), s	11.4	9.1	7.1	22.1	17.1	50.9	15.2	33.7
Green Ext Time (p_c), s	0.1	5.6	0.0	2.0	0.0	4.5	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	49.9
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	195	100	80	125	225	145	895	55	210	655	35
Future Volume (veh/h)	70	195	100	80	125	225	145	895	55	210	655	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		0.99	1.00		1.00
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	1786	1786	1786	1786	1786	1786	1758	1758	1758	1772	1772	1772
Adj Flow Rate, veh/h	70	195	100	80	125	225	145	895	55	210	655	35
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	3	3	3	2	2	2
Cap, veh/h	213	242	200	176	253	210	164	961	59	515	1568	84
Arrive On Green	0.04	0.14	0.14	0.05	0.14	0.14	0.10	0.34	0.34	0.31	0.55	0.55
Sat Flow, veh/h	1701	1786	1480	1701	1786	1481	1674	2801	172	1688	2850	152
Grp Volume(v), veh/h	70	195	100	80	125	225	145	399	551	210	289	401
Grp Sat Flow(s),veh/h/ln	1701	1786	1480	1701	1786	1481	1674	1248	1725	1688	1258	1744
Q Serve(g_s), s	4.2	12.7	7.5	4.8	7.8	9.5	10.3	37.0	37.0	11.8	16.1	16.1
Cycle Q Clear(g_c), s	4.2	12.7	7.5	4.8	7.8	9.5	10.3	37.0	37.0	11.8	16.1	16.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		0.09
Lane Grp Cap(c), veh/h	213	242	200	176	253	210	164	428	592	515	692	959
V/C Ratio(X)	0.33	0.81	0.50	0.45	0.49	1.07	0.88	0.93	0.93	0.41	0.42	0.42
Avail Cap(c_a), veh/h	359	327	271	312	327	272	195	484	669	515	692	959
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	0.71	0.71	0.71
Uniform Delay (d), s/veh	42.4	50.4	48.1	42.5	47.5	16.0	53.4	38.1	38.1	33.1	15.8	15.8
Incr Delay (d2), s/veh	0.9	10.2	1.9	1.8	1.5	73.7	31.2	29.3	23.5	0.4	1.3	1.0
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(95%),veh/ln	3.3	10.5	5.2	3.8	6.4	12.3	9.6	20.6	26.0	7.8	7.6	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.3	60.5	50.0	44.3	49.0	89.7	84.7	67.4	61.6	33.4	17.1	16.7
LnGrp LOS	D	E	D	D	D	F	F	E	E	C	B	B
Approach Vol, veh/h		365			430			1095			900	
Approach Delay, s/veh		54.3			69.4			66.8			20.7	
Approach LOS		D			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	41.6	46.1	11.0	21.2	16.8	71.0	10.2	22.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	16.5	47.0	16.0	22.5	14.5	49.0	16.0	22.5
Max Q Clear Time (g_c+I1), s	13.8	39.0	6.8	14.7	12.3	18.1	6.2	11.5
Green Ext Time (p_c), s	0.2	2.6	0.1	0.7	0.1	2.8	0.1	1.1

Intersection Summary	
HCM 6th Ctrl Delay	50.7
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1062	50	30	1113	10	65
Future Vol, veh/h	1062	50	30	1113	10	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1062	50	30	1113	10	65

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1112	0	1704	556
Stage 1	-	-	-	-	1087	-
Stage 2	-	-	-	-	617	-
Critical Hdwy	-	-	4.16	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	-	-	2.23	-	3.53	3.33
Pot Cap-1 Maneuver	-	-	618	-	82	472
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	498	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	618	-	72	472
Mov Cap-2 Maneuver	-	-	-	-	72	-
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	435	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	23.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	271	-	-	618	-
HCM Lane V/C Ratio	0.277	-	-	0.049	-
HCM Control Delay (s)	23.3	-	-	11.1	0.7
HCM Lane LOS	C	-	-	B	A
HCM 95th %tile Q(veh)	1.1	-	-	0.2	-

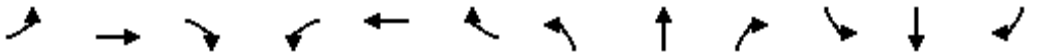
Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	0	190	15	0	100
Future Vol, veh/h	15	0	190	15	0	100
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	13	13	4	4	2	2
Mvmt Flow	15	0	190	15	0	100

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	301	201	0	0	208	0
Stage 1	201	-	-	-	-	-
Stage 2	100	-	-	-	-	-
Critical Hdwy	6.53	6.33	-	-	4.12	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	-	-	2.218	-
Pot Cap-1 Maneuver	668	813	-	-	1363	-
Stage 1	807	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	667	811	-	-	1360	-
Mov Cap-2 Maneuver	667	-	-	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	897	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	667	1360	-
HCM Lane V/C Ratio	-	-	0.022	-	-
HCM Control Delay (s)	-	-	10.5	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	370	0	10	460	355	10	5	5	345	5	190
Future Volume (veh/h)	140	370	0	10	460	355	10	5	5	345	5	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1772	1772	1772	1786	1786	1786	1800	1800	1800	1772	1772	1772
Adj Flow Rate, veh/h	140	370	0	10	460	355	10	5	5	345	5	190
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	1	1	1	0	0	0	2	2	2
Cap, veh/h	338	725	0	402	600	508	262	81	81	612	12	439
Arrive On Green	0.09	0.41	0.00	0.02	0.34	0.34	0.02	0.10	0.10	0.22	0.30	0.30
Sat Flow, veh/h	1688	1772	0	1701	1786	1514	1714	826	826	1688	39	1469
Grp Volume(v), veh/h	140	370	0	10	460	355	10	0	10	345	0	195
Grp Sat Flow(s),veh/h/ln	1688	1772	0	1701	1786	1514	1714	0	1651	1688	0	1508
Q Serve(g_s), s	3.0	9.5	0.0	0.2	14.1	12.5	0.3	0.0	0.3	10.3	0.0	6.4
Cycle Q Clear(g_c), s	3.0	9.5	0.0	0.2	14.1	12.5	0.3	0.0	0.3	10.3	0.0	6.4
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.50	1.00		0.97
Lane Grp Cap(c), veh/h	338	725	0	402	600	508	262	0	162	612	0	450
V/C Ratio(X)	0.41	0.51	0.00	0.02	0.77	0.70	0.04	0.00	0.06	0.56	0.00	0.43
Avail Cap(c_a), veh/h	1042	1186	0	1376	1195	1013	1103	0	971	1101	0	886
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	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.5	13.5	0.0	13.2	18.2	17.7	24.2	0.0	25.1	16.5	0.0	17.3
Incr Delay (d2), s/veh	0.8	0.6	0.0	0.0	2.1	1.7	0.1	0.0	0.2	0.8	0.0	0.7
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(95%),veh/ln	1.8	6.0	0.0	0.2	9.4	7.5	0.2	0.0	0.2	6.7	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.3	14.1	0.0	13.2	20.3	19.4	24.3	0.0	25.2	17.3	0.0	18.0
LnGrp LOS	B	B	A	B	C	B	C	A	C	B	A	B
Approach Vol, veh/h		510			825			20			540	
Approach Delay, s/veh		13.9			19.8			24.8			17.5	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	10.0	4.9	29.1	4.9	22.3	9.4	24.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	31.0	36.0	36.0	41.0	31.0	36.0	31.0	41.0
Max Q Clear Time (g_c+I1), s	12.3	2.3	2.2	11.5	2.3	8.4	5.0	16.1
Green Ext Time (p_c), s	1.0	0.0	0.0	2.3	0.0	1.3	0.4	4.5

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	450	0	0	885	345	405
Future Volume (veh/h)	450	0	0	885	345	405
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1772	0	0	1772	1786	1786
Adj Flow Rate, veh/h	450	0	0	885	345	405
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	0	0	2	1	1
Cap, veh/h	1126	0	0	1126	505	449
Arrive On Green	0.64	0.00	0.00	0.64	0.30	0.30
Sat Flow, veh/h	1772	0	0	1772	1701	1514
Grp Volume(v), veh/h	450	0	0	885	345	405
Grp Sat Flow(s),veh/h/ln	1772	0	0	1772	1701	1514
Q Serve(g_s), s	14.7	0.0	0.0	43.0	21.1	30.3
Cycle Q Clear(g_c), s	14.7	0.0	0.0	43.0	21.1	30.3
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1126	0	0	1126	505	449
V/C Ratio(X)	0.40	0.00	0.00	0.79	0.68	0.90
Avail Cap(c_a), veh/h	1126	0	0	1126	1109	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.5	0.0	0.0	15.7	36.6	39.8
Incr Delay (d2), s/veh	1.1	0.0	0.0	5.6	1.6	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.8	0.0	0.0	24.7	13.9	17.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.6	0.0	0.0	21.2	38.2	46.7
LnGrp LOS	B	A	A	C	D	D
Approach Vol, veh/h	450			885	750	
Approach Delay, s/veh	11.6			21.2	42.8	
Approach LOS	B			C	D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		79.0		39.1		79.0
Change Period (Y+Rc), s		4.0		4.0		4.0
Max Green Setting (Gmax), s		75.0		77.0		75.0
Max Q Clear Time (g_c+I1), s		45.0		32.3		16.7
Green Ext Time (p_c), s		8.1		2.7		3.2

Intersection Summary		
HCM 6th Ctrl Delay		26.9
HCM 6th LOS		C

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	450	450	355	875	0	0
Future Vol, veh/h	450	450	355	875	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	300	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	450	450	355	875	0	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	675	900
Stage 1	-	-	0	0
Stage 2	-	-	675	900
Critical Hdwy	-	-	6.42	6.52
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.42	5.52
Follow-up Hdwy	-	-	3.518	4.018
Pot Cap-1 Maneuver	-	-	419	~ 278
Stage 1	-	-	-	-
Stage 2	-	-	506	~ 357
Platoon blocked, %	-	-		
Mov Cap-1 Maneuver	-	-	419	0
Mov Cap-2 Maneuver	-	-	483	0
Stage 1	-	-	-	0
Stage 2	-	-	506	0

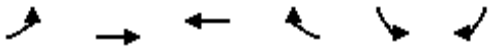
Approach	EB	WB
HCM Control Delay, s	0	
HCM LOS		-

Minor Lane/Major Mvmt	EBT	EBR	WBLn1	WBLn2
Capacity (veh/h)	-	-	483	-
HCM Lane V/C Ratio	-	-	0.735	-
HCM Control Delay (s)	-	-	30.4	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

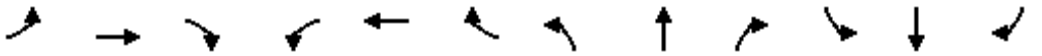
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	490	115	700	495	175	125	225	690	150	195	110
Future Volume (vph)	90	490	115	700	495	175	125	225	690	150	195	110
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.95		0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1693	3280		1608	1678	1476	1676	1765	1492	1644	3081	
Flt Permitted	0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1693	3280		1608	1678	1476	1676	1765	1492	1644	3081	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	90	490	115	700	495	175	125	225	690	150	195	110
RTOR Reduction (vph)	0	14	0	0	0	51	0	0	46	0	57	0
Lane Group Flow (vph)	90	591	0	588	607	124	125	225	644	150	248	0
Confl. Peds. (#/hr)	2		1	1		2	2		3	3		2
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	4%	4%	4%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	2	2		6	6		3	8	6	7	4	
Permitted Phases						6			8			
Actuated Green, G (s)	25.9	25.9		50.7	50.7	50.7	15.2	21.9	72.6	15.5	22.2	
Effective Green, g (s)	25.9	25.9		50.7	50.7	50.7	15.2	21.9	72.6	15.5	22.2	
Actuated g/C Ratio	0.20	0.20		0.38	0.38	0.38	0.12	0.17	0.55	0.12	0.17	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
Lane Grp Cap (vph)	332	643		617	644	566	192	292	820	193	518	
v/s Ratio Prot	0.05	c0.18		c0.37	0.36		0.07	0.13	c0.30	c0.09	0.08	
v/s Ratio Perm						0.08			0.13			
v/c Ratio	0.27	0.92		0.95	0.94	0.22	0.65	0.77	0.78	0.78	0.48	
Uniform Delay, d1	45.0	52.0		39.5	39.2	27.3	55.9	52.6	23.5	56.6	49.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	18.1		25.1	22.5	0.2	8.0	12.2	5.1	18.1	0.8	
Delay (s)	45.5	70.1		64.6	61.7	27.6	63.9	64.8	28.6	74.7	50.5	
Level of Service	D	E		E	E	C	E	E	C	E	D	
Approach Delay (s)		66.9			58.6			40.7			58.5	
Approach LOS		E			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	55.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	620	705	805	95	80	545
Future Volume (vph)	620	705	805	95	80	545
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0	5.0		4.5	4.5
Lane Util. Factor	1.00	1.00	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1693	1782	3322		1676	1500
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1693	1782	3322		1676	1500
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	620	705	805	95	80	545
RTOR Reduction (vph)	0	0	8	0	0	9
Lane Group Flow (vph)	620	705	892	0	80	536
Confl. Peds. (#/hr)	3			3		
Confl. Bikes (#/hr)						1
Heavy Vehicles (%)	1%	1%	1%	1%	2%	2%
Turn Type	Prot	NA	NA		Prot	pt+ov
Protected Phases	7	4	8		6	1 7
Permitted Phases						
Actuated Green, G (s)	43.9	81.3	32.4		19.3	67.7
Effective Green, g (s)	43.9	81.3	32.4		19.3	67.7
Actuated g/C Ratio	0.40	0.74	0.29		0.18	0.61
Clearance Time (s)	5.0	5.0	5.0		4.5	
Vehicle Extension (s)	3.0	3.0	4.0		2.5	
Lane Grp Cap (vph)	675	1315	977		293	922
v/s Ratio Prot	c0.37	0.40	c0.27		0.05	c0.36
v/s Ratio Perm						
v/c Ratio	0.92	0.54	0.91		0.27	0.58
Uniform Delay, d1	31.4	6.2	37.5		39.3	12.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	17.4	0.4	12.8		0.4	0.8
Delay (s)	48.8	6.7	50.3		39.7	13.5
Level of Service	D	A	D		D	B
Approach Delay (s)		26.4	50.3		16.8	
Approach LOS		C	D		B	

Intersection Summary			
HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	110.1	Sum of lost time (s)	14.5
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	10	15	10	25	40	45	965	20	40	865	100
Future Volume (veh/h)	25	10	15	10	25	40	45	965	20	40	865	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1758	1758	1758	1744	1744	1744	1772	1772	1772	1786	1786	1786
Adj Flow Rate, veh/h	25	10	15	10	25	40	45	965	20	40	865	100
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	4	4	4	2	2	2	1	1	1
Cap, veh/h	256	74	169	118	67	94	448	1661	34	440	1493	173
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.06	0.49	0.49	0.05	0.49	0.49
Sat Flow, veh/h	891	651	1490	131	596	831	1688	3373	70	1701	3063	354
Grp Volume(v), veh/h	35	0	15	75	0	0	45	482	503	40	479	486
Grp Sat Flow(s),veh/h/ln	1542	0	1490	1558	0	0	1688	1683	1759	1701	1697	1721
Q Serve(g_s), s	0.0	0.0	0.4	0.1	0.0	0.0	0.5	8.1	8.1	0.4	8.0	8.0
Cycle Q Clear(g_c), s	0.7	0.0	0.4	1.7	0.0	0.0	0.5	8.1	8.1	0.4	8.0	8.0
Prop In Lane	0.71		1.00	0.13		0.53	1.00		0.04	1.00		0.21
Lane Grp Cap(c), veh/h	330	0	169	279	0	0	448	829	867	440	827	839
V/C Ratio(X)	0.11	0.00	0.09	0.27	0.00	0.00	0.10	0.58	0.58	0.09	0.58	0.58
Avail Cap(c_a), veh/h	2164	0	2084	1094	0	0	1433	2355	2461	1442	2374	2408
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	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	0.0	15.8	16.4	0.0	0.0	5.1	7.2	7.2	5.1	7.3	7.3
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.6	0.0	0.0	0.1	0.8	0.7	0.1	0.8	0.8
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(95%),veh/ln	0.5	0.0	0.2	1.1	0.0	0.0	0.2	3.4	3.5	0.2	3.4	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	0.0	16.1	17.0	0.0	0.0	5.2	7.9	7.9	5.2	8.0	8.0
LnGrp LOS	B	A	B	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		50			75			1030			1005	
Approach Delay, s/veh		16.1			17.0			7.8			7.9	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	24.0		9.0	6.8	23.8		9.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	25.5	55.5		55.5	25.5	55.5		25.5				
Max Q Clear Time (g_c+I1), s	2.4	10.1		2.7	2.5	10.0		3.7				
Green Ext Time (p_c), s	0.1	9.5		0.3	0.1	9.3		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		8.4	
HCM 6th LOS		A	

Intersection	
Int Delay, s/veh	104.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	125	220	230	15	245	55	230	95	20	25	40	80
Future Vol, veh/h	125	220	230	15	245	55	230	95	20	25	40	80
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	1	1	1	3	3	3
Mvmt Flow	125	220	230	15	245	55	230	95	20	25	40	80

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	300	0	0	450	0	0	948	915	336	947	1003	273
Stage 1	-	-	-	-	-	-	585	585	-	303	303	-
Stage 2	-	-	-	-	-	-	363	330	-	644	700	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.11	6.51	6.21	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.13	5.53	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.509	4.009	3.309	3.527	4.027	3.327
Pot Cap-1 Maneuver	1261	-	-	1116	-	-	242	274	708	240	241	763
Stage 1	-	-	-	-	-	-	499	499	-	704	662	-
Stage 2	-	-	-	-	-	-	658	648	-	460	440	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1261	-	-	1116	-	-	~ 170	244	707	150	214	763
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 170	244	-	150	214	-
Stage 1	-	-	-	-	-	-	450	450	-	634	653	-
Stage 2	-	-	-	-	-	-	545	640	-	317	396	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0.4	$ 407.9	20.1
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	195	1261	-	-	1116	-	-	150	411
HCM Lane V/C Ratio	1.769	0.099	-	-	0.013	-	-	0.167	0.292
HCM Control Delay (s)	$ 407.9	8.2	-	-	8.3	-	-	33.7	17.3
HCM Lane LOS	F	A	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	24.1	0.3	-	-	0	-	-	0.6	1.2

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	126.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	240	405	125	150	285	30	60	120	125	30	80	220
Future Vol, veh/h	240	405	125	150	285	30	60	120	125	30	80	220
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	0	0	0
Mvmt Flow	240	405	125	150	285	30	60	120	125	30	80	220
Number of Lanes	0	1	1	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	234	83.1	24	30.4
HCM LOS	F	F	C	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	37%	0%	34%	0%	100%	0%
Vol Thru, %	0%	49%	63%	0%	66%	0%	0%	27%
Vol Right, %	0%	51%	0%	100%	0%	100%	0%	73%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	60	245	645	125	435	30	30	300
LT Vol	60	0	240	0	150	0	30	0
Through Vol	0	120	405	0	285	0	0	80
RT Vol	0	125	0	125	0	30	0	220
Lane Flow Rate	60	245	645	125	435	30	30	300
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.16	0.597	1.538	0.265	1.038	0.064	0.079	0.706
Departure Headway (Hd)	10.761	9.854	8.827	7.904	9.509	8.594	10.574	9.503
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	335	370	419	458	387	419	341	384
Service Time	8.461	7.554	6.527	5.604	7.209	6.294	8.274	7.203
HCM Lane V/C Ratio	0.179	0.662	1.539	0.273	1.124	0.072	0.088	0.781
HCM Control Delay	15.5	26.1	276.7	13.4	88	11.9	14.2	32
HCM Lane LOS	C	D	F	B	F	B	B	D
HCM 95th-tile Q	0.6	3.7	34.3	1.1	13.1	0.2	0.3	5.2

Intersection	
Intersection Delay, s/veh	18.6
Intersection LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	260	145	135	290	260	185
Future Vol, veh/h	260	145	135	290	260	185
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	260	145	135	290	260	185
Number of Lanes	1	1	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	15.8	15.1	24.6
HCM LOS	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1
Vol Left, %	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	58%
Vol Right, %	0%	0%	0%	100%	42%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	135	290	260	145	445
LT Vol	135	0	260	0	0
Through Vol	0	290	0	0	260
RT Vol	0	0	0	145	185
Lane Flow Rate	135	290	260	145	445
Geometry Grp	7	7	7	7	4
Degree of Util (X)	0.264	0.526	0.536	0.25	0.744
Departure Headway (Hd)	7.046	6.535	7.422	6.199	6.018
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	508	548	484	577	601
Service Time	4.819	4.309	5.19	3.966	4.08
HCM Lane V/C Ratio	0.266	0.529	0.537	0.251	0.74
HCM Control Delay	12.4	16.4	18.5	11	24.6
HCM Lane LOS	B	C	C	B	C
HCM 95th-tile Q	1.1	3	3.1	1	6.5

Intersection	
Intersection Delay, s/veh	13.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	15	35	25	35	160	30	150	10	50	325	10
Future Vol, veh/h	15	15	35	25	35	160	30	150	10	50	325	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	1	1	1	1	1	1	0	0	0
Mvmt Flow	15	15	35	25	35	160	30	150	10	50	325	10
Number of Lanes	1	1	0	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	9.6	12.2	10.5	17.3
HCM LOS	A	B	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	100%	0%	11%	13%
Vol Thru, %	0%	94%	0%	30%	16%	84%
Vol Right, %	0%	6%	0%	70%	73%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	160	15	50	220	385
LT Vol	30	0	15	0	25	50
Through Vol	0	150	0	15	35	325
RT Vol	0	10	0	35	160	10
Lane Flow Rate	30	160	15	50	220	385
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.054	0.261	0.03	0.085	0.359	0.609
Departure Headway (Hd)	6.424	5.873	7.096	6.088	5.874	5.698
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	557	611	504	587	612	635
Service Time	4.165	3.614	4.849	3.841	3.917	3.733
HCM Lane V/C Ratio	0.054	0.262	0.03	0.085	0.359	0.606
HCM Control Delay	9.5	10.7	10.1	9.4	12.2	17.3
HCM Lane LOS	A	B	B	A	B	C
HCM 95th-tile Q	0.2	1	0.1	0.3	1.6	4.1

Intersection	
Intersection Delay, s/veh	19.9
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	325	335	15	230	345
Future Vol, veh/h	15	325	335	15	230	345
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	16	353	364	16	250	375
Number of Lanes	1	1	1	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	19.1	22	19.1
HCM LOS	C	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	96%	0%	0%	0%	100%
Vol Right, %	4%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	350	15	325	230	345
LT Vol	0	15	0	230	0
Through Vol	335	0	0	0	345
RT Vol	15	0	325	0	0
Lane Flow Rate	380	16	353	250	375
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.677	0.035	0.629	0.48	0.666
Departure Headway (Hd)	6.406	7.634	6.409	6.905	6.395
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	559	467	562	520	563
Service Time	4.482	5.413	4.186	4.686	4.176
HCM Lane V/C Ratio	0.68	0.034	0.628	0.481	0.666
HCM Control Delay	22	10.7	19.5	16	21.1
HCM Lane LOS	C	B	C	C	C
HCM 95th-tile Q	5.1	0.1	4.4	2.6	4.9

Intersection	
Intersection Delay, s/veh	12.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	190	0	0	205	200	20	30	45	185	0	5
Future Vol, veh/h	20	190	0	0	205	200	20	30	45	185	0	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	1	1	1
Mvmt Flow	20	190	0	0	205	200	20	30	45	185	0	5
Number of Lanes	0	1	0	0	1	0	0	1	0	1	0	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	11	13.7	9.9	13
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	21%	10%	0%	100%	0%
Vol Thru, %	32%	90%	51%	0%	0%
Vol Right, %	47%	0%	49%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	95	210	405	185	5
LT Vol	20	20	0	185	0
Through Vol	30	190	205	0	0
RT Vol	45	0	200	0	5
Lane Flow Rate	95	210	405	185	5
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.153	0.317	0.548	0.347	0.008
Departure Headway (Hd)	5.788	5.426	4.873	6.749	5.529
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	618	662	737	533	646
Service Time	3.842	3.473	2.914	4.494	3.274
HCM Lane V/C Ratio	0.154	0.317	0.55	0.347	0.008
HCM Control Delay	9.9	11	13.7	13.1	8.3
HCM Lane LOS	A	B	B	B	A
HCM 95th-tile Q	0.5	1.4	3.4	1.5	0

Intersection	
Intersection Delay, s/veh	12.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	255	145	35	325	85	0	0	0	30	30	20
Future Vol, veh/h	30	255	145	35	325	85	0	0	0	30	30	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	1	1	1	2	2	2	2	2	2	0	0	0
Mvmt Flow	30	255	145	35	325	85	0	0	0	30	30	20
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	12.4	13.1	9.6
HCM LOS	B	B	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	8%	38%
Vol Thru, %	59%	73%	38%
Vol Right, %	34%	19%	25%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	430	445	80
LT Vol	30	35	30
Through Vol	255	325	30
RT Vol	145	85	20
Lane Flow Rate	430	445	80
Geometry Grp	1	1	1
Degree of Util (X)	0.529	0.557	0.126
Departure Headway (Hd)	4.425	4.507	5.662
Convergence, Y/N	Yes	Yes	Yes
Cap	813	797	628
Service Time	2.469	2.552	3.743
HCM Lane V/C Ratio	0.529	0.558	0.127
HCM Control Delay	12.4	13.1	9.6
HCM Lane LOS	B	B	A
HCM 95th-tile Q	3.2	3.5	0.4

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	255	405	10	0	40
Future Vol, veh/h	30	255	405	10	0	40
Conflicting Peds, #/hr	9	0	0	9	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	33	277	440	11	0	43

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	460	0	-	0	798	455
Stage 1	-	-	-	-	455	-
Stage 2	-	-	-	-	343	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1101	-	-	-	358	609
Stage 1	-	-	-	-	643	-
Stage 2	-	-	-	-	723	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1093	-	-	-	340	604
Mov Cap-2 Maneuver	-	-	-	-	340	-
Stage 1	-	-	-	-	615	-
Stage 2	-	-	-	-	718	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1093	-	-	-	604
HCM Lane V/C Ratio	0.03	-	-	-	0.072
HCM Control Delay (s)	8.4	0	-	-	11.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	270	70	120	235	85	65
Future Vol, veh/h	270	70	120	235	85	65
Conflicting Peds, #/hr	0	4	4	0	2	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	270	70	120	235	85	65

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	344	0	786	310
Stage 1	-	-	-	-	309	-
Stage 2	-	-	-	-	477	-
Critical Hdwy	-	-	4.11	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.209	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	1221	-	362	732
Stage 1	-	-	-	-	747	-
Stage 2	-	-	-	-	626	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1217	-	325	729
Mov Cap-2 Maneuver	-	-	-	-	325	-
Stage 1	-	-	-	-	745	-
Stage 2	-	-	-	-	563	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	15.8
HCM LOS			C

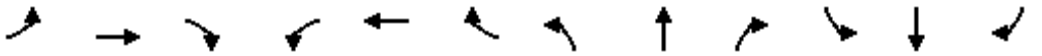
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	325	729	-	-	1217	-
HCM Lane V/C Ratio	0.262	0.089	-	-	0.099	-
HCM Control Delay (s)	20	10.4	-	-	8.3	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	1	0.3	-	-	0.3	-

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	105	130	0	0	180	0	20	10	35	5	0
Future Vol, veh/h	20	105	130	0	0	180	0	20	10	35	5	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	3	3	3
Mvmt Flow	20	105	130	0	0	180	0	20	10	35	5	0
Number of Lanes	0	1	0	0	0	1	0	1	0	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	8.4	7.6	7.8	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	8%	0%	88%
Vol Thru, %	67%	41%	0%	12%
Vol Right, %	33%	51%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	255	180	40
LT Vol	0	20	0	35
Through Vol	20	105	0	5
RT Vol	10	130	180	0
Lane Flow Rate	30	255	180	40
Geometry Grp	1	1	1	1
Degree of Util (X)	0.038	0.274	0.186	0.056
Departure Headway (Hd)	4.614	3.87	3.72	5.025
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	779	915	970	716
Service Time	2.625	1.954	1.72	3.035
HCM Lane V/C Ratio	0.039	0.279	0.186	0.056
HCM Control Delay	7.8	8.4	7.6	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	1.1	0.7	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	375	10	0	360	210	0	0	10	260	0	305
Future Volume (veh/h)	335	375	10	0	360	210	0	0	10	260	0	305
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
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	1772	1772	1772	1772	1772	1772	1800	1800	1800	1772	1772	1772
Adj Flow Rate, veh/h	335	375	10	0	360	210	0	0	10	260	0	305
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	0	0	0	2	2	2
Cap, veh/h	503	1176	31	65	718	419	0	0	355	385	0	342
Arrive On Green	0.68	0.68	0.68	0.00	0.68	0.68	0.00	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	842	1718	46	998	1048	611	0	0	1522	1371	0	1466
Grp Volume(v), veh/h	335	0	385	0	0	570	0	0	10	260	0	305
Grp Sat Flow(s),veh/h/ln	842	0	1764	998	0	1660	0	0	1522	1371	0	1466
Q Serve(g_s), s	35.0	0.0	9.7	0.0	0.0	18.2	0.0	0.0	0.6	19.4	0.0	22.2
Cycle Q Clear(g_c), s	53.1	0.0	9.7	0.0	0.0	18.2	0.0	0.0	0.6	19.9	0.0	22.2
Prop In Lane	1.00		0.03	1.00		0.37	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	503	0	1208	65	0	1137	0	0	355	385	0	342
V/C Ratio(X)	0.67	0.00	0.32	0.00	0.00	0.50	0.00	0.00	0.03	0.67	0.00	0.89
Avail Cap(c_a), veh/h	503	0	1208	65	0	1137	0	0	421	446	0	406
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	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	7.0	0.0	0.0	8.3	0.0	0.0	32.6	40.3	0.0	40.9
Incr Delay (d2), s/veh	6.8	0.0	0.7	0.0	0.0	1.6	0.0	0.0	0.0	3.3	0.0	19.0
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(95%),veh/ln	12.2	0.0	6.6	0.0	0.0	10.8	0.0	0.0	0.4	11.4	0.0	14.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	0.0	7.7	0.0	0.0	9.9	0.0	0.0	32.6	43.6	0.0	59.9
LnGrp LOS	C	A	A	A	A	A	A	A	C	D	A	E
Approach Vol, veh/h		720			570			10			565	
Approach Delay, s/veh		17.1			9.9			32.6			52.4	
Approach LOS		B			A			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		30.2		80.0		30.2		80.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		30.5		75.5		30.5		75.5				
Max Q Clear Time (g_c+I1), s		2.6		55.1		24.2		20.2				
Green Ext Time (p_c), s		0.0		4.8		1.5		5.0				

Intersection Summary												
HCM 6th Ctrl Delay			25.7									
HCM 6th LOS			C									

Movement	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (veh/h)	55	340	160	130	55	45	45	35	40	50	255	20
Future Volume (veh/h)	55	340	160	130	55	45	45	35	40	50	255	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	0.97		0.97	0.97		0.94	1.00	1.00	1.00
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	1772	1772	1772	1772	1772	1772	1758	1758	1758	1758	1758	1758
Adj Flow Rate, veh/h	55	55	160	130	55	45	45	35	40	50	20	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	3	3	3
Cap, veh/h	530	530	186	412	165	135	378	107	122	360	49	49
Arrive On Green	0.06	0.06	0.35	0.09	0.19	0.19	0.05	0.15	0.15	0.10	0.39	0.39
Sat Flow, veh/h	1688	1688	536	1688	889	728	1674	724	827	1674	126	126
Grp Volume(v), veh/h	55	55	500	130	0	100	45	0	75	50	275	275
Grp Sat Flow(s),veh/h/ln	1688	1688	1674	1688	0	1617	1674	0	1552	1674	1735	1735
Q Serve(g_s), s	1.2	1.2	16.1	3.7	0.0	3.1	1.3	0.0	2.5	1.0	6.7	6.7
Cycle Q Clear(g_c), s	1.2	1.2	16.1	3.7	0.0	3.1	1.3	0.0	2.5	1.0	6.7	6.7
Prop In Lane	1.00	1.00	0.32	1.00		0.45	1.00		0.53	1.00	0.07	0.07
Lane Grp Cap(c), veh/h	530	530	582	412	0	300	378	0	229	360	677	677
V/C Ratio(X)	0.10	0.10	0.86	0.32	0.00	0.33	0.12	0.00	0.33	0.14	0.41	0.41
Avail Cap(c_a), veh/h	602	602	707	436	0	711	461	0	679	360	732	732
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.6	10.6	17.6	18.3	0.0	20.5	19.0	0.0	22.1	11.4	12.8	12.8
Incr Delay (d2), s/veh	0.1	0.1	11.0	0.5	0.0	0.8	0.2	0.0	1.0	0.2	0.8	0.8
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(95%),veh/ln	0.7	0.7	11.8	2.5	0.0	2.1	0.9	0.0	1.7	0.6	4.5	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.8	10.8	28.6	18.8	0.0	21.3	19.2	0.0	23.1	11.6	13.6	13.6
LnGrp LOS	B	B	C	B	A	C	B	A	C	B	B	B
Approach Vol, veh/h	555	555			230			120		325		
Approach Delay, s/veh	26.8	26.8			19.9			21.7		13.3		
Approach LOS	C	C			B			C		B		

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	15.2	10.5	24.7	9.8	13.1	8.0	27.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.0	25.5	6.0	24.5	6.1	25.4	6.0	24.5
Max Q Clear Time (g_c+I1), s	3.3	5.1	3.0	18.1	5.7	4.5	3.2	8.7
Green Ext Time (p_c), s	0.0	0.6	0.0	2.0	0.0	0.4	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	21.5
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	340	130	15	280	105	15
Future Vol, veh/h	340	130	15	280	105	15
Conflicting Peds, #/hr	0	1	1	0	4	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	340	130	15	280	105	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	471	0	720	406
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	314	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1091	-	395	645
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	741	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1090	-	388	644
Mov Cap-2 Maneuver	-	-	-	-	388	-
Stage 1	-	-	-	-	672	-
Stage 2	-	-	-	-	728	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	17.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	408	-	-	1090	-
HCM Lane V/C Ratio	0.294	-	-	0.014	-
HCM Control Delay (s)	17.5	-	-	8.3	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.2	-	-	0	-

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	40	40	45	40	5	35	130	90	5	105	10
Future Vol, veh/h	5	40	40	45	40	5	35	130	90	5	105	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	6	4	4	4	4	4	4	0	0	0
Mvmt Flow	5	40	40	45	40	5	35	130	90	5	105	10
Number of Lanes	0	1	0	0	1	0	0	1	0	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	8.3	8.7	9.3	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	6%	50%	4%
Vol Thru, %	51%	47%	44%	88%
Vol Right, %	35%	47%	6%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	255	85	90	120
LT Vol	35	5	45	5
Through Vol	130	40	40	105
RT Vol	90	40	5	10
Lane Flow Rate	255	85	90	120
Geometry Grp	1	1	1	1
Degree of Util (X)	0.308	0.111	0.125	0.152
Departure Headway (Hd)	4.351	4.693	4.984	4.567
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	826	762	718	784
Service Time	2.38	2.734	3.025	2.603
HCM Lane V/C Ratio	0.309	0.112	0.125	0.153
HCM Control Delay	9.3	8.3	8.7	8.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.3	0.4	0.4	0.5

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	185	30	65	10	20	5	65	70	5	5	20	145
Future Vol, veh/h	185	30	65	10	20	5	65	70	5	5	20	145
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	0	0	0	4	4	4	3	3	3
Mvmt Flow	185	30	65	10	20	5	65	70	5	5	20	145
Number of Lanes	0	1	0	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	10.5	8.3	9.2	8.8
HCM LOS	B	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	66%	29%	3%
Vol Thru, %	0%	93%	11%	57%	12%
Vol Right, %	0%	7%	23%	14%	85%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	65	75	280	35	170
LT Vol	65	0	185	10	5
Through Vol	0	70	30	20	20
RT Vol	0	5	65	5	145
Lane Flow Rate	65	75	280	35	170
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.108	0.114	0.367	0.048	0.213
Departure Headway (Hd)	6.002	5.45	4.721	4.984	4.508
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	595	655	759	713	792
Service Time	3.759	3.207	2.767	3.052	2.563
HCM Lane V/C Ratio	0.109	0.115	0.369	0.049	0.215
HCM Control Delay	9.5	8.9	10.5	8.3	8.8
HCM Lane LOS	A	A	B	A	A
HCM 95th-tile Q	0.4	0.4	1.7	0.2	0.8

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	85	180	75	5	155	50	65	45	15	45	85	85
Future Vol, veh/h	85	180	75	5	155	50	65	45	15	45	85	85
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	2	2	2
Mvmt Flow	85	180	75	5	155	50	65	45	15	45	85	85
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	12.9	10.7	10.4	10.2
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	52%	25%	2%	35%	0%
Vol Thru, %	36%	53%	74%	65%	0%
Vol Right, %	12%	22%	24%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	340	210	130	85
LT Vol	65	85	5	45	0
Through Vol	45	180	155	85	0
RT Vol	15	75	50	0	85
Lane Flow Rate	125	340	210	130	85
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.204	0.485	0.308	0.23	0.129
Departure Headway (Hd)	5.882	5.138	5.278	6.361	5.474
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	609	700	680	564	654
Service Time	3.93	3.174	3.319	4.103	3.216
HCM Lane V/C Ratio	0.205	0.486	0.309	0.23	0.13
HCM Control Delay	10.4	12.9	10.7	11	9
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	0.8	2.7	1.3	0.9	0.4

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	840	1140	60	15	15
Future Vol, veh/h	15	840	1140	60	15	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	15	840	1140	60	15	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1200	0	-	0	2010	1140
Stage 1	-	-	-	-	1140	-
Stage 2	-	-	-	-	870	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	582	-	-	-	66	247
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	413	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	582	-	-	-	63	247
Mov Cap-2 Maneuver	-	-	-	-	63	-
Stage 1	-	-	-	-	293	-
Stage 2	-	-	-	-	413	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	55.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	582	-	-	-	100
HCM Lane V/C Ratio	0.026	-	-	-	0.3
HCM Control Delay (s)	11.3	0	-	-	55.7
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1

MOVEMENT SUMMARY

Site: 34 [Johnson Rd NE & SR 305_Alt4 (Site Folder: Future PM 2044)]

New Site
Site Category: Alternative 4 PM 2044
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Johnson Rd NE														
3	L2	30	4.0	30	4.0	0.109	13.0	LOS B	0.5	12.2	0.59	0.73	0.59	35.1
8	T1	45	4.0	45	4.0	0.109	7.1	LOS A	0.5	12.2	0.59	0.73	0.59	35.0
18	R2	10	4.0	10	4.0	0.109	7.0	LOS A	0.5	12.2	0.59	0.73	0.59	34.0
Approach		85	4.0	85	4.0	0.109	9.2	LOS A	0.5	12.2	0.59	0.73	0.59	34.9
East: SR 305														
1	L2	10	2.0	10	2.0	0.009	10.2	LOS B	0.0	1.0	0.24	0.60	0.24	34.4
6	T1	1185	2.0	1185	2.0	0.768	4.8	LOS A	10.0	253.6	0.54	0.46	0.54	36.1
16	R2	35	2.0	35	2.0	0.768	5.0	LOS A	10.0	253.6	0.54	0.46	0.54	34.9
Approach		1230	2.0	1230	2.0	0.768	4.9	LOS A	10.0	253.6	0.54	0.46	0.54	36.1
North: Johnson Rd NE														
7	L2	5	0.0	5	0.0	0.150	16.6	LOS B	0.9	22.0	0.84	0.87	0.84	34.3
4	T1	35	0.0	35	0.0	0.150	10.8	LOS B	0.9	22.0	0.84	0.87	0.84	34.1
14	R2	35	0.0	35	0.0	0.150	10.7	LOS B	0.9	22.0	0.84	0.87	0.84	33.2
Approach		75	0.0	75	0.0	0.150	11.1	LOS B	0.9	22.0	0.84	0.87	0.84	33.7
West: SR 305														
5	L2	25	2.0	25	2.0	0.022	10.0	LOS B	0.1	2.6	0.18	0.61	0.18	34.6
2	T1	785	2.0	785	2.0	0.495	4.2	LOS A	4.2	107.3	0.25	0.38	0.25	37.2
12	R2	25	2.0	25	2.0	0.495	4.3	LOS A	4.2	107.3	0.25	0.38	0.25	35.9
Approach		835	2.0	835	2.0	0.495	4.4	LOS A	4.2	107.3	0.25	0.39	0.25	37.1
All Vehicles		2225	2.0	2225	2.0	0.768	5.1	LOS A	10.0	253.6	0.44	0.46	0.44	36.3

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	30	5	125	5	215	50	90	200	5
Future Vol, veh/h	0	0	0	30	5	125	5	215	50	90	200	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	30	5	125	5	215	50	90	200	5
Number of Lanes	0	1	0	0	1	0	0	1	0	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	0	9	9.9	10.5
HCM LOS	-	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	0%	19%	31%
Vol Thru, %	80%	100%	3%	68%
Vol Right, %	19%	0%	78%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	270	0	160	295
LT Vol	5	0	30	90
Through Vol	215	0	5	200
RT Vol	50	0	125	5
Lane Flow Rate	270	0	160	295
Geometry Grp	1	1	1	1
Degree of Util (X)	0.338	0	0.21	0.38
Departure Headway (Hd)	4.512	5.409	4.726	4.634
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	794	0	755	773
Service Time	2.556	3.485	2.778	2.677
HCM Lane V/C Ratio	0.34	0	0.212	0.382
HCM Control Delay	9.9	8.5	9	10.5
HCM Lane LOS	A	N	A	B
HCM 95th-tile Q	1.5	0	0.8	1.8

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	85	160	110	140	15
Future Vol, veh/h	15	85	160	110	140	15
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	3	3
Mvmt Flow	15	85	160	110	140	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	270	0	-	0	330	216
Stage 1	-	-	-	-	215	-
Stage 2	-	-	-	-	115	-
Critical Hdwy	4.11	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.209	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1299	-	-	-	663	821
Stage 1	-	-	-	-	818	-
Stage 2	-	-	-	-	907	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1299	-	-	-	655	820
Mov Cap-2 Maneuver	-	-	-	-	655	-
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	907	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1299	-	-	-	668
HCM Lane V/C Ratio	0.012	-	-	-	0.232
HCM Control Delay (s)	7.8	0	-	-	12
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.9

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	265	310	65	105	5
Future Vol, veh/h	5	265	310	65	105	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	1	1	4	4
Mvmt Flow	5	265	310	65	105	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	375	0	-	0	618	343
Stage 1	-	-	-	-	343	-
Stage 2	-	-	-	-	275	-
Critical Hdwy	4.14	-	-	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.236	-	-	-	3.536	3.336
Pot Cap-1 Maneuver	1173	-	-	-	450	695
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	767	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1173	-	-	-	448	695
Mov Cap-2 Maneuver	-	-	-	-	448	-
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	767	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	15.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1173	-	-	-	455
HCM Lane V/C Ratio	0.004	-	-	-	0.242
HCM Control Delay (s)	8.1	0	-	-	15.4
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.9

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	20	20	335	300	30
Future Vol, veh/h	30	20	20	335	300	30
Conflicting Peds, #/hr	2	1	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	8	8	3	3	3	3
Mvmt Flow	30	20	20	335	300	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	694	318	332	0	-	0
Stage 1	317	-	-	-	-	-
Stage 2	377	-	-	-	-	-
Critical Hdwy	6.48	6.28	4.13	-	-	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.372	2.227	-	-	-
Pot Cap-1 Maneuver	400	709	1222	-	-	-
Stage 1	725	-	-	-	-	-
Stage 2	681	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	392	707	1220	-	-	-
Mov Cap-2 Maneuver	496	-	-	-	-	-
Stage 1	712	-	-	-	-	-
Stage 2	680	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1220	-	563	-	-
HCM Lane V/C Ratio	0.016	-	0.089	-	-
HCM Control Delay (s)	8	-	12	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	75	885	5	75	780
Future Vol, veh/h	0	75	885	5	75	780
Conflicting Peds, #/hr	3	0	0	10	10	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	0	0	1	1
Mvmt Flow	0	75	885	5	75	780

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1831	898	0	0	900	0
Stage 1	898	-	-	-	-	-
Stage 2	933	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	84	338	-	-	759	-
Stage 1	398	-	-	-	-	-
Stage 2	383	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	75	335	-	-	753	-
Mov Cap-2 Maneuver	75	-	-	-	-	-
Stage 1	395	-	-	-	-	-
Stage 2	344	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.8	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	335	753	-
HCM Lane V/C Ratio	-	-	0.224	0.1	-
HCM Control Delay (s)	-	-	18.8	10.3	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.8	0.3	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱		↰	↱	
Traffic Vol, veh/h	5	0	0	5	5	70	5	845	5	55	720	0
Future Vol, veh/h	5	0	0	5	5	70	5	845	5	55	720	0
Conflicting Peds, #/hr	1	0	0	0	0	1	3	0	10	10	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	1	1	1
Mvmt Flow	5	0	0	5	5	70	5	845	5	55	720	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1729	1703	723	1698	1701	859	723	0	0	860	0	0
Stage 1	833	833	-	868	868	-	-	-	-	-	-	-
Stage 2	896	870	-	830	833	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.11	-	-
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	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	70	93	430	74	93	359	884	-	-	786	-	-
Stage 1	366	386	-	350	372	-	-	-	-	-	-	-
Stage 2	338	372	-	367	386	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	50	85	429	69	85	356	882	-	-	779	-	-
Mov Cap-2 Maneuver	50	85	-	69	85	-	-	-	-	-	-	-
Stage 1	363	358	-	345	367	-	-	-	-	-	-	-
Stage 2	266	367	-	341	358	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	84.8	26.8	0.1	0.7
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	882	-	-	50	244	779	-	-
HCM Lane V/C Ratio	0.006	-	-	0.1	0.328	0.071	-	-
HCM Control Delay (s)	9.1	-	-	84.8	26.8	10	-	-
HCM Lane LOS	A	-	-	F	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	1.4	0.2	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑		↰	↑	
Traffic Vol, veh/h	30	0	20	5	0	5	25	875	5	0	930	55
Future Vol, veh/h	30	0	20	5	0	5	25	875	5	0	930	55
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	-	-	-	-	-	-	200	-	-	180	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	8	8	8	0	0	0	3	3	3	2	2	2
Mvmt Flow	30	0	20	5	0	5	25	875	5	0	930	55

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1888	1888	958	1896	1913	878	985	0	0	880	0	0
Stage 1	958	958	-	928	928	-	-	-	-	-	-	-
Stage 2	930	930	-	968	985	-	-	-	-	-	-	-
Critical Hdwy	7.18	6.58	6.28	7.1	6.5	6.2	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	6.18	5.58	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.18	5.58	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.572	4.072	3.372	3.5	4	3.3	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	52	68	304	54	69	350	697	-	-	768	-	-
Stage 1	302	328	-	324	349	-	-	-	-	-	-	-
Stage 2	313	338	-	308	329	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	50	66	304	49	67	350	697	-	-	768	-	-
Mov Cap-2 Maneuver	50	66	-	49	67	-	-	-	-	-	-	-
Stage 1	291	328	-	312	336	-	-	-	-	-	-	-
Stage 2	297	326	-	288	329	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	119.5	52.3	0.3	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	697	-	-	75	86	768	-	-
HCM Lane V/C Ratio	0.036	-	-	0.667	0.116	-	-	-
HCM Control Delay (s)	10.4	-	-	119.5	52.3	0	-	-
HCM Lane LOS	B	-	-	F	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	3	0.4	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	100	135	370	370	5
Future Vol, veh/h	0	100	135	370	370	5
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	4	4
Mvmt Flow	0	100	135	370	370	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1015	375	377	0	-	0
Stage 1	375	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	263	669	1176	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	224	668	1174	-	-	-
Mov Cap-2 Maneuver	224	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	522	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.3	2.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1174	-	668	-	-
HCM Lane V/C Ratio	0.115	-	0.15	-	-
HCM Control Delay (s)	8.5	0	11.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.5	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	25	745	20	55	720
Future Vol, veh/h	5	25	745	20	55	720
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	2	2	2	2
Mvmt Flow	5	25	745	20	55	720

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1585	755	0	0	765	0
Stage 1	755	-	-	-	-	-
Stage 2	830	-	-	-	-	-
Critical Hdwy	6.44	6.24	-	-	4.12	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	-	-	2.218	-
Pot Cap-1 Maneuver	118	405	-	-	848	-
Stage 1	461	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	110	405	-	-	848	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	397	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.4	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	280	848	-
HCM Lane V/C Ratio	-	-	0.107	0.065	-
HCM Control Delay (s)	-	-	19.4	9.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.2	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	345	45	15	280	45	25	0	0	5	5	50
Future Vol, veh/h	55	345	45	15	280	45	25	0	0	5	5	50
Conflicting Peds, #/hr	1	0	4	4	0	1	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0	5	5	5
Mvmt Flow	55	345	45	15	280	45	25	0	0	5	5	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	326	0	0	394	0	0	842	838	375	815	838	304
Stage 1	-	-	-	-	-	-	482	482	-	334	334	-
Stage 2	-	-	-	-	-	-	360	356	-	481	504	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.1	6.5	6.2	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.15	5.55	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.5	4	3.3	3.545	4.045	3.345
Pot Cap-1 Maneuver	1234	-	-	1165	-	-	286	305	676	293	299	729
Stage 1	-	-	-	-	-	-	569	557	-	674	638	-
Stage 2	-	-	-	-	-	-	662	633	-	561	536	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1233	-	-	1161	-	-	251	286	672	279	281	728
Mov Cap-2 Maneuver	-	-	-	-	-	-	251	286	-	279	281	-
Stage 1	-	-	-	-	-	-	542	530	-	644	629	-
Stage 2	-	-	-	-	-	-	604	624	-	535	510	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.4	20.9	12
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	251	1233	-	-	1161	-	-	575
HCM Lane V/C Ratio	0.1	0.045	-	-	0.013	-	-	0.104
HCM Control Delay (s)	20.9	8.1	-	-	8.1	-	-	12
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	75	150	275	635	650	50
Future Vol, veh/h	75	150	275	635	650	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	75	150	275	635	650	50

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1860	675	700	0	-	0
Stage 1	675	-	-	-	-	-
Stage 2	1185	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	81	454	897	-	-	-
Stage 1	506	-	-	-	-	-
Stage 2	290	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 56	454	897	-	-	-
Mov Cap-2 Maneuver	170	-	-	-	-	-
Stage 1	351	-	-	-	-	-
Stage 2	290	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25.2	3.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	897	-	170	454	-	-
HCM Lane V/C Ratio	0.307	-	0.441	0.33	-	-
HCM Control Delay (s)	10.8	-	41.9	16.8	-	-
HCM Lane LOS	B	-	E	C	-	-
HCM 95th %tile Q(veh)	1.3	-	2	1.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon