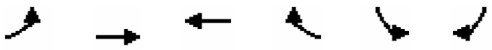


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	149	213	256	83	55	145
Future Volume (veh/h)	149	213	256	83	55	145
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1826	1722	1826	1841	1811	1841
Adj Flow Rate, veh/h	175	251	301	98	65	171
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	5	12	5	4	6	4
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	653	1021	782	255	274	248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.59	0.59	0.59	0.59	0.16	0.16
Unsig. Movement Delay						
Ln Grp Delay, s/veh	7.2	4.1	0.0	5.0	13.8	17.8
Ln Grp LOS	A	A		A	B	B
Approach Vol, veh/h		426	399		236	
Approach Delay, s/veh		5.4	5.0		16.7	
Approach LOS		A	A		B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4				8
Case No	9.0			6.0				8.0
Phs Duration (G+Y+Rc), s	10.3			26.0				26.0
Change Period (Y+Rc), s	4.5			4.5				4.5
Max Green (Gmax), s	19.5			21.5				21.5
Max Allow Headway (MAH), s	4.0			4.9				5.0
Max Q Clear (g_c+I1), s	5.8			10.6				6.4
Green Ext Time (g_e), s	0.6			1.6				1.9
Prob of Phs Call (p_c)	0.91			1.00				1.00
Prob of Max Out (p_x)	0.00			0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7				3
Mvmt Sat Flow, veh/h	1725			962				0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1722				1319

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1560			0				429

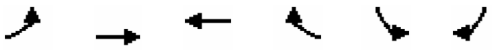
Left Lane Group Data								
Assigned Mvmt	1	0	0	7	0	0	0	3

Lane Assignment	L			L				
Lanes in Grp	1	0	0	1	0	0	0	0
Grp Vol (v), veh/h	65	0	0	175	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1725	0	0	962	0	0	0	0
Q Serve Time (g_s), s	1.2	0.0	0.0	4.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.2	0.0	0.0	8.6	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1725	0	0	962	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	21.5	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	17.1	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	274	0	0	653	0	0	0	0
V/C Ratio (X)	0.24	0.00	0.00	0.27	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	927	0	0	653	0	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	13.3	0.0	0.0	6.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	1.0	0.0	0.0	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
Control Delay (d), s/veh	13.8	0.0	0.0	7.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.4	0.0	0.0	0.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.07	0.00	0.00	0.10	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	251	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1722	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1021	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1021	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	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
Control Delay (d), s/veh	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	171	0	0	0	0	0	0	399
Grp Sat Flow (s), veh/h/ln	1560	0	0	0	0	0	0	1749
Q Serve Time (g_s), s	3.8	0.0	0.0	0.0	0.0	0.0	0.0	4.4
Cycle Q Clear Time (g_c), s	3.8	0.0	0.0	0.0	0.0	0.0	0.0	4.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
Lane Grp Cap (c), veh/h	248	0	0	0	0	0	0	1037
V/C Ratio (X)	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.38
Avail Cap (c_a), veh/h	839	0	0	0	0	0	0	1037
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	14.4	0.0	0.0	0.0	0.0	0.0	0.0	3.9
Incr Delay (d2), s/veh	3.4	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	17.8	0.0	0.0	0.0	0.0	0.0	0.0	5.0
1st-Term Q (Q1), veh/ln	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.6
%ile Storage Ratio (RQ%)	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.7
HCM 7th LOS	A



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	345	265	205	139	147	218
Future Volume (veh/h)	345	265	205	139	147	218
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1885	1856
Adj Flow Rate, veh/h	367	282	218	148	156	232
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	4	2	1	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	646	1095	599	406	373	327
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.59	0.59	0.59	0.59	0.21	0.21
Unsig. Movement Delay						
Ln Grp Delay, s/veh	13.1	5.0	0.0	5.8	15.7	18.9
Ln Grp LOS	B	A		A	B	B
Approach Vol, veh/h		649	366		388	
Approach Delay, s/veh		9.5	5.8		17.6	
Approach LOS		A	A		B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4				8
Case No	9.0			6.0				8.0
Phs Duration (G+Y+Rc), s	13.5			30.0				30.0
Change Period (Y+Rc), s	4.5			4.5				4.5
Max Green (Gmax), s	25.5			25.5				25.5
Max Allow Headway (MAH), s	4.0			4.8				5.0
Max Q Clear (g_c+I1), s	8.0			19.9				6.9
Green Ext Time (g_e), s	1.2			1.7				1.9
Prob of Phs Call (p_c)	0.99			1.00				1.00
Prob of Max Out (p_x)	0.00			0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7				3
Mvmt Sat Flow, veh/h	1795			1016				0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1870				1022

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1572			0				694

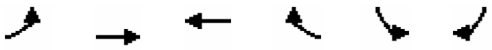
Left Lane Group Data								
Assigned Mvmt	1	0	0	7	0	0	0	3

Lane Assignment	L			L				
Lanes in Grp	1	0	0	1	0	0	0	0
Grp Vol (v), veh/h	156	0	0	367	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1795	0	0	1016	0	0	0	0
Q Serve Time (g_s), s	3.3	0.0	0.0	13.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	0.0	17.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1795	0	0	1016	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	25.5	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	373	0	0	646	0	0	0	0
V/C Ratio (X)	0.42	0.00	0.00	0.57	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	1051	0	0	646	0	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	15.0	0.0	0.0	9.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	3.6	0.0	0.0	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
Control Delay (d), s/veh	15.7	0.0	0.0	13.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	1.1	0.0	0.0	1.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.2	0.0	0.0	2.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.00	0.38	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	282	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1870	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1095	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1095	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	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
Control Delay (d), s/veh	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	232	0	0	0	0	0	0	366
Grp Sat Flow (s), veh/h/ln	1572	0	0	0	0	0	0	1716
Q Serve Time (g_s), s	6.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9
Cycle Q Clear Time (g_c), s	6.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Lane Grp Cap (c), veh/h	327	0	0	0	0	0	0	1005
V/C Ratio (X)	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Avail Cap (c_a), veh/h	921	0	0	0	0	0	0	1005
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	16.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Incr Delay (d2), s/veh	2.9	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	18.9	0.0	0.0	0.0	0.0	0.0	0.0	5.8
1st-Term Q (Q1), veh/ln	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	2.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0
%ile Storage Ratio (RQ%)	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.8
HCM 7th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	149	216	265	93	63	145
Future Volume (veh/h)	149	216	265	93	63	145
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1826	1722	1826	1841	1811	1841
Adj Flow Rate, veh/h	175	254	312	109	74	171
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	5	12	5	4	6	4
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	633	1019	765	267	277	251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.59	0.59	0.59	0.59	0.16	0.16
Unsig. Movement Delay						
Ln Grp Delay, s/veh	7.5	4.1	0.0	5.2	13.9	17.6
Ln Grp LOS	A	A		A	B	B
Approach Vol, veh/h		429	421		245	
Approach Delay, s/veh		5.5	5.2		16.5	
Approach LOS		A	A		B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4				8
Case No	9.0			6.0				8.0
Phs Duration (G+Y+Rc), s	10.3			26.0				26.0
Change Period (Y+Rc), s	4.5			4.5				4.5
Max Green (Gmax), s	19.5			21.5				21.5
Max Allow Headway (MAH), s	4.0			4.9				5.0
Max Q Clear (g_c+I1), s	5.8			11.2				6.7
Green Ext Time (g_e), s	0.6			1.6				2.1
Prob of Phs Call (p_c)	0.92			1.00				1.00
Prob of Max Out (p_x)	0.00			0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7				3
Mvmt Sat Flow, veh/h	1725			943				0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1722				1293

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1560			0				452

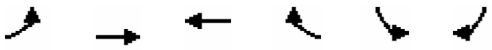
Left Lane Group Data								
Assigned Mvmt	1	0	0	7	0	0	0	3

Lane Assignment	L			L				
Lanes in Grp	1	0	0	1	0	0	0	0
Grp Vol (v), veh/h	74	0	0	175	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1725	0	0	943	0	0	0	0
Q Serve Time (g_s), s	1.4	0.0	0.0	4.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.4	0.0	0.0	9.2	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1725	0	0	943	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	21.5	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	16.8	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	277	0	0	633	0	0	0	0
V/C Ratio (X)	0.27	0.00	0.00	0.28	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	925	0	0	633	0	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	13.4	0.0	0.0	6.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	1.1	0.0	0.0	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
Control Delay (d), s/veh	13.9	0.0	0.0	7.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.5	0.0	0.0	0.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.08	0.00	0.00	0.10	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	254	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1722	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1019	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1019	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	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
Control Delay (d), s/veh	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	171	0	0	0	0	0	0	421
Grp Sat Flow (s), veh/h/ln	1560	0	0	0	0	0	0	1745
Q Serve Time (g_s), s	3.8	0.0	0.0	0.0	0.0	0.0	0.0	4.7
Cycle Q Clear Time (g_c), s	3.8	0.0	0.0	0.0	0.0	0.0	0.0	4.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
Lane Grp Cap (c), veh/h	251	0	0	0	0	0	0	1032
V/C Ratio (X)	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Avail Cap (c_a), veh/h	837	0	0	0	0	0	0	1032
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	14.4	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Incr Delay (d2), s/veh	3.2	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	17.6	0.0	0.0	0.0	0.0	0.0	0.0	5.2
1st-Term Q (Q1), veh/ln	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.6
%ile Storage Ratio (RQ%)	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.9
HCM 7th LOS	A



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	345	273	210	145	171	218
Future Volume (veh/h)	345	273	210	145	171	218
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1885	1856
Adj Flow Rate, veh/h	367	290	223	154	182	232
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	4	2	1	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	635	1093	593	409	376	330
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.58	0.58	0.58	0.58	0.21	0.21
Unsig. Movement Delay						
Ln Grp Delay, s/veh	13.6	5.1	0.0	5.9	16.1	18.7
Ln Grp LOS	B	A		A	B	B
Approach Vol, veh/h		657	377		414	
Approach Delay, s/veh		9.8	5.9		17.6	
Approach LOS		A	A		B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4				8
Case No	9.0			6.0				8.0
Phs Duration (G+Y+Rc), s	13.6			30.0				30.0
Change Period (Y+Rc), s	4.5			4.5				4.5
Max Green (Gmax), s	25.5			25.5				25.5
Max Allow Headway (MAH), s	3.9			4.8				5.0
Max Q Clear (g_c+I1), s	8.0			20.5				7.1
Green Ext Time (g_e), s	1.2			1.6				2.0
Prob of Phs Call (p_c)	0.99			1.00				1.00
Prob of Max Out (p_x)	0.00			0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7				3
Mvmt Sat Flow, veh/h	1795			1006				0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1870				1014

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1572			0				700

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	0	0	0	3

Lane Assignment	L			L				
Lanes in Grp	1	0	0	1	0	0	0	0
Grp Vol (v), veh/h	182	0	0	367	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1795	0	0	1006	0	0	0	0
Q Serve Time (g_s), s	3.9	0.0	0.0	13.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	3.9	0.0	0.0	18.5	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1795	0	0	1006	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	25.5	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	376	0	0	635	0	0	0	0
V/C Ratio (X)	0.48	0.00	0.00	0.58	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	1049	0	0	635	0	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	15.2	0.0	0.0	9.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	3.8	0.0	0.0	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
Control Delay (d), s/veh	16.1	0.0	0.0	13.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	0.0	1.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.5	0.0	0.0	2.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.24	0.00	0.00	0.40	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	290	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1870	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1093	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1093	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	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
Control Delay (d), s/veh	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	232	0	0	0	0	0	0	377
Grp Sat Flow (s), veh/h/ln	1572	0	0	0	0	0	0	1715
Q Serve Time (g_s), s	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1
Cycle Q Clear Time (g_c), s	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Lane Grp Cap (c), veh/h	330	0	0	0	0	0	0	1002
V/C Ratio (X)	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.38
Avail Cap (c_a), veh/h	919	0	0	0	0	0	0	1002
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	16.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Incr Delay (d2), s/veh	2.7	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	18.7	0.0	0.0	0.0	0.0	0.0	0.0	5.9
1st-Term Q (Q1), veh/ln	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	2.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0
%ile Storage Ratio (RQ%)	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.0
HCM 7th LOS	B