

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	300	0	0	893
Future Vol, veh/h	0	0	300	0	0	893
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	0	326	0	0	971
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1297	326	0	0	326	0
Stage 1	326	-	-	-	-	-
Stage 2	971	-	-	-	-	-
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	178	713	-	-	1228	-
Stage 1	729	-	-	-	-	-
Stage 2	366	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	178	713	-	-	1228	-
Mov Cap-2 Maneuver	178	-	-	-	-	-
Stage 1	729	-	-	-	-	-
Stage 2	366	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1228	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1022	0	0	502
Future Vol, veh/h	0	0	1022	0	0	502
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	0	1111	0	0	546
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1657	1111	0	0	1111	0
Stage 1	1111	-	-	-	-	-
Stage 2	546	-	-	-	-	-
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	107	253	-	-	625	-
Stage 1	314	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	107	253	-	-	625	-
Mov Cap-2 Maneuver	107	-	-	-	-	-
Stage 1	314	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	625	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	86	76	0
Future Vol, veh/h	0	0	0	86	76	0
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	0	0	93	83	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	176	83	83	0	-	0
Stage 1	83	-	-	-	-	-
Stage 2	93	-	-	-	-	-
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	811	974	1508	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	928	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	811	974	1508	-	-	-
Mov Cap-2 Maneuver	811	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	928	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1508	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	6	82	43	3
Future Vol, veh/h	0	4	6	82	43	3
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	4	7	89	47	3
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	152	49	50	0	-	0
Stage 1	49	-	-	-	-	-
Stage 2	103	-	-	-	-	-
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	837	1017	1550	-	-	-
Stage 1	971	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	833	1017	1550	-	-	-
Mov Cap-2 Maneuver	833	-	-	-	-	-
Stage 1	966	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.6	0.5		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1550	-	1017	-	-	
HCM Lane V/C Ratio	0.004	-	0.004	-	-	
HCM Control Delay (s)	7.3	0	8.6	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	20	5	100	99	0
Future Vol, veh/h	1	20	5	100	99	0
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1	22	5	109	108	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	227	108	108	0	-	0
Stage 1	108	-	-	-	-	-
Stage 2	119	-	-	-	-	-
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	759	943	1476	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	904	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	756	943	1476	-	-	-
Mov Cap-2 Maneuver	756	-	-	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	904	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9	0.4		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1476	-	932	-	-	
HCM Lane V/C Ratio	0.004	-	0.024	-	-	
HCM Control Delay (s)	7.4	0	9	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	18	32	102	52	3
Future Vol, veh/h	0	18	32	102	52	3
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	20	35	111	57	3
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	240	59	60	0	-	0
Stage 1	59	-	-	-	-	-
Stage 2	181	-	-	-	-	-
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	746	1004	1537	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	848	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	728	1004	1537	-	-	-
Mov Cap-2 Maneuver	728	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	848	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.7	1.8		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1537	-	1004	-	-	
HCM Lane V/C Ratio	0.023	-	0.019	-	-	
HCM Control Delay (s)	7.4	0	8.7	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-	

Intersection						
Int Delay, s/veh	5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	0	6	0	0	15
Future Vol, veh/h	28	0	6	0	0	15
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	30	0	7	0	0	16
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	23	7	0	0	7	0
Stage 1	7	-	-	-	-	-
Stage 2	16	-	-	-	-	-
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	991	1072	-	-	1607	-
Stage 1	1013	-	-	-	-	-
Stage 2	1004	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	991	1072	-	-	1607	-
Mov Cap-2 Maneuver	991	-	-	-	-	-
Stage 1	1013	-	-	-	-	-
Stage 2	1004	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	8.7	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	991	1607	-	
HCM Lane V/C Ratio	-	-	0.031	-	-	
HCM Control Delay (s)	-	-	8.7	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	0	22	11	0	18
Future Vol, veh/h	3	0	22	11	0	18
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	3	0	24	12	0	20
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	50	30	0	0	36	0
Stage 1	30	-	-	-	-	-
Stage 2	20	-	-	-	-	-
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	957	1042	-	-	1568	-
Stage 1	990	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	957	1042	-	-	1568	-
Mov Cap-2 Maneuver	957	-	-	-	-	-
Stage 1	990	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	8.8	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	957	1568	-	
HCM Lane V/C Ratio	-	-	0.003	-	-	
HCM Control Delay (s)	-	-	8.8	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Intersection						
Int Delay, s/veh	4.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	0	9	1	0	19
Future Vol, veh/h	28	0	9	1	0	19
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	30	0	10	1	0	21
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	32	11	0	0	11	0
Stage 1	11	-	-	-	-	-
Stage 2	21	-	-	-	-	-
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	979	1067	-	-	1602	-
Stage 1	1009	-	-	-	-	-
Stage 2	999	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	979	1067	-	-	1602	-
Mov Cap-2 Maneuver	979	-	-	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	999	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.8	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 979		1602	-	
HCM Lane V/C Ratio	-	- 0.031		-	-	
HCM Control Delay (s)	-	- 8.8		0	-	
HCM Lane LOS	-	- A		A	-	
HCM 95th %tile Q(veh)	-	- 0.1		0	-	

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	0	28	11	0	28
Future Vol, veh/h	3	0	28	11	0	28
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	3	0	30	12	0	30
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	66	36	0	0	42	0
Stage 1	36	-	-	-	-	-
Stage 2	30	-	-	-	-	-
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	937	1034	-	-	1561	-
Stage 1	984	-	-	-	-	-
Stage 2	990	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	937	1034	-	-	1561	-
Mov Cap-2 Maneuver	937	-	-	-	-	-
Stage 1	984	-	-	-	-	-
Stage 2	990	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	8.9	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	937	1561	-	
HCM Lane V/C Ratio	-	-	0.003	-	-	
HCM Control Delay (s)	-	-	8.9	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	79	0	0	217
Future Vol, veh/h	0	0	79	0	0	217
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	0	86	0	0	236
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	322	86	0	0	86	0
Stage 1	86	-	-	-	-	-
Stage 2	236	-	-	-	-	-
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	670	970	-	-	1504	-
Stage 1	935	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	670	970	-	-	1504	-
Mov Cap-2 Maneuver	670	-	-	-	-	-
Stage 1	935	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1504	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	277	2	0	184
Future Vol, veh/h	0	0	277	2	0	184
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	0	301	2	0	200
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	502	302	0	0	303	0
Stage 1	302	-	-	-	-	-
Stage 2	200	-	-	-	-	-
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	527	735	-	-	1252	-
Stage 1	748	-	-	-	-	-
Stage 2	831	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	527	735	-	-	1252	-
Mov Cap-2 Maneuver	527	-	-	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	831	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1252	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	0	87	1	0	224
Future Vol, veh/h	7	0	87	1	0	224
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	8	0	95	1	0	243
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	339	96	0	0	96	0
Stage 1	96	-	-	-	-	-
Stage 2	243	-	-	-	-	-
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	655	958	-	-	1491	-
Stage 1	925	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	655	958	-	-	1491	-
Mov Cap-2 Maneuver	655	-	-	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	10.6		0		0	
HCM LOS	B					
Minor Lane/Major Mvmt		NBT	NBRWBLn1		SBL	SBT
Capacity (veh/h)		-	-	655	1491	-
HCM Lane V/C Ratio		-	-	0.012	-	-
HCM Control Delay (s)		-	-	10.6	0	-
HCM Lane LOS		-	-	B	A	-
HCM 95th %tile Q(veh)		-	-	0	0	-

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	1	292	9	0	196
Future Vol, veh/h	3	1	292	9	0	196
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	3	1	317	10	0	213
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	535	322	0	0	327	0
Stage 1	322	-	-	-	-	-
Stage 2	213	-	-	-	-	-
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	504	717	-	-	1227	-
Stage 1	732	-	-	-	-	-
Stage 2	820	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	504	717	-	-	1227	-
Mov Cap-2 Maneuver	504	-	-	-	-	-
Stage 1	732	-	-	-	-	-
Stage 2	820	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.7	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	544	1227	-	
HCM Lane V/C Ratio	-	-	0.008	-	-	
HCM Control Delay (s)	-	-	11.7	0	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Intersection												
Int Delay, s/veh	5.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕			↕	
Traffic Vol, veh/h	5	255	7	11	211	3	83	0	111	41	1	48
Future Vol, veh/h	5	255	7	11	211	3	83	0	111	41	1	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	277	8	12	229	3	90	0	121	45	1	52
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	232	0	0	285	0	0	572	547	281	605	548	229
Stage 1	-	-	-	-	-	-	291	291	-	253	253	-
Stage 2	-	-	-	-	-	-	281	256	-	352	295	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1330	-	-	1271	-	-	429	443	755	408	443	808
Stage 1	-	-	-	-	-	-	715	670	-	749	696	-
Stage 2	-	-	-	-	-	-	724	694	-	663	667	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1330	-	-	1271	-	-	396	436	755	339	436	808
Mov Cap-2 Maneuver	-	-	-	-	-	-	396	436	-	339	436	-
Stage 1	-	-	-	-	-	-	712	667	-	746	688	-
Stage 2	-	-	-	-	-	-	669	686	-	555	664	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			15.7			14.1		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	544	1330	-	-	1271	-	-	493				
HCM Lane V/C Ratio	0.388	0.004	-	-	0.009	-	-	0.198				
HCM Control Delay (s)	15.7	7.7	0	-	7.9	0	-	14.1				
HCM Lane LOS	C	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	1.8	0	-	-	0	-	-	0.7				

Intersection												
Int Delay, s/veh	7.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	390	66	123	356	56	39	1	74	35	3	21
Future Vol, veh/h	61	390	66	123	356	56	39	1	74	35	3	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	66	424	72	134	387	61	42	1	80	38	3	23
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	448	0	0	496	0	0	1291	1308	460	1288	1283	387
Stage 1	-	-	-	-	-	-	592	592	-	655	655	-
Stage 2	-	-	-	-	-	-	699	716	-	633	628	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1107	-	-	1063	-	-	139	159	599	140	164	659
Stage 1	-	-	-	-	-	-	491	492	-	453	461	-
Stage 2	-	-	-	-	-	-	429	433	-	466	474	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1107	-	-	1063	-	-	107	121	599	98	125	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	107	121	-	98	125	-
Stage 1	-	-	-	-	-	-	450	451	-	415	383	-
Stage 2	-	-	-	-	-	-	341	360	-	369	435	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			2			37.6			49.2		
HCM LOS							E			E		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	230	1107	-	-	1063	-	-	143				
HCM Lane V/C Ratio	0.539	0.06	-	-	0.126	-	-	0.448				
HCM Control Delay (s)	37.6	8.5	0	-	8.9	0	-	49.2				
HCM Lane LOS	E	A	A	-	A	A	-	E				
HCM 95th %tile Q(veh)	2.9	0.2	-	-	0.4	-	-	2				

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕		↕	↕	
Traffic Vol, veh/h	5	255	7	11	211	3	83	0	111	41	1	48
Future Vol, veh/h	5	255	7	11	211	3	83	0	111	41	1	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	277	8	12	229	3	90	0	121	45	1	52
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	232	0	0	285	0	0	572	547	281	607	550	231
Stage 1	-	-	-	-	-	-	291	291	-	255	255	-
Stage 2	-	-	-	-	-	-	281	256	-	352	295	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1330	-	-	1271	-	-	429	443	755	407	441	806
Stage 1	-	-	-	-	-	-	715	670	-	747	695	-
Stage 2	-	-	-	-	-	-	724	694	-	663	667	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1330	-	-	1271	-	-	396	437	755	339	435	806
Mov Cap-2 Maneuver	-	-	-	-	-	-	396	437	-	339	435	-
Stage 1	-	-	-	-	-	-	712	667	-	744	689	-
Stage 2	-	-	-	-	-	-	670	688	-	555	664	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.1			0.4			13.3			13.2		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	396		755	1330	-	-	1271	-	-	339	792	
HCM Lane V/C Ratio	0.228		0.16	0.004	-	-	0.009	-	-	0.131	0.067	
HCM Control Delay (s/veh)	16.8		10.7	7.7	0	-	7.9	-	-	17.2	9.9	
HCM Lane LOS	C		B	A	A	-	A	-	-	C	A	
HCM 95th %tile Q (veh)	0.9		0.6	0	-	-	0	-	-	0.4	0.2	

HCM 6th TWSC
21: N Harbour Dr/Oakbay Dr & 211th St

Existing PM Peak
Mitigated - Final

Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕		↕	↕	
Traffic Vol, veh/h	61	390	66	123	356	56	39	1	74	35	3	21
Future Vol, veh/h	61	390	66	123	356	56	39	1	74	35	3	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	66	424	72	134	387	61	42	1	80	38	3	23
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	448	0	0	496	0	0	1291	1308	460	1319	1314	418
Stage 1	-	-	-	-	-	-	592	592	-	686	686	-
Stage 2	-	-	-	-	-	-	699	716	-	633	628	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1107	-	-	1063	-	-	139	159	599	133	157	633
Stage 1	-	-	-	-	-	-	491	492	-	436	446	-
Stage 2	-	-	-	-	-	-	429	433	-	466	474	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1107	-	-	1063	-	-	111	127	599	97	126	633
Mov Cap-2 Maneuver	-	-	-	-	-	-	111	127	-	97	126	-
Stage 1	-	-	-	-	-	-	450	451	-	400	390	-
Stage 2	-	-	-	-	-	-	358	378	-	369	435	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1			2			27.4			43.9		
HCM LOS							D			E		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	111	571	1107	-	-	1063	-	-	97	421		
HCM Lane V/C Ratio	0.382	0.143	0.06	-	-	0.126	-	-	0.392	0.062		
HCM Control Delay (s/veh)	56.2	12.4	8.5	0	-	8.9	-	-	64.3	14.1		
HCM Lane LOS	F	B	A	A	-	A	-	-	F	B		
HCM 95th %tile Q (veh)	1.6	0.5	0.2	-	-	0.4	-	-	1.6	0.2		

HCM 6th TWSC
21: N Harbour Dr/Oakbay Dr & 211th St

Future AM Peak

Intersection												
Int Delay, s/veh	11.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	632	7	11	320	3	83	0	111	41	1	48
Future Vol, veh/h	5	632	7	11	320	3	83	0	111	41	1	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	687	8	12	348	3	90	0	121	45	1	52
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	351	0	0	695	0	0	1101	1076	691	1134	1077	348
Stage 1	-	-	-	-	-	-	701	701	-	372	372	-
Stage 2	-	-	-	-	-	-	400	375	-	762	705	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1202	-	-	896	-	-	188	218	443	179	218	693
Stage 1	-	-	-	-	-	-	428	439	-	646	617	-
Stage 2	-	-	-	-	-	-	624	615	-	396	438	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1202	-	-	896	-	-	170	213	443	128	213	693
Mov Cap-2 Maneuver	-	-	-	-	-	-	170	213	-	128	213	-
Stage 1	-	-	-	-	-	-	425	436	-	641	607	-
Stage 2	-	-	-	-	-	-	566	605	-	286	435	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.3			57.3			32.2		
HCM LOS							F			D		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	263	1202	-	-	896	-	-	228				
HCM Lane V/C Ratio	0.802	0.005	-	-	0.013	-	-	0.429				
HCM Control Delay (s)	57.3	8	0	-	9.1	0	-	32.2				
HCM Lane LOS	F	A	A	-	A	A	-	D				
HCM 95th %tile Q(veh)	6.2	0	-	-	0	-	-	2				

HCM 6th TWSC
21: N Harbour Dr/Oakbay Dr & 211th St

Future PM Peak

Intersection												
Int Delay, s/veh	73.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	682	66	123	813	56	39	1	74	35	3	21
Future Vol, veh/h	61	682	66	123	813	56	39	1	74	35	3	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	66	741	72	134	884	61	42	1	80	38	3	23
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	945	0	0	813	0	0	2105	2122	777	2102	2097	884
Stage 1	-	-	-	-	-	-	909	909	-	1152	1152	-
Stage 2	-	-	-	-	-	-	1196	1213	-	950	945	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	722	-	-	809	-	-	~ 37	50	395	~ 37	52	343
Stage 1	-	-	-	-	-	-	328	352	-	239	271	-
Stage 2	-	-	-	-	-	-	226	253	-	311	339	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	722	-	-	809	-	-	~ 20	27	395	~ 18	28	343
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 20	27	-	~ 18	28	-
Stage 1	-	-	-	-	-	-	273	293	-	199	175	-
Stage 2	-	-	-	-	-	-	134	163	-	205	282	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			1.3			\$ 799			\$ 889.5		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	52	722	-	-	809	-	-	28				
HCM Lane V/C Ratio	2.383	0.092	-	-	0.165	-	-	2.29				
HCM Control Delay (s)	\$ 799	10.5	0	-	10.3	0	-	\$ 889.5				
HCM Lane LOS	F	B	A	-	B	A	-	F				
HCM 95th %tile Q(veh)	12.7	0.3	-	-	0.6	-	-	7.7				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

HCM 6th Roundabout
21: N Harbour Dr/Oakbay Dr & 211th St

Future AM Peak
Mitigated - Final

Intersection				
Intersection Delay, s/veh	8.2			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	700	363	211	98
Demand Flow Rate, veh/h	721	373	218	101
Vehicles Circulating, veh/h	59	98	759	463
Vehicles Exiting, veh/h	505	879	21	8
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.1	5.7	10.6	5.5
Approach LOS	A	A	B	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	721	373	218	101
Cap Entry Lane, veh/h	1299	1249	636	861
Entry HV Adj Factor	0.971	0.972	0.968	0.970
Flow Entry, veh/h	700	363	211	98
Cap Entry, veh/h	1262	1214	616	835
V/C Ratio	0.555	0.299	0.343	0.117
Control Delay, s/veh	9.1	5.7	10.6	5.5
LOS	A	A	B	A
95th %tile Queue, veh	4	1	2	0

HCM 6th Roundabout
21: N Harbour Dr/Oakbay Dr & 211th St

Future PM Peak
Mitigated - Final

Intersection				
Intersection Delay, s/veh	21.8			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	879	1079	123	64
Demand Flow Rate, veh/h	905	1112	126	66
Vehicles Circulating, veh/h	180	112	870	1092
Vehicles Exiting, veh/h	978	884	215	132
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	18.0	27.0	9.4	10.3
Approach LOS	C	D	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	905	1112	126	66
Cap Entry Lane, veh/h	1148	1231	568	453
Entry HV Adj Factor	0.971	0.971	0.976	0.968
Flow Entry, veh/h	879	1079	123	64
Cap Entry, veh/h	1115	1195	555	439
V/C Ratio	0.788	0.903	0.222	0.146
Control Delay, s/veh	18.0	27.0	9.4	10.3
LOS	C	D	A	B
95th %tile Queue, veh	9	14	1	1

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	223	5	16	318	11	18	0	8	43	1	21
Future Vol, veh/h	2	223	5	16	318	11	18	0	8	43	1	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	242	5	17	346	12	20	0	9	47	1	23
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	358	0	0	247	0	0	647	641	245	639	637	352
Stage 1	-	-	-	-	-	-	249	249	-	386	386	-
Stage 2	-	-	-	-	-	-	398	392	-	253	251	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1195	-	-	1313	-	-	383	392	791	387	394	689
Stage 1	-	-	-	-	-	-	753	699	-	635	608	-
Stage 2	-	-	-	-	-	-	626	605	-	749	697	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1195	-	-	1313	-	-	365	385	791	377	387	689
Mov Cap-2 Maneuver	-	-	-	-	-	-	365	385	-	377	387	-
Stage 1	-	-	-	-	-	-	751	698	-	634	598	-
Stage 2	-	-	-	-	-	-	594	595	-	739	696	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			13.8			14.7		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	437	1195	-	-	1313	-	-	442				
HCM Lane V/C Ratio	0.065	0.002	-	-	0.013	-	-	0.16				
HCM Control Delay (s)	13.8	8	0	-	7.8	0	-	14.7				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.6				

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	20	491	18	19	326	85	15	3	19	34	0	10
Future Vol, veh/h	20	491	18	19	326	85	15	3	19	34	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	22	534	20	21	354	92	16	3	21	37	0	11
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	446	0	0	554	0	0	1036	1076	544	1042	1040	400
Stage 1	-	-	-	-	-	-	588	588	-	442	442	-
Stage 2	-	-	-	-	-	-	448	488	-	600	598	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1109	-	-	1011	-	-	209	218	537	207	229	648
Stage 1	-	-	-	-	-	-	493	494	-	592	575	-
Stage 2	-	-	-	-	-	-	588	548	-	486	489	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1109	-	-	1011	-	-	197	206	537	188	216	648
Mov Cap-2 Maneuver	-	-	-	-	-	-	197	206	-	188	216	-
Stage 1	-	-	-	-	-	-	479	480	-	575	559	-
Stage 2	-	-	-	-	-	-	562	533	-	451	475	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.4			19.2			25.4		
HCM LOS							C			D		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	293	1109	-	-	1011	-	-	224				
HCM Lane V/C Ratio	0.137	0.02	-	-	0.02	-	-	0.214				
HCM Control Delay (s)	19.2	8.3	0	-	8.6	0	-	25.4				
HCM Lane LOS	C	A	A	-	A	A	-	D				
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0.1	-	-	0.8				

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	510	5	16	360	60	18	0	8	61	1	29
Future Vol, veh/h	5	510	5	16	360	60	18	0	8	61	1	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	554	5	17	391	65	20	0	9	66	1	32
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	456	0	0	559	0	0	1041	1057	557	1029	1027	424
Stage 1	-	-	-	-	-	-	567	567	-	458	458	-
Stage 2	-	-	-	-	-	-	474	490	-	571	569	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1100	-	-	1007	-	-	207	224	528	211	233	628
Stage 1	-	-	-	-	-	-	507	505	-	581	565	-
Stage 2	-	-	-	-	-	-	569	547	-	504	504	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1100	-	-	1007	-	-	191	217	528	203	226	628
Mov Cap-2 Maneuver	-	-	-	-	-	-	191	217	-	203	226	-
Stage 1	-	-	-	-	-	-	503	501	-	577	552	-
Stage 2	-	-	-	-	-	-	527	534	-	492	500	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.3			22.2			27.2		
HCM LOS							C			D		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	238	1100	-	-	1007	-	-	259				
HCM Lane V/C Ratio	0.119	0.005	-	-	0.017	-	-	0.382				
HCM Control Delay (s)	22.2	8.3	0	-	8.6	0	-	27.2				
HCM Lane LOS	C	A	A	-	A	A	-	D				
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	1.7				

Intersection												
Int Delay, s/veh	4.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	726	18	19	446	334	15	3	19	40	0	18
Future Vol, veh/h	30	726	18	19	446	334	15	3	19	40	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	33	789	20	21	485	363	16	3	21	43	0	20
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	848	0	0	809	0	0	1584	1755	799	1586	1584	667
Stage 1	-	-	-	-	-	-	865	865	-	709	709	-
Stage 2	-	-	-	-	-	-	719	890	-	877	875	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	785	-	-	812	-	-	87	85	384	87	108	457
Stage 1	-	-	-	-	-	-	347	369	-	423	436	-
Stage 2	-	-	-	-	-	-	418	360	-	342	366	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	785	-	-	812	-	-	75	74	384	72	94	457
Mov Cap-2 Maneuver	-	-	-	-	-	-	75	74	-	72	94	-
Stage 1	-	-	-	-	-	-	320	341	-	390	413	-
Stage 2	-	-	-	-	-	-	379	341	-	296	338	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.2			45.5			94		
HCM LOS							E			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	128	785	-	-	812	-	-	97				
HCM Lane V/C Ratio	0.314	0.042	-	-	0.025	-	-	0.65				
HCM Control Delay (s)	45.5	9.8	0	-	9.5	0	-	94				
HCM Lane LOS	E	A	A	-	A	A	-	F				
HCM 95th %tile Q(veh)	1.2	0.1	-	-	0.1	-	-	3.2				

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	38	206	0	0	345	22	0	0	0	24	0	50
Future Vol, veh/h	38	206	0	0	345	22	0	0	0	24	0	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	41	224	0	0	375	24	0	0	0	26	0	54
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	399	0	0	224	0	0	720	705	224	693	693	387
Stage 1	-	-	-	-	-	-	306	306	-	387	387	-
Stage 2	-	-	-	-	-	-	414	399	-	306	306	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1154	-	-	1339	-	-	342	360	813	356	366	659
Stage 1	-	-	-	-	-	-	702	660	-	635	608	-
Stage 2	-	-	-	-	-	-	614	600	-	702	660	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1154	-	-	1339	-	-	304	345	813	345	351	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	304	345	-	345	351	-
Stage 1	-	-	-	-	-	-	673	633	-	609	608	-
Stage 2	-	-	-	-	-	-	563	600	-	673	633	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			0			0			13.4		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	1154	-	-	1339	-	-	509				
HCM Lane V/C Ratio	-	0.036	-	-	-	-	-	0.158				
HCM Control Delay (s)	0	8.2	0	-	0	-	-	13.4				
HCM Lane LOS	A	A	A	-	A	-	-	B				
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.6				

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	52	492	0	0	325	38	0	0	0	46	0	50
Future Vol, veh/h	52	492	0	0	325	38	0	0	0	46	0	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	57	535	0	0	353	41	0	0	0	50	0	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	394	0	0	535	0	0	1050	1043	535	1023	1023	374
Stage 1	-	-	-	-	-	-	649	649	-	374	374	-
Stage 2	-	-	-	-	-	-	401	394	-	649	649	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1159	-	-	1028	-	-	204	228	543	213	235	670
Stage 1	-	-	-	-	-	-	457	464	-	645	616	-
Stage 2	-	-	-	-	-	-	624	603	-	457	464	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1159	-	-	1028	-	-	177	212	543	201	219	670
Mov Cap-2 Maneuver	-	-	-	-	-	-	177	212	-	201	219	-
Stage 1	-	-	-	-	-	-	425	432	-	600	616	-
Stage 2	-	-	-	-	-	-	573	603	-	425	432	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	0	21.9
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1159	-	-	1028	-	-	316
HCM Lane V/C Ratio	-	0.049	-	-	-	-	-	0.33
HCM Control Delay (s)	0	8.3	0	-	0	-	-	21.9
HCM Lane LOS	A	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	-	0.2	-	-	0	-	-	1.4

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	228	0	0	388	35	0	0	0	47	0	51
Future Vol, veh/h	40	228	0	0	388	35	0	0	0	47	0	51
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	43	248	0	0	422	38	0	0	0	51	0	55

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	460	0	0	248	0	0	803	794	248	775	775	441
Stage 1	-	-	-	-	-	-	334	334	-	441	441	-
Stage 2	-	-	-	-	-	-	469	460	-	334	334	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1096	-	-	1312	-	-	301	320	788	314	328	614
Stage 1	-	-	-	-	-	-	678	641	-	593	575	-
Stage 2	-	-	-	-	-	-	573	564	-	678	641	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1096	-	-	1312	-	-	264	306	788	303	313	614
Mov Cap-2 Maneuver	-	-	-	-	-	-	264	306	-	303	313	-
Stage 1	-	-	-	-	-	-	647	612	-	566	575	-
Stage 2	-	-	-	-	-	-	521	564	-	647	612	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	0	16.8
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1096	-	-	1312	-	-	411
HCM Lane V/C Ratio	-	0.04	-	-	-	-	-	0.259
HCM Control Delay (s)	0	8.4	0	-	0	-	-	16.8
HCM Lane LOS	A	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	1

HCM 6th TWSC
23: Mill Creek Rd & 211th St

Future PM Peak

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	53	564	0	0	359	64	0	0	0	60	0	52
Future Vol, veh/h	53	564	0	0	359	64	0	0	0	60	0	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	58	613	0	0	390	70	0	0	0	65	0	57
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	460	0	0	613	0	0	1183	1189	613	1154	1154	425
Stage 1	-	-	-	-	-	-	729	729	-	425	425	-
Stage 2	-	-	-	-	-	-	454	460	-	729	729	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1096	-	-	961	-	-	166	187	491	173	196	627
Stage 1	-	-	-	-	-	-	413	427	-	605	585	-
Stage 2	-	-	-	-	-	-	584	564	-	413	427	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1096	-	-	961	-	-	142	172	491	162	180	627
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	172	-	162	180	-
Stage 1	-	-	-	-	-	-	380	393	-	557	585	-
Stage 2	-	-	-	-	-	-	531	564	-	380	393	-
Approach	EB		WB				NB			SB		
HCM Control Delay, s	0.7		0				0			33		
HCM LOS							A			D		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	1096	-	-	961	-	-	247				
HCM Lane V/C Ratio	-	0.053	-	-	-	-	-	0.493				
HCM Control Delay (s)	0	8.5	0	-	0	-	-	33				
HCM Lane LOS	A	A	A	-	A	-	-	D				
HCM 95th %tile Q(veh)	-	0.2	-	-	0	-	-	2.5				

Intersection						
Int Delay, s/veh	7.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↗	↖
Traffic Vol, veh/h	70	93	568	55	16	150
Future Vol, veh/h	70	93	568	55	16	150
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	100	-	-	0	332
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	76	101	617	60	17	163
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	76	0	1370	76
Stage 1	-	-	-	-	76	-
Stage 2	-	-	-	-	1294	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1517	-	161	982
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	256	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1517	-	93	982
Mov Cap-2 Maneuver	-	-	-	-	93	-
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	148	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		8.2		13.5	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	93	982	-	-	1517	-
HCM Lane V/C Ratio	0.187	0.166	-	-	0.407	-
HCM Control Delay (s)	52.4	9.4	-	-	9	0
HCM Lane LOS	F	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	0.6	-	-	2	-

Intersection							
Int Delay, s/veh	10.9						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Traffic Vol, veh/h	173	80	323	44	57	508	
Future Vol, veh/h	173	80	323	44	57	508	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	Yield	-	None	-	Yield	
Storage Length	-	100	-	-	0	332	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	92	92	92	92	92	92	
Heavy Vehicles, %	3	3	3	3	3	3	
Mvmt Flow	188	87	351	48	62	552	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	0	188	0	938	188	
Stage 1	-	-	-	-	188	-	
Stage 2	-	-	-	-	750	-	
Critical Hdwy	-	-	4.13	-	6.43	6.23	
Critical Hdwy Stg 1	-	-	-	-	5.43	-	
Critical Hdwy Stg 2	-	-	-	-	5.43	-	
Follow-up Hdwy	-	-	2.227	-	3.527	3.327	
Pot Cap-1 Maneuver	-	-	1380	-	292	851	
Stage 1	-	-	-	-	842	-	
Stage 2	-	-	-	-	465	-	
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	1380	-	216	851	
Mov Cap-2 Maneuver	-	-	-	-	216	-	
Stage 1	-	-	-	-	842	-	
Stage 2	-	-	-	-	344	-	
Approach	EB		WB		NB		
HCM Control Delay, s	0		7.5		17.9		
HCM LOS	C						
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	216		851	-	-	1380	-
HCM Lane V/C Ratio	0.287		0.649	-	-	0.254	-
HCM Control Delay (s)	28.2		16.7	-	-	8.5	0
HCM Lane LOS	D		C	-	-	A	A
HCM 95th %tile Q(veh)	1.1		4.9	-	-	1	-

HCM 6th TWSC
24: Little Chicago Rd & 211th St

Future AM Peak

Intersection						
Int Delay, s/veh	8.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↗	↖
Traffic Vol, veh/h	72	106	612	55	18	172
Future Vol, veh/h	72	106	612	55	18	172
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	100	-	-	0	332
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	78	115	665	60	20	187
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	78	0	1468	78
Stage 1	-	-	-	-	78	-
Stage 2	-	-	-	-	1390	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1514	-	140	980
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	230	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1514	-	76	980
Mov Cap-2 Maneuver	-	-	-	-	76	-
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	126	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		8.5		15.1	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	76	980	-	-	1514	-
HCM Lane V/C Ratio	0.257	0.191	-	-	0.439	-
HCM Control Delay (s)	68.1	9.5	-	-	9.2	0
HCM Lane LOS	F	A	-	-	A	A
HCM 95th %tile Q(veh)	0.9	0.7	-	-	2.3	-

HCM 6th TWSC
24: Little Chicago Rd & 211th St

Future PM Peak

Intersection						
Int Delay, s/veh	13.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↗	↖
Traffic Vol, veh/h	180	89	359	44	69	574
Future Vol, veh/h	180	89	359	44	69	574
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	100	-	-	0	332
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	196	97	390	48	75	624
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	196	0	1024	196
Stage 1	-	-	-	-	196	-
Stage 2	-	-	-	-	828	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1371	-	260	843
Stage 1	-	-	-	-	835	-
Stage 2	-	-	-	-	427	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1371	-	184	843
Mov Cap-2 Maneuver	-	-	-	-	184	-
Stage 1	-	-	-	-	835	-
Stage 2	-	-	-	-	302	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		7.7		22.2	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	184	843	-	-	1371	-
HCM Lane V/C Ratio	0.408	0.74	-	-	0.285	-
HCM Control Delay (s)	37.4	20.4	-	-	8.7	0
HCM Lane LOS	E	C	-	-	A	A
HCM 95th %tile Q(veh)	1.8	6.8	-	-	1.2	-

Intersection				
Intersection Delay, s/veh	5.3			
Intersection LOS	A			
Approach	EB		NB	SB
Entry Lanes	2		1	1
Conflicting Circle Lanes	1		1	1
Adj Approach Flow, veh/h	525		123	219
Demand Flow Rate, veh/h	541		127	225
Vehicles Circulating, veh/h	111		76	102
Vehicles Exiting, veh/h	216		576	101
Ped Vol Crossing Leg, #/h	0		0	0
Ped Cap Adj	1.000		1.000	1.000
Approach Delay, s/veh	5.9		3.7	4.5
Approach LOS	A		A	A
Lane	Left	Right	Left	Left
Designated Moves	L	TR	LT	TR
Assumed Moves	L	TR	LT	TR
RT Channelized				
Lane Util	0.140	0.860	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.609	2.609
Critical Headway, s	4.544	4.544	4.976	4.976
Entry Flow, veh/h	76	465	127	225
Cap Entry Lane, veh/h	1284	1284	1277	1244
Entry HV Adj Factor	0.974	0.970	0.971	0.972
Flow Entry, veh/h	74	451	123	219
Cap Entry, veh/h	1250	1245	1239	1209
V/C Ratio	0.059	0.362	0.099	0.181
Control Delay, s/veh	3.4	6.3	3.7	4.5
LOS	A	A	A	A
95th %tile Queue, veh	0	2	0	1

Intersection				
Intersection Delay, s/veh	7.7			
Intersection LOS	A			
Approach	EB		NB	SB
Entry Lanes	2		1	1
Conflicting Circle Lanes	1		1	1
Adj Approach Flow, veh/h	510		648	194
Demand Flow Rate, veh/h	526		667	200
Vehicles Circulating, veh/h	99		160	494
Vehicles Exiting, veh/h	595		465	333
Ped Vol Crossing Leg, #/h	0		0	0
Ped Cap Adj	1.000		1.000	1.000
Approach Delay, s/veh	4.9		10.1	7.0
Approach LOS	A		B	A
Lane	Left	Right	Left	Left
Designated Moves	L	TR	LT	TR
Assumed Moves	L	TR	LT	TR
RT Channelized				
Lane Util	0.304	0.696	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.609	2.609
Critical Headway, s	4.544	4.544	4.976	4.976
Entry Flow, veh/h	160	366	667	200
Cap Entry Lane, veh/h	1298	1298	1172	834
Entry HV Adj Factor	0.969	0.970	0.971	0.971
Flow Entry, veh/h	155	355	648	194
Cap Entry, veh/h	1257	1259	1139	809
V/C Ratio	0.123	0.282	0.569	0.240
Control Delay, s/veh	3.9	5.4	10.1	7.0
LOS	A	A	B	A
95th %tile Queue, veh	0	1	4	1

Intersection				
Intersection Delay, s/veh	9.5			
Intersection LOS	A			
Approach	EB		NB	SB
Entry Lanes	2		1	1
Conflicting Circle Lanes	1		1	1
Adj Approach Flow, veh/h	934		237	233
Demand Flow Rate, veh/h	962		244	240
Vehicles Circulating, veh/h	119		81	215
Vehicles Exiting, veh/h	336		1000	110
Ped Vol Crossing Leg, #/h	0		0	0
Ped Cap Adj	1.000		1.000	1.000
Approach Delay, s/veh	11.8		4.6	5.4
Approach LOS	B		A	A
Lane	Left	Right	Left	Left
Designated Moves	L	TR	LT	TR
Assumed Moves	L	TR	LT	TR
RT Channelized				
Lane Util	0.084	0.916	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.609	2.609
Critical Headway, s	4.544	4.544	4.976	4.976
Entry Flow, veh/h	81	881	244	240
Cap Entry Lane, veh/h	1274	1274	1270	1108
Entry HV Adj Factor	0.975	0.970	0.972	0.969
Flow Entry, veh/h	79	855	237	233
Cap Entry, veh/h	1243	1237	1235	1074
V/C Ratio	0.064	0.691	0.192	0.217
Control Delay, s/veh	3.4	12.6	4.6	5.4
LOS	A	B	A	A
95th %tile Queue, veh	0	6	1	1

Intersection				
Intersection Delay, s/veh	31.5			
Intersection LOS	D			
Approach	EB		NB	SB
Entry Lanes	2		1	1
Conflicting Circle Lanes	1		1	1
Adj Approach Flow, veh/h	829		1143	210
Demand Flow Rate, veh/h	854		1177	216
Vehicles Circulating, veh/h	105		177	996
Vehicles Exiting, veh/h	1107		782	358
Ped Vol Crossing Leg, #/h	0		0	0
Ped Cap Adj	1.000		1.000	1.000
Approach Delay, s/veh	7.7		51.9	15.1
Approach LOS	A		F	C
Lane	Left	Right	Left	Left
Designated Moves	L	TR	LT	TR
Assumed Moves	L	TR	LT	TR
RT Channelized				
Lane Util	0.207	0.793	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.609	2.609
Critical Headway, s	4.544	4.544	4.976	4.976
Entry Flow, veh/h	177	677	1177	216
Cap Entry Lane, veh/h	1291	1291	1152	500
Entry HV Adj Factor	0.972	0.970	0.971	0.972
Flow Entry, veh/h	172	657	1143	210
Cap Entry, veh/h	1254	1253	1118	486
V/C Ratio	0.137	0.525	1.022	0.432
Control Delay, s/veh	4.0	8.6	51.9	15.1
LOS	A	A	F	C
95th %tile Queue, veh	0	3	22	2

Intersection						
Int Delay, s/veh	5.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	81	66	29	336	234
Future Vol, veh/h	29	81	66	29	336	234
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	32	88	72	32	365	254
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1072	88	0	0	104	0
Stage 1	88	-	-	-	-	-
Stage 2	984	-	-	-	-	-
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	243	968	-	-	1481	-
Stage 1	933	-	-	-	-	-
Stage 2	361	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	173	968	-	-	1481	-
Mov Cap-2 Maneuver	173	-	-	-	-	-
Stage 1	933	-	-	-	-	-
Stage 2	257	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	16.3	0		4.8		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	438	1481	-	
HCM Lane V/C Ratio	-	-	0.273	0.247	-	
HCM Control Delay (s)	-	-	16.3	8.2	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	1.1	1	-	

Intersection						
Int Delay, s/veh	45.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	345	389	124	282	235
Future Vol, veh/h	55	345	389	124	282	235
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	60	375	423	135	307	255
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1360	491	0	0	558	0
Stage 1	491	-	-	-	-	-
Stage 2	869	-	-	-	-	-
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	163	575	-	-	1008	-
Stage 1	613	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	105	575	-	-	1008	-
Mov Cap-2 Maneuver	105	-	-	-	-	-
Stage 1	613	-	-	-	-	-
Stage 2	264	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	154.6	0	5.5			
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	356	1008	-	
HCM Lane V/C Ratio	-	-	1.221	0.304	-	
HCM Control Delay (s)	-	-	154.6	10.1	0	
HCM Lane LOS	-	-	F	B	A	
HCM 95th %tile Q(veh)	-	-	18.6	1.3	-	

HCM 6th Signalized Intersection Summary 26: Hague Rd & 206th St

Existing AM Peak
Mitigated - Final

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	29	81	66	29	336	234
Future Volume (veh/h)	29	81	66	29	336	234
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	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	32	88	72	32	365	254
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	377	622	337	150	787	1026
Arrive On Green	0.21	0.21	0.28	0.28	0.18	0.55
Sat Flow, veh/h	1767	1572	1217	541	1767	1856
Grp Volume(v), veh/h	32	88	0	104	365	254
Grp Sat Flow(s),veh/h/ln	1767	1572	0	1758	1767	1856
Q Serve(g_s), s	0.6	1.5	0.0	1.9	5.5	3.0
Cycle Q Clear(g_c), s	0.6	1.5	0.0	1.9	5.5	3.0
Prop In Lane	1.00	1.00		0.31	1.00	
Lane Grp Cap(c), veh/h	377	622	0	487	787	1026
V/C Ratio(X)	0.08	0.14	0.00	0.21	0.46	0.25
Avail Cap(c_a), veh/h	496	728	0	535	920	1216
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	13.5	8.3	0.0	11.9	6.8	5.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.2	0.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.4	0.0	0.6	1.1	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.6	8.4	0.0	12.1	7.3	5.1
LnGrp LOS	B	A		B	A	A
Approach Vol, veh/h	120		104			619
Approach Delay, s/veh	9.8		12.1			6.4
Approach LOS	A		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.8	16.8			28.6	14.1
Change Period (Y+Rc), s	4.0	5.0			5.0	5.0
Max Green Setting (Gmax), s	11.0	13.0			28.0	12.0
Max Q Clear Time (g_c+I1), s	7.5	3.9			5.0	3.5
Green Ext Time (p_c), s	0.4	0.2			1.3	0.2
Intersection Summary						
HCM 6th Ctrl Delay, s/veh			7.6			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary 26: Hague Rd & 206th St

Existing PM Peak
Mitigated - Final

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	55	345	389	124	282	235
Future Volume (veh/h)	55	345	389	124	282	235
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	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	60	375	423	135	307	255
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	405	578	491	157	445	1075
Arrive On Green	0.23	0.23	0.36	0.36	0.14	0.58
Sat Flow, veh/h	1767	1572	1348	430	1767	1856
Grp Volume(v), veh/h	60	375	0	558	307	255
Grp Sat Flow(s),veh/h/ln	1767	1572	0	1778	1767	1856
Q Serve(g_s), s	1.4	10.4	0.0	15.2	5.0	3.5
Cycle Q Clear(g_c), s	1.4	10.4	0.0	15.2	5.0	3.5
Prop In Lane	1.00	1.00		0.24	1.00	
Lane Grp Cap(c), veh/h	405	578	0	648	445	1075
V/C Ratio(X)	0.15	0.65	0.00	0.86	0.69	0.24
Avail Cap(c_a), veh/h	405	578	0	816	538	1348
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	16.1	13.7	0.0	15.4	10.5	5.4
Incr Delay (d2), s/veh	0.2	2.5	0.0	7.7	2.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.3	0.0	6.0	1.5	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.2	16.3	0.0	23.1	13.4	5.5
LnGrp LOS	B	B		C	B	A
Approach Vol, veh/h	435		558			562
Approach Delay, s/veh	16.3		23.1			9.8
Approach LOS	B		C			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.2	24.1			35.3	17.0
Change Period (Y+Rc), s	4.0	5.0			5.0	5.0
Max Green Setting (Gmax), s	10.0	24.0			38.0	12.0
Max Q Clear Time (g_c+I1), s	7.0	17.2			5.5	12.4
Green Ext Time (p_c), s	0.3	1.9			1.4	0.0
Intersection Summary						
HCM 6th Ctrl Delay, s/veh			16.4			
HCM 6th LOS			B			

Intersection						
Int Delay, s/veh	16					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	133	119	29	534	415
Future Vol, veh/h	29	133	119	29	534	415
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	32	145	129	32	580	451
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1756	145	0	0	161	0
Stage 1	145	-	-	-	-	-
Stage 2	1611	-	-	-	-	-
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	93	900	-	-	1412	-
Stage 1	880	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	42	900	-	-	1412	-
Mov Cap-2 Maneuver	42	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	81	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	93.6	0		5.2		
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 193		1412	-	
HCM Lane V/C Ratio	-	- 0.912		0.411	-	
HCM Control Delay (s)	-	- 93.6		9.3	0	
HCM Lane LOS	-	- F		A	A	
HCM 95th %tile Q(veh)	-	- 7.1		2.1	-	

Intersection						
Int Delay, s/veh	615.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	617	574	124	451	349
Future Vol, veh/h	55	617	574	124	451	349
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	60	671	624	135	490	379
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	2051	692	0	0	759	0
Stage 1	692	-	-	-	-	-
Stage 2	1359	-	-	-	-	-
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	61	~ 442	-	-	848	-
Stage 1	495	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 16	~ 442	-	-	848	-
Mov Cap-2 Maneuver	~ 16	-	-	-	-	-
Stage 1	495	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, \$	1977.1	0		8.4		
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	139	848	-	
HCM Lane V/C Ratio	-	-	5.255	0.578	-	
HCM Control Delay (s)	-	\$ 1977.1		14.9	0	
HCM Lane LOS	-	-	F	B	A	
HCM 95th %tile Q(veh)	-	-	77.5	3.8	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection			
Intersection Delay, s/veh	13.9		
Intersection LOS	B		
Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	177	161	1031
Demand Flow Rate, veh/h	182	166	1062
Vehicles Circulating, veh/h	133	597	33
Vehicles Exiting, veh/h	630	498	282
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.4	7.4	16.6
Approach LOS	A	A	C
Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	182	166	1062
Cap Entry Lane, veh/h	1205	751	1334
Entry HV Adj Factor	0.973	0.971	0.971
Flow Entry, veh/h	177	161	1031
Cap Entry, veh/h	1172	729	1296
V/C Ratio	0.151	0.221	0.796
Control Delay, s/veh	4.4	7.4	16.6
LOS	A	A	C
95th %tile Queue, veh	1	1	9

Intersection			
Intersection Delay, s/veh	40.9		
Intersection LOS	E		
Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	731	759	869
Demand Flow Rate, veh/h	753	782	895
Vehicles Circulating, veh/h	643	505	62
Vehicles Exiting, veh/h	644	452	1334
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	72.6	43.0	12.5
Approach LOS	F	E	B
Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	753	782	895
Cap Entry Lane, veh/h	716	824	1295
Entry HV Adj Factor	0.971	0.971	0.971
Flow Entry, veh/h	731	759	869
Cap Entry, veh/h	695	800	1257
V/C Ratio	1.051	0.949	0.691
Control Delay, s/veh	72.6	43.0	12.5
LOS	F	E	B
95th %tile Queue, veh	19	14	6

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	385	0	5	98	0	0	0	1	0	0	0
Future Vol, veh/h	0	385	0	5	98	0	0	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	418	0	5	107	0	0	0	1	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	107	0	0	418	0	0	535	535	418	536	535	107
Stage 1	-	-	-	-	-	-	418	418	-	117	117	-
Stage 2	-	-	-	-	-	-	117	117	-	419	418	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1478	-	-	1136	-	-	455	450	633	454	450	944
Stage 1	-	-	-	-	-	-	610	589	-	885	797	-
Stage 2	-	-	-	-	-	-	885	797	-	610	589	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1478	-	-	1136	-	-	453	448	633	451	448	944
Mov Cap-2 Maneuver	-	-	-	-	-	-	453	448	-	451	448	-
Stage 1	-	-	-	-	-	-	610	589	-	885	793	-
Stage 2	-	-	-	-	-	-	881	793	-	609	589	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.4			10.7			0		
HCM LOS							B			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	633	1478	-	-	1136	-	-	-				
HCM Lane V/C Ratio	0.002	-	-	-	0.005	-	-	-				
HCM Control Delay (s)	10.7	0	-	-	8.2	0	-	0				
HCM Lane LOS	B	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-				

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	401	6	8	387	1	8	0	4	1	0	0
Future Vol, veh/h	0	401	6	8	387	1	8	0	4	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	436	7	9	421	1	9	0	4	1	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	422	0	0	443	0	0	880	880	440	882	883	422
Stage 1	-	-	-	-	-	-	440	440	-	440	440	-
Stage 2	-	-	-	-	-	-	440	440	-	442	443	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1132	-	-	1112	-	-	267	285	615	266	284	630
Stage 1	-	-	-	-	-	-	594	576	-	594	576	-
Stage 2	-	-	-	-	-	-	594	576	-	592	574	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1132	-	-	1112	-	-	265	282	615	262	281	630
Mov Cap-2 Maneuver	-	-	-	-	-	-	265	282	-	262	281	-
Stage 1	-	-	-	-	-	-	594	576	-	594	570	-
Stage 2	-	-	-	-	-	-	587	570	-	588	574	-
Approach	EB		WB				NB		SB			
HCM Control Delay, s	0		0.2				16.5		18.8			
HCM LOS							C		C			
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	327	1132	-	-	1112	-	-	262				
HCM Lane V/C Ratio	0.04	-	-	-	0.008	-	-	0.004				
HCM Control Delay (s)	16.5	0	-	-	8.3	0	-	18.8				
HCM Lane LOS	C	A	-	-	A	A	-	C				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0				

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	491	1	5	150	5	0	0	2	20	0	0
Future Vol, veh/h	0	491	1	5	150	5	0	0	2	20	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	534	1	5	163	5	0	0	2	22	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	168	0	0	535	0	0	711	713	535	712	711	166
Stage 1	-	-	-	-	-	-	535	535	-	176	176	-
Stage 2	-	-	-	-	-	-	176	178	-	536	535	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1404	-	-	1028	-	-	347	356	543	346	357	876
Stage 1	-	-	-	-	-	-	527	522	-	823	752	-
Stage 2	-	-	-	-	-	-	823	750	-	527	522	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1404	-	-	1028	-	-	346	354	543	343	355	876
Mov Cap-2 Maneuver	-	-	-	-	-	-	346	354	-	343	355	-
Stage 1	-	-	-	-	-	-	527	522	-	823	748	-
Stage 2	-	-	-	-	-	-	819	746	-	525	522	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			11.7			16.2		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	543	1404	-	-	1028	-	-	343				
HCM Lane V/C Ratio	0.004	-	-	-	0.005	-	-	0.063				
HCM Control Delay (s)	11.7	0	-	-	8.5	0	-	16.2				
HCM Lane LOS	B	A	-	-	A	A	-	C				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2				

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	570	6	8	659	12	9	11	5	13	0	0
Future Vol, veh/h	0	570	6	8	659	12	9	11	5	13	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	620	7	9	716	13	10	12	5	14	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	729	0	0	627	0	0	1365	1371	624	1373	1368	723
Stage 1	-	-	-	-	-	-	624	624	-	741	741	-
Stage 2	-	-	-	-	-	-	741	747	-	632	627	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	870	-	-	950	-	-	124	145	484	122	146	425
Stage 1	-	-	-	-	-	-	471	476	-	407	421	-
Stage 2	-	-	-	-	-	-	407	419	-	467	475	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	870	-	-	950	-	-	123	143	484	112	144	425
Mov Cap-2 Maneuver	-	-	-	-	-	-	123	143	-	112	144	-
Stage 1	-	-	-	-	-	-	471	476	-	407	414	-
Stage 2	-	-	-	-	-	-	400	412	-	450	475	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			32.9			41.7		
HCM LOS							D			E		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	156	870	-	-	950	-	-	112				
HCM Lane V/C Ratio	0.174	-	-	-	0.009	-	-	0.126				
HCM Control Delay (s)	32.9	0	-	-	8.8	0	-	41.7				
HCM Lane LOS	D	A	-	-	A	A	-	E				
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.4				

HCM 6th Signalized Intersection Summary
28: Cicero Rd/SR 19 & 206th St

Existing AM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	195	137	93	83	24	16	80	17	116	437	11
Future Volume (veh/h)	13	195	137	93	83	24	16	80	17	116	437	11
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	14	212	149	101	90	26	17	87	18	126	475	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	119	357	241	356	285	66	330	527	109	613	655	555
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	24	1013	684	570	808	188	902	1491	309	1279	1856	1572
Grp Volume(v), veh/h	375	0	0	217	0	0	17	0	105	126	475	12
Grp Sat Flow(s),veh/h/ln	1721	0	0	1566	0	0	902	0	1800	1279	1856	1572
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	1.4	2.5	7.6	0.2
Cycle Q Clear(g_c), s	6.1	0.0	0.0	3.0	0.0	0.0	8.1	0.0	1.4	3.9	7.6	0.2
Prop In Lane	0.04		0.40	0.47		0.12	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	716	0	0	707	0	0	330	0	636	613	655	555
V/C Ratio(X)	0.52	0.00	0.00	0.31	0.00	0.00	0.05	0.00	0.17	0.21	0.72	0.02
Avail Cap(c_a), veh/h	869	0	0	825	0	0	543	0	1061	914	1093	927
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(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.1	0.0	0.0	8.1	0.0	0.0	13.1	0.0	7.5	8.9	9.5	7.2
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.1	0.2	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	0.8	0.0	0.0	0.1	0.0	0.3	0.4	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.7	0.0	0.0	8.3	0.0	0.0	13.1	0.0	7.7	9.0	11.1	7.2
LnGrp LOS	A	A	A	A	A	A	B	A	A	A	B	A
Approach Vol, veh/h		375			217			122			613	
Approach Delay, s/veh		9.7			8.3			8.4			10.6	
Approach LOS		A			A			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		17.0		17.0		17.0		17.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		20.0		15.0		20.0		15.0				
Max Q Clear Time (g_c+l1), s		10.1		8.1		9.6		5.0				
Green Ext Time (p_c), s		0.3		1.2		2.2		0.9				
Intersection Summary												
HCM 6th Ctrl Delay				9.8								
HCM 6th LOS				A								

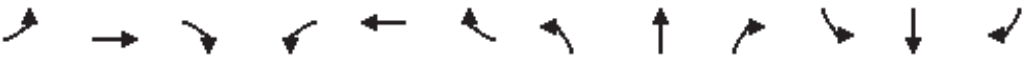
HCM 6th Signalized Intersection Summary
28: Cicero Rd/SR 19 & 206th St

Existing PM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	245	71	31	254	125	134	455	69	86	186	16
Future Volume (veh/h)	33	245	71	31	254	125	134	455	69	86	186	16
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	36	266	77	34	276	136	146	495	75	93	202	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	127	422	115	118	362	169	596	679	103	321	801	679
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	90	1318	359	68	1131	526	1153	1574	239	835	1856	1572
Grp Volume(v), veh/h	379	0	0	446	0	0	146	0	570	93	202	17
Grp Sat Flow(s),veh/h/ln	1767	0	0	1726	0	0	1153	0	1813	835	1856	1572
Q Serve(g_s), s	0.0	0.0	0.0	2.1	0.0	0.0	3.7	0.0	10.5	4.2	2.8	0.3
Cycle Q Clear(g_c), s	7.3	0.0	0.0	9.4	0.0	0.0	6.5	0.0	10.5	14.7	2.8	0.3
Prop In Lane	0.09		0.20	0.08		0.30	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	664	0	0	649	0	0	596	0	782	321	801	679
V/C Ratio(X)	0.57	0.00	0.00	0.69	0.00	0.00	0.24	0.00	0.73	0.29	0.25	0.03
Avail Cap(c_a), veh/h	873	0	0	859	0	0	728	0	990	417	1013	859
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(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.8	0.0	0.0	12.5	0.0	0.0	9.4	0.0	9.5	15.6	7.3	6.6
Incr Delay (d2), s/veh	0.8	0.0	0.0	1.5	0.0	0.0	0.2	0.0	2.0	0.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	3.0	0.0	0.0	0.6	0.0	2.6	0.6	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.6	0.0	0.0	13.9	0.0	0.0	9.6	0.0	11.5	16.1	7.5	6.6
LnGrp LOS	B	A	A	B	A	A	A	A	B	B	A	A
Approach Vol, veh/h		379			446			716			312	
Approach Delay, s/veh		12.6			13.9			11.1			10.0	
Approach LOS		B			B			B			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.4		17.9		22.4		17.9				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		18.0		22.0		18.0				
Max Q Clear Time (g_c+l1), s		12.5		9.3		16.7		11.4				
Green Ext Time (p_c), s		2.7		1.5		0.7		1.5				
Intersection Summary												
HCM 6th Ctrl Delay				11.9								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary 28: Cicero Rd/SR 19 & 206th St

Future AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↔		↔	↔	↔
Traffic Volume (veh/h)	14	224	234	95	140	72	16	86	19	120	737	12
Future Volume (veh/h)	14	224	234	95	140	72	16	86	19	120	737	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	15	243	254	103	152	78	17	93	21	130	801	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	53	287	290	141	196	86	161	584	132	685	839	711
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.03	0.40	0.40	0.08	0.45	0.45
Sat Flow, veh/h	22	852	860	249	582	254	1767	1465	331	1767	1856	1572
Grp Volume(v), veh/h	512	0	0	333	0	0	17	0	114	130	801	13
Grp Sat Flow(s),veh/h/ln	1734	0	0	1086	0	0	1767	0	1796	1767	1856	1572
Q Serve(g_s), s	0.0	0.0	0.0	2.2	0.0	0.0	0.5	0.0	3.3	3.3	34.0	0.4
Cycle Q Clear(g_c), s	22.7	0.0	0.0	24.9	0.0	0.0	0.5	0.0	3.3	3.3	34.0	0.4
Prop In Lane	0.03		0.50	0.31		0.23	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	629	0	0	423	0	0	161	0	716	685	839	711
V/C Ratio(X)	0.81	0.00	0.00	0.79	0.00	0.00	0.11	0.00	0.16	0.19	0.95	0.02
Avail Cap(c_a), veh/h	680	0	0	464	0	0	263	0	834	693	862	731
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	0.0	0.0	25.2	0.0	0.0	19.1	0.0	15.8	11.3	21.6	12.4
Incr Delay (d2), s/veh	7.1	0.0	0.0	8.1	0.0	0.0	0.3	0.0	0.1	0.1	20.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	0.0	0.0	6.8	0.0	0.0	0.2	0.0	1.2	1.1	16.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	0.0	0.0	33.2	0.0	0.0	19.4	0.0	15.9	11.5	41.7	12.4
LnGrp LOS	C	A	A	C	A	A	B	A	B	B	D	B
Approach Vol, veh/h	512			333			131			944		
Approach Delay, s/veh	32.7			33.2			16.3			37.1		
Approach LOS	C			C			B			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	37.6		32.5	7.2	42.0		32.5				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	7.0	38.0		30.0	7.0	38.0		30.0				
Max Q Clear Time (g_c+l1), s	5.3	5.3		24.7	2.5	36.0		26.9				
Green Ext Time (p_c), s	0.0	0.5		1.5	0.0	1.0		0.6				
Intersection Summary												
HCM 6th Ctrl Delay				33.9								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
28: Cicero Rd/SR 19 & 206th St

Future PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	422	76	36	403	206	264	655	74	206	198	17
Future Volume (veh/h)	33	422	76	36	403	206	264	655	74	206	198	17
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	36	459	83	39	438	224	287	712	80	224	215	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	51	482	85	51	387	192	585	655	74	205	686	582
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.11	0.40	0.40	0.08	0.37	0.37
Sat Flow, veh/h	55	1205	211	54	966	479	1767	1638	184	1767	1856	1572
Grp Volume(v), veh/h	578	0	0	701	0	0	287	0	792	224	215	18
Grp Sat Flow(s),veh/h/ln	1471	0	0	1499	0	0	1767	0	1822	1767	1856	1572
Q Serve(g_s), s	0.0	0.0	0.0	1.9	0.0	0.0	12.8	0.0	52.0	11.0	10.7	0.9
Cycle Q Clear(g_c), s	50.1	0.0	0.0	52.0	0.0	0.0	12.8	0.0	52.0	11.0	10.7	0.9
Prop In Lane	0.06		0.14	0.06		0.32	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	618	0	0	629	0	0	585	0	729	205	686	582
V/C Ratio(X)	0.94	0.00	0.00	1.11	0.00	0.00	0.49	0.00	1.09	1.09	0.31	0.03
Avail Cap(c_a), veh/h	618	0	0	629	0	0	600	0	729	205	686	582
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	0.0	0.0	39.0	0.0	0.0	20.7	0.0	39.0	38.8	29.2	26.1
Incr Delay (d2), s/veh	21.7	0.0	0.0	71.7	0.0	0.0	0.6	0.0	59.3	89.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.8	0.0	0.0	32.6	0.0	0.0	5.1	0.0	33.7	9.6	4.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.3	0.0	0.0	110.8	0.0	0.0	21.4	0.0	98.3	128.8	29.5	26.1
LnGrp LOS	E	A	A	F	A	A	C	A	F	F	C	C
Approach Vol, veh/h		578			701			1079			457	
Approach Delay, s/veh		58.3			110.8			77.8			78.0	
Approach LOS		E			F			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	57.0		57.0	19.9	53.1		57.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	11.0	52.0		52.0	16.0	47.0		52.0				
Max Q Clear Time (g_c+I1), s	13.0	54.0		52.1	14.8	12.7		54.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	1.1		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				82.0								
HCM 6th LOS				F								

HCM 6th Signalized Intersection Summary 28: Cicero Rd/SR 19 & 206th St

Future AM Peak
Mitigated - Final

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	224	234	95	140	72	16	86	19	120	737	12
Future Volume (veh/h)	14	224	234	95	140	72	16	86	19	120	737	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	15	243	254	103	152	78	17	93	21	130	801	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	413	285	298	152	637	667	94	592	134	279	850	720
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.03	0.40	0.40	0.08	0.46	0.46
Sat Flow, veh/h	1141	831	868	893	1856	1572	3428	1465	331	3428	1856	1572
Grp Volume(v), veh/h	15	0	497	103	152	78	17	0	114	130	801	13
Grp Sat Flow(s),veh/h/ln	1141	0	1699	893	1856	1572	1714	0	1796	1714	1856	1572
Q Serve(g_s), s	0.8	0.0	22.2	5.8	4.8	2.5	0.4	0.0	3.3	3.0	33.6	0.4
Cycle Q Clear(g_c), s	5.6	0.0	22.2	28.0	4.8	2.5	0.4	0.0	3.3	3.0	33.6	0.4
Prop In Lane	1.00		0.51	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	413	0	583	152	637	667	94	0	726	279	850	720
V/C Ratio(X)	0.04	0.00	0.85	0.68	0.24	0.12	0.18	0.00	0.16	0.47	0.94	0.02
Avail Cap(c_a), veh/h	413	0	583	152	637	667	357	0	869	357	898	761
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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	0.0	24.9	39.0	19.2	14.2	38.8	0.0	15.5	35.8	21.1	12.1
Incr Delay (d2), s/veh	0.0	0.0	11.7	11.3	0.2	0.1	0.9	0.0	0.1	1.2	17.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	10.0	2.5	2.0	0.8	0.2	0.0	1.2	1.2	15.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	0.0	36.5	50.3	19.4	14.3	39.7	0.0	15.6	37.0	38.4	12.1
LnGrp LOS	C		D	D	B	B	D		B	D	D	B
Approach Vol, veh/h	512			333			131			944		
Approach Delay, s/veh	36.1			27.8			18.7			37.9		
Approach LOS	D			C			B			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.6	38.0		33.0	6.2	42.4		33.0				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0				
Max Green Setting (Gmax), s	8.5	39.5		28.0	8.5	39.5		28.0				
Max Q Clear Time (g_c+I1), s	5.0	5.3		24.2	2.4	35.6		30.0				
Green Ext Time (p_c), s	0.1	0.5		1.1	0.0	1.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				34.3								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary 28: Cicero Rd/SR 19 & 206th St

Future PM Peak
Mitigated - Final

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	422	76	36	403	206	264	655	74	206	198	17
Future Volume (veh/h)	33	422	76	36	403	206	264	655	74	206	198	17
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	36	459	83	39	438	224	287	712	80	224	215	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	150	466	84	87	566	616	370	737	83	298	796	675
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.11	0.45	0.45	0.09	0.43	0.43
Sat Flow, veh/h	767	1529	277	857	1856	1572	3428	1638	184	3428	1856	1572
Grp Volume(v), veh/h	36	0	542	39	438	224	287	0	792	224	215	18
Grp Sat Flow(s),veh/h/ln	767	0	1806	857	1856	1572	1714	0	1822	1714	1856	1572
Q Serve(g_s), s	4.0	0.0	26.4	0.6	19.0	8.9	7.2	0.0	37.4	5.7	6.6	0.6
Cycle Q Clear(g_c), s	23.0	0.0	26.4	27.0	19.0	8.9	7.2	0.0	37.4	5.7	6.6	0.6
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	150	0	551	87	566	616	370	0	820	298	796	675
V/C Ratio(X)	0.24	0.00	0.98	0.45	0.77	0.36	0.78	0.00	0.97	0.75	0.27	0.03
Avail Cap(c_a), veh/h	150	0	551	87	566	616	503	0	827	341	796	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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	0.0	30.6	44.2	28.0	19.1	38.5	0.0	23.7	39.5	16.3	14.6
Incr Delay (d2), s/veh	0.8	0.0	34.2	3.6	6.6	0.4	5.2	0.0	23.1	7.9	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	15.9	0.9	9.1	3.1	3.1	0.0	18.9	2.5	2.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.3	0.0	64.8	47.8	34.6	19.4	43.7	0.0	46.8	47.4	16.5	14.6
LnGrp LOS	D		E	D	C	B	D		D	D	B	B
Approach Vol, veh/h		578			701			1079			457	
Approach Delay, s/veh		63.2			30.5			46.0			31.6	
Approach LOS		E			C			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	44.8		32.0	13.5	43.0		32.0				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0				
Max Green Setting (Gmax), s	8.8	40.2		27.0	13.0	36.0		27.0				
Max Q Clear Time (g_c+I1), s	7.7	39.4		28.4	9.2	8.6		29.0				
Green Ext Time (p_c), s	0.1	0.4		0.0	0.3	1.1		0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			43.3									
HCM 6th LOS			D									

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	379	0	0	175	3	0
Future Vol, veh/h	379	0	0	175	3	0
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	412	0	0	190	3	0
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	412	0	602	412
Stage 1	-	-	-	-	412	-
Stage 2	-	-	-	-	190	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1142	-	461	638
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	840	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1142	-	461	638
Mov Cap-2 Maneuver	-	-	-	-	461	-
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	840	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		12.9	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	461	-	-	1142	-	
HCM Lane V/C Ratio	0.007	-	-	-	-	
HCM Control Delay (s)	12.9	-	-	0	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0	-	-	0	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	425	7	1	414	4	0
Future Vol, veh/h	425	7	1	414	4	0
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	462	8	1	450	4	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	470
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1086
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1086
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	300	-	-	1086	-
HCM Lane V/C Ratio	0.014	-	-	0.001	-
HCM Control Delay (s)	17.2	-	-	8.3	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	413	0	0	279	3	0
Future Vol, veh/h	413	0	0	279	3	0
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	449	0	0	303	3	0
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	449	0	752	449
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	303	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1106	-	377	608
Stage 1	-	-	-	-	641	-
Stage 2	-	-	-	-	747	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1106	-	377	608
Mov Cap-2 Maneuver	-	-	-	-	377	-
Stage 1	-	-	-	-	641	-
Stage 2	-	-	-	-	747	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		14.6	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	377	-	-	1106	-	
HCM Lane V/C Ratio	0.009	-	-	-	-	
HCM Control Delay (s)	14.6	-	-	0	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0	-	-	0	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	722	9	1	652	4	0
Future Vol, veh/h	722	9	1	652	4	0
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	785	10	1	709	4	0
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	795	0	1501	790
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	711	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	822	-	133	389
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	485	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	822	-	133	389
Mov Cap-2 Maneuver	-	-	-	-	133	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	484	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		33	
HCM LOS					D	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	133	-	-	822	-	
HCM Lane V/C Ratio	0.033	-	-	0.001	-	
HCM Control Delay (s)	33	-	-	9.4	0	
HCM Lane LOS	D	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

HCM 6th Signalized Intersection Summary 30: Cumberland Rd & 206th St

Existing AM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	137	190	8	138	17	51	36	0	21	173	5
Future Volume (veh/h)	3	137	190	8	138	17	51	36	0	21	173	5
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	3	149	207	9	150	18	55	39	0	23	188	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	407	486	532	387	443	53	487	538	0	568	453	12
Arrive On Green	0.01	0.26	0.26	0.02	0.27	0.27	0.08	0.29	0.00	0.04	0.25	0.25
Sat Flow, veh/h	1767	1856	1572	1767	1625	195	1767	1856	0	1767	1799	48
Grp Volume(v), veh/h	3	149	207	9	0	168	55	39	0	23	0	193
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	0	1820	1767	1856	0	1767	0	1847
Q Serve(g_s), s	0.1	3.0	4.6	0.2	0.0	3.4	1.0	0.7	0.0	0.4	0.0	4.0
Cycle Q Clear(g_c), s	0.1	3.0	4.6	0.2	0.0	3.4	1.0	0.7	0.0	0.4	0.0	4.0
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.00	1.00		0.03
Lane Grp Cap(c), veh/h	407	486	532	387	0	496	487	538	0	568	0	465
V/C Ratio(X)	0.01	0.31	0.39	0.02	0.00	0.34	0.11	0.07	0.00	0.04	0.00	0.41
Avail Cap(c_a), veh/h	667	486	533	628	0	496	622	648	0	769	0	645
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(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	13.6	11.5	12.1	0.0	13.4	10.8	11.8	0.0	11.7	0.0	14.3
Incr Delay (d2), s/veh	0.0	0.4	0.5	0.0	0.0	0.4	0.1	0.1	0.0	0.0	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	1.3	0.1	0.0	1.2	0.3	0.2	0.0	0.1	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.4	13.9	12.0	12.1	0.0	13.8	10.9	11.8	0.0	11.7	0.0	14.9
LnGrp LOS	B	B	B	B	A	B	B	B	A	B	A	B
Approach Vol, veh/h		359			177			94			216	
Approach Delay, s/veh		12.8			13.7			11.3			14.6	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.8	18.3	4.8	17.0	7.5	16.5	4.3	17.5				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	7.0	16.0	7.0	12.0	7.0	16.0	7.0	12.0				
Max Q Clear Time (g_c+l1), s	2.4	2.7	2.2	6.6	3.0	6.0	2.1	5.4				
Green Ext Time (p_c), s	0.0	0.1	0.0	0.7	0.0	0.6	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay			13.3									
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary 30: Cumberland Rd & 206th St

Existing PM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	246	154	4	203	52	210	231	26	20	81	7
Future Volume (veh/h)	16	246	154	4	203	52	210	231	26	20	81	7
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	17	267	167	4	221	57	228	251	28	22	88	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	304	485	621	287	340	88	633	550	61	444	400	36
Arrive On Green	0.03	0.26	0.26	0.01	0.24	0.24	0.13	0.34	0.34	0.04	0.24	0.24
Sat Flow, veh/h	1767	1856	1572	1767	1423	367	1767	1640	183	1767	1676	152
Grp Volume(v), veh/h	17	267	167	4	0	278	228	0	279	22	0	96
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	0	1789	1767	0	1823	1767	0	1828
Q Serve(g_s), s	0.4	6.2	3.6	0.1	0.0	7.0	4.4	0.0	6.0	0.5	0.0	2.1
Cycle Q Clear(g_c), s	0.4	6.2	3.6	0.1	0.0	7.0	4.4	0.0	6.0	0.5	0.0	2.1
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.10	1.00		0.08
Lane Grp Cap(c), veh/h	304	485	621	287	0	428	633	0	611	444	0	436
V/C Ratio(X)	0.06	0.55	0.27	0.01	0.00	0.65	0.36	0.00	0.46	0.05	0.00	0.22
Avail Cap(c_a), veh/h	499	518	649	520	0	500	679	0	611	625	0	474
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	0.00	1.00
Uniform Delay (d), s/veh	14.0	16.0	10.3	14.5	0.0	17.2	10.2	0.0	13.1	13.3	0.0	15.3
Incr Delay (d2), s/veh	0.1	1.1	0.2	0.0	0.0	2.3	0.3	0.0	0.5	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.3	1.0	0.0	0.0	2.7	1.3	0.0	2.0	0.1	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.1	17.1	10.5	14.5	0.0	19.5	10.5	0.0	13.6	13.4	0.0	15.6
LnGrp LOS	B	B	B	B	A	B	B	A	B	B	A	B
Approach Vol, veh/h	451			282			507			118		
Approach Delay, s/veh	14.5			19.4			12.2			15.2		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.8	21.8	4.4	18.1	10.7	17.0	5.5	17.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	7.0	14.0	7.0	14.0	8.0	13.0	7.0	14.0				
Max Q Clear Time (g_c+I1), s	2.5	8.0	2.1	8.2	6.4	4.1	2.4	9.0				
Green Ext Time (p_c), s	0.0	0.7	0.0	1.0	0.1	0.2	0.0	0.6				
Intersection Summary												
HCM 6th Ctrl Delay	14.7											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary 30: Cumberland Rd & 206th St

Future AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	176	279	8	151	19	162	51	0	21	263	9
Future Volume (veh/h)	5	176	279	8	151	19	162	51	0	21	263	9
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	191	303	9	164	21	176	55	0	23	286	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	361	453	588	317	405	52	229	620	0	540	433	15
Arrive On Green	0.01	0.24	0.24	0.02	0.25	0.25	0.13	0.33	0.00	0.04	0.24	0.24
Sat Flow, veh/h	1767	1856	1572	1767	1612	206	1767	1856	0	1767	1782	62
Grp Volume(v), veh/h	5	191	303	9	0	185	176	55	0	23	0	296
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	0	1818	1767	1856	0	1767	0	1844
Q Serve(g_s), s	0.1	4.3	7.3	0.2	0.0	4.2	4.7	1.0	0.0	0.5	0.0	7.1
Cycle Q Clear(g_c), s	0.1	4.3	7.3	0.2	0.0	4.2	4.7	1.0	0.0	0.5	0.0	7.1
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.00	1.00		0.03
Lane Grp Cap(c), veh/h	361	453	588	317	0	457	229	620	0	540	0	448
V/C Ratio(X)	0.01	0.42	0.52	0.03	0.00	0.40	0.77	0.09	0.00	0.04	0.00	0.66
Avail Cap(c_a), veh/h	597	453	588	540	0	457	324	620	0	724	0	526
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(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	15.6	11.9	13.7	0.0	15.3	20.7	11.2	0.0	12.8	0.0	16.8
Incr Delay (d2), s/veh	0.0	0.6	0.8	0.0	0.0	0.6	6.9	0.1	0.0	0.0	0.0	2.4
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(50%),veh/ln	0.0	1.6	2.1	0.1	0.0	1.5	2.1	0.3	0.0	0.1	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	16.2	12.7	13.7	0.0	15.9	27.6	11.3	0.0	12.9	0.0	19.2
LnGrp LOS	B	B	B	B	A	B	C	B	A	B	A	B
Approach Vol, veh/h	499				194				231			
Approach Delay, s/veh	14.1				15.8				23.7			
Approach LOS	B				B				C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.9	21.4	4.8	17.0	10.4	16.9	4.5	17.3				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	7.0	16.0	7.0	12.0	9.0	14.0	7.0	12.0				
Max Q Clear Time (g_c+l1), s	2.5	3.0	2.2	9.3	6.7	9.1	2.1	6.2				
Green Ext Time (p_c), s	0.0	0.1	0.0	0.6	0.1	0.6	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay	17.3											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary 30: Cumberland Rd & 206th St

Future PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	275	483	5	227	52	532	342	26	20	120	13
Future Volume (veh/h)	26	275	483	5	227	52	532	342	26	20	120	13
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	28	299	525	5	247	57	578	372	28	22	130	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	202	417	907	166	281	65	622	823	62	322	273	29
Arrive On Green	0.04	0.22	0.22	0.01	0.19	0.19	0.35	0.48	0.48	0.03	0.17	0.17
Sat Flow, veh/h	1767	1856	1572	1767	1458	337	1767	1704	128	1767	1646	177
Grp Volume(v), veh/h	28	299	525	5	0	304	578	0	400	22	0	144
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	0	1795	1767	0	1832	1767	0	1824
Q Serve(g_s), s	0.9	10.8	15.4	0.2	0.0	11.9	22.8	0.0	10.5	0.7	0.0	5.2
Cycle Q Clear(g_c), s	0.9	10.8	15.4	0.2	0.0	11.9	22.8	0.0	10.5	0.7	0.0	5.2
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.07	1.00		0.10
Lane Grp Cap(c), veh/h	202	417	907	166	0	345	622	0	885	322	0	302
V/C Ratio(X)	0.14	0.72	0.58	0.03	0.00	0.88	0.93	0.00	0.45	0.07	0.00	0.48
Avail Cap(c_a), veh/h	300	417	907	320	0	347	683	0	885	432	0	327
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	0.00	1.00
Uniform Delay (d), s/veh	22.4	26.0	9.7	23.7	0.0	28.5	22.6	0.0	12.4	23.5	0.0	27.4
Incr Delay (d2), s/veh	0.3	5.8	0.9	0.1	0.0	22.0	18.3	0.0	0.4	0.1	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	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	5.0	4.3	0.1	0.0	6.8	11.5	0.0	3.7	0.3	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.7	31.8	10.7	23.7	0.0	50.4	40.9	0.0	12.8	23.6	0.0	28.6
LnGrp LOS	C	C	B	C	A	D	D	A	B	C	A	C
Approach Vol, veh/h	852			309			978			166		
Approach Delay, s/veh	18.5			50.0			29.4			27.9		
Approach LOS	B			D			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	40.0	4.7	21.3	29.5	17.0	7.0	18.9				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	7.0	34.0	7.0	14.0	28.0	13.0	7.0	14.0				
Max Q Clear Time (g_c+l1), s	2.7	12.5	2.2	17.4	24.8	7.2	2.9	13.9				
Green Ext Time (p_c), s	0.0	2.2	0.0	0.0	0.7	0.3	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	28.0											
HCM 6th LOS	C											

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	161	6	0	163	5	0	1	0	12	1	19
Future Vol, veh/h	0	161	6	0	163	5	0	1	0	12	1	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	175	7	0	177	5	0	1	0	13	1	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	182	0	0	182	0	0	370	361	179	359	362	180
Stage 1	-	-	-	-	-	-	179	179	-	180	180	-
Stage 2	-	-	-	-	-	-	191	182	-	179	182	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1387	-	-	1387	-	-	585	565	861	595	564	860
Stage 1	-	-	-	-	-	-	820	749	-	819	749	-
Stage 2	-	-	-	-	-	-	808	747	-	820	747	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1387	-	-	1387	-	-	570	565	861	594	564	860
Mov Cap-2 Maneuver	-	-	-	-	-	-	570	565	-	594	564	-
Stage 1	-	-	-	-	-	-	820	749	-	819	749	-
Stage 2	-	-	-	-	-	-	787	747	-	819	747	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	11.4	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	565	1387	-	-	1387	-	-	726
HCM Lane V/C Ratio	0.002	-	-	-	-	-	-	0.048
HCM Control Delay (s)	11.4	0	-	-	0	-	-	10.2
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	244	2	0	241	12	0	4	0	10	1	4
Future Vol, veh/h	29	244	2	0	241	12	0	4	0	10	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	32	265	2	0	262	13	0	4	0	11	1	4
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	275	0	0	267	0	0	601	605	266	601	600	269
Stage 1	-	-	-	-	-	-	330	330	-	269	269	-
Stage 2	-	-	-	-	-	-	271	275	-	332	331	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1282	-	-	1291	-	-	411	411	770	411	413	767
Stage 1	-	-	-	-	-	-	681	644	-	734	685	-
Stage 2	-	-	-	-	-	-	733	681	-	679	643	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1282	-	-	1291	-	-	399	399	770	399	401	767
Mov Cap-2 Maneuver	-	-	-	-	-	-	399	399	-	399	401	-
Stage 1	-	-	-	-	-	-	661	625	-	713	685	-
Stage 2	-	-	-	-	-	-	728	681	-	655	624	-
Approach	EB		WB				NB			SB		
HCM Control Delay, s	0.8		0				14.1			13.2		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	399	1282	-	-	1291	-	-	458				
HCM Lane V/C Ratio	0.011	0.025	-	-	-	-	-	0.036				
HCM Control Delay (s)	14.1	7.9	0	-	0	-	-	13.2				
HCM Lane LOS	B	A	A	-	A	-	-	B				
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1				

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	197	6	0	176	10	0	3	0	37	1	19
Future Vol, veh/h	2	197	6	0	176	10	0	3	0	37	1	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	214	7	0	191	11	0	3	0	40	1	21
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	202	0	0	221	0	0	430	424	218	420	422	197
Stage 1	-	-	-	-	-	-	222	222	-	197	197	-
Stage 2	-	-	-	-	-	-	208	202	-	223	225	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1364	-	-	1342	-	-	534	520	819	542	522	842
Stage 1	-	-	-	-	-	-	778	718	-	803	736	-
Stage 2	-	-	-	-	-	-	792	732	-	777	716	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1364	-	-	1342	-	-	519	519	819	539	521	842
Mov Cap-2 Maneuver	-	-	-	-	-	-	519	519	-	539	521	-
Stage 1	-	-	-	-	-	-	776	717	-	801	736	-
Stage 2	-	-	-	-	-	-	771	732	-	772	715	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0			12			11.5		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	519	1364	-	-	1342	-	-	612				
HCM Lane V/C Ratio	0.006	0.002	-	-	-	-	-	0.101				
HCM Control Delay (s)	12	7.6	0	-	0	-	-	11.5				
HCM Lane LOS	B	A	A	-	A	-	-	B				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3				

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	33	268	2	0	263	34	0	4	0	29	1	6
Future Vol, veh/h	33	268	2	0	263	34	0	4	0	29	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	36	291	2	0	286	37	0	4	0	32	1	7
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	323	0	0	293	0	0	673	687	292	671	670	305
Stage 1	-	-	-	-	-	-	364	364	-	305	305	-
Stage 2	-	-	-	-	-	-	309	323	-	366	365	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1231	-	-	1263	-	-	368	368	745	369	377	732
Stage 1	-	-	-	-	-	-	653	622	-	702	660	-
Stage 2	-	-	-	-	-	-	699	649	-	651	622	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1231	-	-	1263	-	-	354	355	745	356	364	732
Mov Cap-2 Maneuver	-	-	-	-	-	-	354	355	-	356	364	-
Stage 1	-	-	-	-	-	-	630	600	-	677	660	-
Stage 2	-	-	-	-	-	-	692	649	-	624	600	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			0			15.3			15.3		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	355	1231	-	-	1263	-	-	390				
HCM Lane V/C Ratio	0.012	0.029	-	-	-	-	-	0.1				
HCM Control Delay (s)	15.3	8	0	-	0	-	-	15.3				
HCM Lane LOS	C	A	A	-	A	-	-	C				
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.3				

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	195	4	11	161	33	0	2	4	37	6	15
Future Vol, veh/h	11	195	4	11	161	33	0	2	4	37	6	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	212	4	12	175	36	0	2	4	40	7	16
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	211	0	0	216	0	0	467	473	214	458	457	193
Stage 1	-	-	-	-	-	-	238	238	-	217	217	-
Stage 2	-	-	-	-	-	-	229	235	-	241	240	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1354	-	-	1348	-	-	504	488	823	511	498	846
Stage 1	-	-	-	-	-	-	763	706	-	783	721	-
Stage 2	-	-	-	-	-	-	772	709	-	760	705	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1354	-	-	1348	-	-	482	478	823	499	488	846
Mov Cap-2 Maneuver	-	-	-	-	-	-	482	478	-	499	488	-
Stage 1	-	-	-	-	-	-	755	699	-	775	714	-
Stage 2	-	-	-	-	-	-	743	702	-	746	698	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.4			10.5			12.3		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	663	1354	-	-	1348	-	-	557				
HCM Lane V/C Ratio	0.01	0.009	-	-	0.009	-	-	0.113				
HCM Control Delay (s)	10.5	7.7	0	-	7.7	0	-	12.3				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.4				

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	235	0	7	204	37	3	12	12	48	6	5
Future Vol, veh/h	14	235	0	7	204	37	3	12	12	48	6	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	255	0	8	222	40	3	13	13	52	7	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	262	0	0	255	0	0	549	563	255	556	543	242
Stage 1	-	-	-	-	-	-	285	285	-	258	258	-
Stage 2	-	-	-	-	-	-	264	278	-	298	285	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1296	-	-	1304	-	-	445	434	781	440	445	794
Stage 1	-	-	-	-	-	-	720	674	-	744	692	-
Stage 2	-	-	-	-	-	-	739	679	-	709	674	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1296	-	-	1304	-	-	430	425	781	416	436	794
Mov Cap-2 Maneuver	-	-	-	-	-	-	430	425	-	416	436	-
Stage 1	-	-	-	-	-	-	711	665	-	734	687	-
Stage 2	-	-	-	-	-	-	722	674	-	675	665	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.2			12.1			14.7		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	534	1296	-	-	1304	-	-	436				
HCM Lane V/C Ratio	0.055	0.012	-	-	0.006	-	-	0.147				
HCM Control Delay (s)	12.1	7.8	0	-	7.8	0	-	14.7				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.5				

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	317	4	11	189	50	0	2	4	80	7	16
Future Vol, veh/h	13	317	4	11	189	50	0	2	4	80	7	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	14	345	4	12	205	54	0	2	4	87	8	17
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	259	0	0	349	0	0	644	658	347	634	633	232
Stage 1	-	-	-	-	-	-	375	375	-	256	256	-
Stage 2	-	-	-	-	-	-	269	283	-	378	377	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1300	-	-	1204	-	-	384	383	694	390	396	805
Stage 1	-	-	-	-	-	-	644	615	-	746	694	-
Stage 2	-	-	-	-	-	-	734	675	-	642	614	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1300	-	-	1204	-	-	363	373	694	379	386	805
Mov Cap-2 Maneuver	-	-	-	-	-	-	363	373	-	379	386	-
Stage 1	-	-	-	-	-	-	636	607	-	736	686	-
Stage 2	-	-	-	-	-	-	702	667	-	627	606	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.4			11.8			16.9		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	539	1300	-	-	1204	-	-	414				
HCM Lane V/C Ratio	0.012	0.011	-	-	0.01	-	-	0.27				
HCM Control Delay (s)	11.8	7.8	0	-	8	0	-	16.9				
HCM Lane LOS	B	A	A	-	A	A	-	C				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	1.1				

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	317	0	7	314	81	3	14	12	69	8	5
Future Vol, veh/h	14	317	0	7	314	81	3	14	12	69	8	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	345	0	8	341	88	3	15	13	75	9	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	429	0	0	345	0	0	783	820	345	790	776	385
Stage 1	-	-	-	-	-	-	375	375	-	401	401	-
Stage 2	-	-	-	-	-	-	408	445	-	389	375	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1125	-	-	1208	-	-	310	309	696	307	327	660
Stage 1	-	-	-	-	-	-	644	615	-	624	599	-
Stage 2	-	-	-	-	-	-	618	573	-	633	615	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1125	-	-	1208	-	-	295	301	696	284	319	660
Mov Cap-2 Maneuver	-	-	-	-	-	-	295	301	-	284	319	-
Stage 1	-	-	-	-	-	-	634	605	-	614	594	-
Stage 2	-	-	-	-	-	-	599	568	-	596	605	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.1			15			22.2		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	392	1125	-	-	1208	-	-	298				
HCM Lane V/C Ratio	0.08	0.014	-	-	0.006	-	-	0.299				
HCM Control Delay (s)	15	8.2	0	-	8	0	-	22.2				
HCM Lane LOS	C	A	A	-	A	A	-	C				
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	1.2				

HCM 6th Signalized Intersection Summary 33: SR 37 & 206th St

Existing AM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	37	139	63	42	10	74	184	3	0	602	71
Future Volume (veh/h)	54	37	139	63	42	10	74	184	3	0	602	71
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	59	40	151	68	46	11	80	200	3	0	654	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	166	103	257	318	192	37	288	923	14	162	825	97
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.51	0.51	0.51	0.00	0.51	0.51
Sat Flow, veh/h	246	383	959	717	718	138	719	1823	27	1170	1629	192
Grp Volume(v), veh/h	250	0	0	125	0	0	80	0	203	0	0	731
Grp Sat Flow(s),veh/h/ln	1587	0	0	1573	0	0	719	0	1851	1170	0	1821
Q Serve(g_s), s	2.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	2.7	0.0	0.0	14.7
Cycle Q Clear(g_c), s	5.9	0.0	0.0	2.4	0.0	0.0	19.2	0.0	2.7	0.0	0.0	14.7
Prop In Lane	0.24		0.60	0.54		0.09	1.00		0.01	1.00		0.11
Lane Grp Cap(c), veh/h	526	0	0	547	0	0	288	0	937	162	0	922
V/C Ratio(X)	0.48	0.00	0.00	0.23	0.00	0.00	0.28	0.00	0.22	0.00	0.00	0.79
Avail Cap(c_a), veh/h	530	0	0	551	0	0	460	0	1378	441	0	1356
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(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	14.0	0.0	0.0	12.7	0.0	0.0	17.0	0.0	6.1	0.0	0.0	9.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.2	0.0	0.0	0.5	0.0	0.1	0.0	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.8	0.0	0.0	0.6	0.0	0.6	0.0	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.6	0.0	0.0	13.0	0.0	0.0	17.5	0.0	6.2	0.0	0.0	11.1
LnGrp LOS	B	A	A	B	A	A	B	A	A	A	A	B
Approach Vol, veh/h		250			125			283			731	
Approach Delay, s/veh		14.6			13.0			9.4			11.1	
Approach LOS		B			B			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.4		16.9		27.4		16.9				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		33.0		12.0		33.0		12.0				
Max Q Clear Time (g_c+l1), s		21.2		7.9		16.7		4.4				
Green Ext Time (p_c), s		1.2		0.5		4.3		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				11.5								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary 33: SR 37 & 206th St

Existing PM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	81	132	39	47	0	209	685	44	4	355	43
Future Volume (veh/h)	99	81	132	39	47	0	209	685	44	4	355	43
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	108	88	143	42	51	0	227	745	48	4	386	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	209	133	174	251	262	0	509	897	58	263	844	103
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.00	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	403	511	667	525	1005	0	948	1724	111	679	1622	198
Grp Volume(v), veh/h	339	0	0	93	0	0	227	0	793	4	0	433
Grp Sat Flow(s),veh/h/ln	1581	0	0	1530	0	0	948	0	1836	679	0	1820
Q Serve(g_s), s	7.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	16.7	0.2	0.0	6.9
Cycle Q Clear(g_c), s	9.2	0.0	0.0	1.8	0.0	0.0	15.9	0.0	16.7	16.9	0.0	6.9
Prop In Lane	0.32		0.42	0.45		0.00	1.00		0.06	1.00		0.11
Lane Grp Cap(c), veh/h	517	0	0	514	0	0	509	0	955	263	0	947
V/C Ratio(X)	0.66	0.00	0.00	0.18	0.00	0.00	0.45	0.00	0.83	0.02	0.00	0.46
Avail Cap(c_a), veh/h	586	0	0	579	0	0	657	0	1243	369	0	1233
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	0.0	13.2	0.0	0.0	11.9	0.0	9.3	16.4	0.0	6.9
Incr Delay (d2), s/veh	2.2	0.0	0.0	0.2	0.0	0.0	0.6	0.0	3.8	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.0	0.6	0.0	0.0	1.4	0.0	4.5	0.0	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.0	0.0	0.0	13.3	0.0	0.0	12.5	0.0	13.1	16.4	0.0	7.3
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h	339		93				1020				437	
Approach Delay, s/veh	18.0		13.3				12.9				7.3	
Approach LOS	B		B				B				A	
Timer - Assigned Phs	2		4				6				8	
Phs Duration (G+Y+Rc), s	28.8		17.0				28.8				17.0	
Change Period (Y+Rc), s	5.0		5.0				5.0				5.0	
Max Green Setting (Gmax), s	31.0		14.0				31.0				14.0	
Max Q Clear Time (g_c+I1), s	18.7		11.2				18.9				3.8	
Green Ext Time (p_c), s	5.1		0.5				1.9				0.2	
Intersection Summary												
HCM 6th Ctrl Delay	12.6											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary 33: SR 37 & 206th St

Future AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	41	294	97	45	10	110	239	7	0	854	77
Future Volume (veh/h)	60	41	294	97	45	10	110	239	7	0	854	77
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	65	45	320	105	49	11	120	260	8	0	928	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	91	57	321	141	58	10	112	1172	36	65	914	83
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.06	0.65	0.65	0.00	0.55	0.55
Sat Flow, veh/h	208	225	1261	342	229	41	1767	1791	55	1102	1676	152
Grp Volume(v), veh/h	430	0	0	165	0	0	120	0	268	0	0	1012
Grp Sat Flow(s),veh/h/ln	1695	0	0	612	0	0	1767	0	1846	1102	0	1828
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	7.0	0.0	6.5	0.0	0.0	60.0
Cycle Q Clear(g_c), s	27.9	0.0	0.0	28.0	0.0	0.0	7.0	0.0	6.5	0.0	0.0	60.0
Prop In Lane	0.15		0.74	0.64		0.07	1.00		0.03	1.00		0.08
Lane Grp Cap(c), veh/h	469	0	0	209	0	0	112	0	1208	65	0	997
V/C Ratio(X)	0.92	0.00	0.00	0.79	0.00	0.00	1.07	0.00	0.22	0.00	0.00	1.01
Avail Cap(c_a), veh/h	469	0	0	209	0	0	112	0	1208	65	0	997
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	41.1	0.0	0.0	40.8	0.0	0.0	51.5	0.0	7.7	0.0	0.0	25.0
Incr Delay (d2), s/veh	22.8	0.0	0.0	17.9	0.0	0.0	104.1	0.0	0.1	0.0	0.0	32.2
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(50%),veh/ln	14.0	0.0	0.0	5.4	0.0	0.0	6.3	0.0	2.2	0.0	0.0	31.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.9	0.0	0.0	58.7	0.0	0.0	155.6	0.0	7.8	0.0	0.0	57.2
LnGrp LOS	E	A	A	E	A	A	F	A	A	A	A	F
Approach Vol, veh/h		430			165			388			1012	
Approach Delay, s/veh		63.9			58.7			53.5			57.2	
Approach LOS		E			E			D			E	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		77.0		33.0	12.0	65.0		33.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		72.0		28.0	7.0	60.0		28.0				
Max Q Clear Time (g_c+l1), s		8.5		29.9	9.0	62.0		30.0				
Green Ext Time (p_c), s		1.5		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				58.1								
HCM 6th LOS				E								

HCM 6th Signalized Intersection Summary 33: SR 37 & 206th St

Future PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	88	218	51	54	2	343	934	72	5	460	56
Future Volume (veh/h)	109	88	218	51	54	2	343	934	72	5	460	56
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	118	96	237	55	59	2	373	1015	78	5	500	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	153	105	228	165	158	5	398	1050	81	107	544	66
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.23	0.62	0.62	0.34	0.34	0.34
Sat Flow, veh/h	375	388	845	390	586	17	1767	1701	131	512	1622	198
Grp Volume(v), veh/h	451	0	0	116	0	0	373	0	1093	5	0	561
Grp Sat Flow(s),veh/h/ln	1608	0	0	993	0	0	1767	0	1832	512	0	1820
Q Serve(g_s), s	17.1	0.0	0.0	0.0	0.0	0.0	18.4	0.0	50.3	0.8	0.0	26.3
Cycle Q Clear(g_c), s	24.0	0.0	0.0	6.9	0.0	0.0	18.4	0.0	50.3	26.1	0.0	26.3
Prop In Lane	0.26		0.53	0.47		0.02	1.00		0.07	1.00		0.11
Lane Grp Cap(c), veh/h	486	0	0	328	0	0	398	0	1130	107	0	610
V/C Ratio(X)	0.93	0.00	0.00	0.35	0.00	0.00	0.94	0.00	0.97	0.05	0.00	0.92
Avail Cap(c_a), veh/h	486	0	0	328	0	0	398	0	1156	114	0	636
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	0.0	25.7	0.0	0.0	33.8	0.0	16.1	40.4	0.0	28.3
Incr Delay (d2), s/veh	24.3	0.0	0.0	0.6	0.0	0.0	29.6	0.0	18.8	0.2	0.0	18.2
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(50%),veh/ln	12.3	0.0	0.0	1.9	0.0	0.0	10.6	0.0	21.8	0.1	0.0	13.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	0.0	0.0	26.3	0.0	0.0	63.4	0.0	35.0	40.6	0.0	46.6
LnGrp LOS	E	A	A	C	A	A	E	A	C	D	A	D
Approach Vol, veh/h		451			116			1466			566	
Approach Delay, s/veh		56.8			26.3			42.2			46.5	
Approach LOS		E			C			D			D	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		59.8		29.0	25.0	34.8		29.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		56.0		24.0	20.0	31.0		24.0				
Max Q Clear Time (g_c+I1), s		52.3		26.0	20.4	28.3		8.9				
Green Ext Time (p_c), s		2.5		0.0	0.0	0.9		0.5				
Intersection Summary												
HCM 6th Ctrl Delay				45.0								
HCM 6th LOS				D								

Intersection						
Int Delay, s/veh	2					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	123	166	13	137	684
Future Vol, veh/h	0	123	166	13	137	684
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	-	-	135	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	134	180	14	149	743
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1221	180	0	0	194	0
Stage 1	180	-	-	-	-	-
Stage 2	1041	-	-	-	-	-
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	198	860	-	-	1373	-
Stage 1	849	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	176	860	-	-	1373	-
Mov Cap-2 Maneuver	176	-	-	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	302	-	-	-	-	-
Approach	NW	NE		SW		
HCM Control Delay, s	10	0		1.3		
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	860	1373	-	
HCM Lane V/C Ratio	-	-	0.155	0.108	-	
HCM Control Delay (s)	-	-	10	7.9	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.5	0.4	-	

Intersection						
Int Delay, s/veh	4.7					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	1	177	807	16	169	308
Future Vol, veh/h	1	177	807	16	169	308
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	-	-	135	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1	192	877	17	184	335
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1580	877	0	0	894	0
Stage 1	877	-	-	-	-	-
Stage 2	703	-	-	-	-	-
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	119	346	-	-	755	-
Stage 1	405	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	90	346	-	-	755	-
Mov Cap-2 Maneuver	90	-	-	-	-	-
Stage 1	405	-	-	-	-	-
Stage 2	370	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	28.5	0	4			
HCM LOS	D					
Minor Lane/Major Mvmt	NET	NER	NWL	SWL	SWT	
Capacity (veh/h)	-	-	341	755	-	
HCM Lane V/C Ratio	-	-	0.567	0.243	-	
HCM Control Delay (s)	-	-	28.5	11.3	-	
HCM Lane LOS	-	-	D	B	-	
HCM 95th %tile Q(veh)	-	-	3.3	1	-	

Intersection						
Int Delay, s/veh	33.1					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	40	199	187	24	421	841
Future Vol, veh/h	40	199	187	24	421	841
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	-	-	135	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	216	203	26	458	914
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	2033	203	0	0	229	0
Stage 1	203	-	-	-	-	-
Stage 2	1830	-	-	-	-	-
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	62	835	-	-	1333	-
Stage 1	829	-	-	-	-	-
Stage 2	139	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 41	835	-	-	1333	-
Mov Cap-2 Maneuver	~ 41	-	-	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	91	-	-	-	-	-
Approach	NW	NE		SW		
HCM Control Delay, s	221.4	0		3		
HCM LOS	F					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	197	1333	-	
HCM Lane V/C Ratio	-	-	1.319	0.343	-	
HCM Control Delay (s)	-	-	221.4	9.1	-	
HCM Lane LOS	-	-	F	A	-	
HCM 95th %tile Q(veh)	-	-	14.5	1.5	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection						
Int Delay, s/veh	169					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	19	442	953	62	328	352
Future Vol, veh/h	19	442	953	62	328	352
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	-	-	135	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	21	480	1036	67	357	383
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	2133	1036	0	0	1103	0
Stage 1	1036	-	-	-	-	-
Stage 2	1097	-	-	-	-	-
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	54	~ 280	-	-	629	-
Stage 1	341	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	23	~ 280	-	-	629	-
Mov Cap-2 Maneuver	23	-	-	-	-	-
Stage 1	341	-	-	-	-	-
Stage 2	137	-	-	-	-	-
Approach	NW		NE		SW	
HCM Control Delay, s\$	777.4		0		8.7	
HCM LOS	F					
Minor Lane/Major Mvmt	NET		NERNWLn1		SWL	SWT
Capacity (veh/h)	-		-		192	629
HCM Lane V/C Ratio	-		-		2.61	0.567
HCM Control Delay (s)	-		-\$		777.4	17.9
HCM Lane LOS	-		-		F	C
HCM 95th %tile Q(veh)	-		-		43	3.6
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection					
Intersection Delay, s/veh 8.8					
Intersection LOS A					
Approach	NW	NE		SW	
Entry Lanes	1	2		2	
Conflicting Circle Lanes	1	1		1	
Adj Approach Flow, veh/h	259	229		1372	
Demand Flow Rate, veh/h	266	236		1413	
Vehicles Circulating, veh/h	209	472		44	
Vehicles Exiting, veh/h	499	985		431	
Ped Vol Crossing Leg, #/h	0	0		0	
Ped Cap Adj	1.000	1.000		1.000	
Approach Delay, s/veh	5.5	6.1		9.9	
Approach LOS	A	A		A	
Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	R	L	TR
Assumed Moves	LR	LT	R	L	TR
RT Channelized					
Lane Util	1.000	0.886	0.114	0.334	0.666
Follow-Up Headway, s	2.609	2.535	2.535	2.535	2.535
Critical Headway, s	4.976	4.544	4.544	4.544	4.544
Entry Flow, veh/h	266	209	27	472	941
Cap Entry Lane, veh/h	1115	924	924	1364	1364
Entry HV Adj Factor	0.974	0.971	0.963	0.970	0.971
Flow Entry, veh/h	259	203	26	458	914
Cap Entry, veh/h	1086	897	890	1324	1325
V/C Ratio	0.239	0.226	0.029	0.346	0.690
Control Delay, s/veh	5.5	6.3	4.3	5.9	12.0
LOS	A	A	A	A	B
95th %tile Queue, veh	1	1	0	2	6

Intersection					
Intersection Delay, s/veh52.1					
Intersection LOS F					
Approach	NW	NE		SW	
Entry Lanes	1	2		2	
Conflicting Circle Lanes	1	1		1	
Adj Approach Flow, veh/h	501	1103		740	
Demand Flow Rate, veh/h	516	1136		762	
Vehicles Circulating, veh/h	1067	368		22	
Vehicles Exiting, veh/h	437	416		1561	
Ped Vol Crossing Leg, #/h	0	0		0	
Ped Cap Adj	1.000	1.000		1.000	
Approach Delay, s/veh	105.6	59.4		5.0	
Approach LOS	F	F		A	
Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	R	L	TR
Assumed Moves	LR	LT	R	L	TR
RT Channelized					
Lane Util	1.000	0.939	0.061	0.483	0.517
Follow-Up Headway, s	2.609	2.535	2.535	2.535	2.535
Critical Headway, s	4.976	4.544	4.544	4.544	4.544
Entry Flow, veh/h	516	1067	69	368	394
Cap Entry Lane, veh/h	465	1016	1016	1392	1392
Entry HV Adj Factor	0.971	0.971	0.971	0.970	0.971
Flow Entry, veh/h	501	1036	67	357	383
Cap Entry, veh/h	451	986	986	1350	1351
V/C Ratio	1.110	1.050	0.068	0.264	0.283
Control Delay, s/veh	105.6	63.0	4.3	4.9	5.1
LOS	F	F	A	A	A
95th %tile Queue, veh	17	23	0	1	1

Intersection						
Int Delay, s/veh	5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	10	0	0	5	11
Future Vol, veh/h	0	10	0	0	5	11
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	11	0	0	5	12

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1	0	0 12 1
Stage 1	-	-	- 1 -
Stage 2	-	-	- 11 -
Critical Hdwy	4.13	-	- 6.43 6.23
Critical Hdwy Stg 1	-	-	- 5.43 -
Critical Hdwy Stg 2	-	-	- 5.43 -
Follow-up Hdwy	2.227	-	- 3.527 3.327
Pot Cap-1 Maneuver	1615	-	- 1005 1081
Stage 1	-	-	- 1020 -
Stage 2	-	-	- 1009 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1615	-	- 1005 1081
Mov Cap-2 Maneuver	-	-	- 1005 -
Stage 1	-	-	- 1020 -
Stage 2	-	-	- 1009 -

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1615	-	-	-	1056
HCM Lane V/C Ratio	-	-	-	-	0.016
HCM Control Delay (s)	0	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection

Int Delay, s/veh 3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	13	11	0	0	7
Future Vol, veh/h	14	13	11	0	0	7
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	15	14	12	0	0	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	12	0	56
Stage 1	-	-	12
Stage 2	-	-	44
Critical Hdwy	4.13	-	6.43
Critical Hdwy Stg 1	-	-	5.43
Critical Hdwy Stg 2	-	-	5.43
Follow-up Hdwy	2.227	-	3.527
Pot Cap-1 Maneuver	1600	-	949
Stage 1	-	-	1008
Stage 2	-	-	976
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1600	-	940
Mov Cap-2 Maneuver	-	-	940
Stage 1	-	-	999
Stage 2	-	-	976

Approach	EB	WB	SB
HCM Control Delay, s	3.8	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1600	-	-	-	1066
HCM Lane V/C Ratio	0.01	-	-	-	0.007
HCM Control Delay (s)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	10	2	0	5	11
Future Vol, veh/h	3	10	2	0	5	11
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	3	11	2	0	5	12
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2	0	-	0	19	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	17	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1614	-	-	-	996	1079
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1003	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1614	-	-	-	994	1079
Mov Cap-2 Maneuver	-	-	-	-	994	-
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	1003	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.7	0		8.5		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1614	-	-	-	1051	
HCM Lane V/C Ratio	0.002	-	-	-	0.017	
HCM Control Delay (s)	7.2	0	-	-	8.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	3.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	15	11	0	0	7
Future Vol, veh/h	17	15	11	0	0	7
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	16	12	0	0	8
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	12	0	-	0	64	12
Stage 1	-	-	-	-	12	-
Stage 2	-	-	-	-	52	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1600	-	-	-	939	1066
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	968	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1600	-	-	-	929	1066
Mov Cap-2 Maneuver	-	-	-	-	929	-
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	968	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.9	0		8.4		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1600	-	-	-	-	1066
HCM Lane V/C Ratio	0.012	-	-	-	-	0.007
HCM Control Delay (s)	7.3	0	-	-	-	8.4
HCM Lane LOS	A	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection												
Int Delay, s/veh	0.6											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	120	6	0	344	0	0	0	12	15	0	0
Future Vol, veh/h	0	120	6	0	344	0	0	0	12	15	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	130	7	0	374	0	0	0	13	16	0	0
Major/Minor	Major1		Major2			Minor2			Minor1			
Conflicting Flow All	374	0	0	137	0	0	508	511	374	515	508	134
Stage 1	-	-	-	-	-	-	374	374	-	134	134	-
Stage 2	-	-	-	-	-	-	134	137	-	381	374	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1179	-	-	1441	-	-	474	465	670	469	466	912
Stage 1	-	-	-	-	-	-	645	616	-	867	784	-
Stage 2	-	-	-	-	-	-	867	781	-	639	616	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1179	-	-	1441	-	-	474	465	670	460	466	912
Mov Cap-2 Maneuver	-	-	-	-	-	-	474	465	-	460	466	-
Stage 1	-	-	-	-	-	-	645	616	-	867	784	-
Stage 2	-	-	-	-	-	-	867	781	-	627	616	-
Approach	NB		SB			NE			SW			
HCM Control Delay, s	0		0			10.5			13.1			
HCM LOS						B			B			
Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBR	SBL	SBT	SBRSWLn1					
Capacity (veh/h)	670	1179	-	-	1441	-	-	-	460			
HCM Lane V/C Ratio	0.019	-	-	-	-	-	-	-	0.035			
HCM Control Delay (s)	10.5	0	-	-	0	-	-	-	13.1			
HCM Lane LOS	B	A	-	-	A	-	-	-	B			
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-	0.1			

Intersection												
Int Delay, s/veh	0.6											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	13	489	31	0	226	0	0	0	7	16	0	0
Future Vol, veh/h	13	489	31	0	226	0	0	0	7	16	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	14	532	34	0	246	0	0	0	8	17	0	0
Major/Minor	Major1			Major2			Minor2			Minor1		
Conflicting Flow All	246	0	0	566	0	0	823	840	246	827	823	549
Stage 1	-	-	-	-	-	-	246	246	-	577	577	-
Stage 2	-	-	-	-	-	-	577	594	-	250	246	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1314	-	-	1001	-	-	291	300	790	290	307	534
Stage 1	-	-	-	-	-	-	756	701	-	500	500	-
Stage 2	-	-	-	-	-	-	500	491	-	752	701	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1314	-	-	1001	-	-	288	295	790	284	302	534
Mov Cap-2 Maneuver	-	-	-	-	-	-	288	295	-	284	302	-
Stage 1	-	-	-	-	-	-	744	701	-	492	492	-
Stage 2	-	-	-	-	-	-	492	483	-	745	701	-
Approach	NB			SB			NE			SW		
HCM Control Delay, s	0.2			0			9.6			18.5		
HCM LOS							A			C		
Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBR	SBL	SBT	SBRSWLn1					
Capacity (veh/h)	790	1314	-	-	1001	-	-	-	284			
HCM Lane V/C Ratio	0.01	0.011	-	-	-	-	-	-	0.061			
HCM Control Delay (s)	9.6	7.8	0	-	0	-	-	-	18.5			
HCM Lane LOS	A	A	A	-	A	-	-	-	C			
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-	0.2			

HCM 6th TWSC
44: Riverwood Ave & Cumberland Rd

Future AM Peak

Intersection												
Int Delay, s/veh	1.6											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	260	9	0	585	0	0	0	66	17	0	0
Future Vol, veh/h	13	260	9	0	585	0	0	0	66	17	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	14	283	10	0	636	0	0	0	72	18	0	0
Major/Minor	Major1		Major2			Minor2			Minor1			
Conflicting Flow All	636	0	0	293	0	0	952	957	636	988	952	288
Stage 1	-	-	-	-	-	-	636	636	-	316	316	-
Stage 2	-	-	-	-	-	-	316	321	-	672	636	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	943	-	-	1263	-	-	238	257	476	225	258	749
Stage 1	-	-	-	-	-	-	464	470	-	693	653	-
Stage 2	-	-	-	-	-	-	693	650	-	444	470	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	943	-	-	1263	-	-	235	252	476	189	253	749
Mov Cap-2 Maneuver	-	-	-	-	-	-	235	252	-	189	253	-
Stage 1	-	-	-	-	-	-	456	470	-	681	641	-
Stage 2	-	-	-	-	-	-	681	638	-	377	470	-
Approach	NB		SB			NE			SW			
HCM Control Delay, s	0.4		0			13.9			26.1			
HCM LOS						B			D			
Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBR	SBL	SBT	SBRSWLn1					
Capacity (veh/h)	476	943	-	-	1263	-	-	-	189			
HCM Lane V/C Ratio	0.151	0.015	-	-	-	-	-	-	0.098			
HCM Control Delay (s)	13.9	8.9	0	-	0	-	-	-	26.1			
HCM Lane LOS	B	A	A	-	A	-	-	-	D			
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	-	0.3			

HCM 6th TWSC
44: Riverwood Ave & Cumberland Rd

Future PM Peak

Intersection												
Int Delay, s/veh	3.3											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	77	997	36	0	637	0	0	0	47	19	0	0
Future Vol, veh/h	77	997	36	0	637	0	0	0	47	19	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	84	1084	39	0	692	0	0	0	51	21	0	0

Major/Minor	Major1			Major2			Minor2			Minor1		
Conflicting Flow All	692	0	0	1123	0	0	1964	1983	692	1990	1964	1104
Stage 1	-	-	-	-	-	-	692	692	-	1272	1272	-
Stage 2	-	-	-	-	-	-	1272	1291	-	718	692	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	898	-	-	618	-	-	47	61	442	45	63	255
Stage 1	-	-	-	-	-	-	433	444	-	205	238	-
Stage 2	-	-	-	-	-	-	205	233	-	419	444	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	898	-	-	618	-	-	38	46	442	32	47	255
Mov Cap-2 Maneuver	-	-	-	-	-	-	38	46	-	32	47	-
Stage 1	-	-	-	-	-	-	324	444	-	153	178	-
Stage 2	-	-	-	-	-	-	153	174	-	371	444	-

Approach	NB	SB	NE	SW
HCM Control Delay, s	0.7	0	14.2	235.3
HCM LOS			B	F

Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBR	SBL	SBT	SBR	SWLn1
Capacity (veh/h)	442	898	-	-	618	-	-	32
HCM Lane V/C Ratio	0.116	0.093	-	-	-	-	-	0.645
HCM Control Delay (s)	14.2	9.4	0	-	0	-	-	235.3
HCM Lane LOS	B	A	A	-	A	-	-	F
HCM 95th %tile Q(veh)	0.4	0.3	-	-	0	-	-	2.2

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	78	15	129	14	9	805
Future Vol, veh/h	78	15	129	14	9	805
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	-	-	82	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	85	16	140	15	10	875
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1035	140	0	0	155	0
Stage 1	140	-	-	-	-	-
Stage 2	895	-	-	-	-	-
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	256	905	-	-	1419	-
Stage 1	884	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	254	905	-	-	1419	-
Mov Cap-2 Maneuver	254	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	394	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	24.2	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	287	1419	-	
HCM Lane V/C Ratio	-	-	0.352	0.007	-	
HCM Control Delay (s)	-	-	24.2	7.6	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	1.5	0	-	

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	26	659	99	24	434
Future Vol, veh/h	38	26	659	99	24	434
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	-	-	82	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	41	28	716	108	26	472
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1240	716	0	0	824	0
Stage 1	716	-	-	-	-	-
Stage 2	524	-	-	-	-	-
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	193	428	-	-	802	-
Stage 1	482	-	-	-	-	-
Stage 2	592	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	187	428	-	-	802	-
Mov Cap-2 Maneuver	187	-	-	-	-	-
Stage 1	482	-	-	-	-	-
Stage 2	573	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	25.8	0	0.5			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	242	802	-	
HCM Lane V/C Ratio	-	-	0.287	0.033	-	
HCM Control Delay (s)	-	-	25.8	9.6	-	
HCM Lane LOS	-	-	D	A	-	
HCM 95th %tile Q(veh)	-	-	1.1	0.1	-	

HCM 6th TWSC
45: Little Chicago Rd & Buttonwood Dr

Future AM Peak

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	78	15	153	14	9	862
Future Vol, veh/h	78	15	153	14	9	862
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	-	-	82	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	85	16	166	15	10	937
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1123	166	0	0	181	0
Stage 1	166	-	-	-	-	-
Stage 2	957	-	-	-	-	-
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	226	876	-	-	1388	-
Stage 1	861	-	-	-	-	-
Stage 2	371	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	224	876	-	-	1388	-
Mov Cap-2 Maneuver	224	-	-	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	28.1	0	0.1			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	255	1388	-	
HCM Lane V/C Ratio	-	-	0.396	0.007	-	
HCM Control Delay (s)	-	-	28.1	7.6	-	
HCM Lane LOS	-	-	D	A	-	
HCM 95th %tile Q(veh)	-	-	1.8	0	-	

HCM 6th TWSC
45: Little Chicago Rd & Buttonwood Dr

Future PM Peak

Intersection						
Int Delay, s/veh	1.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	26	737	99	24	479
Future Vol, veh/h	38	26	737	99	24	479
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	-	-	82	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	41	28	801	108	26	521
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1374	801	0	0	909	0
Stage 1	801	-	-	-	-	-
Stage 2	573	-	-	-	-	-
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	160	383	-	-	745	-
Stage 1	440	-	-	-	-	-
Stage 2	562	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	154	383	-	-	745	-
Mov Cap-2 Maneuver	154	-	-	-	-	-
Stage 1	440	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	31.7	0		0.5		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	203	745	-	
HCM Lane V/C Ratio	-	-	0.343	0.035	-	
HCM Control Delay (s)	-	-	31.7	10	-	
HCM Lane LOS	-	-	D	B	-	
HCM 95th %tile Q(veh)	-	-	1.4	0.1	-	

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗		↕			↕	
Traffic Vol, veh/h	11	299	23	9	603	3	32	6	1	31	47	82
Future Vol, veh/h	11	299	23	9	603	3	32	6	1	31	47	82
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	485	-	-	523	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	325	25	10	655	3	35	7	1	34	51	89
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	658	0	0	350	0	0	1096	1027	325	1041	1049	655
Stage 1	-	-	-	-	-	-	349	349	-	675	675	-
Stage 2	-	-	-	-	-	-	747	678	-	366	374	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	925	-	-	1203	-	-	190	233	714	207	227	464
Stage 1	-	-	-	-	-	-	665	632	-	442	452	-
Stage 2	-	-	-	-	-	-	403	450	-	651	616	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	925	-	-	1203	-	-	123	226	714	198	220	464
Mov Cap-2 Maneuver	-	-	-	-	-	-	123	226	-	198	220	-
Stage 1	-	-	-	-	-	-	654	622	-	435	446	-
Stage 2	-	-	-	-	-	-	285	444	-	633	606	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.1			43.4			33.7		
HCM LOS							E			D		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	135	925	-	-	1203	-	-	293				
HCM Lane V/C Ratio	0.314	0.013	-	-	0.008	-	-	0.594				
HCM Control Delay (s)	43.4	8.9	0	-	8	0	-	33.7				
HCM Lane LOS	E	A	A	-	A	A	-	D				
HCM 95th %tile Q(veh)	1.2	0	-	-	0	-	-	3.5				

Intersection												
Int Delay, s/veh	12.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰	↱		↰	↱		↰	↱
Traffic Vol, veh/h	89	591	36	10	374	23	12	44	19	24	59	32
Future Vol, veh/h	89	591	36	10	374	23	12	44	19	24	59	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	485	-	-	523	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	97	642	39	11	407	25	13	48	21	26	64	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	432	0	0	681	0	0	1327	1290	642	1319	1304	407
Stage 1	-	-	-	-	-	-	836	836	-	429	429	-
Stage 2	-	-	-	-	-	-	491	454	-	890	875	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1122	-	-	907	-	-	132	163	472	133	160	642
Stage 1	-	-	-	-	-	-	360	381	-	602	582	-
Stage 2	-	-	-	-	-	-	557	568	-	336	366	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1122	-	-	907	-	-	70	138	472	83	135	642
Mov Cap-2 Maneuver	-	-	-	-	-	-	70	138	-	83	135	-
Stage 1	-	-	-	-	-	-	310	328	-	518	573	-
Stage 2	-	-	-	-	-	-	460	559	-	236	315	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			0.2			60.7			96.7		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	141	1122	-	-	907	-	-	148
HCM Lane V/C Ratio	0.578	0.086	-	-	0.012	-	-	0.845
HCM Control Delay (s)	60.7	8.5	0	-	9	0	-	96.7
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	2.9	0.3	-	-	0	-	-	5.6

HCM 6th TWSC
46: Moontown Rd/Hinkle Rd & SR 38

Future AM Peak

Intersection												
Int Delay, s/veh	17.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗		↕			↕	
Traffic Vol, veh/h	12	395	25	27	720	22	39	7	3	40	48	84
Future Vol, veh/h	12	395	25	27	720	22	39	7	3	40	48	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	485	-	-	523	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	13	429	27	29	783	24	42	8	3	43	52	91
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	807	0	0	456	0	0	1380	1320	429	1315	1323	783
Stage 1	-	-	-	-	-	-	455	455	-	841	841	-
Stage 2	-	-	-	-	-	-	925	865	-	474	482	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	814	-	-	1100	-	-	121	156	624	134	155	392
Stage 1	-	-	-	-	-	-	583	567	-	358	379	-
Stage 2	-	-	-	-	-	-	321	369	-	569	552	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	814	-	-	1100	-	-	63	145	624	121	144	392
Mov Cap-2 Maneuver	-	-	-	-	-	-	63	145	-	121	144	-
Stage 1	-	-	-	-	-	-	571	555	-	350	361	-
Stage 2	-	-	-	-	-	-	201	351	-	547	540	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			134.5			102.4		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	73	814	-	-	1100	-	-	196				
HCM Lane V/C Ratio	0.73	0.016	-	-	0.027	-	-	0.954				
HCM Control Delay (s)	134.5	9.5	0	-	8.4	0	-	102.4				
HCM Lane LOS	F	A	A	-	A	A	-	F				
HCM 95th %tile Q(veh)	3.4	0	-	-	0.1	-	-	7.8				

HCM 6th TWSC
46: Moontown Rd/Hinkle Rd & SR 38

Future PM Peak

Intersection												
Int Delay, s/veh	126.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗		↕			↕	
Traffic Vol, veh/h	91	719	46	19	474	29	14	45	38	70	62	33
Future Vol, veh/h	91	719	46	19	474	29	14	45	38	70	62	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	485	-	-	523	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	99	782	50	21	515	32	15	49	41	76	67	36
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	547	0	0	832	0	0	1605	1569	782	1607	1587	515
Stage 1	-	-	-	-	-	-	980	980	-	557	557	-
Stage 2	-	-	-	-	-	-	625	589	-	1050	1030	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1017	-	-	796	-	-	84	110	393	84	107	558
Stage 1	-	-	-	-	-	-	299	327	-	513	511	-
Stage 2	-	-	-	-	-	-	471	494	-	273	309	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1017	-	-	796	-	-	23	86	393	~ 35	84	558
Mov Cap-2 Maneuver	-	-	-	-	-	-	23	86	-	~ 35	84	-
Stage 1	-	-	-	-	-	-	244	267	-	419	492	-
Stage 2	-	-	-	-	-	-	366	475	-	163	252	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			0.4			\$ 307.6			\$ 1067.3		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	79	1017	-	-	796	-	-	59				
HCM Lane V/C Ratio	1.335	0.097	-	-	0.026	-	-	3.04				
HCM Control Delay (s)	\$ 307.6	8.9	0	-	9.6	0	-	\$ 1067.3				
HCM Lane LOS	F	A	A	-	A	A	-	F				
HCM 95th %tile Q(veh)	8.2	0.3	-	-	0.1	-	-	18.6				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection				
Intersection Delay, s/veh	5.2			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	57	202	270	308
Demand Flow Rate, veh/h	58	208	278	317
Vehicles Circulating, veh/h	448	222	111	140
Vehicles Exiting, veh/h	9	167	395	290
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.8	5.1	5.0	5.5
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	58	208	278	317
Cap Entry Lane, veh/h	874	1100	1232	1196
Entry HV Adj Factor	0.981	0.971	0.971	0.971
Flow Entry, veh/h	57	202	270	308
Cap Entry, veh/h	857	1068	1196	1161
V/C Ratio	0.066	0.189	0.226	0.265
Control Delay, s/veh	4.8	5.1	5.0	5.5
LOS	A	A	A	A
95th %tile Queue, veh	0	1	1	1

Intersection				
Intersection Delay, s/veh	11.9			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	66	277	807	453
Demand Flow Rate, veh/h	68	285	831	466
Vehicles Circulating, veh/h	605	693	179	229
Vehicles Exiting, veh/h	90	317	494	749
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.9	11.4	14.7	8.0
Approach LOS	A	B	B	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	68	285	831	466
Cap Entry Lane, veh/h	744	681	1150	1092
Entry HV Adj Factor	0.971	0.971	0.971	0.971
Flow Entry, veh/h	66	277	807	453
Cap Entry, veh/h	723	661	1117	1061
V/C Ratio	0.091	0.419	0.723	0.427
Control Delay, s/veh	5.9	11.4	14.7	8.0
LOS	A	B	B	A
95th %tile Queue, veh	0	2	7	2

Intersection				
Intersection Delay, s/veh	7.4			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	57	209	330	608
Demand Flow Rate, veh/h	58	215	340	626
Vehicles Circulating, veh/h	764	282	111	147
Vehicles Exiting, veh/h	9	169	711	350
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.8	5.6	5.5	9.2
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	58	215	340	626
Cap Entry Lane, veh/h	633	1035	1232	1188
Entry HV Adj Factor	0.981	0.972	0.971	0.971
Flow Entry, veh/h	57	209	330	608
Cap Entry, veh/h	621	1006	1196	1153
V/C Ratio	0.092	0.208	0.276	0.527
Control Delay, s/veh	6.8	5.6	5.5	9.2
LOS	A	A	A	A
95th %tile Queue, veh	0	1	1	3

Intersection				
Intersection Delay, s/veh	20.9			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	66	280	1015	578
Demand Flow Rate, veh/h	68	288	1046	595
Vehicles Circulating, veh/h	735	901	179	230
Vehicles Exiting, veh/h	90	324	624	959
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.9	16.5	29.1	10.1
Approach LOS	A	C	D	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	68	288	1046	595
Cap Entry Lane, veh/h	652	551	1150	1091
Entry HV Adj Factor	0.971	0.971	0.971	0.971
Flow Entry, veh/h	66	280	1015	578
Cap Entry, veh/h	633	535	1116	1060
V/C Ratio	0.104	0.523	0.910	0.545
Control Delay, s/veh	6.9	16.5	29.1	10.1
LOS	A	C	D	B
95th %tile Queue, veh	0	3	14	3

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	176	205	6	15	10
Future Vol, veh/h	1	176	205	6	15	10
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1	191	223	7	16	11
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	230	0	-	0	420	227
Stage 1	-	-	-	-	227	-
Stage 2	-	-	-	-	193	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1332	-	-	-	588	810
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	837	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1332	-	-	-	587	810
Mov Cap-2 Maneuver	-	-	-	-	587	-
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	837	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		10.7		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1332	-	-	-	660	
HCM Lane V/C Ratio	0.001	-	-	-	0.041	
HCM Control Delay (s)	7.7	0	-	-	10.7	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	309	297	9	14	17
Future Vol, veh/h	17	309	297	9	14	17
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	336	323	10	15	18

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	333	0	0 700 328
Stage 1	-	-	- 328 -
Stage 2	-	-	- 372 -
Critical Hdwy	4.13	-	- 6.43 6.23
Critical Hdwy Stg 1	-	-	- 5.43 -
Critical Hdwy Stg 2	-	-	- 5.43 -
Follow-up Hdwy	2.227	-	- 3.527 3.327
Pot Cap-1 Maneuver	1221	-	- 404 711
Stage 1	-	-	- 728 -
Stage 2	-	-	- 695 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1221	-	- 397 711
Mov Cap-2 Maneuver	-	-	- 397 -
Stage 1	-	-	- 715 -
Stage 2	-	-	- 695 -

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1221	-	-	-	524
HCM Lane V/C Ratio	0.015	-	-	-	0.064
HCM Control Delay (s)	8	0	-	-	12.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	177	211	14	47	10
Future Vol, veh/h	2	177	211	14	47	10
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	2	192	229	15	51	11

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	244	0	0 433 237
Stage 1	-	-	- 237 -
Stage 2	-	-	- 196 -
Critical Hdwy	4.13	-	- 6.43 6.23
Critical Hdwy Stg 1	-	-	- 5.43 -
Critical Hdwy Stg 2	-	-	- 5.43 -
Follow-up Hdwy	2.227	-	- 3.527 3.327
Pot Cap-1 Maneuver	1316	-	- 578 800
Stage 1	-	-	- 800 -
Stage 2	-	-	- 835 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1316	-	- 577 800
Mov Cap-2 Maneuver	-	-	- 577 -
Stage 1	-	-	- 798 -
Stage 2	-	-	- 835 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1316	-	-	-	607
HCM Lane V/C Ratio	0.002	-	-	-	0.102
HCM Control Delay (s)	7.7	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	314	300	59	35	17
Future Vol, veh/h	18	314	300	59	35	17
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	20	341	326	64	38	18

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	390	0	0 739 358
Stage 1	-	-	- 358 -
Stage 2	-	-	- 381 -
Critical Hdwy	4.13	-	- 6.43 6.23
Critical Hdwy Stg 1	-	-	- 5.43 -
Critical Hdwy Stg 2	-	-	- 5.43 -
Follow-up Hdwy	2.227	-	- 3.527 3.327
Pot Cap-1 Maneuver	1163	-	- 383 684
Stage 1	-	-	- 705 -
Stage 2	-	-	- 688 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1163	-	- 375 684
Mov Cap-2 Maneuver	-	-	- 375 -
Stage 1	-	-	- 690 -
Stage 2	-	-	- 688 -

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1163	-	-	-	440
HCM Lane V/C Ratio	0.017	-	-	-	0.128
HCM Control Delay (s)	8.1	0	-	-	14.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection						
Int Delay, s/veh	7.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	39	168	106	99	685	82
Future Vol, veh/h	39	168	106	99	685	82
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	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	42	183	115	108	745	89
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1128	790	834	0	-	0
Stage 1	790	-	-	-	-	-
Stage 2	338	-	-	-	-	-
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	225	389	795	-	-	-
Stage 1	445	-	-	-	-	-
Stage 2	720	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	192	389	795	-	-	-
Mov Cap-2 Maneuver	192	-	-	-	-	-
Stage 1	380	-	-	-	-	-
Stage 2	720	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	37.4	5.3		0		
HCM LOS	E					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	795	-	326	-	-	
HCM Lane V/C Ratio	0.145	-	0.69	-	-	
HCM Control Delay (s)	10.3	-	37.4	-	-	
HCM Lane LOS	B	-	E	-	-	
HCM 95th %tile Q(veh)	0.5	-	4.8	-	-	

Intersection						
Int Delay, s/veh	19.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	47	223	292	700	267	68
Future Vol, veh/h	47	223	292	700	267	68
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	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	51	242	317	761	290	74
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1722	327	364	0	-	0
Stage 1	327	-	-	-	-	-
Stage 2	1395	-	-	-	-	-
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	98	712	1189	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	228	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	72	712	1189	-	-	-
Mov Cap-2 Maneuver	72	-	-	-	-	-
Stage 1	534	-	-	-	-	-
Stage 2	228	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	107.3	2.7		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1189	-	280	-	-	
HCM Lane V/C Ratio	0.267	-	1.048	-	-	
HCM Control Delay (s)	9.1	-	107.3	-	-	
HCM Lane LOS	A	-	F	-	-	
HCM 95th %tile Q(veh)	1.1	-	11.4	-	-	

Intersection			
Intersection Delay, s/veh	11.4		
Intersection LOS	B		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	225	223	834
Demand Flow Rate, veh/h	231	229	859
Vehicles Circulating, veh/h	767	43	118
Vehicles Exiting, veh/h	210	955	154
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	11.0	4.3	13.3
Approach LOS	B	A	B
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	231	229	859
Cap Entry Lane, veh/h	631	1321	1223
Entry HV Adj Factor	0.974	0.973	0.971
Flow Entry, veh/h	225	223	834
Cap Entry, veh/h	615	1285	1187
V/C Ratio	0.366	0.173	0.702
Control Delay, s/veh	11.0	4.3	13.3
LOS	B	A	B
95th %tile Queue, veh	2	1	6

Intersection			
Intersection Delay, s/veh	15.5		
Intersection LOS	C		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	293	1078	364
Demand Flow Rate, veh/h	302	1111	375
Vehicles Circulating, veh/h	299	53	327
Vehicles Exiting, veh/h	403	548	837
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.7	20.5	7.9
Approach LOS	A	C	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	302	1111	375
Cap Entry Lane, veh/h	1017	1307	989
Entry HV Adj Factor	0.970	0.970	0.971
Flow Entry, veh/h	293	1078	364
Cap Entry, veh/h	987	1269	960
V/C Ratio	0.297	0.850	0.379
Control Delay, s/veh	6.7	20.5	7.9
LOS	A	C	A
95th %tile Queue, veh	1	11	2

Intersection						
Int Delay, s/veh	49.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	200	114	119	1124	85
Future Vol, veh/h	40	200	114	119	1124	85
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	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	217	124	129	1222	92
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1645	1268	1314	0	-	0
Stage 1	1268	-	-	-	-	-
Stage 2	377	-	-	-	-	-
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	109	~ 205	523	-	-	-
Stage 1	263	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	83	~ 205	523	-	-	-
Mov Cap-2 Maneuver	83	-	-	-	-	-
Stage 1	201	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s\$	338.1		6.9		0	
HCM LOS	F					
Minor Lane/Major Mvmt	NBL		NBT	EBLn1	SBT	SBR
Capacity (veh/h)	523		-	165	-	-
HCM Lane V/C Ratio	0.237		-	1.581	-	-
HCM Control Delay (s)	14		-\$ 338.1		-	-
HCM Lane LOS	B		-	F	-	-
HCM 95th %tile Q(veh)	0.9		-	17.6	-	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection						
Int Delay, s/veh	91.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	48	244	344	1081	314	69
Future Vol, veh/h	48	244	344	1081	314	69
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	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	52	265	374	1175	341	75
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	2302	379	416	0	-	0
Stage 1	379	-	-	-	-	-
Stage 2	1923	-	-	-	-	-
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	~ 42	666	1138	-	-	-
Stage 1	690	-	-	-	-	-
Stage 2	125	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 28	666	1138	-	-	-
Mov Cap-2 Maneuver	~ 28	-	-	-	-	-
Stage 1	463	-	-	-	-	-
Stage 2	125	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s\$	643.7	2.3		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1138	-	140	-	-	
HCM Lane V/C Ratio	0.329	-	2.267	-	-	
HCM Control Delay (s)	9.7	-\$ 643.7		-	-	
HCM Lane LOS	A	-	F	-	-	
HCM 95th %tile Q(veh)	1.4	-	26.6	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection					
Intersection Delay, s/veh 9.9					
Intersection LOS A					
Approach	EB	NB		SB	
Entry Lanes	1	2		2	
Conflicting Circle Lanes	2	2		2	
Adj Approach Flow, veh/h	260	253		1314	
Demand Flow Rate, veh/h	268	261		1354	
Vehicles Circulating, veh/h	1259	44		128	
Vehicles Exiting, veh/h	223	1483		177	
Ped Vol Crossing Leg, #/h	0	0		0	
Ped Cap Adj	1.000	1.000		1.000	
Approach Delay, s/veh	19.3	3.6		9.3	
Approach LOS	C	A		A	
Lane	Left	Left	Right	Left	Right
Designated Moves	LR	L	TR	LT	TR
Assumed Moves	LR	L	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.490	0.510	0.470	0.530
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	268	128	133	636	718
Cap Entry Lane, veh/h	487	1296	1368	1200	1274
Entry HV Adj Factor	0.970	0.969	0.971	0.971	0.970
Flow Entry, veh/h	260	124	129	618	697
Cap Entry, veh/h	472	1256	1328	1165	1236
V/C Ratio	0.550	0.099	0.097	0.530	0.564
Control Delay, s/veh	19.3	3.7	3.5	9.2	9.4
LOS	C	A	A	A	A
95th %tile Queue, veh	3	0	0	3	4

Intersection					
Intersection Delay, s/veh 15.3					
Intersection LOS C					
Approach	EB	NB		SB	
Entry Lanes	1	2		2	
Conflicting Circle Lanes	2	2		2	
Adj Approach Flow, veh/h	317	1549		416	
Demand Flow Rate, veh/h	327	1595		428	
Vehicles Circulating, veh/h	351	54		385	
Vehicles Exiting, veh/h	462	624		1264	
Ped Vol Crossing Leg, #/h	0	0		0	
Ped Cap Adj	1.000	1.000		1.000	
Approach Delay, s/veh	6.7	19.5		5.9	
Approach LOS	A	C		A	
Lane	Left	Left	Right	Left	Right
Designated Moves	LR	L	TR	LT	TR
Assumed Moves	LR	L	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.241	0.759	0.470	0.530
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	327	385	1210	201	227
Cap Entry Lane, veh/h	1054	1284	1356	947	1024
Entry HV Adj Factor	0.969	0.971	0.971	0.972	0.971
Flow Entry, veh/h	317	374	1175	195	220
Cap Entry, veh/h	1022	1248	1317	921	994
V/C Ratio	0.310	0.300	0.892	0.212	0.222
Control Delay, s/veh	6.7	5.6	24.0	6.0	5.8
LOS	A	A	C	A	A
95th %tile Queue, veh	1	1	14	1	1

Intersection				
Intersection Delay, s/veh	5.4			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	47	110	84	426
Demand Flow Rate, veh/h	49	113	86	438
Vehicles Circulating, veh/h	400	89	43	108
Vehicles Exiting, veh/h	146	40	406	94
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.6	3.7	3.3	6.4
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	49	113	86	438
Cap Entry Lane, veh/h	918	1260	1321	1236
Entry HV Adj Factor	0.965	0.977	0.974	0.973
Flow Entry, veh/h	47	110	84	426
Cap Entry, veh/h	885	1231	1286	1202
V/C Ratio	0.053	0.090	0.065	0.354
Control Delay, s/veh	4.6	3.7	3.3	6.4
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	2

Intersection				
Intersection Delay, s/veh	6.2			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	220	122	421	259
Demand Flow Rate, veh/h	226	126	433	267
Vehicles Circulating, veh/h	240	532	225	74
Vehicles Exiting, veh/h	101	126	241	584
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.4	6.3	7.5	4.7
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	226	126	433	267
Cap Entry Lane, veh/h	1080	802	1097	1280
Entry HV Adj Factor	0.973	0.970	0.972	0.972
Flow Entry, veh/h	220	122	421	259
Cap Entry, veh/h	1051	778	1067	1243
V/C Ratio	0.209	0.157	0.395	0.209
Control Delay, s/veh	5.4	6.3	7.5	4.7
LOS	A	A	A	A
95th %tile Queue, veh	1	1	2	1

Intersection				
Intersection Delay, s/veh	8.8			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	47	110	254	749
Demand Flow Rate, veh/h	49	113	261	772
Vehicles Circulating, veh/h	730	264	43	108
Vehicles Exiting, veh/h	150	40	736	269
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.5	4.5	4.5	11.0
Approach LOS	A	A	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	49	113	261	772
Cap Entry Lane, veh/h	655	1054	1321	1236
Entry HV Adj Factor	0.965	0.977	0.972	0.971
Flow Entry, veh/h	47	110	254	749
Cap Entry, veh/h	632	1030	1283	1200
V/C Ratio	0.075	0.107	0.198	0.625
Control Delay, s/veh	6.5	4.5	4.5	11.0
LOS	A	A	A	B
95th %tile Queue, veh	0	0	1	5

Intersection				
Intersection Delay, s/veh	26.8			
Intersection LOS	D			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	222	122	1046	754
Demand Flow Rate, veh/h	228	126	1077	776
Vehicles Circulating, veh/h	745	1178	227	74
Vehicles Exiting, veh/h	105	126	746	1230
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.6	14.3	43.6	10.3
Approach LOS	B	B	E	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	228	126	1077	776
Cap Entry Lane, veh/h	645	415	1095	1280
Entry HV Adj Factor	0.974	0.970	0.971	0.971
Flow Entry, veh/h	222	122	1046	754
Cap Entry, veh/h	628	403	1063	1243
V/C Ratio	0.353	0.304	0.984	0.606
Control Delay, s/veh	10.6	14.3	43.6	10.3
LOS	B	B	E	B
95th %tile Queue, veh	2	1	19	4

Intersection						
Int Delay, s/veh	1.5					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	32	55	16	149	599	73
Future Vol, veh/h	32	55	16	149	599	73
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	-	475	-	-	550
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	35	60	17	162	651	79
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	766	326	730	0	-	0
Stage 1	651	-	-	-	-	-
Stage 2	115	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	337	667	863	-	-	-
Stage 1	478	-	-	-	-	-
Stage 2	894	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	330	667	863	-	-	-
Mov Cap-2 Maneuver	330	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	894	-	-	-	-	-
Approach	SE	NE		SW		
HCM Control Delay, s	14.2	0.9		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR	
Capacity (veh/h)	863	-	485	-	-	
HCM Lane V/C Ratio	0.02	-	0.195	-	-	
HCM Control Delay (s)	9.3	-	14.2	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-	

Intersection						
Int Delay, s/veh	3					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	87	25	89	728	341	31
Future Vol, veh/h	87	25	89	728	341	31
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	-	475	-	-	550
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	95	27	97	791	371	34
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	961	186	405	0	-	0
Stage 1	371	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	252	821	1143	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	231	821	1143	-	-	-
Mov Cap-2 Maneuver	231	-	-	-	-	-
Stage 1	608	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s	28.1	0.9	0			
HCM LOS	D					
Minor Lane/Major Mvmt	NEL	NET SELn1	SWT	SWR		
Capacity (veh/h)	1143	- 275	-	-		
HCM Lane V/C Ratio	0.085	- 0.443	-	-		
HCM Control Delay (s)	8.4	- 28.1	-	-		
HCM Lane LOS	A	- D	-	-		
HCM 95th %tile Q(veh)	0.3	- 2.1	-	-		

Intersection						
Int Delay, s/veh	1.5					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	32	55	16	179	796	73
Future Vol, veh/h	32	55	16	179	796	73
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	-	475	-	-	550
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	35	60	17	195	865	79
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	997	433	944	0	-	0
Stage 1	865	-	-	-	-	-
Stage 2	132	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	239	568	716	-	-	-
Stage 1	370	-	-	-	-	-
Stage 2	877	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	233	568	716	-	-	-
Mov Cap-2 Maneuver	233	-	-	-	-	-
Stage 1	361	-	-	-	-	-
Stage 2	877	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s	17.9	0.8	0			
HCM LOS	C					
Minor Lane/Major Mvmt	NEL	NET SELn1	SWT	SWR		
Capacity (veh/h)	716	- 372	-	-		
HCM Lane V/C Ratio	0.024	- 0.254	-	-		
HCM Control Delay (s)	10.2	- 17.9	-	-		
HCM Lane LOS	B	- C	-	-		
HCM 95th %tile Q(veh)	0.1	- 1	-	-		

Intersection

Int Delay, s/veh 3.5

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	87	25	89	920	403	31
Future Vol, veh/h	87	25	89	920	403	31
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	-	475	-	-	550
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	95	27	97	1000	438	34

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1132	219	472
Stage 1	438	-	-
Stage 2	694	-	-
Critical Hdwy	6.86	6.96	4.16
Critical Hdwy Stg 1	5.86	-	-
Critical Hdwy Stg 2	5.86	-	-
Follow-up Hdwy	3.53	3.33	2.23
Pot Cap-1 Maneuver	195	782	1079
Stage 1	615	-	-
Stage 2	454	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	177	782	1079
Mov Cap-2 Maneuver	177	-	-
Stage 1	560	-	-
Stage 2	454	-	-

Approach	SE	NE	SW
HCM Control Delay, s	41.9	0.8	0
HCM LOS	E		

Minor Lane/Major Mvmt	NEL	NET SELn1	SWT	SWR
Capacity (veh/h)	1079	-	214	-
HCM Lane V/C Ratio	0.09	-	0.569	-
HCM Control Delay (s)	8.7	-	41.9	-
HCM Lane LOS	A	-	E	-
HCM 95th %tile Q(veh)	0.3	-	3.1	-

Intersection					
Intersection Delay, s/veh 5.7					
Intersection LOS A					
Approach	SE	NE		SW	
Entry Lanes	1	2		2	
Conflicting Circle Lanes	2	2		2	
Adj Approach Flow, veh/h	95	212		944	
Demand Flow Rate, veh/h	98	219		972	
Vehicles Circulating, veh/h	891	36		18	
Vehicles Exiting, veh/h	99	953		237	
Ped Vol Crossing Leg, #/h	0	0		0	
Ped Cap Adj	1.000	1.000		1.000	
Approach Delay, s/veh	7.3	3.4		6.0	
Approach LOS	A	A		A	
Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	98	103	116	457	515
Cap Entry Lane, veh/h	666	1306	1377	1328	1399
Entry HV Adj Factor	0.969	0.968	0.969	0.971	0.972
Flow Entry, veh/h	95	100	112	444	500
Cap Entry, veh/h	645	1264	1335	1289	1359
V/C Ratio	0.147	0.079	0.084	0.344	0.368
Control Delay, s/veh	7.3	3.5	3.4	6.0	6.0
LOS	A	A	A	A	A
95th %tile Queue, veh	1	0	0	2	2

Intersection					
Intersection Delay, s/veh 6.5					
Intersection LOS A					
Approach	SE	NE		SW	
Entry Lanes	1	2		2	
Conflicting Circle Lanes	2	2		2	
Adj Approach Flow, veh/h	122	1097		472	
Demand Flow Rate, veh/h	126	1130		486	
Vehicles Circulating, veh/h	451	98		100	
Vehicles Exiting, veh/h	135	479		1128	
Ped Vol Crossing Leg, #/h	0	0		0	
Ped Cap Adj	1.000	1.000		1.000	
Approach Delay, s/veh	5.1	7.5		4.6	
Approach LOS	A	A		A	
Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.469	0.531
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	126	531	599	228	258
Cap Entry Lane, veh/h	968	1233	1307	1231	1304
Entry HV Adj Factor	0.968	0.971	0.971	0.973	0.969
Flow Entry, veh/h	122	516	581	222	250
Cap Entry, veh/h	937	1198	1268	1198	1264
V/C Ratio	0.130	0.430	0.458	0.185	0.198
Control Delay, s/veh	5.1	7.4	7.5	4.6	4.5
LOS	A	A	A	A	A
95th %tile Queue, veh	0	2	2	1	1

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	0	119	4	0	153
Future Vol, veh/h	17	0	119	4	0	153
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	0	129	4	0	166

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	297	131	0
Stage 1	131	-	-
Stage 2	166	-	-
Critical Hdwy	6.43	6.23	-
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	-
Pot Cap-1 Maneuver	692	916	-
Stage 1	893	-	-
Stage 2	861	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	692	916	-
Mov Cap-2 Maneuver	692	-	-
Stage 1	893	-	-
Stage 2	861	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	692	1446
HCM Lane V/C Ratio	-	-	0.027	-
HCM Control Delay (s)	-	-	10.3	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	0	173	39	1	185
Future Vol, veh/h	14	0	173	39	1	185
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	15	0	188	42	1	201
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	412	209	0	0	230	0
Stage 1	209	-	-	-	-	-
Stage 2	203	-	-	-	-	-
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	594	829	-	-	1332	-
Stage 1	824	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	593	829	-	-	1332	-
Mov Cap-2 Maneuver	593	-	-	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	828	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	11.2	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 593		1332	-	
HCM Lane V/C Ratio	-	- 0.026		0.001	-	
HCM Control Delay (s)	-	- 11.2		7.7	0	
HCM Lane LOS	-	- B		A	A	
HCM 95th %tile Q(veh)	-	- 0.1		0	-	

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	1	221	4	1	544
Future Vol, veh/h	17	1	221	4	1	544
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	1	240	4	1	591
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	835	242	0	0	244	0
Stage 1	242	-	-	-	-	-
Stage 2	593	-	-	-	-	-
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	336	794	-	-	1316	-
Stage 1	796	-	-	-	-	-
Stage 2	550	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	336	794	-	-	1316	-
Mov Cap-2 Maneuver	336	-	-	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	549	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	16	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt		NBT	NBRWBLn1	SBL	SBT	
Capacity (veh/h)		-	-	347	1316	-
HCM Lane V/C Ratio		-	-	0.056	0.001	-
HCM Control Delay (s)		-	-	16	7.7	0
HCM Lane LOS		-	-	C	A	A
HCM 95th %tile Q(veh)		-	-	0.2	0	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	2	564	44	3	425
Future Vol, veh/h	14	2	564	44	3	425
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	15	2	613	48	3	462
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1105	637	0	0	661	0
Stage 1	637	-	-	-	-	-
Stage 2	468	-	-	-	-	-
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	232	475	-	-	923	-
Stage 1	525	-	-	-	-	-
Stage 2	628	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	231	475	-	-	923	-
Mov Cap-2 Maneuver	231	-	-	-	-	-
Stage 1	525	-	-	-	-	-
Stage 2	625	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	20.7	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	247	923	-	
HCM Lane V/C Ratio	-	-	0.07	0.004	-	
HCM Control Delay (s)	-	-	20.7	8.9	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Intersection						
Int Delay, s/veh	2.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	7	2	5	15	2	2
Future Vol, veh/h	7	2	5	15	2	2
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	8	2	5	16	2	2
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	10	0	35	9
Stage 1	-	-	-	-	9	-
Stage 2	-	-	-	-	26	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1603	-	975	1070
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1603	-	972	1070
Mov Cap-2 Maneuver	-	-	-	-	972	-
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	991	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.8		8.5	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1		EBT	EBR	WBL	WBT
Capacity (veh/h)	1019		-	-	1603	-
HCM Lane V/C Ratio	0.004		-	-	0.003	-
HCM Control Delay (s)	8.5		-	-	7.3	0
HCM Lane LOS	A		-	-	A	A
HCM 95th %tile Q(veh)	0		-	-	0	-

Intersection						
Int Delay, s/veh	2.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	19	2	8	19	6	7
Future Vol, veh/h	19	2	8	19	6	7
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	21	2	9	21	7	8
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	23	0	61	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	39	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1586	-	943	1052
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	981	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1586	-	937	1052
Mov Cap-2 Maneuver	-	-	-	-	937	-
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	975	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.2		8.7	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	996	-	-	1586	-	
HCM Lane V/C Ratio	0.014	-	-	0.005	-	
HCM Control Delay (s)	8.7	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

Intersection						
Int Delay, s/veh	3.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	7	2	15	15	2	2
Future Vol, veh/h	7	2	15	15	2	2
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	8	2	16	16	2	2
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	10	0	57	9
Stage 1	-	-	-	-	9	-
Stage 2	-	-	-	-	48	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1603	-	948	1070
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	972	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1603	-	939	1070
Mov Cap-2 Maneuver	-	-	-	-	939	-
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	962	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		3.6		8.6	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1000	-	-	1603	-	
HCM Lane V/C Ratio	0.004	-	-	0.01	-	
HCM Control Delay (s)	8.6	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

Intersection						
Int Delay, s/veh	2.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	2	10	19	7	7
Future Vol, veh/h	25	2	10	19	7	7
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	27	2	11	21	8	8
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	29	0	71	28
Stage 1	-	-	-	-	28	-
Stage 2	-	-	-	-	43	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1578	-	931	1044
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	977	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1578	-	924	1044
Mov Cap-2 Maneuver	-	-	-	-	924	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	970	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.5		8.7	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	980	-	-	1578	-	
HCM Lane V/C Ratio	0.016	-	-	0.007	-	
HCM Control Delay (s)	8.7	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	117	191	0	1	0
Future Vol, veh/h	0	117	191	0	1	0
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	127	208	0	1	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	208	0	0 335 208
Stage 1	-	-	- 208 -
Stage 2	-	-	- 127 -
Critical Hdwy	4.13	-	- 6.43 6.23
Critical Hdwy Stg 1	-	-	- 5.43 -
Critical Hdwy Stg 2	-	-	- 5.43 -
Follow-up Hdwy	2.227	-	- 3.527 3.327
Pot Cap-1 Maneuver	1357	-	- 658 830
Stage 1	-	-	- 824 -
Stage 2	-	-	- 896 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1357	-	- 658 830
Mov Cap-2 Maneuver	-	-	- 658 -
Stage 1	-	-	- 824 -
Stage 2	-	-	- 896 -

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1357	-	-	-	658
HCM Lane V/C Ratio	-	-	-	-	0.002
HCM Control Delay (s)	0	-	-	-	10.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	201	118	0	0	0
Future Vol, veh/h	10	201	118	0	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	11	218	128	0	0	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	128	0	-	0	368	128
Stage 1	-	-	-	-	128	-
Stage 2	-	-	-	-	240	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1452	-	-	-	630	919
Stage 1	-	-	-	-	895	-
Stage 2	-	-	-	-	798	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1452	-	-	-	624	919
Mov Cap-2 Maneuver	-	-	-	-	624	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	798	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.4	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1452	-	-	-	-	
HCM Lane V/C Ratio	0.007	-	-	-	-	
HCM Control Delay (s)	7.5	0	-	-	0	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	138	248	0	1	10
Future Vol, veh/h	0	138	248	0	1	10
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	150	270	0	1	11
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	270	0	-	0	420	270
Stage 1	-	-	-	-	270	-
Stage 2	-	-	-	-	150	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1288	-	-	-	588	766
Stage 1	-	-	-	-	773	-
Stage 2	-	-	-	-	875	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1288	-	-	-	588	766
Mov Cap-2 Maneuver	-	-	-	-	588	-
Stage 1	-	-	-	-	773	-
Stage 2	-	-	-	-	875	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		9.9		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1288	-	-	-	745	
HCM Lane V/C Ratio	-	-	-	-	0.016	
HCM Control Delay (s)	0	-	-	-	9.9	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	250	140	1	0	2
Future Vol, veh/h	10	250	140	1	0	2
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	11	272	152	1	0	2
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	153	0	-	0	447	153
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	294	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1421	-	-	-	567	890
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	754	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1421	-	-	-	562	890
Mov Cap-2 Maneuver	-	-	-	-	562	-
Stage 1	-	-	-	-	865	-
Stage 2	-	-	-	-	754	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.3	0		9.1		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1421	-	-	-	-	890
HCM Lane V/C Ratio	0.008	-	-	-	-	0.002
HCM Control Delay (s)	7.6	0	-	-	-	9.1
HCM Lane LOS	A	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	118	0	1	189	0	0
Future Vol, veh/h	118	0	1	189	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	128	0	1	205	0	0

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	128	0	335	128
Stage 1	-	-	-	-	128	-
Stage 2	-	-	-	-	207	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1452	-	658	919
Stage 1	-	-	-	-	895	-
Stage 2	-	-	-	-	825	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1452	-	657	919
Mov Cap-2 Maneuver	-	-	-	-	657	-
Stage 1	-	-	-	-	895	-
Stage 2	-	-	-	-	824	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1452	-
HCM Lane V/C Ratio	-	-	-	0.001	-
HCM Control Delay (s)	0	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	203	0	0	120	0	10
Future Vol, veh/h	203	0	0	120	0	10
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	221	0	0	130	0	11
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	221	0	351	221
Stage 1	-	-	-	-	221	-
Stage 2	-	-	-	-	130	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1342	-	644	816
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	894	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1342	-	644	816
Mov Cap-2 Maneuver	-	-	-	-	644	-
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	894	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		9.5	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	816	-	-	1342	-	
HCM Lane V/C Ratio	0.013	-	-	-	-	
HCM Control Delay (s)	9.5	-	-	0	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0	-	-	0	-	

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	139	4	1	257	0	0
Future Vol, veh/h	139	4	1	257	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	151	4	1	279	0	0
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	155	0	434	153
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	281	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1419	-	577	890
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	764	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1419	-	576	890
Mov Cap-2 Maneuver	-	-	-	-	576	-
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	763	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	-	-	-	1419	-	
HCM Lane V/C Ratio	-	-	-	0.001	-	
HCM Control Delay (s)	0	-	-	7.5	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	-	-	-	0	-	

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	251	3	0	145	0	10
Future Vol, veh/h	251	3	0	145	0	10
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	273	3	0	158	0	11
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	276	0	433	275
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	158	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1281	-	578	761
Stage 1	-	-	-	-	769	-
Stage 2	-	-	-	-	868	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1281	-	578	761
Mov Cap-2 Maneuver	-	-	-	-	578	-
Stage 1	-	-	-	-	769	-
Stage 2	-	-	-	-	868	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		9.8	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	761	-	-	1281	-	
HCM Lane V/C Ratio	0.014	-	-	-	-	
HCM Control Delay (s)	9.8	-	-	0	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0	-	-	0	-	

Intersection	
Intersection Delay, s/veh	11.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	91	30	34	218	2	57	106	6	17	170	63
Future Vol, veh/h	6	91	30	34	218	2	57	106	6	17	170	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	7	99	33	37	237	2	62	115	7	18	185	68
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	10.1	12.4	10.9	11.8
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	34%	5%	13%	7%
Vol Thru, %	63%	72%	86%	68%
Vol Right, %	4%	24%	1%	25%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	169	127	254	250
LT Vol	57	6	34	17
Through Vol	106	91	218	170
RT Vol	6	30	2	63
Lane Flow Rate	184	138	276	272
Geometry Grp	1	1	1	1
Degree of Util (X)	0.286	0.213	0.419	0.399
Departure Headway (Hd)	5.604	5.551	5.46	5.286
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	639	645	657	679
Service Time	3.652	3.601	3.502	3.331
HCM Lane V/C Ratio	0.288	0.214	0.42	0.401
HCM Control Delay	10.9	10.1	12.4	11.8
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.2	0.8	2.1	1.9

Intersection	
Intersection Delay, s/veh	14.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	164	80	33	121	7	49	217	54	3	180	26
Future Vol, veh/h	36	164	80	33	121	7	49	217	54	3	180	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	39	178	87	36	132	8	53	236	59	3	196	28
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	14.8	12.2	16.3	12.9
HCM LOS	B	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	13%	20%	1%
Vol Thru, %	68%	59%	75%	86%
Vol Right, %	17%	29%	4%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	320	280	161	209
LT Vol	49	36	33	3
Through Vol	217	164	121	180
RT Vol	54	80	7	26
Lane Flow Rate	348	304	175	227
Geometry Grp	1	1	1	1
Degree of Util (X)	0.566	0.502	0.309	0.383
Departure Headway (Hd)	5.856	5.942	6.36	6.072
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	619	609	565	593
Service Time	3.874	3.963	4.408	4.117
HCM Lane V/C Ratio	0.562	0.499	0.31	0.383
HCM Control Delay	16.3	14.8	12.2	12.9
HCM Lane LOS	C	B	B	B
HCM 95th-tile Q	3.5	2.8	1.3	1.8

Intersection	
Intersection Delay, s/veh	105.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	100	31	125	247	2	60	209	28	22	555	64
Future Vol, veh/h	6	100	31	125	247	2	60	209	28	22	555	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	7	109	34	136	268	2	65	227	30	24	603	70
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	17.2	42	26.7	197.7
HCM LOS	C	E	D	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	4%	33%	3%
Vol Thru, %	70%	73%	66%	87%
Vol Right, %	9%	23%	1%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	297	137	374	641
LT Vol	60	6	125	22
Through Vol	209	100	247	555
RT Vol	28	31	2	64
Lane Flow Rate	323	149	407	697
Geometry Grp	1	1	1	1
Degree of Util (X)	0.673	0.343	0.842	1.365
Departure Headway (Hd)	8.28	9.371	8.272	7.053
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	439	386	443	516
Service Time	6.28	7.371	6.272	5.116
HCM Lane V/C Ratio	0.736	0.386	0.919	1.351
HCM Control Delay	26.7	17.2	42	197.7
HCM Lane LOS	D	C	E	F
HCM 95th-tile Q	4.9	1.5	8.2	31.3

Intersection	
Intersection Delay, s/veh	247.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	195	88	74	135	8	68	610	133	4	415	30
Future Vol, veh/h	38	195	88	74	135	8	68	610	133	4	415	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	41	212	96	80	147	9	74	663	145	4	451	33
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	48.2	31.5	461.7	107.7
HCM LOS	E	D	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	12%	34%	1%
Vol Thru, %	75%	61%	62%	92%
Vol Right, %	16%	27%	4%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	811	321	217	449
LT Vol	68	38	74	4
Through Vol	610	195	135	415
RT Vol	133	88	8	30
Lane Flow Rate	882	349	236	488
Geometry Grp	1	1	1	1
Degree of Util (X)	1.964	0.818	0.601	1.093
Departure Headway (Hd)	8.411	10.85	11.963	10.131
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	441	338	304	361
Service Time	6.411	8.85	9.963	8.131
HCM Lane V/C Ratio	2	1.033	0.776	1.352
HCM Control Delay	461.7	48.2	31.5	107.7
HCM Lane LOS	F	E	D	F
HCM 95th-tile Q	57.1	7	3.6	14.3

Intersection				
Intersection Delay, s/veh 16.7				
Intersection LOS C				
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	150	406	322	697
Demand Flow Rate, veh/h	154	418	332	718
Vehicles Circulating, veh/h	786	308	144	483
Vehicles Exiting, veh/h	415	168	796	243
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.2	8.3	5.7	28.2
Approach LOS	A	A	A	D
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	154	418	332	718
Cap Entry Lane, veh/h	619	1008	1191	843
Entry HV Adj Factor	0.972	0.971	0.970	0.971
Flow Entry, veh/h	150	406	322	697
Cap Entry, veh/h	602	979	1156	818
V/C Ratio	0.249	0.415	0.279	0.852
Control Delay, s/veh	9.2	8.3	5.7	28.2
LOS	A	A	A	D
95th %tile Queue, veh	1	2	1	10

Intersection				
Intersection Delay, s/veh 17.1				
Intersection LOS C				
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	349	236	882	488
Demand Flow Rate, veh/h	359	242	908	503
Vehicles Circulating, veh/h	551	801	264	309
Vehicles Exiting, veh/h	261	371	646	734
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.9	12.0	25.0	9.8
Approach LOS	B	B	C	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	359	242	908	503
Cap Entry Lane, veh/h	787	610	1054	1007
Entry HV Adj Factor	0.971	0.974	0.971	0.971
Flow Entry, veh/h	349	236	882	488
Cap Entry, veh/h	764	593	1024	978
V/C Ratio	0.456	0.397	0.861	0.500
Control Delay, s/veh	10.9	12.0	25.0	9.8
LOS	B	B	C	A
95th %tile Queue, veh	2	2	11	3

HCM 6th Signalized Intersection Summary
73: SR 37 & 191st St

Existing AM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱	↰	↱		↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	5	95	393	308	215	7	170	161	36	0	664	17
Future Volume (veh/h)	5	95	393	308	215	7	170	161	36	0	664	17
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	103	427	335	234	8	185	175	39	0	722	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	15	319	284	379	383	13	308	1395	960	381	848	663
Arrive On Green	0.18	0.18	0.18	0.21	0.21	0.21	0.10	0.40	0.40	0.00	0.24	0.24
Sat Flow, veh/h	86	1766	1572	1767	1784	61	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	108	0	427	335	0	242	185	175	39	0	722	18
Grp Sat Flow(s), veh/h/ln	1851	0	1572	1767	0	1845	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	3.6	0.0	13.0	13.2	0.0	8.5	5.3	2.3	0.7	0.0	14.1	0.5
Cycle Q Clear(g_c), s	3.6	0.0	13.0	13.2	0.0	8.5	5.3	2.3	0.7	0.0	14.1	0.5
Prop In Lane	0.05		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	0	284	379	0	396	308	1395	960	381	848	663
V/C Ratio(X)	0.32	0.00	1.50	0.88	0.00	0.61	0.60	0.13	0.04	0.00	0.85	0.03
Avail Cap(c_a), veh/h	335	0	284	393	0	411	329	1395	960	575	932	700
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	29.4	27.4	0.0	25.5	18.3	13.8	5.6	0.0	26.1	12.2
Incr Delay (d2), s/veh	0.6	0.0	243.3	19.9	0.0	2.5	2.7	0.0	0.0	0.0	7.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	23.7	7.2	0.0	3.7	2.0	0.7	0.3	0.0	5.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	0.0	272.7	47.3	0.0	28.0	21.1	13.8	5.6	0.0	33.2	12.2
LnGrp LOS	C	A	F	D	A	C	C	B	A	A	C	B
Approach Vol, veh/h	535			577			399			740		
Approach Delay, s/veh	223.0			39.2			16.4			32.7		
Approach LOS	F			D			B			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	33.5		18.0	11.2	22.3		20.4				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0				
Max Green Setting (Gmax), s	0.0	19.0		13.0	8.0	19.0		16.0				
Max Q Clear Time (g_c+10), s	0.0	4.3		15.0	7.3	16.1		15.2				
Green Ext Time (p_c), s	0.0	0.8		0.0	0.0	1.2		0.2				
Intersection Summary												
HCM 6th Ctrl Delay	76.7											
HCM 6th LOS	E											

HCM 6th Signalized Intersection Summary

73: SR 37 & 191st St

Existing PM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↗	↘	↗	↘		↗	↗↗	↘	↗	↗↗	↘
Traffic Volume (veh/h)	30	223	194	167	126	15	298	801	265	3	369	6
Future Volume (veh/h)	30	223	194	167	126	15	298	801	265	3	369	6
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	33	242	211	182	137	16	324	871	288	3	401	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	40	295	286	321	296	35	478	1209	825	180	641	572
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.17	0.34	0.34	0.01	0.18	0.18
Sat Flow, veh/h	221	1623	1572	1767	1631	190	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	275	0	211	182	0	153	324	871	288	3	401	7
Grp Sat Flow(s),veh/h/ln	1844	0	1572	1767	0	1821	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	9.5	0.0	8.4	6.2	0.0	5.0	9.2	14.2	7.0	0.1	6.9	0.2
Cycle Q Clear(g_c), s	9.5	0.0	8.4	6.2	0.0	5.0	9.2	14.2	7.0	0.1	6.9	0.2
Prop In Lane	0.12		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	0	286	321	0	331	478	1209	825	180	641	572
V/C Ratio(X)	0.82	0.00	0.74	0.57	0.00	0.46	0.68	0.72	0.35	0.02	0.63	0.01
Avail Cap(c_a), veh/h	335	0	286	321	0	331	478	1209	825	385	855	667
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.9	0.0	25.5	24.6	0.0	24.1	16.5	18.9	9.1	21.9	24.9	13.4
Incr Delay (d2), s/veh	14.8	0.0	9.6	2.3	0.0	1.0	3.8	2.1	0.3	0.0	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	3.6	2.6	0.0	2.0	3.4	5.0	2.9	0.0	2.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.8	0.0	35.1	27.0	0.0	25.1	20.3	21.0	9.4	21.9	25.9	13.4
LnGrp LOS	D	A	D	C	A	C	C	C	A	C	C	B
Approach Vol, veh/h	486		335			1483			411			
Approach Delay, s/veh	38.3		26.1			18.6			25.7			
Approach LOS	D		C			B			C			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	4.4	27.6	17.0		15.0	17.0	17.0					
Change Period (Y+Rc), s	4.0	5.0	5.0		4.0	5.0	5.0					
Max Green Setting (Gmax), s	3.0	19.0	12.0		11.0	16.0	12.0					
Max Q Clear Time (g_c+I2), s	12.1	16.2	11.5		11.2	8.9	8.2					
Green Ext Time (p_c), s	0.0	1.6	0.1		0.0	1.3	0.5					
Intersection Summary												
HCM 6th Ctrl Delay			24.1									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary 73: SR 37 & 191st St

Future AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗	↖	↕		↖	↕↕	↗	↖	↕↕	↗
Traffic Volume (veh/h)	5	99	683	334	220	7	322	191	44	1	860	17
Future Volume (veh/h)	5	99	683	334	220	7	322	191	44	1	860	17
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	108	742	363	239	8	350	208	48	1	935	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	40	209	525	358	655	22	386	1749	1099	385	986	440
Arrive On Green	0.12	0.12	0.12	0.20	0.37	0.37	0.22	0.50	0.50	0.00	0.28	0.28
Sat Flow, veh/h	29	1808	1572	1767	1785	60	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	113	0	742	363	0	247	350	208	48	1	935	18
Grp Sat Flow(s),veh/h/ln	1837	0	1572	1767	0	1845	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	0.0	0.0	12.0	21.0	0.0	10.1	20.0	3.3	1.0	0.0	26.9	0.9
Cycle Q Clear(g_c), s	5.9	0.0	12.0	21.0	0.0	10.1	20.0	3.3	1.0	0.0	26.9	0.9
Prop In Lane	0.04		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	0	525	358	0	677	386	1749	1099	385	986	440
V/C Ratio(X)	0.45	0.00	1.41	1.01	0.00	0.36	0.91	0.12	0.04	0.00	0.95	0.04
Avail Cap(c_a), veh/h	249	0	525	358	0	677	495	1749	1099	518	987	440
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	0.0	34.5	41.3	0.0	24.0	39.5	14.0	4.8	26.7	36.6	27.2
Incr Delay (d2), s/veh	1.3	0.0	196.8	50.9	0.0	0.3	17.5	0.0	0.0	0.0	17.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	41.2	13.9	0.0	4.3	9.9	1.2	0.3	0.0	13.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.4	0.0	231.3	92.1	0.0	24.3	57.0	14.0	4.9	26.7	54.0	27.2
LnGrp LOS	D	A	F	F	A	C	E	B	A	C	D	C
Approach Vol, veh/h	855		610			606			954			
Approach Delay, s/veh	206.6		64.7			38.1			53.5			
Approach LOS	F		E			D			D			
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	4.2	56.4	26.0	17.0	26.6	34.0	43.0					
Change Period (Y+Rc), s	4.0	5.0	5.0	5.0	4.0	5.0	5.0					
Max Green Setting (Gmax), s	3.0	50.0	21.0	12.0	29.0	29.0	38.0					
Max Q Clear Time (g_c+I2), s	12.0	5.3	23.0	14.0	22.0	28.9	12.1					
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.6	0.0	1.3					
Intersection Summary												
HCM 6th Ctrl Delay			95.9									
HCM 6th LOS			F									

HCM 6th Signalized Intersection Summary

73: SR 37 & 191st St

Future PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	238	630	178	156	15	843	993	293	3	431	6
Future Volume (veh/h)	30	238	630	178	156	15	843	993	293	3	431	6
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	33	259	685	193	170	16	916	1079	318	3	468	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	53	267	977	189	513	48	862	2071	1092	113	478	213
Arrive On Green	0.16	0.16	0.16	0.11	0.31	0.31	0.46	0.59	0.59	0.01	0.14	0.14
Sat Flow, veh/h	146	1628	1572	1767	1670	157	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	292	0	685	193	0	186	916	1079	318	3	468	7
Grp Sat Flow(s),veh/h/ln	1774	0	1572	1767	0	1827	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	17.0	0.0	23.0	15.0	0.0	11.0	64.0	25.5	10.8	0.2	18.5	0.5
Cycle Q Clear(g_c), s	23.0	0.0	23.0	15.0	0.0	11.0	64.0	25.5	10.8	0.2	18.5	0.5
Prop In Lane	0.11		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	320	0	977	189	0	561	862	2071	1092	113	478	213
V/C Ratio(X)	0.91	0.00	0.70	1.02	0.00	0.33	1.06	0.52	0.29	0.03	0.98	0.03
Avail Cap(c_a), veh/h	320	0	977	189	0	561	862	2071	1092	204	478	213
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.4	0.0	17.8	62.5	0.0	37.4	32.5	17.2	8.2	51.7	60.3	52.5
Incr Delay (d2), s/veh	29.1	0.0	2.3	70.5	0.0	0.3	48.5	0.2	0.1	0.1	35.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	0.0	14.4	10.4	0.0	4.9	36.3	9.4	3.4	0.1	10.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.5	0.0	20.0	133.0	0.0	37.8	81.0	17.4	8.3	51.8	95.7	52.6
LnGrp LOS	F	A	C	F	A	D	F	B	A	D	F	D
Approach Vol, veh/h	977		379				2313			478		
Approach Delay, s/veh	40.2		86.3				41.4			94.8		
Approach LOS	D		F				D			F		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	4.8	87.2	20.0	28.0	68.0	24.0	48.0					
Change Period (Y+Rc), s	4.0	5.0	5.0	5.0	4.0	5.0	5.0					
Max Green Setting (Gmax), s	3.0	75.0	15.0	23.0	64.0	19.0	43.0					
Max Q Clear Time (g_c+1/2), s	12.2	27.5	17.0	25.0	66.0	20.5	13.0					
Green Ext Time (p_c), s	0.0	10.0	0.0	0.0	0.0	0.0	1.0					

Intersection Summary

HCM 6th Ctrl Delay	51.3
HCM 6th LOS	D

Intersection

Intersection Delay, s/veh 13.5

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔		↔			↔	
Traffic Vol, veh/h	22	106	9	32	157	37	7	26	12	264	96	20
Future Vol, veh/h	22	106	9	32	157	37	7	26	12	264	96	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	115	10	35	171	40	8	28	13	287	104	22
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	10.6	11.6	9.2	16.1
HCM LOS	B	B	A	C

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	16%	16%	17%	0%	69%
Vol Thru, %	58%	77%	83%	0%	25%
Vol Right, %	27%	7%	0%	100%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	45	137	189	37	380
LT Vol	7	22	32	0	264
Through Vol	26	106	157	0	96
RT Vol	12	9	0	37	20
Lane Flow Rate	49	149	205	40	413
Geometry Grp	2	4a	5	5	2
Degree of Util (X)	0.077	0.239	0.352	0.06	0.606
Departure Headway (Hd)	5.665	5.78	6.167	5.371	5.283
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	631	621	583	666	686
Service Time	3.712	3.82	3.902	3.106	3.312
HCM Lane V/C Ratio	0.078	0.24	0.352	0.06	0.602
HCM Control Delay	9.2	10.6	12.2	8.5	16.1
HCM Lane LOS	A	B	B	A	C
HCM 95th-tile Q	0.2	0.9	1.6	0.2	4.1

Intersection

Intersection Delay, s/veh15.1

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕			↕	
Traffic Vol, veh/h	4	176	11	42	121	241	28	181	81	157	76	6
Future Vol, veh/h	4	176	11	42	121	241	28	181	81	157	76	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	191	12	46	132	262	30	197	88	171	83	7
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	14.3	13.7	17	15.9
HCM LOS	B	B	C	C

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	10%	2%	26%	0%	66%
Vol Thru, %	62%	92%	74%	0%	32%
Vol Right, %	28%	6%	0%	100%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	290	191	163	241	239
LT Vol	28	4	42	0	157
Through Vol	181	176	121	0	76
RT Vol	81	11	0	241	6
Lane Flow Rate	315	208	177	262	260
Geometry Grp	2	4a	5	5	2
Degree of Util (X)	0.554	0.393	0.345	0.449	0.484
Departure Headway (Hd)	6.328	6.812	7.02	6.173	6.704
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	567	527	512	582	535
Service Time	4.381	4.873	4.773	3.925	4.76
HCM Lane V/C Ratio	0.556	0.395	0.346	0.45	0.486
HCM Control Delay	17	14.3	13.5	13.9	15.9
HCM Lane LOS	C	B	B	B	C
HCM 95th-tile Q	3.4	1.9	1.5	2.3	2.6

Intersection

Intersection Delay, s/veh72.2

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	106	9	32	158	193	7	26	12	558	96	20
Future Vol, veh/h	22	106	9	32	158	193	7	26	12	558	96	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	115	10	35	172	210	8	28	13	607	104	22
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	13.3	14.1	10.8	121.3
HCM LOS	B	B	B	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	16%	16%	17%	0%	83%
Vol Thru, %	58%	77%	83%	0%	14%
Vol Right, %	27%	7%	0%	100%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	45	137	190	193	674
LT Vol	7	22	32	0	558
Through Vol	26	106	158	0	96
RT Vol	12	9	0	193	20
Lane Flow Rate	49	149	207	210	733
Geometry Grp	2	4a	5	5	2
Degree of Util (X)	0.091	0.283	0.397	0.357	1.188
Departure Headway (Hd)	7.109	7.417	7.509	6.704	5.84
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	507	487	483	539	623
Service Time	5.109	5.417	5.209	4.404	3.85
HCM Lane V/C Ratio	0.097	0.306	0.429	0.39	1.177
HCM Control Delay	10.8	13.3	15.1	13.1	121.3
HCM Lane LOS	B	B	C	B	F
HCM 95th-tile Q	0.3	1.2	1.9	1.6	25.3

Intersection

Intersection Delay, s/veh 70.4

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔		↔			↔	
Traffic Vol, veh/h	4	176	11	42	121	816	28	181	81	608	76	6
Future Vol, veh/h	4	176	11	42	121	816	28	181	81	608	76	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	191	12	46	132	887	30	197	88	661	83	7
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	27.9	345.7	38.3	328.1
HCM LOS	D	F	E	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	10%	2%	26%	0%	88%
Vol Thru, %	62%	92%	74%	0%	11%
Vol Right, %	28%	6%	0%	100%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	290	191	163	816	690
LT Vol	28	4	42	0	608
Through Vol	181	176	121	0	76
RT Vol	81	11	0	816	6
Lane Flow Rate	315	208	177	887	750
Geometry Grp	2	4a	5	5	2
Degree of Util (X)	0.717	0.515	0.41	1.846	1.653
Departure Headway (Hd)	11.285	12.414	9.811	8.943	9.306
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	325	293	370	417	397
Service Time	9.285	10.414	7.511	6.643	7.306
HCM Lane V/C Ratio	0.969	0.71	0.478	2.127	1.889
HCM Control Delay	38.3	27.9	19.2	410.9	328.1
HCM Lane LOS	E	D	C	F	F
HCM 95th-tile Q	5.2	2.8	1.9	48.3	37.9

Intersection				
Intersection Delay, s/veh 10.6				
Intersection LOS B				
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	149	417	49	733
Demand Flow Rate, veh/h	153	429	50	755
Vehicles Circulating, veh/h	768	62	768	221
Vehicles Exiting, veh/h	208	756	153	270
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.0	5.9	6.7	13.8
Approach LOS	A	A	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	153	429	50	755
Cap Entry Lane, veh/h	630	1295	630	1101
Entry HV Adj Factor	0.971	0.972	0.983	0.971
Flow Entry, veh/h	149	417	49	733
Cap Entry, veh/h	612	1259	620	1069
V/C Ratio	0.243	0.331	0.079	0.685
Control Delay, s/veh	9.0	5.9	6.7	13.8
LOS	A	A	A	B
95th %tile Queue, veh	1	1	0	6

Intersection				
Intersection Delay, s/veh31.3				
Intersection LOS D				
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	207	1065	315	751
Demand Flow Rate, veh/h	213	1097	325	773
Vehicles Circulating, veh/h	813	238	882	214
Vehicles Exiting, veh/h	174	969	144	1121
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.2	51.1	18.2	14.1
Approach LOS	B	F	C	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	213	1097	325	773
Cap Entry Lane, veh/h	602	1082	561	1109
Entry HV Adj Factor	0.973	0.971	0.969	0.971
Flow Entry, veh/h	207	1065	315	751
Cap Entry, veh/h	586	1051	544	1077
V/C Ratio	0.354	1.013	0.579	0.697
Control Delay, s/veh	11.2	51.1	18.2	14.1
LOS	B	F	C	B
95th %tile Queue, veh	2	21	4	6

Intersection						
Int Delay, s/veh	5.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T	T		T
Traffic Vol, veh/h	230	0	22	81	0	162
Future Vol, veh/h	230	0	22	81	0	162
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	-	-	160	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	250	0	24	88	0	176
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	200	24	0	0	112	0
Stage 1	24	-	-	-	-	-
Stage 2	176	-	-	-	-	-
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	786	1050	-	-	1471	-
Stage 1	996	-	-	-	-	-
Stage 2	852	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	786	1050	-	-	1471	-
Mov Cap-2 Maneuver	786	-	-	-	-	-
Stage 1	996	-	-	-	-	-
Stage 2	852	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.7	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	786	1471	-	
HCM Lane V/C Ratio	-	-	0.318	-	-	
HCM Control Delay (s)	-	-	11.7	0	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	1.4	0	-	

Intersection

Int Delay, s/veh 2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	112	16	235	205	6	86
Future Vol, veh/h	112	16	235	205	6	86
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	-	-	160	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	122	17	255	223	7	93

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	362	255	0
Stage 1	255	-	-
Stage 2	107	-	-
Critical Hdwy	6.43	6.23	-
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	-
Pot Cap-1 Maneuver	635	781	-
Stage 1	785	-	-
Stage 2	915	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	631	781	-
Mov Cap-2 Maneuver	631	-	-
Stage 1	785	-	-
Stage 2	909	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	647	1079
HCM Lane V/C Ratio	-	-	0.215	0.006
HCM Control Delay (s)	-	-	12.1	8.4
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.8	0

HCM 6th TWSC
75: 10th St/Allisonville Rd & 191st St

Future AM Peak

Intersection						
Int Delay, s/veh	5.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T	T		T
Traffic Vol, veh/h	231	0	22	81	0	165
Future Vol, veh/h	231	0	22	81	0	165
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	-	-	160	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	251	0	24	88	0	179
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	203	24	0	0	112	0
Stage 1	24	-	-	-	-	-
Stage 2	179	-	-	-	-	-
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	783	1050	-	-	1471	-
Stage 1	996	-	-	-	-	-
Stage 2	850	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	783	1050	-	-	1471	-
Mov Cap-2 Maneuver	783	-	-	-	-	-
Stage 1	996	-	-	-	-	-
Stage 2	850	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.8	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	783	1471	-	
HCM Lane V/C Ratio	-	-	0.321	-	-	
HCM Control Delay (s)	-	-	11.8	0	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	1.4	0	-	

HCM 6th TWSC
75: 10th St/Allisonville Rd & 191st St

Future PM Peak

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	112	16	237	205	6	89
Future Vol, veh/h	112	16	237	205	6	89
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	-	-	160	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	122	17	258	223	7	97
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	369	258	0	0	481	0
Stage 1	258	-	-	-	-	-
Stage 2	111	-	-	-	-	-
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	629	778	-	-	1076	-
Stage 1	783	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	625	778	-	-	1076	-
Mov Cap-2 Maneuver	625	-	-	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	905	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	12.2	0	0.5			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	641	1076	-	
HCM Lane V/C Ratio	-	-	0.217	0.006	-	
HCM Control Delay (s)	-	-	12.2	8.4	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.8	0	-	

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	648	4	12	580	0	50
Future Vol, veh/h	648	4	12	580	0	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	185	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	704	4	13	630	0	54
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	708	0	1360	704
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	656	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	886	-	163	435
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	514	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	886	-	161	435
Mov Cap-2 Maneuver	-	-	-	-	161	-
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	506	-
Approach	EB		WB		NE	
HCM Control Delay, s	0		0.2		14.5	
HCM LOS	B					
Minor Lane/Major Mvmt	NELn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	435	-	-	886	-	
HCM Lane V/C Ratio	0.125	-	-	0.015	-	
HCM Control Delay (s)	14.5	-	-	9.1	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.4	-	-	0	-	

Intersection						
Int Delay, s/veh	2.2					
Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑	↗	↖	↑	↘	
Traffic Vol, veh/h	956	17	49	629	4	104
Future Vol, veh/h	956	17	49	629	4	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	185	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1039	18	53	684	4	113
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1057	0	1829	1039
Stage 1	-	-	-	-	1039	-
Stage 2	-	-	-	-	790	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	655	-	84	279
Stage 1	-	-	-	-	339	-
Stage 2	-	-	-	-	445	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	655	-	77	279
Mov Cap-2 Maneuver	-	-	-	-	77	-
Stage 1	-	-	-	-	339	-
Stage 2	-	-	-	-	409	-
Approach	EB		WB		NE	
HCM Control Delay, s	0		0.8		30.8	
HCM LOS	D					
Minor Lane/Major Mvmt	NELn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	254	-	-	655	-	
HCM Lane V/C Ratio	0.462	-	-	0.081	-	
HCM Control Delay (s)	30.8	-	-	11	-	
HCM Lane LOS	D	-	-	B	-	
HCM 95th %tile Q(veh)	2.3	-	-	0.3	-	

Intersection						
Int Delay, s/veh	1.9					
Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑	↗	↘	↑	↘↗	
Traffic Vol, veh/h	1584	4	12	895	2	51
Future Vol, veh/h	1584	4	12	895	2	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	185	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1722	4	13	973	2	55
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1726	0	2721	1722
Stage 1	-	-	-	-	1722	-
Stage 2	-	-	-	-	999	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	363	-	23	110
Stage 1	-	-	-	-	157	-
Stage 2	-	-	-	-	355	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	363	-	22	110
Mov Cap-2 Maneuver	-	-	-	-	22	-
Stage 1	-	-	-	-	157	-
Stage 2	-	-	-	-	342	-
Approach	EB		WB		NE	
HCM Control Delay, s	0		0.2		87.5	
HCM LOS	F					
Minor Lane/Major Mvmt	NELn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	96	-	-	363	-	
HCM Lane V/C Ratio	0.6	-	-	0.036	-	
HCM Control Delay (s)	87.5	-	-	15.3	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	2.8	-	-	0.1	-	

Intersection						
Int Delay, s/veh	34.4					
Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	1668	19	50	1729	5	105
Future Vol, veh/h	1668	19	50	1729	5	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	185	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1813	21	54	1879	5	114
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1834	0	3800	1813
Stage 1	-	-	-	-	1813	-
Stage 2	-	-	-	-	1987	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	330	-	~ 4	~ 97
Stage 1	-	-	-	-	142	-
Stage 2	-	-	-	-	116	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	330	-	~ 3	~ 97
Mov Cap-2 Maneuver	-	-	-	-	~ 3	-
Stage 1	-	-	-	-	142	-
Stage 2	-	-	-	-	97	-
Approach	EB		WB		NE	
HCM Control Delay, s	0		0.5		\$ 1109.4	
HCM LOS	F					
Minor Lane/Major Mvmt	NELn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	40	-	-	330	-	
HCM Lane V/C Ratio	2.989	-	-	0.165	-	
HCM Control Delay (s)	\$ 1109.4	-	-	18	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	13.3	-	-	0.6	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection					
Intersection Delay, s/veh 9.2					
Intersection LOS A					
Approach	EB		WB		NE
Entry Lanes	2		2		1
Conflicting Circle Lanes	2		2		2
Adj Approach Flow, veh/h	1726		986		57
Demand Flow Rate, veh/h	1778		1015		59
Vehicles Circulating, veh/h	13		2		1774
Vehicles Exiting, veh/h	1004		1831		17
Ped Vol Crossing Leg, #/h	0		0		0
Ped Cap Adj	1.000		1.000		1.000
Approach Delay, s/veh	10.8		6.1		15.5
Approach LOS	B		A		C
Lane	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LR
Assumed Moves	LT	TR	LT	TR	LR
RT Channelized					
Lane Util	0.470	0.530	0.470	0.530	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328
Entry Flow, veh/h	836	942	477	538	59
Cap Entry Lane, veh/h	1334	1405	1347	1418	314
Entry HV Adj Factor	0.971	0.971	0.971	0.971	0.966
Flow Entry, veh/h	811	915	463	522	57
Cap Entry, veh/h	1294	1364	1309	1377	304
V/C Ratio	0.627	0.671	0.354	0.379	0.188
Control Delay, s/veh	10.5	11.2	6.0	6.1	15.5
LOS	B	B	A	A	C
95th %tile Queue, veh	5	6	2	2	1

Intersection					
Intersection Delay, s/veh 13.4					
Intersection LOS B					
Approach	EB		WB		NE
Entry Lanes	2		2		1
Conflicting Circle Lanes	2		2		2
Adj Approach Flow, veh/h	1834		1933		119
Demand Flow Rate, veh/h	1889		1991		122
Vehicles Circulating, veh/h	56		5		1867
Vehicles Exiting, veh/h	1940		1984		78
Ped Vol Crossing Leg, #/h	0		0		0
Ped Cap Adj	1.000		1.000		1.000
Approach Delay, s/veh	13.2		13.0		23.7
Approach LOS	B		B		C
Lane	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LR
Assumed Moves	LT	TR	LT	TR	LR
RT Channelized					
Lane Util	0.470	0.530	0.470	0.530	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328
Entry Flow, veh/h	888	1001	936	1055	122
Cap Entry Lane, veh/h	1282	1354	1344	1414	290
Entry HV Adj Factor	0.970	0.971	0.970	0.971	0.975
Flow Entry, veh/h	862	972	908	1024	119
Cap Entry, veh/h	1244	1315	1304	1373	283
V/C Ratio	0.693	0.739	0.697	0.746	0.420
Control Delay, s/veh	12.6	13.7	12.3	13.6	23.7
LOS	B	B	B	B	C
95th %tile Queue, veh	6	7	6	8	2

HCM 6th Signalized Intersection Summary
77: Little Chicago Rd & SR 38

Existing AM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	339	80	155	344	43	107	113	112	136	431	332
Future Volume (veh/h)	15	339	80	155	344	43	107	113	112	136	431	332
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	16	368	87	168	374	47	116	123	122	148	468	361
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	314	423	522	367	586	1185	312	394	352	505	439	338
Arrive On Green	0.03	0.23	0.23	0.12	0.32	0.32	0.10	0.22	0.22	0.11	0.23	0.23
Sat Flow, veh/h	1767	1856	1572	1767	1856	2768	1767	1763	1572	1767	1897	1459
Grp Volume(v), veh/h	16	368	87	168	374	47	116	123	122	148	435	394
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1384	1767	1763	1572	1767	1763	1593
Q Serve(g_s), s	0.4	10.7	2.2	3.7	9.7	0.6	2.7	3.3	3.7	3.4	13.0	13.0
Cycle Q Clear(g_c), s	0.4	10.7	2.2	3.7	9.7	0.6	2.7	3.3	3.7	3.4	13.0	13.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.92
Lane Grp Cap(c), veh/h	314	423	522	367	586	1185	312	394	352	505	408	369
V/C Ratio(X)	0.05	0.87	0.17	0.46	0.64	0.04	0.37	0.31	0.35	0.29	1.07	1.07
Avail Cap(c_a), veh/h	517	430	528	414	586	1185	380	408	364	558	408	369
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	20.9	13.3	13.7	16.4	9.3	15.0	18.2	18.3	13.7	21.6	21.6
Incr Delay (d2), s/veh	0.1	17.1	0.1	0.9	2.3	0.0	0.7	0.4	0.6	0.3	63.0	66.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.0	0.7	1.3	3.8	0.1	0.9	1.2	1.2	1.2	11.7	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	38.0	13.4	14.6	18.8	9.3	15.7	18.6	18.9	14.0	84.5	87.8
LnGrp LOS	B	D	B	B	B	A	B	B	B	B	F	F
Approach Vol, veh/h	471				589				361			
Approach Delay, s/veh	32.7				16.8				17.8			
Approach LOS	C				B				B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	17.5	10.5	17.8	9.9	18.0	5.5	22.7				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	8.0	13.0	8.0	13.0	8.0	13.0	8.0	13.0				
Max Q Clear Time (g_c+l1), s	5.4	5.7	5.7	12.7	4.7	15.0	2.4	11.7				
Green Ext Time (p_c), s	0.1	0.7	0.1	0.1	0.1	0.0	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay	43.9											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary
77: Little Chicago Rd & SR 38

Existing PM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	212	471	114	171	310	113	130	467	280	110	299	100
Future Volume (veh/h)	212	471	114	171	310	113	130	467	280	110	299	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	230	512	124	186	337	123	141	508	304	120	325	109
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	426	565	624	307	531	1039	399	539	322	272	653	215
Arrive On Green	0.12	0.30	0.30	0.10	0.29	0.29	0.09	0.25	0.25	0.09	0.25	0.25
Sat Flow, veh/h	1767	1856	1572	1767	1856	2768	1767	2123	1267	1767	2605	859
Grp Volume(v), veh/h	230	512	124	186	337	123	141	422	390	120	218	216
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1384	1767	1763	1627	1767	1763	1701
Q Serve(g_s), s	6.3	18.8	3.7	5.1	11.2	2.1	4.0	16.6	16.7	3.4	7.5	7.7
Cycle Q Clear(g_c), s	6.3	18.8	3.7	5.1	11.2	2.1	4.0	16.6	16.7	3.4	7.5	7.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.78	1.00		0.50
Lane Grp Cap(c), veh/h	426	565	624	307	531	1039	399	447	413	272	442	426
V/C Ratio(X)	0.54	0.91	0.20	0.61	0.63	0.12	0.35	0.94	0.95	0.44	0.49	0.51
Avail Cap(c_a), veh/h	444	602	655	332	576	1106	435	447	413	313	447	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.7	23.7	14.0	17.7	22.1	14.5	17.1	26.0	26.0	18.7	22.7	22.8
Incr Delay (d2), s/veh	1.2	16.9	0.2	2.8	2.0	0.1	0.5	28.5	30.7	1.1	0.9	0.9
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(50%),veh/ln	2.4	10.0	1.2	2.1	4.7	0.6	1.5	9.7	9.2	1.3	2.9	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.9	40.6	14.2	20.4	24.1	14.5	17.7	54.4	56.7	19.9	23.6	23.7
LnGrp LOS	B	D	B	C	C	B	B	D	E	B	C	C
Approach Vol, veh/h	866			646			953			554		
Approach Delay, s/veh	30.5			21.2			49.9			22.8		
Approach LOS	C			C			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	23.0	11.0	26.6	10.6	22.8	12.3	25.3				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	8.0	18.0	8.0	23.0	8.0	18.0	9.0	22.0				
Max Q Clear Time (g_c+I1), s	5.4	18.7	7.1	20.8	6.0	9.7	8.3	13.2				
Green Ext Time (p_c), s	0.1	0.0	0.0	0.8	0.1	1.5	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay	33.2											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary 77: Little Chicago Rd & SR 38

Future AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	977	102	191	566	45	119	125	175	149	480	344
Future Volume (veh/h)	21	977	102	191	566	45	119	125	175	149	480	344
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	1062	111	208	615	49	129	136	190	162	522	374
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	51	928	870	177	1060	1817	142	344	306	286	445	318
Arrive On Green	0.03	0.50	0.50	0.10	0.57	0.57	0.05	0.19	0.19	0.09	0.23	0.23
Sat Flow, veh/h	1767	1856	1572	1767	1856	2768	1767	1763	1572	1767	1961	1404
Grp Volume(v), veh/h	23	1062	111	208	615	49	129	136	190	162	469	427
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1384	1767	1763	1572	1767	1763	1603
Q Serve(g_s), s	1.9	75.0	5.1	15.0	31.9	0.9	8.0	10.1	16.6	10.7	34.0	34.0
Cycle Q Clear(g_c), s	1.9	75.0	5.1	15.0	31.9	0.9	8.0	10.1	16.6	10.7	34.0	34.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.88
Lane Grp Cap(c), veh/h	51	928	870	177	1060	1817	142	344	306	286	400	363
V/C Ratio(X)	0.45	1.14	0.13	1.18	0.58	0.03	0.91	0.40	0.62	0.57	1.17	1.18
Avail Cap(c_a), veh/h	94	928	870	177	1060	1817	142	344	306	313	400	363
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.7	37.5	16.1	67.5	20.6	9.0	50.7	52.7	55.3	42.6	58.0	58.0
Incr Delay (d2), s/veh	6.2	77.9	0.1	123.4	0.8	0.0	48.7	0.7	3.8	2.0	101.7	104.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	52.6	1.8	12.8	13.6	0.3	5.8	4.5	6.8	4.8	26.2	24.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.8	115.4	16.2	190.9	21.4	9.0	99.4	53.4	59.1	44.6	159.7	162.0
LnGrp LOS	E	F	B	F	C	A	F	D	E	D	F	F
Approach Vol, veh/h	1196				872				455			
Approach Delay, s/veh	105.5				61.1				68.8			
Approach LOS	F				E				E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.8	34.2	19.0	80.0	12.0	39.0	8.3	90.7				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	15.0	27.0	15.0	75.0	8.0	34.0	8.0	82.0				
Max Q Clear Time (g_c+l1), s	12.7	18.6	17.0	77.0	10.0	36.0	3.9	33.9				
Green Ext Time (p_c), s	0.1	1.1	0.0	0.0	0.0	0.0	0.0	4.6				
Intersection Summary												
HCM 6th Ctrl Delay	101.1											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary
77: Little Chicago Rd & SR 38

Future PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	951	132	246	1049	123	157	527	345	118	330	109
Future Volume (veh/h)	230	951	132	246	1049	123	157	527	345	118	330	109
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	250	1034	143	267	1140	134	171	573	375	128	359	118
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	212	891	881	224	903	1494	247	449	294	142	506	164
Arrive On Green	0.12	0.48	0.48	0.13	0.49	0.49	0.08	0.22	0.22	0.05	0.19	0.19
Sat Flow, veh/h	1767	1856	1572	1767	1856	2768	1767	2042	1336	1767	2618	848
Grp Volume(v), veh/h	250	1034	143	267	1140	134	171	495	453	128	240	237
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1384	1767	1763	1615	1767	1763	1703
Q Serve(g_s), s	18.0	72.0	6.6	19.0	73.0	3.5	11.5	33.0	33.0	8.0	19.1	19.6
Cycle Q Clear(g_c), s	18.0	72.0	6.6	19.0	73.0	3.5	11.5	33.0	33.0	8.0	19.1	19.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.83	1.00		0.50
Lane Grp Cap(c), veh/h	212	891	881	224	903	1494	247	388	355	142	341	329
V/C Ratio(X)	1.18	1.16	0.16	1.19	1.26	0.09	0.69	1.28	1.28	0.90	0.70	0.72
Avail Cap(c_a), veh/h	212	891	881	224	903	1494	247	388	355	142	341	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.0	39.0	16.0	65.5	38.5	16.7	44.2	58.5	58.5	50.7	56.5	56.7
Incr Delay (d2), s/veh	118.5	84.9	0.1	122.1	127.0	0.0	8.1	142.7	144.3	46.9	6.4	7.4
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(50%),veh/ln	15.0	52.4	2.4	16.1	63.6	1.1	5.5	29.8	27.4	5.7	9.0	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	184.5	123.9	16.1	187.6	165.5	16.7	52.2	201.2	202.8	97.6	62.9	64.1
LnGrp LOS	F	F	B	F	F	B	D	F	F	F	E	E
Approach Vol, veh/h	1427			1541			1119			605		
Approach Delay, s/veh	123.7			156.4			179.1			70.7		
Approach LOS	F			F			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	38.0	23.0	77.0	16.0	34.0	22.0	78.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	8.0	33.0	19.0	72.0	12.0	29.0	18.0	73.0				
Max Q Clear Time (g_c+I1), s	10.0	35.0	21.0	74.0	13.5	21.6	20.0	75.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			140.8									
HCM 6th LOS			F									

HCM 6th Signalized Intersection Summary

77: Little Chicago Rd & SR 38

Future AM Peak
Mitigated - Final



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	977	102	191	566	45	119	125	175	149	480	344
Future Volume (veh/h)	21	977	102	191	566	45	119	125	175	149	480	344
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	1062	111	208	615	49	129	136	190	162	522	374
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	60	1142	629	240	1501	1421	216	876	604	465	511	366
Arrive On Green	0.03	0.32	0.32	0.14	0.43	0.43	0.08	0.25	0.25	0.09	0.26	0.26
Sat Flow, veh/h	1767	3526	1572	1767	3526	2768	1767	3526	1572	1767	1961	1404
Grp Volume(v), veh/h	23	1062	111	208	615	49	129	136	190	162	469	427
Grp Sat Flow(s),veh/h/ln	1767	1763	1572	1767	1763	1384	1767	1763	1572	1767	1763	1603
Q Serve(g_s), s	1.1	25.7	4.0	10.2	10.7	0.8	4.7	2.7	7.5	5.9	23.0	23.0
Cycle Q Clear(g_c), s	1.1	25.7	4.0	10.2	10.7	0.8	4.7	2.7	7.5	5.9	23.0	23.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.88
Lane Grp Cap(c), veh/h	60	1142	629	240	1501	1421	216	876	604	465	459	417
V/C Ratio(X)	0.38	0.93	0.18	0.87	0.41	0.03	0.60	0.16	0.31	0.35	1.02	1.02
Avail Cap(c_a), veh/h	160	1158	636	240	1501	1421	242	918	623	470	459	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	28.9	17.1	37.4	17.6	10.6	24.5	25.9	19.0	21.5	32.7	32.7
Incr Delay (d2), s/veh	3.9	12.9	0.1	26.6	0.2	0.0	3.3	0.1	0.3	0.4	47.6	49.9
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(50%),veh/ln	0.5	12.1	1.4	6.0	4.0	0.2	2.0	1.1	2.6	2.4	15.3	14.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.6	41.8	17.2	64.0	17.8	10.6	27.8	26.0	19.3	21.9	80.3	82.6
LnGrp LOS	D	D	B	E	B	B	C	C	B	C	F	F
Approach Vol, veh/h	1196			872			455			1058		
Approach Delay, s/veh	39.6			28.4			23.7			72.3		
Approach LOS	D			C			C			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	1.8	26.9	16.0	33.6	10.7	28.0	7.0	42.6				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	3.0	23.0	12.0	29.0	8.0	23.0	8.0	33.0				
Max Q Clear Time (g_c+1/9), s	9.5	9.5	12.2	27.7	6.7	25.0	3.1	12.7				
Green Ext Time (p_c), s	0.0	1.1	0.0	0.9	0.0	0.0	0.0	4.0				

Intersection Summary

HCM 6th Ctrl Delay, s/veh 44.5
HCM 6th LOS D

HCM 6th Signalized Intersection Summary 77: Little Chicago Rd & SR 38

Future PM Peak
Mitigated - Final



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	951	132	246	1049	123	157	527	345	118	330	109
Future Volume (veh/h)	230	951	132	246	1049	123	157	527	345	118	330	109
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	250	1034	143	267	1140	134	171	573	375	128	359	118
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	270	1164	677	293	1209	1181	307	674	561	260	456	148
Arrive On Green	0.15	0.33	0.33	0.17	0.34	0.34	0.10	0.19	0.19	0.08	0.17	0.17
Sat Flow, veh/h	1767	3526	1572	1767	3526	2768	1767	3526	1572	1767	2618	848
Grp Volume(v), veh/h	250	1034	143	267	1140	134	171	573	375	128	240	237
Grp Sat Flow(s),veh/h/ln	1767	1763	1572	1767	1763	1384	1767	1763	1572	1767	1763	1703
Q Serve(g_s), s	11.0	21.8	4.5	11.7	24.6	2.3	6.1	12.3	15.0	4.5	10.2	10.5
Cycle Q Clear(g_c), s	11.0	21.8	4.5	11.7	24.6	2.3	6.1	12.3	15.0	4.5	10.2	10.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	270	1164	677	293	1209	1181	307	674	561	260	307	297
V/C Ratio(X)	0.93	0.89	0.21	0.91	0.94	0.11	0.56	0.85	0.67	0.49	0.78	0.80
Avail Cap(c_a), veh/h	270	1168	679	293	1213	1184	309	674	561	292	337	325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	24.9	14.0	32.2	25.0	13.6	23.7	30.7	21.3	24.3	31.0	31.1
Incr Delay (d2), s/veh	35.4	8.6	0.2	30.9	14.3	0.0	2.2	10.1	3.0	1.4	10.4	12.2
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(50%),veh/ln	7.1	9.6	1.5	7.2	11.7	0.7	2.5	5.8	5.7	1.9	5.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.2	33.5	14.1	63.1	39.4	13.6	25.9	40.8	24.4	25.7	41.4	43.3
LnGrp LOS	E	C	B	E	D	B	C	D	C	C	D	D
Approach Vol, veh/h	1427					1541		1119		605		
Approach Delay, s/veh	37.7					41.2		33.0		38.8		
Approach LOS	D					D		C		D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.0	20.0	17.0	30.9	11.9	18.7	16.0	31.9				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	15.0	15.0	13.0	26.0	8.0	15.0	12.0	27.0				
Max Q Clear Time (g_c+I), s	17.0	17.0	13.7	23.8	8.1	12.5	13.0	26.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.4	0.0	0.7	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			37.9									
HCM 6th LOS			D									

Intersection

Intersection Delay, s/veh 14

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	67	12	25	411	59	46	50	18	0	46	8
Future Vol, veh/h	2	67	12	25	411	59	46	50	18	0	46	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	73	13	27	447	64	50	54	20	0	50	9
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	8.8	16.3	9.8	9.1
HCM LOS	A	C	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	40%	2%	5%	0%
Vol Thru, %	44%	83%	83%	85%
Vol Right, %	16%	15%	12%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	114	81	495	54
LT Vol	46	2	25	0
Through Vol	50	67	411	46
RT Vol	18	12	59	8
Lane Flow Rate	124	88	538	59
Geometry Grp	1	1	1	1
Degree of Util (X)	0.188	0.122	0.671	0.09
Departure Headway (Hd)	5.462	4.971	4.49	5.5
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	651	714	802	644
Service Time	3.548	3.051	2.541	3.596
HCM Lane V/C Ratio	0.19	0.123	0.671	0.092
HCM Control Delay	9.8	8.8	16.3	9.1
HCM Lane LOS	A	A	C	A
HCM 95th-tile Q	0.7	0.4	5.3	0.3

Intersection

Intersection Delay, s/veh15.9

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	401	30	44	191	14	26	60	79	34	71	9
Future Vol, veh/h	13	401	30	44	191	14	26	60	79	34	71	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	14	436	33	48	208	15	28	65	86	37	77	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	20.4	12.9	11.6	11.3
HCM LOS	C	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	3%	18%	30%
Vol Thru, %	36%	90%	77%	62%
Vol Right, %	48%	7%	6%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	165	444	249	114
LT Vol	26	13	44	34
Through Vol	60	401	191	71
RT Vol	79	30	14	9
Lane Flow Rate	179	483	271	124
Geometry Grp	1	1	1	1
Degree of Util (X)	0.298	0.711	0.425	0.22
Departure Headway (Hd)	5.984	5.305	5.651	6.378
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	595	680	633	559
Service Time	4.065	3.363	3.721	4.465
HCM Lane V/C Ratio	0.301	0.71	0.428	0.222
HCM Control Delay	11.6	20.4	12.9	11.3
HCM Lane LOS	B	C	B	B
HCM 95th-tile Q	1.2	5.9	2.1	0.8

Intersection

Intersection Delay, s/veh23.5

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	90	13	52	487	63	50	58	22	3	55	10
Future Vol, veh/h	2	90	13	52	487	63	50	58	22	3	55	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	98	14	57	529	68	54	63	24	3	60	11
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	9.6	30.2	10.9	10
HCM LOS	A	D	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	38%	2%	9%	4%
Vol Thru, %	45%	86%	81%	81%
Vol Right, %	17%	12%	10%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	105	602	68
LT Vol	50	2	52	3
Through Vol	58	90	487	55
RT Vol	22	13	63	10
Lane Flow Rate	141	114	654	74
Geometry Grp	1	1	1	1
Degree of Util (X)	0.235	0.171	0.866	0.125
Departure Headway (Hd)	5.989	5.407	4.765	6.084
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	599	663	766	588
Service Time	4.036	3.447	2.765	4.137
HCM Lane V/C Ratio	0.235	0.172	0.854	0.126
HCM Control Delay	10.9	9.6	30.2	10
HCM Lane LOS	B	A	D	A
HCM 95th-tile Q	0.9	0.6	10.6	0.4

Intersection

Intersection Delay, s/veh31.4

Intersection LOS D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	482	34	58	245	21	27	72	97	37	83	10
Future Vol, veh/h	15	482	34	58	245	21	27	72	97	37	83	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	524	37	63	266	23	29	78	105	40	90	11
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	49.3	19.4	14.6	13.5
HCM LOS	E	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	3%	18%	28%
Vol Thru, %	37%	91%	76%	64%
Vol Right, %	49%	6%	6%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	196	531	324	130
LT Vol	27	15	58	37
Through Vol	72	482	245	83
RT Vol	97	34	21	10
Lane Flow Rate	213	577	352	141
Geometry Grp	1	1	1	1
Degree of Util (X)	0.406	0.949	0.621	0.29
Departure Headway (Hd)	6.869	5.919	6.347	7.39
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	522	612	567	483
Service Time	4.949	3.977	4.418	5.479
HCM Lane V/C Ratio	0.408	0.943	0.621	0.292
HCM Control Delay	14.6	49.3	19.4	13.5
HCM Lane LOS	B	E	C	B
HCM 95th-tile Q	2	12.8	4.2	1.2

Intersection						
Intersection Delay, s/veh 5.9						
Intersection LOS A						
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	190	130	270		809	
Demand Flow Rate, veh/h	196	134	278		833	
Vehicles Circulating, veh/h	522	440	168		173	
Vehicles Exiting, veh/h	484	6	550		401	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	6.3	5.1	4.1		6.5	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.471	0.529	0.471	0.529
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	196	134	131	147	392	441
Cap Entry Lane, veh/h	911	977	1157	1231	1151	1226
Entry HV Adj Factor	0.969	0.970	0.969	0.974	0.970	0.972
Flow Entry, veh/h	190	130	127	143	380	429
Cap Entry, veh/h	883	948	1121	1199	1116	1191
V/C Ratio	0.215	0.137	0.113	0.119	0.341	0.360
Control Delay, s/veh	6.3	5.1	4.2	4.0	6.6	6.5
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	0	2	2

Intersection						
Intersection Delay, s/veh 9.0						
Intersection LOS A						
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	548	67	735		682	
Demand Flow Rate, veh/h	565	69	757		702	
Vehicles Circulating, veh/h	510	1110	493		114	
Vehicles Exiting, veh/h	306	140	582		1065	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	13.3	8.3	9.2		5.5	
Approach LOS	B	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	565	69	356	401	330	372
Cap Entry Lane, veh/h	921	553	858	934	1215	1289
Entry HV Adj Factor	0.971	0.973	0.970	0.971	0.972	0.972
Flow Entry, veh/h	548	67	345	389	321	362
Cap Entry, veh/h	893	538	832	907	1181	1253
V/C Ratio	0.614	0.125	0.415	0.429	0.272	0.289
Control Delay, s/veh	13.3	8.3	9.4	9.1	5.5	5.5
LOS	B	A	A	A	A	A
95th %tile Queue, veh	4	0	2	2	1	1

HCM 6th Roundabout
79: Little Chicago Rd & 191st St/Maple Grove Way

Future AM Peak

Intersection						
Intersection Delay, s/veh 7.3						
Intersection LOS A						
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	282	130	398		940	
Demand Flow Rate, veh/h	290	134	410		968	
Vehicles Circulating, veh/h	605	583	179		267	
Vehicles Exiting, veh/h	630	6	716		450	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	8.3	5.8	4.7		8.3	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.471	0.529	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	290	134	193	217	455	513
Cap Entry Lane, veh/h	849	865	1145	1220	1056	1132
Entry HV Adj Factor	0.972	0.970	0.969	0.972	0.971	0.971
Flow Entry, veh/h	282	130	187	211	442	498
Cap Entry, veh/h	825	839	1110	1186	1026	1099
V/C Ratio	0.342	0.155	0.169	0.178	0.431	0.453
Control Delay, s/veh	8.3	5.8	4.7	4.6	8.3	8.2
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	1	1	1	2	2

HCM 6th Roundabout
79: Little Chicago Rd & 191st St/Maple Grove Way

Future PM Peak

Intersection						
Intersection Delay, s/veh 17.5						
Intersection LOS C						
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	756	67	996		784	
Demand Flow Rate, veh/h	779	69	1026		807	
Vehicles Circulating, veh/h	585	1434	548		259	
Vehicles Exiting, veh/h	481	140	816		1244	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	34.0	11.4	13.7		7.1	
Approach LOS	D	B	B		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	779	69	482	544	379	428
Cap Entry Lane, veh/h	864	420	815	891	1064	1139
Entry HV Adj Factor	0.971	0.973	0.971	0.971	0.972	0.971
Flow Entry, veh/h	756	67	468	528	368	416
Cap Entry, veh/h	839	408	792	865	1034	1106
V/C Ratio	0.902	0.164	0.591	0.610	0.356	0.376
Control Delay, s/veh	34.0	11.4	13.9	13.5	7.2	7.1
LOS	D	B	B	B	A	A
95th %tile Queue, veh	12	1	4	4	2	2

HCM 6th Signalized Intersection Summary
80: Gretna Green Ln/S Harbour Dr & SR 38

Existing AM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	623	0	1	364	59	13	0	23	112	0	87
Future Volume (veh/h)	31	623	0	1	364	59	13	0	23	112	0	87
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	34	677	0	1	396	64	14	0	25	122	0	95
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	462	830	0	286	830	703	236	51	284	596	0	460
Arrive On Green	0.45	0.45	0.00	0.45	0.45	0.45	0.29	0.00	0.29	0.29	0.00	0.29
Sat Flow, veh/h	924	1856	0	756	1856	1572	371	174	973	1375	0	1572
Grp Volume(v), veh/h	34	677	0	1	396	64	39	0	0	122	0	95
Grp Sat Flow(s),veh/h/ln	924	1856	0	756	1856	1572	1518	0	0	1375	0	1572
Q Serve(g_s), s	1.0	12.2	0.0	0.0	5.8	0.9	0.0	0.0	0.0	1.8	0.0	1.7
Cycle Q Clear(g_c), s	6.8	12.2	0.0	12.2	5.8	0.9	0.7	0.0	0.0	2.4	0.0	1.7
Prop In Lane	1.00		0.00	1.00		1.00	0.36		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	462	830	0	286	830	703	571	0	0	596	0	460
V/C Ratio(X)	0.07	0.82	0.00	0.00	0.48	0.09	0.07	0.00	0.00	0.20	0.00	0.21
Avail Cap(c_a), veh/h	603	1112	0	401	1112	942	601	0	0	624	0	492
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.8	9.2	0.0	14.6	7.5	6.1	9.8	0.0	0.0	10.4	0.0	10.2
Incr Delay (d2), s/veh	0.1	3.6	0.0	0.0	0.4	0.1	0.0	0.0	0.0	0.2	0.0	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(50%),veh/ln	0.2	3.6	0.0	0.0	1.4	0.2	0.2	0.0	0.0	0.7	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.9	12.8	0.0	14.6	7.9	6.2	9.9	0.0	0.0	10.6	0.0	10.4
LnGrp LOS	A	B	A	B	A	A	A	A	A	B	A	B
Approach Vol, veh/h												
711												
Approach Delay, s/veh												
12.7												
Approach LOS												
B												
Timer - Assigned Phs												
2												
4												
6												
8												
Phs Duration (G+Y+Rc), s												
16.2												
22.2												
16.2												
22.2												
Change Period (Y+Rc), s												
5.0												
5.0												
5.0												
Max Green Setting (Gmax), s												
12.0												
23.0												
12.0												
23.0												
Max Q Clear Time (g_c+l1), s												
2.7												
14.2												
4.4												
14.2												
Green Ext Time (p_c), s												
0.1												
3.0												
0.5												
1.6												
Intersection Summary												
HCM 6th Ctrl Delay												
10.6												
HCM 6th LOS												
B												

HCM 6th Signalized Intersection Summary
80: Gretna Green Ln/S Harbour Dr & SR 38

Existing PM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	834	7	20	571	143	10	0	6	114	0	43
Future Volume (veh/h)	63	834	7	20	571	143	10	0	6	114	0	43
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	68	907	8	22	621	155	11	0	7	124	0	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	396	1062	9	245	1073	910	287	27	126	457	0	349
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.22	0.00	0.22	0.22	0.00	0.22
Sat Flow, veh/h	690	1836	16	605	1856	1572	773	120	569	1397	0	1572
Grp Volume(v), veh/h	68	0	915	22	621	155	18	0	0	124	0	47
Grp Sat Flow(s),veh/h/ln	690	0	1853	605	1856	1572	1462	0	0	1397	0	1572
Q Serve(g_s), s	3.5	0.0	20.6	1.6	10.6	2.3	0.0	0.0	0.0	3.3	0.0	1.2
Cycle Q Clear(g_c), s	14.1	0.0	20.6	22.2	10.6	2.3	0.4	0.0	0.0	3.7	0.0	1.2
Prop In Lane	1.00		0.01	1.00		1.00	0.61		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	396	0	1072	245	1073	910	440	0	0	457	0	349
V/C Ratio(X)	0.17	0.00	0.85	0.09	0.58	0.17	0.04	0.00	0.00	0.27	0.00	0.13
Avail Cap(c_a), veh/h	520	0	1404	353	1406	1192	465	0	0	481	0	376
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	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.2	0.0	8.8	18.0	6.7	4.9	15.3	0.0	0.0	16.6	0.0	15.6
Incr Delay (d2), s/veh	0.2	0.0	4.2	0.2	0.5	0.1	0.0	0.0	0.0	0.3	0.0	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(50%),veh/ln	0.4	0.0	5.8	0.2	2.5	0.5	0.2	0.0	0.0	1.1	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.4	0.0	13.0	18.2	7.2	5.0	15.4	0.0	0.0	16.9	0.0	15.8
LnGrp LOS	B	A	B	B	A	A	B	A	A	B	A	B
Approach Vol, veh/h	983		798			18			171			
Approach Delay, s/veh	12.9		7.1			15.4			16.6			
Approach LOS	B		A			B			B			
Timer - Assigned Phs	2		4			6			8			
Phs Duration (G+Y+Rc), s	16.1		34.0			16.1			34.0			
Change Period (Y+Rc), s	5.0		5.0			5.0			5.0			
Max Green Setting (Gmax), s	12.0		38.0			12.0			38.0			
Max Q Clear Time (g_c+I1), s	2.4		22.6			5.7			24.2			
Green Ext Time (p_c), s	0.0		6.4			0.3			3.9			
Intersection Summary												
HCM 6th Ctrl Delay			10.9									
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary 80: Gretna Green Ln/S Harbour Dr & SR 38

Future AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1560	0	1	679	59	13	0	23	112	0	87
Future Volume (veh/h)	31	1560	0	1	679	59	13	0	23	112	0	87
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	34	1696	0	1	738	64	14	0	25	122	0	95
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	557	1583	0	48	1583	1342	44	13	43	135	0	126
Arrive On Green	0.85	0.85	0.00	0.85	0.85	0.85	0.08	0.00	0.08	0.08	0.00	0.08
Sat Flow, veh/h	673	1856	0	287	1856	1572	136	165	539	1375	0	1572
Grp Volume(v), veh/h	34	1696	0	1	738	64	39	0	0	122	0	95
Grp Sat Flow(s),veh/h/ln	673	1856	0	287	1856	1572	841	0	0	1375	0	1572
Q Serve(g_s), s	1.9	128.0	0.0	0.0	14.5	0.9	0.2	0.0	0.0	3.0	0.0	8.9
Cycle Q Clear(g_c), s	16.5	128.0	0.0	128.0	14.5	0.9	9.0	0.0	0.0	12.0	0.0	8.9
Prop In Lane	1.00		0.00	1.00		1.00	0.36		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	557	1583	0	48	1583	1342	100	0	0	135	0	126
V/C Ratio(X)	0.06	1.07	0.00	0.02	0.47	0.05	0.39	0.00	0.00	0.90	0.00	0.76
Avail Cap(c_a), veh/h	557	1583	0	48	1583	1342	100	0	0	135	0	126
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.7	11.0	0.0	75.0	2.7	1.7	65.1	0.0	0.0	71.0	0.0	67.6
Incr Delay (d2), s/veh	0.0	44.4	0.0	0.2	0.2	0.0	2.5	0.0	0.0	49.7	0.0	22.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	49.5	0.0	0.0	3.5	0.2	1.5	0.0	0.0	6.6	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.7	55.4	0.0	75.2	2.9	1.7	67.6	0.0	0.0	120.8	0.0	90.1
LnGrp LOS	A	F	A	E	A	A	E	A	A	F	A	F
Approach Vol, veh/h	1730		803			39			217			
Approach Delay, s/veh	54.4		2.9			67.6			107.3			
Approach LOS	D		A			E			F			
Timer - Assigned Phs	2		4			6			8			
Phs Duration (G+Y+Rc), s	17.0		133.0			17.0			133.0			
Change Period (Y+Rc), s	5.0		5.0			5.0			5.0			
Max Green Setting (Gmax), s	12.0		128.0			12.0			128.0			
Max Q Clear Time (g_c+I1), s	11.0		130.0			14.0			130.0			
Green Ext Time (p_c), s	0.0		0.0			0.0			0.0			
Intersection Summary												
HCM 6th Ctrl Delay	43.8											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary 80: Gretna Green Ln/S Harbour Dr & SR 38

Future PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	1547	7	20	1672	143	10	0	6	114	0	43
Future Volume (veh/h)	63	1547	7	20	1672	143	10	0	6	114	0	43
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	68	1682	8	22	1817	155	11	0	7	124	0	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	48	1575	7	48	1583	1342	84	9	34	167	0	126
Arrive On Green	0.85	0.85	0.85	0.85	0.85	0.85	0.08	0.00	0.08	0.08	0.00	0.08
Sat Flow, veh/h	220	1845	9	289	1856	1572	563	112	430	1397	0	1572
Grp Volume(v), veh/h	68	0	1690	22	1817	155	18	0	0	124	0	47
Grp Sat Flow(s),veh/h/ln	220	0	1854	289	1856	1572	1105	0	0	1397	0	1572
Q Serve(g_s), s	0.0	0.0	128.0	0.0	128.0	2.4	0.3	0.0	0.0	7.5	0.0	4.3
Cycle Q Clear(g_c), s	128.0	0.0	128.0	128.0	128.0	2.4	4.5	0.0	0.0	12.0	0.0	4.3
Prop In Lane	1.00		0.00	1.00		1.00	0.61		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	48	0	1582	48	1583	1342	127	0	0	167	0	126
V/C Ratio(X)	1.42	0.00	1.07	0.46	1.15	0.12	0.14	0.00	0.00	0.74	0.00	0.37
Avail Cap(c_a), veh/h	48	0	1582	48	1583	1342	127	0	0	167	0	126
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	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	75.0	0.0	11.0	75.0	11.0	1.8	64.5	0.0	0.0	69.0	0.0	65.4
Incr Delay (d2), s/veh	274.6	0.0	43.3	6.7	74.3	0.0	0.5	0.0	0.0	16.3	0.0	1.8
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(50%),veh/ln	5.5	0.0	48.9	0.9	62.6	0.5	0.7	0.0	0.0	5.6	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	349.6	0.0	54.3	81.7	85.3	1.8	65.0	0.0	0.0	85.3	0.0	67.3
LnGrp LOS	F	A	F	F	F	A	E	A	A	F	A	E
Approach Vol, veh/h	1758					1994		18		171		
Approach Delay, s/veh	65.7					78.8		65.0		80.4		
Approach LOS	E					E		E		F		
Timer - Assigned Phs	2		4			6		8				
Phs Duration (G+Y+Rc), s	17.0		133.0			17.0		133.0				
Change Period (Y+Rc), s	5.0		5.0			5.0		5.0				
Max Green Setting (Gmax), s	12.0		128.0			12.0		128.0				
Max Q Clear Time (g_c+I1), s	6.5		130.0			14.0		130.0				
Green Ext Time (p_c), s	0.0		0.0			0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			73.0									
HCM 6th LOS			E									

HCM 6th Signalized Intersection Summary 80: Gretna Green Ln/S Harbour Dr & SR 38

Future AM Peak
Mitigated - Final



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1560	0	1	679	59	13	0	23	112	0	87
Future Volume (veh/h)	31	1560	0	1	679	59	13	0	23	112	0	87
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	34	1696	0	1	738	64	14	0	25	122	0	95
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	456	2051	0	195	2051	915	179	38	219	456	0	355
Arrive On Green	0.58	0.58	0.00	0.58	0.58	0.58	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	673	3618	0	287	3526	1572	376	169	972	1375	0	1572
Grp Volume(v), veh/h	34	1696	0	1	738	64	39	0	0	122	0	95
Grp Sat Flow(s),veh/h/ln	673	1763	0	287	1763	1572	1516	0	0	1375	0	1572
Q Serve(g_s), s	1.5	20.1	0.0	0.1	5.7	0.9	0.0	0.0	0.0	2.6	0.0	2.6
Cycle Q Clear(g_c), s	7.2	20.1	0.0	20.3	5.7	0.9	1.0	0.0	0.0	3.6	0.0	2.6
Prop In Lane	1.00		0.00	1.00		1.00	0.36		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	456	2051	0	195	2051	915	436	0	0	456	0	355
V/C Ratio(X)	0.07	0.83	0.00	0.01	0.36	0.07	0.09	0.00	0.00	0.27	0.00	0.27
Avail Cap(c_a), veh/h	492	2242	0	210	2242	1000	445	0	0	464	0	364
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	8.7	0.0	16.9	5.7	4.7	15.9	0.0	0.0	16.9	0.0	16.6
Incr Delay (d2), s/veh	0.1	2.5	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.3	0.0	0.4
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(50%),veh/ln	0.2	5.1	0.0	0.0	1.3	0.2	0.3	0.0	0.0	1.2	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.7	11.3	0.0	16.9	5.8	4.8	16.0	0.0	0.0	17.2	0.0	17.0
LnGrp LOS	A	B		B	A	A	B			B		B
Approach Vol, veh/h	1730		803			39			217			
Approach Delay, s/veh	11.2		5.8			16.0			17.1			
Approach LOS	B		A			B			B			
Timer - Assigned Phs	2		4			6			8			
Phs Duration (G+Y+Rc), s	16.7		35.2			16.7			35.2			
Change Period (Y+Rc), s	5.0		5.0			5.0			5.0			
Max Green Setting (Gmax), s	12.0		33.0			12.0			33.0			
Max Q Clear Time (g_c+I1), s	3.0		22.1			5.6			22.3			
Green Ext Time (p_c), s	0.1		8.1			0.5			3.7			
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			10.2									
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary 80: Gretna Green Ln/S Harbour Dr & SR 38

Future PM Peak
Mitigated - Final



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	1547	7	20	1672	143	10	0	6	114	0	43
Future Volume (veh/h)	63	1547	7	20	1672	143	10	0	6	114	0	43
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	68	1682	8	22	1817	155	11	0	7	124	0	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	177	2278	11	213	2232	996	248	23	110	406	0	308
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.20	0.00	0.20	0.20	0.00	0.20
Sat Flow, veh/h	220	3598	17	289	3526	1572	762	117	559	1397	0	1572
Grp Volume(v), veh/h	68	824	866	22	1817	155	18	0	0	124	0	47
Grp Sat Flow(s),veh/h/ln	220	1763	1852	289	1763	1572	1439	0	0	1397	0	1572
Q Serve(g_s), s	14.2	18.8	18.8	3.3	22.8	2.3	0.0	0.0	0.0	2.7	0.0	1.4
Cycle Q Clear(g_c), s	37.0	18.8	18.8	22.2	22.8	2.3	1.5	0.0	0.0	4.2	0.0	1.4
Prop In Lane	1.00		0.01	1.00		1.00	0.61		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	177	1116	1173	213	2232	996	381	0	0	406	0	308
V/C Ratio(X)	0.39	0.74	0.74	0.10	0.81	0.16	0.05	0.00	0.00	0.31	0.00	0.15
Avail Cap(c_a), veh/h	177	1116	1173	213	2232	996	419	0	0	443	0	350
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	7.4	7.4	15.0	8.1	4.4	19.1	0.0	0.0	20.5	0.0	19.5
Incr Delay (d2), s/veh	1.4	2.6	2.5	0.2	2.4	0.1	0.1	0.0	0.0	0.4	0.0	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(50%),veh/ln	0.9	4.9	5.1	0.2	5.7	0.5	0.2	0.0	0.0	1.4	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.0	10.0	9.9	15.2	10.5	4.4	19.1	0.0	0.0	20.9	0.0	19.7
LnGrp LOS	C	B	A	B	B	A	B			C		B
Approach Vol, veh/h	1758					1994		18		171		
Approach Delay, s/veh	10.5					10.1		19.1		20.6		
Approach LOS	B					B		B		C		
Timer - Assigned Phs	2		4			6		8				
Phs Duration (G+Y+Rc), s	16.4		42.0			16.4		42.0				
Change Period (Y+Rc), s	5.0		5.0			5.0		5.0				
Max Green Setting (Gmax), s	13.0		37.0			13.0		37.0				
Max Q Clear Time (g_c+I1), s	3.5		39.0			6.2		24.8				
Green Ext Time (p_c), s	0.0		0.0			0.3		9.6				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			10.8									
HCM 6th LOS			B									

Intersection												
Int Delay, s/veh	4.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	727	4	6	378	2	7	0	83	43	0	62
Future Vol, veh/h	7	727	4	6	378	2	7	0	83	43	0	62
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	165	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	790	4	7	411	2	8	0	90	47	0	67

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	413	0	0	794	0	0	1268	1235	792	1279	1236	412
Stage 1	-	-	-	-	-	-	808	808	-	426	426	-
Stage 2	-	-	-	-	-	-	460	427	-	853	810	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1141	-	-	823	-	-	145	176	388	142	175	638
Stage 1	-	-	-	-	-	-	373	393	-	604	584	-
Stage 2	-	-	-	-	-	-	579	584	-	352	392	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1141	-	-	823	-	-	128	173	388	108	172	638
Mov Cap-2 Maneuver	-	-	-	-	-	-	128	173	-	108	172	-
Stage 1	-	-	-	-	-	-	370	390	-	600	579	-
Stage 2	-	-	-	-	-	-	513	579	-	268	389	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.1			20.1			40.2		
HCM LOS							C			E		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	335	1141	-	-	823	-	-	212
HCM Lane V/C Ratio	0.292	0.007	-	-	0.008	-	-	0.538
HCM Control Delay (s)	20.1	8.2	-	-	9.4	-	-	40.2
HCM Lane LOS	C	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	1.2	0	-	-	0	-	-	2.8

Intersection												
Int Delay, s/veh	13.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	67	841	16	35	694	74	5	0	54	36	0	33
Future Vol, veh/h	67	841	16	35	694	74	5	0	54	36	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	165	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	73	914	17	38	754	80	5	0	59	39	0	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	834	0	0	931	0	0	1957	1979	923	1968	1947	794
Stage 1	-	-	-	-	-	-	1069	1069	-	870	870	-
Stage 2	-	-	-	-	-	-	888	910	-	1098	1077	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	795	-	-	731	-	-	48	61	326	47	64	386
Stage 1	-	-	-	-	-	-	267	297	-	345	367	-
Stage 2	-	-	-	-	-	-	337	352	-	257	294	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	795	-	-	731	-	-	39	53	326	~ 34	55	386
Mov Cap-2 Maneuver	-	-	-	-	-	-	39	53	-	~ 34	55	-
Stage 1	-	-	-	-	-	-	242	270	-	313	348	-
Stage 2	-	-	-	-	-	-	290	334	-	191	267	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.4	31.1	\$ 313.4
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	201	795	-	-	731	-	-	60
HCM Lane V/C Ratio	0.319	0.092	-	-	0.052	-	-	1.25
HCM Control Delay (s)	31.1	10	-	-	10.2	-	-	\$ 313.4
HCM Lane LOS	D	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	1.3	0.3	-	-	0.2	-	-	6.3

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

Intersection												
Int Delay, s/veh	1188.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	1664	4	6	693	2	7	0	83	43	0	62
Future Vol, veh/h	7	1664	4	6	693	2	7	0	83	43	0	62
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	165	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	1809	4	7	753	2	8	0	90	47	0	67
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	755	0	0	1813	0	0	2629	2596	1811	2640	2597	754
Stage 1	-	-	-	-	-	-	1827	1827	-	768	768	-
Stage 2	-	-	-	-	-	-	802	769	-	1872	1829	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	851	-	-	336	-	-	16	25	97	~ 15	25	407
Stage 1	-	-	-	-	-	-	98	127	-	393	409	-
Stage 2	-	-	-	-	-	-	376	409	-	92	127	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	851	-	-	336	-	-	13	24	97	~ 1	24	407
Mov Cap-2 Maneuver	-	-	-	-	-	-	13	24	-	~ 1	24	-
Stage 1	-	-	-	-	-	-	97	126	-	389	400	-
Stage 2	-	-	-	-	-	-	307	400	-	~ 6	126	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			\$ 398.6			\$ 28749.8		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	65	851	-	-	336	-	-	2				
HCM Lane V/C Ratio	1.505	0.009	-	-	0.019	-	-	-57.065				
HCM Control Delay (s)	\$ 398.6	9.3	-	-	15.9	-	-	\$ 28749.8				
HCM Lane LOS	F	A	-	-	C	-	-	F				
HCM 95th %tile Q(veh)	8.4	0	-	-	0.1	-	-	16.6				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection												
Int Delay, s/veh	420.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	67	1554	16	35	1795	74	5	0	54	36	0	33
Future Vol, veh/h	67	1554	16	35	1795	74	5	0	54	36	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	165	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	73	1689	17	38	1951	80	5	0	59	39	0	36
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2031	0	0	1706	0	0	3929	3951	1698	3940	3919	1991
Stage 1	-	-	-	-	-	-	1844	1844	-	2067	2067	-
Stage 2	-	-	-	-	-	-	2085	2107	-	1873	1852	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	276	-	-	370	-	-	~ 2	3	114	~ 2	3	75
Stage 1	-	-	-	-	-	-	96	124	-	71	96	-
Stage 2	-	-	-	-	-	-	69	91	-	92	123	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	276	-	-	370	-	-	~ 1	2	114	~ 1	2	75
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 1	2	-	~ 1	2	-
Stage 1	-	-	-	-	-	-	71	91	-	52	86	-
Stage 2	-	-	-	-	-	-	32	82	-	~ 33	91	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			0.3			\$ 2847.2			\$ 19907.9		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	11	276	-	-	370	-	-	2				
HCM Lane V/C Ratio	5.83	0.264	-	-	0.103	-	-	37.5				
HCM Control Delay (s)	\$ 2847.2	22.7	-	-	15.8	-	-	\$ 19907.9				
HCM Lane LOS	F	C	-	-	C	-	-	F				
HCM 95th %tile Q(veh)	9.2	1	-	-	0.3	-	-	11.6				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection												
Int Delay, s/veh	4.8											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕		↗	↖			↕		↗	↖	
Traffic Vol, veh/h	0	15	22	109	0	27	1	207	51	96	463	0
Future Vol, veh/h	0	15	22	109	0	27	1	207	51	96	463	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	365	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	16	24	118	0	29	1	225	55	104	503	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	826	993	252	723	966	140	503	0	0	280	0	0
Stage 1	711	711	-	255	255	-	-	-	-	-	-	-
Stage 2	115	282	-	468	711	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	263	242	745	312	251	879	1051	-	-	1272	-	-
Stage 1	388	432	-	724	693	-	-	-	-	-	-	-
Stage 2	875	674	-	542	432	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	238	222	745	267	230	879	1051	-	-	1272	-	-
Mov Cap-2 Maneuver	238	222	-	267	230	-	-	-	-	-	-	-
Stage 1	388	397	-	723	692	-	-	-	-	-	-	-
Stage 2	845	673	-	462	397	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	15.6	24.9	0	1.4
HCM LOS	C	C		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	NWLn2	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1051	-	-	267	879	381	1272	-
HCM Lane V/C Ratio	0.001	-	-	0.444	0.033	0.106	0.082	-
HCM Control Delay (s)	8.4	0	-	28.8	9.2	15.6	8.1	-
HCM Lane LOS	A	A	-	D	A	C	A	-
HCM 95th %tile Q(veh)	0	-	-	2.1	0.1	0.4	0.3	-

Intersection												
Int Delay, s/veh	6											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	4	16	53	4	201	17	716	103	91	447	0
Future Vol, veh/h	0	4	16	53	4	201	17	716	103	91	447	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	365	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	4	17	58	4	218	18	778	112	99	486	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1111	1610	243	1313	1554	445	486	0	0	890	0	0
Stage 1	684	684	-	870	870	-	-	-	-	-	-	-
Stage 2	427	926	-	443	684	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	162	103	755	115	111	558	1066	-	-	751	-	-
Stage 1	402	445	-	311	365	-	-	-	-	-	-	-
Stage 2	573	343	-	561	445	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	83	86	755	95	93	558	1066	-	-	751	-	-
Mov Cap-2 Maneuver	83	86	-	95	93	-	-	-	-	-	-	-
Stage 1	388	386	-	300	353	-	-	-	-	-	-	-
Stage 2	333	331	-	470	386	-	-	-	-	-	-	-
Approach	SE		NW		NE		SW					
HCM Control Delay, s	18.2		32.2		0.3		1.8					
HCM LOS	C		D									
Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	NWLn2	SELn1	SWL	SWT	SWR				
Capacity (veh/h)	1066	-	-	95	508	295	751	-	-			
HCM Lane V/C Ratio	0.017	-	-	0.606	0.439	0.074	0.132	-	-			
HCM Control Delay (s)	8.4	0.1	-	89.2	17.5	18.2	10.5	-	-			
HCM Lane LOS	A	A	-	F	C	C	B	-	-			
HCM 95th %tile Q(veh)	0.1	-	-	2.9	2.2	0.2	0.5	-	-			

Intersection												
Int Delay, s/veh	6.2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	15	22	109	0	27	1	262	51	96	745	0
Future Vol, veh/h	0	15	22	109	0	27	1	262	51	96	745	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	365	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	16	24	118	0	29	1	285	55	104	810	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1163	1360	405	936	1333	170	810	0	0	340	0	0
Stage 1	1018	1018	-	315	315	-	-	-	-	-	-	-
Stage 2	145	342	-	621	1018	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	149	146	592	218	152	841	805	-	-	1209	-	-
Stage 1	252	311	-	668	652	-	-	-	-	-	-	-
Stage 2	840	634	-	439	311	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	134	133	592	177	139	841	805	-	-	1209	-	-
Mov Cap-2 Maneuver	134	133	-	177	139	-	-	-	-	-	-	-
Stage 1	251	284	-	667	651	-	-	-	-	-	-	-
Stage 2	809	633	-	363	284	-	-	-	-	-	-	-
Approach	SE		NW		NE		SW					
HCM Control Delay, s	22.4		49.1		0		0.9					
HCM LOS	C		E									
Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	NWLn2	SELn1	SWL	SWT	SWR				
Capacity (veh/h)	805	-	-	177	841	247	1209	-	-			
HCM Lane V/C Ratio	0.001	-	-	0.669	0.035	0.163	0.086	-	-			
HCM Control Delay (s)	9.5	0	-	58.9	9.4	22.4	8.3	-	-			
HCM Lane LOS	A	A	-	F	A	C	A	-	-			
HCM 95th %tile Q(veh)	0	-	-	3.9	0.1	0.6	0.3	-	-			

Intersection												
Int Delay, s/veh	10.4											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	4	19	53	4	201	17	908	103	91	563	0
Future Vol, veh/h	0	4	19	53	4	201	17	908	103	91	563	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	365	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	4	21	58	4	218	18	987	112	99	612	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1342	1945	306	1585	1889	550	612	0	0	1099	0	0
Stage 1	810	810	-	1079	1079	-	-	-	-	-	-	-
Stage 2	532	1135	-	506	810	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	110	63	687	72	69	476	956	-	-	625	-	-
Stage 1	338	389	-	231	291	-	-	-	-	-	-	-
Stage 2	496	273	-	514	389	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	47	50	687	~ 55	55	476	956	-	-	625	-	-
Mov Cap-2 Maneuver	47	50	-	~ 55	55	-	-	-	-	-	-	-
Stage 1	321	328	-	219	276	-	-	-	-	-	-	-
Stage 2	251	259	-	414	328	-	-	-	-	-	-	-
Approach	SE		NW		NE		SW					
HCM Control Delay, s	24		71.4		0.3		1.6					
HCM LOS	C		F									
Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	NWLn2	SELn1	SWL	SWT	SWR				
Capacity (veh/h)	956	-	-	55	414	214	625	-	-			
HCM Lane V/C Ratio	0.019	-	-	1.047	0.538	0.117	0.158	-	-			
HCM Control Delay (s)	8.8	0.2	-	257.1	23.4	24	11.8	-	-			
HCM Lane LOS	A	A	-	F	C	C	B	-	-			
HCM 95th %tile Q(veh)	0.1	-	-	4.8	3.1	0.4	0.6	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection						
Intersection Delay, s/veh 5.9						
Intersection LOS A						
Approach	SE	NW	NE	SW		
Entry Lanes	1	1	2	2		
Conflicting Circle Lanes	2	2	2	2		
Adj Approach Flow, veh/h	40	147	341	914		
Demand Flow Rate, veh/h	41	152	352	941		
Vehicles Circulating, veh/h	1063	295	123	123		
Vehicles Exiting, veh/h	1	180	981	324		
Ped Vol Crossing Leg, #/h	0	0	0	0		
Ped Cap Adj	1.000	1.000	1.000	1.000		
Approach Delay, s/veh	7.3	4.6	4.2	6.7		
Approach LOS	A	A	A	A		
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.469	0.531	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	41	152	165	187	442	499
Cap Entry Lane, veh/h	575	1105	1205	1279	1205	1279
Entry HV Adj Factor	0.964	0.967	0.973	0.968	0.972	0.970
Flow Entry, veh/h	40	147	160	181	429	484
Cap Entry, veh/h	555	1069	1172	1238	1171	1241
V/C Ratio	0.071	0.138	0.137	0.146	0.367	0.390
Control Delay, s/veh	7.3	4.6	4.2	4.1	6.7	6.7
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	1	2	2

Intersection						
Intersection Delay, s/veh 7.8						
Intersection LOS A						
Approach	SE	NW	NE	SW		
Entry Lanes	1	1	2	2		
Conflicting Circle Lanes	2	2	2	2		
Adj Approach Flow, veh/h	25	280	1117	711		
Demand Flow Rate, veh/h	26	289	1151	732		
Vehicles Circulating, veh/h	792	1036	106	83		
Vehicles Exiting, veh/h	23	221	712	1242		
Ped Vol Crossing Leg, #/h	0	0	0	0		
Ped Cap Adj	1.000	1.000	1.000	1.000		
Approach Delay, s/veh	5.6	14.7	7.7	5.4		
Approach LOS	A	B	A	A		
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	26	289	541	610	344	388
Cap Entry Lane, veh/h	724	589	1224	1298	1251	1323
Entry HV Adj Factor	0.957	0.968	0.971	0.971	0.971	0.971
Flow Entry, veh/h	25	280	525	592	334	377
Cap Entry, veh/h	693	570	1189	1260	1214	1285
V/C Ratio	0.036	0.491	0.442	0.470	0.275	0.293
Control Delay, s/veh	5.6	14.7	7.6	7.7	5.5	5.4
LOS	A	B	A	A	A	A
95th %tile Queue, veh	0	3	2	3	1	1

HCM 6th Signalized Intersection Summary 83: Cicero Rd/SR 19 & Field Dr

Existing AM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	384	8	117	3	123	189	382	596	1
Future Volume (veh/h)	0	0	0	384	8	117	3	123	189	382	596	1
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	0	0	417	9	127	3	134	205	415	648	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	146	535	0	656	30	428	336	453	384	661	943	799
Arrive On Green	0.00	0.00	0.00	0.29	0.29	0.29	0.24	0.24	0.24	0.18	0.51	0.51
Sat Flow, veh/h	1243	1856	0	1767	105	1483	776	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	0	0	0	417	0	136	3	134	205	415	648	1
Grp Sat Flow(s),veh/h/ln	1243	1856	0	1767	0	1589	776	1856	1572	1767	1856	1572
Q Serve(g_s), s	0.0	0.0	0.0	10.8	0.0	3.3	0.1	2.9	5.6	8.0	13.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	10.8	0.0	3.3	0.1	2.9	5.6	8.0	13.0	0.0
Prop In Lane	1.00		0.00	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	535	0	656	0	458	336	453	384	661	943	799
V/C Ratio(X)	0.00	0.00	0.00	0.64	0.00	0.30	0.01	0.30	0.53	0.63	0.69	0.00
Avail Cap(c_a), veh/h	318	792	0	901	0	678	399	603	511	661	1094	927
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)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	16.3	0.0	13.6	14.1	15.2	16.2	9.5	9.1	6.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	0.4	0.0	0.4	1.2	1.9	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	3.8	0.0	1.0	0.0	1.1	1.9	2.3	3.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	17.3	0.0	14.0	14.1	15.5	17.3	11.4	10.6	6.0
LnGrp LOS	A	A	A	B	A	B	B	B	B	B	B	A
Approach Vol, veh/h	0				553				342			
Approach Delay, s/veh	0.0				16.5				16.6			
Approach LOS					B				B			
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	13.0	17.0		19.2		30.0		19.2				
Change Period (Y+Rc), s	4.0	5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s	9.0	16.0		21.0		29.0		21.0				
Max Q Clear Time (g_c+l1), s	10.0	7.6		0.0		15.0		12.8				
Green Ext Time (p_c), s	0.0	0.9		0.0		3.4		1.4				
Intersection Summary												
HCM 6th Ctrl Delay	13.5											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary
83: Cicero Rd/SR 19 & Field Dr

Existing PM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	14	3	247	46	619	9	526	541	301	247	13
Future Volume (veh/h)	5	14	3	247	46	619	9	526	541	301	247	13
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	15	3	268	50	673	10	572	588	327	268	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	65	641	128	649	47	632	396	563	477	316	894	758
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.30	0.30	0.30	0.14	0.48	0.48
Sat Flow, veh/h	725	1501	300	1384	110	1479	1088	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	5	0	18	268	0	723	10	572	588	327	268	14
Grp Sat Flow(s),veh/h/ln	725	0	1801	1384	0	1589	1088	1856	1572	1767	1856	1572
Q Serve(g_s), s	0.0	0.0	0.6	15.3	0.0	47.0	0.7	33.4	33.4	15.6	9.6	0.5
Cycle Q Clear(g_c), s	47.0	0.0	0.6	15.9	0.0	47.0	0.7	33.4	33.4	15.6	9.6	0.5
Prop In Lane	1.00		0.17	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	65	0	770	649	0	679	396	563	477	316	894	758
V/C Ratio(X)	0.08	0.00	0.02	0.41	0.00	1.06	0.03	1.02	1.23	1.03	0.30	0.02
Avail Cap(c_a), veh/h	65	0	770	649	0	679	396	563	477	316	894	758
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	0.0	18.2	22.8	0.0	31.5	26.9	38.3	38.3	33.4	17.3	14.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	53.1	0.0	41.8	121.4	59.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.3	4.9	0.0	27.1	0.2	21.4	28.7	10.2	3.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	0.0	18.2	23.3	0.0	84.6	26.9	80.1	159.7	93.2	17.4	14.9
LnGrp LOS	E	A	B	C	A	F	C	F	F	F	B	B
Approach Vol, veh/h	23			991			1170			609		
Approach Delay, s/veh	26.3			68.0			119.6			58.1		
Approach LOS	C			E			F			E		
Timer - Assigned Phs	1	2	4		6		8					
Phs Duration (G+Y+Rc), s	19.6	38.4	52.0		58.0		52.0					
Change Period (Y+Rc), s	4.0	5.0	5.0		5.0		5.0					
Max Green Setting (Gmax), s	15.6	33.4	47.0		53.0		47.0					
Max Q Clear Time (g_c+l1), s	17.6	35.4	49.0		11.6		49.0					
Green Ext Time (p_c), s	0.0	0.0	0.0		1.5		0.0					
Intersection Summary												
HCM 6th Ctrl Delay				87.1								
HCM 6th LOS				F								

HCM 6th Signalized Intersection Summary 83: Cicero Rd/SR 19 & Field Dr

Existing AM Peak
Mitigated - Final

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	384	8	117	3	123	189	382	596	1
Future Volume (veh/h)	0	0	0	384	8	117	3	123	189	382	596	1
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	0	0	417	9	127	3	134	205	415	648	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	3	3	0	522	11	803	311	419	829	677	947	803
Arrive On Green	0.00	0.00	0.00	0.30	0.30	0.30	0.23	0.23	0.23	0.21	0.51	0.51
Sat Flow, veh/h	1767	1856	0	1732	37	1572	776	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	0	0	0	426	0	127	3	134	205	415	648	1
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1769	0	1572	776	1856	1572	1767	1856	1572
Q Serve(g_s), s	0.0	0.0	0.0	11.8	0.0	2.3	0.2	3.2	3.8	8.6	14.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.8	0.0	2.3	0.2	3.2	3.8	8.6	14.0	0.0
Prop In Lane	1.00		0.00	0.98		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	3	3	0	533	0	803	311	419	829	677	947	803
V/C Ratio(X)	0.00	0.00	0.00	0.80	0.00	0.16	0.01	0.32	0.25	0.61	0.68	0.00
Avail Cap(c_a), veh/h	499	524	0	799	0	1040	385	597	980	802	1257	1065
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)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	17.1	0.0	6.9	16.0	17.2	6.8	10.1	9.8	6.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.5	0.0	0.1	0.0	0.4	0.2	1.0	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	4.6	0.0	0.6	0.0	1.3	2.1	2.5	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	0.0	20.6	0.0	7.0	16.0	17.6	7.0	11.1	10.8	6.4
LnGrp LOS				C				A	B	B	A	A
Approach Vol, veh/h	0			553			342			1064		
Approach Delay, s/veh	0.0			17.4			11.2			10.9		
Approach LOS				B			B			B		
Timer - Assigned Phs	1	2	4			6		8				
Phs Duration (G+Y+Rc), s	15.1	17.0	0.0			32.1		21.0				
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		5.0				
Max Green Setting (Gmax), s	14.9	17.1	15.0			36.0		24.0				
Max Q Clear Time (g_c+I1), s	10.6	5.8	0.0			16.0		13.8				
Green Ext Time (p_c), s	0.6	1.1	0.0			3.9		2.2				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				12.8								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

83: Cicero Rd/SR 19 & Field Dr

Existing PM Peak
Mitigated - Final

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	14	3	247	46	619	9	526	541	301	247	13
Future Volume (veh/h)	5	14	3	247	46	619	9	526	541	301	247	13
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	15	3	268	50	673	10	572	588	327	268	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	102	87	17	434	81	690	403	556	926	342	914	775
Arrive On Green	0.06	0.06	0.06	0.29	0.29	0.29	0.30	0.30	0.30	0.15	0.49	0.49
Sat Flow, veh/h	1767	1501	300	1501	280	1572	1088	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	5	0	18	318	0	673	10	572	588	327	268	14
Grp Sat Flow(s),veh/h/ln	1767	0	1801	1781	0	1572	1088	1856	1572	1767	1856	1572
Q Serve(g_s), s	0.2	0.0	0.9	14.4	0.0	27.0	0.6	28.0	22.9	13.0	8.0	0.4
Cycle Q Clear(g_c), s	0.2	0.0	0.9	14.4	0.0	27.0	0.6	28.0	22.9	13.0	8.0	0.4
Prop In Lane	1.00		0.17	0.84		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	102	0	104	515	0	690	403	556	926	342	914	775
V/C Ratio(X)	0.05	0.00	0.17	0.62	0.00	0.97	0.02	1.03	0.63	0.96	0.29	0.02
Avail Cap(c_a), veh/h	227	0	231	515	0	690	403	556	926	342	914	775
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.6	0.0	41.9	28.7	0.0	25.7	23.1	32.7	12.6	26.1	14.1	12.1
Incr Delay (d2), s/veh	0.2	0.0	0.8	2.2	0.0	28.0	0.0	45.6	1.4	37.1	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.4	6.3	0.0	18.8	0.2	19.2	13.9	8.5	3.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.8	0.0	42.7	31.0	0.0	53.7	23.1	78.3	14.0	63.2	14.2	12.1
LnGrp LOS	D		D	C		D	C	F	B	E	B	B
Approach Vol, veh/h	23			991			1170			609		
Approach Delay, s/veh	42.5			46.4			45.5			40.5		
Approach LOS	D			D			D			D		
Timer - Assigned Phs	1	2	4		6		8					
Phs Duration (G+Y+Rc), s	18.0	33.0	10.4		51.0		32.0					
Change Period (Y+Rc), s	4.0	5.0	5.0		5.0		5.0					
Max Green Setting (Gmax), s	14.0	28.0	12.0		46.0		27.0					
Max Q Clear Time (g_c+I1), s	15.0	30.0	2.9		10.0		29.0					
Green Ext Time (p_c), s	0.0	0.0	0.0		1.5		0.0					
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				44.7								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary 83: Cicero Rd/SR 19 & Field Dr

Future AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	387	8	135	3	133	189	718	731	1
Future Volume (veh/h)	0	0	0	387	8	135	3	133	189	718	731	1
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	0	0	421	9	147	3	145	205	780	795	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	74	2	0	463	24	392	158	230	607	829	1177	998
Arrive On Green	0.00	0.00	0.00	0.26	0.26	0.26	0.12	0.12	0.12	0.47	0.63	0.63
Sat Flow, veh/h	1221	1856	0	1767	92	1495	677	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	0	0	0	421	0	156	3	145	205	780	795	1
Grp Sat Flow(s),veh/h/ln	1221	1856	0	1767	0	1586	677	1856	1572	1767	1856	1572
Q Serve(g_s), s	0.0	0.0	0.0	22.3	0.0	7.8	0.4	7.2	8.9	40.6	26.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	22.3	0.0	7.8	0.4	7.2	8.9	40.6	26.5	0.0
Prop In Lane	1.00		0.00	1.00		0.94	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	74	2	0	463	0	416	158	230	607	829	1177	998
V/C Ratio(X)	0.00	0.00	0.00	0.91	0.00	0.38	0.02	0.63	0.34	0.94	0.68	0.00
Avail Cap(c_a), veh/h	327	288	0	640	0	903	186	307	672	1188	1631	1383
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)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	34.6	0.0	29.2	37.2	40.2	20.9	24.4	11.3	6.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	13.6	0.0	0.6	0.0	2.8	0.3	11.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	11.0	0.0	3.0	0.1	3.4	3.2	17.5	8.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	48.1	0.0	29.8	37.3	43.0	21.3	35.6	12.0	6.5
LnGrp LOS	A	A	A	D	A	C	D	D	C	D	B	A
Approach Vol, veh/h	0				577				353			
Approach Delay, s/veh	0.0				43.1				30.4			
Approach LOS					D				C			
Timer - Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	49.3	17.0	30.3	0.0		66.3		30.3				
Change Period (Y+Rc), s	4.0	5.0	5.0	5.0		5.0		5.0				
Max Green Setting (Gmax), s	65.0	16.0	35.0	15.0		85.0		55.0				
Max Q Clear Time (g_c+l1), s	42.6	10.9	24.3	0.0		28.5		9.8				
Green Ext Time (p_c), s	2.8	0.7	1.0	0.0		6.3		1.0				
Intersection Summary												
HCM 6th Ctrl Delay	29.1											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary 83: Cicero Rd/SR 19 & Field Dr

Future PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	14	3	250	46	999	9	579	543	352	264	13
Future Volume (veh/h)	5	14	3	250	46	999	9	579	543	352	264	13
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	15	3	272	50	1086	10	629	590	383	287	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	48	428	86	298	34	737	326	482	674	283	829	702
Arrive On Green	0.28	0.28	0.28	0.17	0.49	0.49	0.26	0.26	0.26	0.16	0.45	0.45
Sat Flow, veh/h	491	1501	300	1767	70	1513	1070	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	5	0	18	272	0	1136	10	629	590	383	287	14
Grp Sat Flow(s),veh/h/ln	491	0	1801	1767	0	1583	1070	1856	1572	1767	1856	1572
Q Serve(g_s), s	0.0	0.0	1.1	22.7	0.0	73.0	1.0	39.0	39.0	24.0	15.2	0.7
Cycle Q Clear(g_c), s	42.7	0.0	1.1	22.7	0.0	73.0	1.0	39.0	39.0	24.0	15.2	0.7
Prop In Lane	1.00		0.17	1.00		0.96	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	48	0	513	298	0	770	326	482	674	283	829	702
V/C Ratio(X)	0.10	0.00	0.04	0.91	0.00	1.47	0.03	1.30	0.88	1.35	0.35	0.02
Avail Cap(c_a), veh/h	48	0	513	424	0	770	326	482	674	283	829	702
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	75.0	0.0	38.8	61.3	0.0	38.5	41.5	55.5	39.2	63.0	27.2	23.2
Incr Delay (d2), s/veh	0.9	0.0	0.0	18.8	0.0	220.5	0.0	151.2	12.4	181.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.5	11.7	0.0	74.6	0.3	38.5	21.9	24.8	6.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.9	0.0	38.8	80.0	0.0	259.0	41.5	206.7	51.6	244.0	27.4	23.2
LnGrp LOS	E	A	D	F	A	F	D	F	D	F	C	C
Approach Vol, veh/h	23			1408			1229			684		
Approach Delay, s/veh	46.9			224.5			130.9			148.6		
Approach LOS	D			F			F			F		
Timer - Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	28.0	44.0	30.3	47.7		72.0		78.0				
Change Period (Y+Rc), s	4.0	5.0	5.0	5.0		5.0		5.0				
Max Green Setting (Gmax), s	24.0	39.0	36.0	32.0		67.0		73.0				
Max Q Clear Time (g_c+l1), s	26.0	41.0	24.7	44.7		17.2		75.0				
Green Ext Time (p_c), s	0.0	0.0	0.6	0.0		1.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	173.3											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary 84: 10th St & Field Dr

Existing AM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	286	222	4	137	17	38	39	14	17	206	360
Future Volume (veh/h)	105	286	222	4	137	17	38	39	14	17	206	360
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	114	311	241	4	149	18	41	42	15	18	224	391
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	423	456	386	238	262	222	437	655	555	631	599	508
Arrive On Green	0.11	0.25	0.25	0.01	0.14	0.14	0.06	0.35	0.35	0.03	0.32	0.32
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	114	311	241	4	149	18	41	42	15	18	224	391
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	2.4	7.5	6.8	0.1	3.7	0.5	0.7	0.7	0.3	0.3	4.6	11.1
Cycle Q Clear(g_c), s	2.4	7.5	6.8	0.1	3.7	0.5	0.7	0.7	0.3	0.3	4.6	11.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	423	456	386	238	262	222	437	655	555	631	599	508
V/C Ratio(X)	0.27	0.68	0.62	0.02	0.57	0.08	0.09	0.06	0.03	0.03	0.37	0.77
Avail Cap(c_a), veh/h	475	636	539	474	636	539	579	655	555	826	599	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	16.9	16.7	18.1	19.9	18.5	9.9	10.6	10.5	10.5	12.9	15.1
Incr Delay (d2), s/veh	0.3	1.8	1.7	0.0	1.9	0.2	0.1	0.2	0.1	0.0	1.8	10.8
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(50%),veh/ln	0.8	2.9	2.3	0.0	1.6	0.2	0.2	0.3	0.1	0.1	1.9	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	18.8	18.3	18.1	21.8	18.6	10.0	10.8	10.6	10.5	14.7	25.9
LnGrp LOS	B	B	B	B	C	B	A	B	B	B	B	C
Approach Vol, veh/h	666			171			98			633		
Approach Delay, s/veh	17.8			21.4			10.4			21.5		
Approach LOS	B			C			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.5	22.5	4.4	17.2	7.0	21.0	9.5	12.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	16.0	7.0	17.0	7.0	16.0	7.0	17.0					
Max Q Clear Time (g_c+I2,3), s	2.7	2.7	2.1	9.5	2.7	13.1	4.4	5.7				
Green Ext Time (p_c), s	0.0	0.1	0.0	1.6	0.0	0.8	0.1	0.6				

Intersection Summary

HCM 6th Ctrl Delay 19.2
HCM 6th LOS B

HCM 6th Signalized Intersection Summary

84: 10th St & Field Dr

Existing PM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	416	413	111	18	473	36	339	220	40	37	77	183
Future Volume (veh/h)	416	413	111	18	473	36	339	220	40	37	77	183
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	452	449	121	20	514	39	368	239	43	40	84	199
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	485	893	757	384	551	467	417	434	368	301	337	285
Arrive On Green	0.21	0.48	0.48	0.03	0.30	0.30	0.10	0.23	0.23	0.05	0.18	0.18
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	452	449	121	20	514	39	368	239	43	40	84	199
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	16.7	14.6	3.8	0.7	23.7	1.6	9.0	10.0	1.9	1.6	3.4	10.5
Cycle Q Clear(g_c), s	16.7	14.6	3.8	0.7	23.7	1.6	9.0	10.0	1.9	1.6	3.4	10.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	485	893	757	384	551	467	417	434	368	301	337	285
V/C Ratio(X)	0.93	0.50	0.16	0.05	0.93	0.08	0.88	0.55	0.12	0.13	0.25	0.70
Avail Cap(c_a), veh/h	506	893	757	470	568	482	417	434	368	354	337	285
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	15.6	12.8	20.1	30.1	22.3	30.4	29.7	26.6	26.8	30.9	33.8
Incr Delay (d2), s/veh	23.7	0.4	0.1	0.1	22.1	0.1	19.3	5.0	0.6	0.2	1.8	13.2
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(50%),veh/ln	0.5	5.8	1.3	0.3	13.6	0.6	5.6	5.0	0.8	0.7	1.7	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.9	16.1	12.9	20.2	52.2	22.4	49.6	34.6	27.2	27.0	32.7	47.0
LnGrp LOS	D	B	B	C	D	C	D	C	C	C	C	D
Approach Vol, veh/h	1022			573			650			323		
Approach Delay, s/veh	28.9			49.1			42.6			40.8		
Approach LOS	C			D			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	25.6	6.7	47.4	13.0	21.0	23.0	31.2				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	7.0	18.0	7.0	40.0	9.0	16.0	20.0	27.0				
Max Q Clear Time (g_c+1/3), s	13.6	12.0	2.7	16.6	11.0	12.5	18.7	25.7				
Green Ext Time (p_c), s	0.0	0.7	0.0	3.2	0.0	0.4	0.2	0.5				

Intersection Summary

HCM 6th Ctrl Delay 38.4
HCM 6th LOS D

HCM 6th Signalized Intersection Summary 84: 10th St & Field Dr

Future AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	622	222	4	154	17	38	39	14	17	206	364
Future Volume (veh/h)	105	622	222	4	154	17	38	39	14	17	206	364
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	114	676	241	4	167	18	41	42	15	18	224	396
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	168	782	752	180	620	573	100	483	421	478	434	517
Arrive On Green	0.09	0.42	0.42	0.01	0.33	0.33	0.06	0.26	0.26	0.03	0.23	0.23
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	114	676	241	4	167	18	41	42	15	18	224	396
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	4.0	21.3	6.1	0.1	4.2	0.5	1.4	1.1	0.5	0.5	6.7	14.5
Cycle Q Clear(g_c), s	4.0	21.3	6.1	0.1	4.2	0.5	1.4	1.1	0.5	0.5	6.7	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	168	782	752	180	620	573	100	483	421	478	434	517
V/C Ratio(X)	0.68	0.86	0.32	0.02	0.27	0.03	0.41	0.09	0.04	0.04	0.52	0.77
Avail Cap(c_a), veh/h	358	955	898	359	781	709	193	483	421	617	434	517
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	16.9	10.3	15.9	15.6	13.1	29.2	17.9	17.4	17.6	21.4	19.3
Incr Delay (d2), s/veh	4.8	7.1	0.2	0.0	0.2	0.0	2.7	0.1	0.0	0.0	1.1	6.8
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(50%),veh/ln	1.8	9.2	1.9	0.0	1.7	0.2	0.7	0.5	0.2	0.2	2.8	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	24.0	10.6	15.9	15.9	13.1	31.9	18.0	17.4	17.6	22.5	26.1
LnGrp LOS	C	C	B	B	B	B	C	B	B	B	C	C
Approach Vol, veh/h	1031				189				98			
Approach Delay, s/veh	21.8				15.6				23.7			
Approach LOS	C				B				C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.9	21.7	4.5	32.0	7.6	20.0	10.1	26.4				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	7.5	15.0	7.0	33.0	7.0	15.0	13.0	27.0				
Max Q Clear Time (g_c+I12), s	12.5	3.1	2.1	23.3	3.4	16.5	6.0	6.2				
Green Ext Time (p_c), s	0.0	0.1	0.0	3.8	0.0	0.0	0.1	0.9				

Intersection Summary

HCM 6th Ctrl Delay	22.2
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary

84: 10th St & Field Dr

Future PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	418	464	111	18	853	36	339	220	40	37	77	186
Future Volume (veh/h)	418	464	111	18	853	36	339	220	40	37	77	186
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	454	504	121	20	927	39	368	239	43	40	84	202
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	365	1064	1164	407	730	619	295	449	422	238	210	503
Arrive On Green	0.21	0.57	0.57	0.03	0.39	0.39	0.17	0.24	0.24	0.04	0.11	0.11
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	454	504	121	20	927	39	368	239	43	40	84	202
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	31.0	23.9	3.2	1.0	59.0	2.3	25.0	16.8	3.1	2.9	6.3	15.0
Cycle Q Clear(g_c), s	31.0	23.9	3.2	1.0	59.0	2.3	25.0	16.8	3.1	2.9	6.3	15.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	1064	1164	407	730	619	295	449	422	238	210	503
V/C Ratio(X)	1.24	0.47	0.10	0.05	1.27	0.06	1.25	0.53	0.10	0.17	0.40	0.40
Avail Cap(c_a), veh/h	365	1064	1164	443	730	619	295	449	422	254	210	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.5	18.7	5.5	25.5	45.5	28.3	62.5	49.4	41.3	55.3	61.8	39.8
Incr Delay (d2), s/veh	130.5	0.3	0.0	0.0	132.2	0.0	137.3	1.2	0.1	0.3	1.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.0	10.2	1.0	0.4	53.7	0.9	22.5	8.0	1.2	1.3	3.0	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	190.0	19.0	5.5	25.6	177.7	28.3	199.8	50.6	41.4	55.6	63.0	40.3
LnGrp LOS	F	B	A	C	F	C	F	D	D	E	E	D
Approach Vol, veh/h	1079					986		650		326		
Approach Delay, s/veh	89.5					168.7		134.5		48.0		
Approach LOS	F					F		F		D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.7	41.3	8.0	91.0	29.0	22.0	35.0	64.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	7.0	35.0	7.0	83.0	25.0	17.0	31.0	59.0				
Max Q Clear Time (g_c+I4, s)	14.9	18.8	3.0	25.9	27.0	17.0	33.0	61.0				
Green Ext Time (p_c), s	0.0	1.3	0.0	4.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	120.3											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary

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Future AM Peak
Mitigated - Final



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	622	222	4	154	17	38	39	14	17	206	364
Future Volume (veh/h)	105	622	222	4	154	17	38	39	14	17	206	364
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	114	676	241	4	167	18	41	42	15	18	224	396
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	325	782	752	180	620	573	194	483	421	478	434	517
Arrive On Green	0.09	0.42	0.42	0.01	0.33	0.33	0.06	0.26	0.26	0.03	0.23	0.23
Sat Flow, veh/h	3428	1856	1572	1767	1856	1572	3428	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	114	676	241	4	167	18	41	42	15	18	224	396
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1767	1856	1572	1714	1856	1572	1767	1856	1572
Q Serve(g_s), s	2.0	21.3	6.1	0.1	4.2	0.5	0.7	1.1	0.5	0.5	6.7	14.5
Cycle Q Clear(g_c), s	2.0	21.3	6.1	0.1	4.2	0.5	0.7	1.1	0.5	0.5	6.7	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	325	782	752	180	620	573	194	483	421	478	434	517
V/C Ratio(X)	0.35	0.86	0.32	0.02	0.27	0.03	0.21	0.09	0.04	0.04	0.52	0.77
Avail Cap(c_a), veh/h	695	955	898	359	781	709	374	483	421	617	434	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	16.9	10.3	15.9	15.6	13.1	28.9	17.9	17.4	17.6	21.4	19.3
Incr Delay (d2), s/veh	0.6	7.1	0.2	0.0	0.2	0.0	0.5	0.1	0.0	0.0	1.1	6.8
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(50%),veh/ln	0.8	9.2	1.9	0.0	1.7	0.2	0.3	0.5	0.2	0.2	2.8	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.8	24.0	10.6	15.9	15.9	13.1	29.4	18.0	17.4	17.6	22.5	26.1
LnGrp LOS	C	C	B	B	B	B	C	B	B	B	C	C
Approach Vol, veh/h	1031					189		98		638		
Approach Delay, s/veh	21.3					15.6		22.7		24.6		
Approach LOS	C					B		C		C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.9	21.7	4.5	32.0	7.6	20.0	10.1	26.4				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	7.0	15.0	7.0	33.0	7.0	15.0	13.0	27.0				
Max Q Clear Time (g_c+I2), s	12.5	3.1	2.1	23.3	2.7	16.5	4.0	6.2				
Green Ext Time (p_c), s	0.0	0.1	0.0	3.8	0.0	0.0	0.2	0.9				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			21.9									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary 84: 10th St & Field Dr

Future PM Peak
Mitigated - Final



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	418	464	111	18	853	36	339	220	40	37	77	186
Future Volume (veh/h)	418	464	111	18	853	36	339	220	40	37	77	186
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	454	504	121	20	927	39	368	239	43	40	84	202
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	462	1104	1130	463	906	768	425	338	331	203	188	371
Arrive On Green	0.13	0.59	0.59	0.03	0.49	0.49	0.12	0.18	0.18	0.04	0.10	0.10
Sat Flow, veh/h	3428	1856	1572	1767	1856	1572	3428	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	454	504	121	20	927	39	368	239	43	40	84	202
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1767	1856	1572	1714	1856	1572	1767	1856	1572
Q Serve(g_s), s	15.7	17.9	2.8	0.7	58.0	1.5	12.5	14.4	2.6	2.4	5.1	12.0
Cycle Q Clear(g_c), s	15.7	17.9	2.8	0.7	58.0	1.5	12.5	14.4	2.6	2.4	5.1	12.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	462	1104	1130	463	906	768	425	338	331	203	188	371
V/C Ratio(X)	0.98	0.46	0.11	0.04	1.02	0.05	0.87	0.71	0.13	0.20	0.45	0.54
Avail Cap(c_a), veh/h	462	1104	1130	517	906	768	462	338	331	231	188	371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	13.4	5.1	14.1	30.4	15.9	51.0	45.6	38.1	44.6	50.2	39.8
Incr Delay (d2), s/veh	37.2	0.3	0.0	0.0	35.8	0.0	14.9	6.7	0.2	0.5	1.7	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.2	0.8	0.3	33.8	0.6	6.2	7.2	1.0	1.1	2.4	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	88.5	13.7	5.1	14.2	66.1	16.0	65.9	52.3	38.2	45.0	51.9	41.4
LnGrp LOS	F	B	A	B	F	B	E	D	D	D	D	D
Approach Vol, veh/h	1079					986		650		326		
Approach Delay, s/veh	44.2					63.1		59.0		44.6		
Approach LOS	D					E		E		D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.1	26.6	7.4	75.6	18.7	17.0	20.0	63.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	7.0	21.0	7.0	67.0	16.0	12.0	16.0	58.0				
Max Q Clear Time (g_c+I), s	14.4	16.4	2.7	19.9	14.5	14.0	17.7	60.0				
Green Ext Time (p_c), s	0.0	0.6	0.0	3.9	0.2	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			53.5									
HCM 6th LOS			D									

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	303	22	5	134	7	29
Future Vol, veh/h	303	22	5	134	7	29
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	329	24	5	146	8	32

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	353
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1200
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1200
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	658	-	-	1200	-
HCM Lane V/C Ratio	0.059	-	-	0.005	-
HCM Control Delay (s)	10.8	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection

Int Delay, s/veh 4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	503	33	54	445	80	40
Future Vol, veh/h	503	33	54	445	80	40
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	547	36	59	484	87	43

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	583
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	986
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	986
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	34.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	248	-	-	986	-
HCM Lane V/C Ratio	0.526	-	-	0.06	-
HCM Control Delay (s)	34.6	-	-	8.9	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	2.8	-	-	0.2	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	639	22	5	151	7	29
Future Vol, veh/h	639	22	5	151	7	29
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	695	24	5	164	8	32
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	719	0	881	707
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	174	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	878	-	316	434
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	854	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	878	-	314	434
Mov Cap-2 Maneuver	-	-	-	-	314	-
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	849	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.3		14.9	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	404	-	-	878	-	
HCM Lane V/C Ratio	0.097	-	-	0.006	-	
HCM Control Delay (s)	14.9	-	-	9.1	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.3	-	-	0	-	

Intersection						
Int Delay, s/veh	11.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	554	33	54	825	80	40
Future Vol, veh/h	554	33	54	825	80	40
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	602	36	59	897	87	43
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	638	0	1635	620
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	1015	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	941	-	110	486
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	348	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	941	-	96	486
Mov Cap-2 Maneuver	-	-	-	-	96	-
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	305	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.6		142.5	
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	131	-	-	941	-	
HCM Lane V/C Ratio	0.996	-	-	0.062	-	
HCM Control Delay (s)	142.5	-	-	9.1	0	
HCM Lane LOS	F	-	-	A	A	
HCM 95th %tile Q(veh)	7	-	-	0.2	-	

Intersection				
Intersection Delay, s/veh	5.8			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	243	401	75	192
Demand Flow Rate, veh/h	251	413	77	198
Vehicles Circulating, veh/h	255	92	170	416
Vehicles Exiting, veh/h	359	155	336	89
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.7	6.0	3.7	6.4
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	251	413	77	198
Cap Entry Lane, veh/h	1064	1256	1160	903
Entry HV Adj Factor	0.969	0.971	0.977	0.969
Flow Entry, veh/h	243	401	75	192
Cap Entry, veh/h	1031	1219	1133	875
V/C Ratio	0.236	0.329	0.066	0.219
Control Delay, s/veh	5.7	6.0	3.7	6.4
LOS	A	A	A	A
95th %tile Queue, veh	1	1	0	1

Intersection				
Intersection Delay, s/veh	11.6			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	457	565	425	192
Demand Flow Rate, veh/h	471	581	438	198
Vehicles Circulating, veh/h	188	496	367	595
Vehicles Exiting, veh/h	605	309	292	482
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.6	17.6	9.5	8.0
Approach LOS	A	C	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	471	581	438	198
Cap Entry Lane, veh/h	1139	832	949	752
Entry HV Adj Factor	0.970	0.972	0.971	0.968
Flow Entry, veh/h	457	565	425	192
Cap Entry, veh/h	1105	809	921	728
V/C Ratio	0.413	0.698	0.462	0.263
Control Delay, s/veh	7.6	17.6	9.5	8.0
LOS	A	C	A	A
95th %tile Queue, veh	2	6	2	1

Intersection				
Intersection Delay, s/veh	8.6			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	608	419	75	192
Demand Flow Rate, veh/h	627	432	77	198
Vehicles Circulating, veh/h	255	92	546	435
Vehicles Exiting, veh/h	378	531	336	89
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.3	6.2	5.7	6.5
Approach LOS	B	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	627	432	77	198
Cap Entry Lane, veh/h	1064	1256	791	885
Entry HV Adj Factor	0.970	0.971	0.977	0.969
Flow Entry, veh/h	608	419	75	192
Cap Entry, veh/h	1032	1219	772	858
V/C Ratio	0.589	0.344	0.097	0.224
Control Delay, s/veh	11.3	6.2	5.7	6.5
LOS	B	A	A	A
95th %tile Queue, veh	4	2	0	1

Intersection				
Intersection Delay, s/veh	63.5			
Intersection LOS	F			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	513	978	425	192
Demand Flow Rate, veh/h	529	1007	438	198
Vehicles Circulating, veh/h	188	496	425	1021
Vehicles Exiting, veh/h	1031	367	292	482
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.4	125.1	10.5	14.8
Approach LOS	A	F	B	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	529	1007	438	198
Cap Entry Lane, veh/h	1139	832	895	487
Entry HV Adj Factor	0.970	0.972	0.971	0.968
Flow Entry, veh/h	513	978	425	192
Cap Entry, veh/h	1105	808	868	471
V/C Ratio	0.464	1.210	0.490	0.406
Control Delay, s/veh	8.4	125.1	10.5	14.8
LOS	A	F	B	B
95th %tile Queue, veh	3	33	3	2

HCM 6th Roundabout
86: Cumberland Rd & Field Dr/186th St

Future AM Peak
Mitigated - Final

Intersection					
Intersection Delay, s/veh	8.3				
Intersection LOS	A				
Approach	EB	WB		NB	SB
Entry Lanes	1	2		1	1
Conflicting Circle Lanes	1	1		1	1
Adj Approach Flow, veh/h	608	419		75	192
Demand Flow Rate, veh/h	627	432		77	198
Vehicles Circulating, veh/h	255	92		546	435
Vehicles Exiting, veh/h	378	531		336	89
Ped Vol Crossing Leg, #/h	0	0		0	0
Ped Cap Adj	1.000	1.000		1.000	1.000
Approach Delay, s/veh	11.3	5.3		5.7	6.5
Approach LOS	B	A		A	A
Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.910	0.090	1.000	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609	2.609
Critical Headway, s	4.976	4.544	4.544	4.976	4.976
Entry Flow, veh/h	627	393	39	77	198
Cap Entry Lane, veh/h	1064	1306	1306	791	885
Entry HV Adj Factor	0.970	0.970	0.974	0.977	0.969
Flow Entry, veh/h	608	381	38	75	192
Cap Entry, veh/h	1032	1267	1273	772	858
V/C Ratio	0.589	0.301	0.030	0.097	0.224
Control Delay, s/veh	11.3	5.6	3.1	5.7	6.5
LOS	B	A	A	A	A
95th %tile Queue, veh	4	1	0	0	1

HCM 6th Roundabout
86: Cumberland Rd & Field Dr/186th St

Future PM Peak
Mitigated - Final

Intersection					
Intersection Delay, s/veh	26.2				
Intersection LOS	D				
Approach	EB	WB		NB	SB
Entry Lanes	1	2		1	1
Conflicting Circle Lanes	1	1		1	1
Adj Approach Flow, veh/h	513	978		425	192
Demand Flow Rate, veh/h	529	1007		438	198
Vehicles Circulating, veh/h	188	496		425	1021
Vehicles Exiting, veh/h	1031	367		292	482
Ped Vol Crossing Leg, #/h	0	0		0	0
Ped Cap Adj	1.000	1.000		1.000	1.000
Approach Delay, s/veh	8.4	44.6		10.5	14.8
Approach LOS	A	E		B	B
Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.889	0.111	1.000	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609	2.609
Critical Headway, s	4.976	4.544	4.544	4.976	4.976
Entry Flow, veh/h	529	895	112	438	198
Cap Entry Lane, veh/h	1139	904	904	895	487
Entry HV Adj Factor	0.970	0.971	0.973	0.971	0.968
Flow Entry, veh/h	513	869	109	425	192
Cap Entry, veh/h	1105	878	880	868	471
V/C Ratio	0.464	0.990	0.124	0.490	0.406
Control Delay, s/veh	8.4	49.5	5.3	10.5	14.8
LOS	A	E	A	B	B
95th %tile Queue, veh	3	18	0	3	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	7	20	93	2	33	1	189	370	0	14	1259	104
Future Vol, veh/h	7	20	93	2	33	1	189	370	0	14	1259	104
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	-	-	25	-	-	25	580	-	640	470	-	680
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	22	101	2	36	1	205	402	0	15	1368	113

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2027	2210	684	1537	2323	201	1481	0	0	402	0	0
Stage 1	1398	1398	-	812	812	-	-	-	-	-	-	-
Stage 2	629	812	-	725	1511	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	33	43	389	78	36	803	445	-	-	1146	-	-
Stage 1	147	204	-	337	388	-	-	-	-	-	-	-
Stage 2	434	388	-	380	180	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	34	23	389	31	~ 19	803	445	-	-	1146	-	-
Mov Cap-2 Maneuver	62	101	-	38	~-38	-	-	-	-	-	-	-
Stage 1	79	201	-	182	209	-	-	-	-	-	-	-
Stage 2	194	209	-	248	178	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	28.4		6.7	0.1
HCM LOS	D	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	445	-	-	87	389	+	803	1146	-	-
HCM Lane V/C Ratio	0.462	-	-	0.337	0.26	-	0.001	0.013	-	-
HCM Control Delay (s)	19.8	-	-	66.1	17.5	-	9.5	8.2	-	-
HCM Lane LOS	C	-	-	F	C	-	A	A	-	-
HCM 95th %tile Q(veh)	2.4	-	-	1.3	1	-	0	0	-	-

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

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕↕	↕	↕	↕↕	↕
Traffic Vol, veh/h	16	57	190	0	57	6	319	1305	8	9	685	53
Future Vol, veh/h	16	57	190	0	57	6	319	1305	8	9	685	53
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	-	-	25	-	-	25	580	-	640	470	-	680
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	17	62	207	0	62	7	347	1418	9	10	745	58
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2199	2886	373	2536	2935	709	803	0	0	1427	0	0
Stage 1	765	765	-	2112	2112	-	-	-	-	-	-	-
Stage 2	1434	2121	-	424	823	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	25	~ 16	622	13	~ 15	374	810	-	-	467	-	-
Stage 1	360	408	-	52	89	-	-	-	-	-	-	-
Stage 2	139	88	-	576	384	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 9	622	-	~ 8	374	810	-	-	467	-	-
Mov Cap-2 Maneuver	~ -11	~ 34	- ~	-265	~ 20	-	-	-	-	-	-	-
Stage 1	206	399	-	30	~ 51	-	-	-	-	-	-	-
Stage 2	-	~ 50	-	318	376	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s					2.5		0.2					
HCM LOS	-		-									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	810	-	-	-	622	-	374	467	-	-		
HCM Lane V/C Ratio	0.428	-	-	-	0.332	-	0.017	0.021	-	-		
HCM Control Delay (s)	12.7	-	-	-	13.6	-	14.8	12.9	-	-		
HCM Lane LOS	B	-	-	-	B	-	B	B	-	-		
HCM 95th %tile Q(veh)	2.2	-	-	-	1.5	-	0.1	0.1	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection												
Int Delay, s/veh	66.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	35	414	107	35	10	204	551	77	27	1758	104
Future Vol, veh/h	7	35	414	107	35	10	204	551	77	27	1758	104
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	-	-	25	-	-	25	580	-	640	470	-	680
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	38	450	116	38	11	222	599	84	29	1911	113
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2732	3096	956	2076	3125	300	2024	0	0	683	0	0
Stage 1	1969	1969	-	1043	1043	-	-	-	-	-	-	-
Stage 2	763	1127	-	1033	2082	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	9	~ 11	~ 257	~ 31	~ 11	693	273	-	-	899	-	-
Stage 1	64	106	-	243	302	-	-	-	-	-	-	-
Stage 2	361	276	-	247	93	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 2	~ 2	~ 257	-	~ 2	693	273	-	-	899	-	-
Mov Cap-2 Maneuver	-	~ 18	-	~ 52	84	-	-	-	-	-	-	-
Stage 1	12	103	-	~ 45	56	-	-	-	-	-	-	-
Stage 2	21	52	-	-	90	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s\$	456.3				14		0.1					
HCM LOS	F		-									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	273	-	-	18	257	-	693	899	-	-		
HCM Lane V/C Ratio	0.812	-	-	2.536	1.751	-	0.016	0.033	-	-		
HCM Control Delay (s)	57.2	-	-	\$ 1140.3	\$ 386.9	-	10.3	9.1	-	-		
HCM Lane LOS	F	-	-	F	F	-	B	A	-	-		
HCM 95th %tile Q(veh)	6.5	-	-	6.2	29.8	-	0	0.1	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon						

Intersection												
Int Delay, s/veh	36											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕↕	↕	↕	↕↕	↕
Traffic Vol, veh/h	16	64	234	106	72	22	684	2054	226	17	1186	53
Future Vol, veh/h	16	64	234	106	72	22	684	2054	226	17	1186	53
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	-	-	25	-	-	25	580	-	640	470	-	680
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	17	70	254	115	78	24	743	2233	246	18	1289	58
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3967	5290	645	4435	5102	1117	1347	0	0	2479	0	0
Stage 1	1325	1325	-	3719	3719	-	-	-	-	-	-	-
Stage 2	2642	3965	-	716	1383	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	~ 1	0	413	0	0	200	~ 502	-	-	180	-	-
Stage 1	163	221	-	~ 4	~ 12	-	-	-	-	-	-	-
Stage 2	23	~ 9	-	385	207	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	413	-	0	200	~ 502	-	-	180	-	-
Mov Cap-2 Maneuver	~ -19	~ -18	-	~ 4	0	-	-	-	-	-	-	-
Stage 1	163	199	-	~ 4	0	-	-	-	-	-	-	-
Stage 2	-	0	-	~ 87	186	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s							57.4		0.4			
HCM LOS	-		-									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	~ 502	-	-	-	413	-	200	180	-	-		
HCM Lane V/C Ratio	1.481	-	-	-	0.616	-	0.12	0.103	-	-		
HCM Control Delay (s)	248.8	-	-	-	26.7	-	25.4	27.3	-	-		
HCM Lane LOS	F	-	-	-	D	-	D	D	-	-		
HCM 95th %tile Q(veh)	37.6	-	-	-	4	-	0.4	0.3	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	32	22	167	284	11
Future Vol, veh/h	2	32	22	167	284	11
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	2	35	24	182	309	12
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	545	315	321	0	-	0
Stage 1	315	-	-	-	-	-
Stage 2	230	-	-	-	-	-
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	498	723	1233	-	-	-
Stage 1	738	-	-	-	-	-
Stage 2	806	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	487	723	1233	-	-	-
Mov Cap-2 Maneuver	487	-	-	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	806	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.4	0.9		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1233	-	703	-	-	
HCM Lane V/C Ratio	0.019	-	0.053	-	-	
HCM Control Delay (s)	8	0	10.4	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	56	51	347	310	5
Future Vol, veh/h	14	56	51	347	310	5
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	15	61	55	377	337	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	827	340	342	0	-	0
Stage 1	340	-	-	-	-	-
Stage 2	487	-	-	-	-	-
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	340	700	1211	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	616	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	321	700	1211	-	-	-
Mov Cap-2 Maneuver	321	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	616	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12.3	1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1211	-	566	-	-	
HCM Lane V/C Ratio	0.046	-	0.134	-	-	
HCM Control Delay (s)	8.1	0	12.3	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-	

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	56	30	313	771	57
Future Vol, veh/h	13	56	30	313	771	57
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	14	61	33	340	838	62

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1275	869	900
Stage 1	869	-	-
Stage 2	406	-	-
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	183	350	751
Stage 1	409	-	-
Stage 2	671	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	173	350	751
Mov Cap-2 Maneuver	173	-	-
Stage 1	387	-	-
Stage 2	671	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.5	0.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	751	-	293	-	-
HCM Lane V/C Ratio	0.043	-	0.256	-	-
HCM Control Delay (s)	10	0	21.5	-	-
HCM Lane LOS	B	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1	-	-

Intersection						
Int Delay, s/veh	11.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	59	76	60	861	630	31
Future Vol, veh/h	59	76	60	861	630	31
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	64	83	65	936	685	34
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1768	702	719	0	-	0
Stage 1	702	-	-	-	-	-
Stage 2	1066	-	-	-	-	-
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	91	436	878	-	-	-
Stage 1	490	-	-	-	-	-
Stage 2	329	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	77	436	878	-	-	-
Mov Cap-2 Maneuver	77	-	-	-	-	-
Stage 1	415	-	-	-	-	-
Stage 2	329	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	141.4	0.6		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	878	-	144	-	-	
HCM Lane V/C Ratio	0.074	-	1.019	-	-	
HCM Control Delay (s)	9.4	0	141.4	-	-	
HCM Lane LOS	A	A	F	-	-	
HCM 95th %tile Q(veh)	0.2	-	7.6	-	-	

Intersection			
Intersection Delay, s/veh 10.1			
Intersection LOS B			
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	75	373	900
Demand Flow Rate, veh/h	77	384	927
Vehicles Circulating, veh/h	863	14	34
Vehicles Exiting, veh/h	98	926	364
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	8.1	5.2	12.3
Approach LOS	A	A	B
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	77	384	927
Cap Entry Lane, veh/h	572	1360	1333
Entry HV Adj Factor	0.974	0.971	0.971
Flow Entry, veh/h	75	373	900
Cap Entry, veh/h	557	1321	1294
V/C Ratio	0.135	0.282	0.696
Control Delay, s/veh	8.1	5.2	12.3
LOS	A	A	B
95th %tile Queue, veh	0	1	6

Intersection			
Intersection Delay, s/veh 13.5			
Intersection LOS B			
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	147	1001	719
Demand Flow Rate, veh/h	151	1031	741
Vehicles Circulating, veh/h	706	66	67
Vehicles Exiting, veh/h	102	791	1030
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	8.2	17.1	9.6
Approach LOS	A	C	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	151	1031	741
Cap Entry Lane, veh/h	672	1290	1289
Entry HV Adj Factor	0.974	0.971	0.971
Flow Entry, veh/h	147	1001	719
Cap Entry, veh/h	654	1252	1251
V/C Ratio	0.225	0.799	0.575
Control Delay, s/veh	8.2	17.1	9.6
LOS	A	C	A
95th %tile Queue, veh	1	9	4

Intersection						
Int Delay, s/veh	7.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	2	0	0	22
Future Vol, veh/h	0	0	2	0	0	22
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	0	2	0	0	24
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2	0	-	0	2	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1614	-	-	-	1018	1079
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1614	-	-	-	1018	1079
Mov Cap-2 Maneuver	-	-	-	-	1018	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		8.4		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1614	-	-	-	1079	
HCM Lane V/C Ratio	-	-	-	-	0.022	
HCM Control Delay (s)	0	-	-	-	8.4	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	11	3	0	0	0
Future Vol, veh/h	4	11	3	0	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	4	12	3	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	3	0	0 23 3
Stage 1	-	-	- 3 -
Stage 2	-	-	- 20 -
Critical Hdwy	4.13	-	- 6.43 6.23
Critical Hdwy Stg 1	-	-	- 5.43 -
Critical Hdwy Stg 2	-	-	- 5.43 -
Follow-up Hdwy	2.227	-	- 3.527 3.327
Pot Cap-1 Maneuver	1612	-	- 991 1078
Stage 1	-	-	- 1018 -
Stage 2	-	-	- 1000 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1612	-	- 989 1078
Mov Cap-2 Maneuver	-	-	- 989 -
Stage 1	-	-	- 1016 -
Stage 2	-	-	- 1000 -

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1612	-	-	-	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	7.2	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection						
Int Delay, s/veh	8.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	0	3	0	0	89
Future Vol, veh/h	13	0	3	0	0	89
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	14	0	3	0	0	97
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	3	0	-	0	31	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1612	-	-	-	980	1078
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	992	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1612	-	-	-	971	1078
Mov Cap-2 Maneuver	-	-	-	-	971	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	992	-
Approach	EB	WB		SB		
HCM Control Delay, s	7.3	0		8.7		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1612	-	-	-	-	1078
HCM Lane V/C Ratio	0.009	-	-	-	-	0.09
HCM Control Delay (s)	7.3	0	-	-	-	8.7
HCM Lane LOS	A	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0.3

Intersection						
Int Delay, s/veh	6.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	84	14	4	0	0	44
Future Vol, veh/h	84	14	4	0	0	44
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	91	15	4	0	0	48
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	4	0	-	0	201	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	197	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1611	-	-	-	785	1077
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	834	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1611	-	-	-	740	1077
Mov Cap-2 Maneuver	-	-	-	-	740	-
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	834	-
Approach	EB	WB		SB		
HCM Control Delay, s	6.3	0		8.5		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1611	-	-	-	-	1077
HCM Lane V/C Ratio	0.057	-	-	-	-	0.044
HCM Control Delay (s)	7.4	0	-	-	-	8.5
HCM Lane LOS	A	A	-	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.1

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	0	175	0	0	316
Future Vol, veh/h	12	0	175	0	0	316
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	13	0	190	0	0	343
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	533	190	0	0	190	0
Stage 1	190	-	-	-	-	-
Stage 2	343	-	-	-	-	-
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	506	849	-	-	1378	-
Stage 1	840	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	506	849	-	-	1378	-
Mov Cap-2 Maneuver	506	-	-	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	12.3	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	506	1378	-	
HCM Lane V/C Ratio	-	-	0.026	-	-	
HCM Control Delay (s)	-	-	12.3	0	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	0	388	9	0	339
Future Vol, veh/h	5	0	388	9	0	339
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	5	0	422	10	0	368
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	795	427	0	0	432	0
Stage 1	427	-	-	-	-	-
Stage 2	368	-	-	-	-	-
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	355	625	-	-	1122	-
Stage 1	656	-	-	-	-	-
Stage 2	698	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	355	625	-	-	1122	-
Mov Cap-2 Maneuver	355	-	-	-	-	-
Stage 1	656	-	-	-	-	-
Stage 2	698	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	15.3	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	355	1122	-	
HCM Lane V/C Ratio	-	-	0.015	-	-	
HCM Control Delay (s)	-	-	15.3	0	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Intersection						
Int Delay, s/veh	3.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	80	1	367	13	1	983
Future Vol, veh/h	80	1	367	13	1	983
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	87	1	399	14	1	1068
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1476	406	0	0	413	0
Stage 1	406	-	-	-	-	-
Stage 2	1070	-	-	-	-	-
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	138	643	-	-	1141	-
Stage 1	671	-	-	-	-	-
Stage 2	328	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	138	643	-	-	1141	-
Mov Cap-2 Maneuver	138	-	-	-	-	-
Stage 1	671	-	-	-	-	-
Stage 2	327	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	67.5	0		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 139		1141	-	
HCM Lane V/C Ratio	-	- 0.633		0.001	-	
HCM Control Delay (s)	-	- 67.5		8.2	0	
HCM Lane LOS	-	- F		A	A	
HCM 95th %tile Q(veh)	-	- 3.4		0	-	

Intersection						
Int Delay, s/veh	6.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	3	1096	90	7	786
Future Vol, veh/h	50	3	1096	90	7	786
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	54	3	1191	98	8	854
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2110	1240	0	0	1289	0
Stage 1	1240	-	-	-	-	-
Stage 2	870	-	-	-	-	-
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	56	213	-	-	535	-
Stage 1	272	-	-	-	-	-
Stage 2	408	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 54	213	-	-	535	-
Mov Cap-2 Maneuver	~ 54	-	-	-	-	-
Stage 1	272	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	248.4		0		0.1	
HCM LOS	F					
Minor Lane/Major Mvmt		NBT	NBRWBLn1	SBL	SBT	
Capacity (veh/h)		-	-	56	535	-
HCM Lane V/C Ratio		-	-	1.029	0.014	-
HCM Control Delay (s)		-	-	248.4	11.8	0
HCM Lane LOS		-	-	F	B	A
HCM 95th %tile Q(veh)		-	-	4.8	0	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection			
Intersection Delay, s/veh 17.6			
Intersection LOS C			
Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	88	413	1069
Demand Flow Rate, veh/h	91	425	1101
Vehicles Circulating, veh/h	411	1	90
Vehicles Exiting, veh/h	15	1190	412
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.1	5.4	23.3
Approach LOS	A	A	C
Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	91	425	1101
Cap Entry Lane, veh/h	907	1378	1259
Entry HV Adj Factor	0.967	0.972	0.971
Flow Entry, veh/h	88	413	1069
Cap Entry, veh/h	877	1340	1222
V/C Ratio	0.100	0.308	0.875
Control Delay, s/veh	5.1	5.4	23.3
LOS	A	A	C
95th %tile Queue, veh	0	1	13

Intersection			
Intersection Delay, s/veh 26.0			
Intersection LOS D			
Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	57	1289	862
Demand Flow Rate, veh/h	59	1328	888
Vehicles Circulating, veh/h	1227	8	56
Vehicles Exiting, veh/h	109	936	1230
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	11.8	35.9	12.1
Approach LOS	B	E	B
Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	59	1328	888
Cap Entry Lane, veh/h	395	1369	1303
Entry HV Adj Factor	0.966	0.971	0.971
Flow Entry, veh/h	57	1289	862
Cap Entry, veh/h	381	1329	1266
V/C Ratio	0.149	0.970	0.681
Control Delay, s/veh	11.8	35.9	12.1
LOS	B	E	B
95th %tile Queue, veh	1	20	6

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	121	156	225	185	102
Future Vol, veh/h	23	121	156	225	185	102
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	65	-	-	170
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	25	132	170	245	201	111
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	786	201	312	0	-	0
Stage 1	201	-	-	-	-	-
Stage 2	585	-	-	-	-	-
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	360	837	1243	-	-	-
Stage 1	830	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	311	837	1243	-	-	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.3	3.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1243	-	311	837	-	-
HCM Lane V/C Ratio	0.136	-	0.08	0.157	-	-
HCM Control Delay (s)	8.4	-	17.6	10.1	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0.3	0.6	-	-

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	110	166	430	257	36
Future Vol, veh/h	24	110	166	430	257	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	65	-	-	170
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	26	120	180	467	279	39
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1106	279	318	0	-	0
Stage 1	279	-	-	-	-	-
Stage 2	827	-	-	-	-	-
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	232	757	1236	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	428	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	198	757	1236	-	-	-
Mov Cap-2 Maneuver	198	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	428	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	13.3	2.3		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1236	-	198	757	-	-
HCM Lane V/C Ratio	0.146	-	0.132	0.158	-	-
HCM Control Delay (s)	8.4	-	25.9	10.6	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0.4	0.6	-	-

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	121	156	225	185	102
Future Vol, veh/h	23	121	156	225	185	102
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	65	-	-	170
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	25	132	170	245	201	111
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	786	201	312	0	-	0
Stage 1	201	-	-	-	-	-
Stage 2	585	-	-	-	-	-
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	360	837	1243	-	-	-
Stage 1	830	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	311	837	1243	-	-	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.3	3.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1243	-	311	837	-	-
HCM Lane V/C Ratio	0.136	-	0.08	0.157	-	-
HCM Control Delay (s)	8.4	-	17.6	10.1	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0.3	0.6	-	-

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	110	166	430	257	36
Future Vol, veh/h	24	110	166	430	257	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	65	-	-	170
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	26	120	180	467	279	39
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1106	279	318	0	-	0
Stage 1	279	-	-	-	-	-
Stage 2	827	-	-	-	-	-
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	232	757	1236	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	428	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	198	757	1236	-	-	-
Mov Cap-2 Maneuver	198	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	428	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	13.3	2.3		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1236	-	198	757	-	-
HCM Lane V/C Ratio	0.146	-	0.132	0.158	-	-
HCM Control Delay (s)	8.4	-	25.9	10.6	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0.4	0.6	-	-

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	85	3	21	51	13	2	29	42	45	90	0
Future Vol, veh/h	0	85	3	21	51	13	2	29	42	45	90	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	92	3	23	55	14	2	32	46	49	98	0
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	8.2	8.2	7.7	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	0%	25%	33%
Vol Thru, %	40%	97%	60%	67%
Vol Right, %	58%	3%	15%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	73	88	85	135
LT Vol	2	0	21	45
Through Vol	29	85	51	90
RT Vol	42	3	13	0
Lane Flow Rate	79	96	92	147
Geometry Grp	1	1	1	1
Degree of Util (X)	0.093	0.121	0.116	0.185
Departure Headway (Hd)	4.22	4.555	4.538	4.542
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	851	788	791	791
Service Time	2.24	2.576	2.559	2.561
HCM Lane V/C Ratio	0.093	0.122	0.116	0.186
HCM Control Delay	7.7	8.2	8.2	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.4	0.4	0.7

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	3	83	3	57	135	49	8	88	24	25	55	2
Future Vol, veh/h	3	83	3	57	135	49	8	88	24	25	55	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	3	90	3	62	147	53	9	96	26	27	60	2
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	8.5	9.8	8.9	8.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	3%	24%	30%
Vol Thru, %	73%	93%	56%	67%
Vol Right, %	20%	3%	20%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	89	241	82
LT Vol	8	3	57	25
Through Vol	88	83	135	55
RT Vol	24	3	49	2
Lane Flow Rate	130	97	262	89
Geometry Grp	1	1	1	1
Degree of Util (X)	0.174	0.129	0.33	0.124
Departure Headway (Hd)	4.798	4.782	4.532	5.002
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	745	747	791	714
Service Time	2.847	2.832	2.572	3.055
HCM Lane V/C Ratio	0.174	0.13	0.331	0.125
HCM Control Delay	8.9	8.5	9.8	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.4	1.4	0.4

Intersection

Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	85	3	21	51	13	2	29	42	45	90	0
Future Vol, veh/h	0	85	3	21	51	13	2	29	42	45	90	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	92	3	23	55	14	2	32	46	49	98	0
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	8.2	8.2	7.7	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	0%	25%	33%
Vol Thru, %	40%	97%	60%	67%
Vol Right, %	58%	3%	15%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	73	88	85	135
LT Vol	2	0	21	45
Through Vol	29	85	51	90
RT Vol	42	3	13	0
Lane Flow Rate	79	96	92	147
Geometry Grp	1	1	1	1
Degree of Util (X)	0.093	0.121	0.116	0.185
Departure Headway (Hd)	4.22	4.555	4.538	4.542
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	851	788	791	791
Service Time	2.24	2.576	2.559	2.561
HCM Lane V/C Ratio	0.093	0.122	0.116	0.186
HCM Control Delay	7.7	8.2	8.2	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.4	0.4	0.7

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	83	3	57	135	49	8	88	24	25	55	2
Future Vol, veh/h	3	83	3	57	135	49	8	88	24	25	55	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	3	90	3	62	147	53	9	96	26	27	60	2
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	8.5			9.8			8.9			8.8		
HCM LOS	A			A			A			A		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	3%	24%	30%
Vol Thru, %	73%	93%	56%	67%
Vol Right, %	20%	3%	20%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	89	241	82
LT Vol	8	3	57	25
Through Vol	88	83	135	55
RT Vol	24	3	49	2
Lane Flow Rate	130	97	262	89
Geometry Grp	1	1	1	1
Degree of Util (X)	0.174	0.129	0.33	0.124
Departure Headway (Hd)	4.798	4.782	4.532	5.002
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	745	747	791	714
Service Time	2.847	2.832	2.572	3.055
HCM Lane V/C Ratio	0.174	0.13	0.331	0.125
HCM Control Delay	8.9	8.5	9.8	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.4	1.4	0.4

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	3	1	7	4	1	0	80	73	41	211	20
Future Vol, veh/h	0	3	1	7	4	1	0	80	73	41	211	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	3	1	8	4	1	0	87	79	45	229	22

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	459	496	240	459	468	127	251	0	0	166	0	0
Stage 1	330	330	-	127	127	-	-	-	-	-	-	-
Stage 2	129	166	-	332	341	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	511	474	796	511	491	921	1309	-	-	1406	-	-
Stage 1	681	644	-	874	789	-	-	-	-	-	-	-
Stage 2	872	759	-	679	637	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	493	456	796	493	473	921	1309	-	-	1406	-	-
Mov Cap-2 Maneuver	493	456	-	493	473	-	-	-	-	-	-	-
Stage 1	681	620	-	874	789	-	-	-	-	-	-	-
Stage 2	866	759	-	650	613	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.1		12.3		0		1.2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1309	-	-	511 505	1406	-	-
HCM Lane V/C Ratio	-	-	-	0.009 0.026	0.032	-	-
HCM Control Delay (s)	0	-	-	12.1 12.3	7.6	0	-
HCM Lane LOS	A	-	-	B B	A A	-	-
HCM 95th %tile Q(veh)	0	-	-	0 0.1	0.1	-	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	12	2	29	35	12	1	495	47	7	158	1
Future Vol, veh/h	7	12	2	29	35	12	1	495	47	7	158	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	13	2	32	38	13	1	538	51	8	172	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	780	780	173	762	755	564	173	0	0	589	0	0
Stage 1	189	189	-	566	566	-	-	-	-	-	-	-
Stage 2	591	591	-	196	189	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	311	326	868	320	337	523	1398	-	-	981	-	-
Stage 1	810	742	-	507	506	-	-	-	-	-	-	-
Stage 2	492	493	-	803	742	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	275	323	868	307	334	523	1398	-	-	981	-	-
Mov Cap-2 Maneuver	275	323	-	307	334	-	-	-	-	-	-	-
Stage 1	809	735	-	506	505	-	-	-	-	-	-	-
Stage 2	443	493	-	780	735	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17	18.8	0	0.4
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1398	-	-	324 342	981	-	-
HCM Lane V/C Ratio	0.001	-	-	0.07 0.242	0.008	-	-
HCM Control Delay (s)	7.6	0	-	17 18.8	8.7	0	-
HCM Lane LOS	A	A	-	C C	A A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2 0.9	0	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	3	1	7	4	1	0	80	73	41	211	20
Future Vol, veh/h	0	3	1	7	4	1	0	80	73	41	211	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	3	1	8	4	1	0	87	79	45	229	22
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	459	496	240	459	468	127	251	0	0	166	0	0
Stage 1	330	330	-	127	127	-	-	-	-	-	-	-
Stage 2	129	166	-	332	341	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	511	474	796	511	491	921	1309	-	-	1406	-	-
Stage 1	681	644	-	874	789	-	-	-	-	-	-	-
Stage 2	872	759	-	679	637	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	493	456	796	493	473	921	1309	-	-	1406	-	-
Mov Cap-2 Maneuver	493	456	-	493	473	-	-	-	-	-	-	-
Stage 1	681	620	-	874	789	-	-	-	-	-	-	-
Stage 2	866	759	-	650	613	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	12.1		12.3			0			1.2			
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1309	-	-	511	505	1406	-	-				
HCM Lane V/C Ratio	-	-	-	0.009	0.026	0.032	-	-				
HCM Control Delay (s)	0	-	-	12.1	12.3	7.6	0	-				
HCM Lane LOS	A	-	-	B	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	-	-				

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	7	12	2	29	35	12	1	495	47	7	158	1
Future Vol, veh/h	7	12	2	29	35	12	1	495	47	7	158	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	13	2	32	38	13	1	538	51	8	172	1
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	780	780	173	762	755	564	173	0	0	589	0	0
Stage 1	189	189	-	566	566	-	-	-	-	-	-	-
Stage 2	591	591	-	196	189	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	311	326	868	320	337	523	1398	-	-	981	-	-
Stage 1	810	742	-	507	506	-	-	-	-	-	-	-
Stage 2	492	493	-	803	742	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	275	323	868	307	334	523	1398	-	-	981	-	-
Mov Cap-2 Maneuver	275	323	-	307	334	-	-	-	-	-	-	-
Stage 1	809	735	-	506	505	-	-	-	-	-	-	-
Stage 2	443	493	-	780	735	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	17		18.8		0		0.4					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1398	-	-	324	342	981	-	-				
HCM Lane V/C Ratio	0.001	-	-	0.07	0.242	0.008	-	-				
HCM Control Delay (s)	7.6	0	-	17	18.8	8.7	0	-				
HCM Lane LOS	A	A	-	C	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.2	0.9	0	-	-				

HCM 6th Signalized Intersection Summary

107: SR 38 & Logan St

Existing AM Peak

12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	84	29	110	155	114	19	177	45	348	391	13
Future Volume (veh/h)	24	84	29	110	155	114	19	177	45	348	391	13
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	26	91	32	120	168	124	21	192	49	378	425	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	327	377	133	468	285	211	462	876	742	637	843	28
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	1079	1311	461	1258	992	732	942	1856	1572	1130	1786	59
Grp Volume(v), veh/h	26	0	123	120	0	292	21	192	49	378	0	439
Grp Sat Flow(s),veh/h/ln	1079	0	1773	1258	0	1724	942	1856	1572	1130	0	1845
Q Serve(g_s), s	0.9	0.0	2.2	3.4	0.0	6.0	0.7	2.5	0.7	12.3	0.0	6.9
Cycle Q Clear(g_c), s	6.9	0.0	2.2	5.6	0.0	6.0	7.5	2.5	0.7	14.9	0.0	6.9
Prop In Lane	1.00		0.26	1.00		0.42	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	327	0	510	468	0	496	462	876	742	637	0	871
V/C Ratio(X)	0.08	0.00	0.24	0.26	0.00	0.59	0.05	0.22	0.07	0.59	0.00	0.50
Avail Cap(c_a), veh/h	405	0	639	559	0	621	584	1114	944	783	0	1108
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.7	0.0	11.3	13.5	0.0	12.7	10.2	6.5	6.0	10.8	0.0	7.6
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.3	0.0	1.1	0.0	0.1	0.0	0.9	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.7	0.8	0.0	2.0	0.1	0.7	0.2	2.3	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	0.0	11.6	13.8	0.0	13.8	10.3	6.6	6.0	11.7	0.0	8.1
LnGrp LOS	B	A	B	B	A	B	B	A	A	B	A	A
Approach Vol, veh/h	149				412				262			
Approach Delay, s/veh	12.3				13.8				6.8			
Approach LOS	B				B				A			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	24.6			17.0			24.6			17.0		
Change Period (Y+Rc), s	5.0			5.0			5.0			5.0		
Max Green Setting (Gmax), s	25.0			15.0			25.0			15.0		
Max Q Clear Time (g_c+l1), s	9.5			8.9			16.9			8.0		
Green Ext Time (p_c), s	1.1			0.3			2.8			1.3		
Intersection Summary												
HCM 6th Ctrl Delay	10.5											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

107: SR 38 & Logan St

Existing PM Peak

12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	195	44	87	157	266	29	333	54	328	349	15
Future Volume (veh/h)	68	195	44	87	157	266	29	333	54	328	349	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	74	212	48	95	171	289	32	362	59	357	379	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	175	439	99	346	186	314	501	928	786	507	884	37
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	924	1464	332	1111	620	1047	981	1856	1572	958	1767	75
Grp Volume(v), veh/h	74	0	260	95	0	460	32	362	59	357	0	395
Grp Sat Flow(s),veh/h/ln	924	0	1796	1111	0	1667	981	1856	1572	958	0	1842
Q Serve(g_s), s	1.7	0.0	5.9	3.8	0.0	13.3	1.1	6.1	1.0	18.4	0.0	6.8
Cycle Q Clear(g_c), s	15.0	0.0	5.9	9.8	0.0	13.3	7.9	6.1	1.0	24.5	0.0	6.8
Prop In Lane	1.00		0.18	1.00		0.63	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	175	0	539	346	0	500	501	928	786	507	0	921
V/C Ratio(X)	0.42	0.00	0.48	0.27	0.00	0.92	0.06	0.39	0.08	0.70	0.00	0.43
Avail Cap(c_a), veh/h	175	0	539	346	0	500	501	928	786	507	0	921
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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	14.3	18.3	0.0	16.9	10.5	7.8	6.5	15.4	0.0	8.0
Incr Delay (d2), s/veh	1.6	0.0	0.7	0.4	0.0	22.3	0.1	0.3	0.0	4.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.2	0.9	0.0	7.4	0.2	1.8	0.2	3.8	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	0.0	15.0	18.7	0.0	39.2	10.5	8.0	6.5	19.8	0.0	8.3
LnGrp LOS	C	A	B	B	A	D	B	A	A	B	A	A
Approach Vol, veh/h	334			555			453			752		
Approach Delay, s/veh	17.5			35.7			8.0			13.7		
Approach LOS	B			D			A			B		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	30.0			20.0			30.0			20.0		
Change Period (Y+Rc), s	5.0			5.0			5.0			5.0		
Max Green Setting (Gmax), s	25.0			15.0			25.0			15.0		
Max Q Clear Time (g_c+I1), s	9.9			17.0			26.5			15.3		
Green Ext Time (p_c), s	2.1			0.0			0.0			0.0		
Intersection Summary												
HCM 6th Ctrl Delay	18.9											
HCM 6th LOS	B											

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HCM 6th Signalized Intersection Summary 107: SR 38 & Logan St

Future AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	84	29	110	155	114	19	356	45	517	664	13
Future Volume (veh/h)	24	84	29	110	155	114	19	356	45	517	664	13
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	26	91	32	120	168	124	21	387	49	562	722	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	147	271	95	284	205	151	272	449	380	611	1190	23
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.24	0.24	0.24	0.35	0.66	0.66
Sat Flow, veh/h	1079	1311	461	1258	992	732	716	1856	1572	1767	1814	35
Grp Volume(v), veh/h	26	0	123	120	0	292	21	387	49	562	0	736
Grp Sat Flow(s),veh/h/ln	1079	0	1773	1258	0	1724	716	1856	1572	1767	0	1849
Q Serve(g_s), s	1.7	0.0	4.3	6.5	0.0	11.8	1.7	14.5	1.8	22.2	0.0	16.5
Cycle Q Clear(g_c), s	13.5	0.0	4.3	10.8	0.0	11.8	1.7	14.5	1.8	22.2	0.0	16.5
Prop In Lane	1.00		0.26	1.00		0.42	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	147	0	366	284	0	356	272	449	380	611	0	1213
V/C Ratio(X)	0.18	0.00	0.34	0.42	0.00	0.82	0.08	0.86	0.13	0.92	0.00	0.61
Avail Cap(c_a), veh/h	147	0	366	284	0	356	306	536	454	705	0	1399
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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.0	0.0	24.6	29.2	0.0	27.6	21.5	26.4	21.6	22.8	0.0	7.1
Incr Delay (d2), s/veh	0.6	0.0	0.5	1.0	0.0	14.2	0.1	11.9	0.2	16.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.8	2.0	0.0	6.0	0.3	7.4	0.6	11.0	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	0.0	25.1	30.2	0.0	41.8	21.6	38.3	21.7	38.9	0.0	7.7
LnGrp LOS	C	A	C	C	A	D	C	D	C	D	A	A
Approach Vol, veh/h	149			412				457			1298	
Approach Delay, s/veh	26.8			38.4				35.8			21.2	
Approach LOS	C			D				D			C	
Timer - Assigned Phs	1	2	4			6		8				
Phs Duration (G+Y+Rc), s	30.1	22.6	20.0			52.7		20.0				
Change Period (Y+Rc), s	5.0	5.0	5.0			5.0		5.0				
Max Green Setting (Gmax), s	29.0	21.0	15.0			55.0		15.0				
Max Q Clear Time (g_c+I1), s	24.2	16.5	15.5			18.5		13.8				
Green Ext Time (p_c), s	0.9	1.1	0.0			5.9		0.3				
Intersection Summary												
HCM 6th Ctrl Delay			27.5									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary 107: SR 38 & Logan St

Future PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	195	44	87	157	534	29	960	54	328	736	15
Future Volume (veh/h)	68	195	44	87	157	534	29	960	54	328	736	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	74	212	48	95	171	580	32	1043	59	357	800	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	65	399	90	232	101	343	297	810	686	273	1154	23
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.44	0.44	0.44	0.15	0.64	0.64
Sat Flow, veh/h	706	1464	332	1111	371	1258	664	1856	1572	1767	1813	36
Grp Volume(v), veh/h	74	0	260	95	0	751	32	1043	59	357	0	816
Grp Sat Flow(s),veh/h/ln	706	0	1796	1111	0	1629	664	1856	1572	1767	0	1849
Q Serve(g_s), s	0.0	0.0	13.5	8.8	0.0	30.0	3.6	48.0	2.4	17.0	0.0	31.6
Cycle Q Clear(g_c), s	30.0	0.0	13.5	22.3	0.0	30.0	13.2	48.0	2.4	17.0	0.0	31.6
Prop In Lane	1.00		0.18	1.00		0.77	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	65	0	490	232	0	444	297	810	686	273	0	1177
V/C Ratio(X)	1.13	0.00	0.53	0.41	0.00	1.69	0.11	1.29	0.09	1.31	0.00	0.69
Avail Cap(c_a), veh/h	65	0	490	232	0	444	297	810	686	273	0	1177
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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.0	0.0	34.0	43.5	0.0	40.0	24.5	31.0	18.2	46.5	0.0	13.0
Incr Delay (d2), s/veh	151.2	0.0	1.1	1.2	0.0	320.3	0.2	138.9	0.1	162.1	0.0	1.8
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(50%),veh/ln	4.6	0.0	6.0	2.5	0.0	51.3	0.6	51.5	0.9	19.6	0.0	12.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	206.2	0.0	35.1	44.7	0.0	360.3	24.6	169.9	18.2	208.6	0.0	14.8
LnGrp LOS	F	A	D	D	A	F	C	F	B	F	A	B
Approach Vol, veh/h		334			846			1134			1173	
Approach Delay, s/veh		73.0			324.8			157.9			73.8	
Approach LOS		E			F			F			E	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	22.0	53.0		35.0		75.0		35.0				
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s	17.0	48.0		30.0		70.0		30.0				
Max Q Clear Time (g_c+l1), s	19.0	50.0		32.0		33.6		32.0				
Green Ext Time (p_c), s	0.0	0.0		0.0		7.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			162.0									
HCM 6th LOS			F									

Intersection												
Int Delay, s/veh	2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↔	↔		↔	↔	↔	↔			↔	
Traffic Vol, veh/h	0	779	233	9	325	1	49	1	4	0	10	5
Future Vol, veh/h	0	779	233	9	325	1	49	1	4	0	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	81	-	-	95	92	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	847	253	10	353	1	53	1	4	0	11	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	354	0	0	1100	0	0	1229	1221	847	1349	1473	353
Stage 1	-	-	-	-	-	-	847	847	-	373	373	-
Stage 2	-	-	-	-	-	-	382	374	-	976	1100	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1199	-	-	631	-	-	154	179	360	127	126	688
Stage 1	-	-	-	-	-	-	355	377	-	646	617	-
Stage 2	-	-	-	-	-	-	638	616	-	301	287	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1199	-	-	631	-	-	140	175	360	123	123	688
Mov Cap-2 Maneuver	-	-	-	-	-	-	140	175	-	123	123	-
Stage 1	-	-	-	-	-	-	355	377	-	646	605	-
Stage 2	-	-	-	-	-	-	609	604	-	297	287	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	0			0.3			43.1			28.6		
HCM LOS							E			D		
Minor Lane/Major Mvmt	NELn1		NELn2	NWL	NWT	NWR	SEL	SET	SER	SWLn1		
Capacity (veh/h)	140		297	631	-	-	1199	-	-	169		
HCM Lane V/C Ratio	0.38		0.018	0.016	-	-	-	-	-	0.096		
HCM Control Delay (s)	45.7		17.3	10.8	0	-	0	-	-	28.6		
HCM Lane LOS	E		C	B	A	-	A	-	-	D		
HCM 95th %tile Q(veh)	1.6		0.1	0	-	-	0	-	-	0.3		

Intersection												
Int Delay, s/veh	17.7											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕	↗		↕	↗	↗	↕			↕	
Traffic Vol, veh/h	15	778	93	9	690	21	89	4	20	2	1	8
Future Vol, veh/h	15	778	93	9	690	21	89	4	20	2	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	81	-	-	95	92	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	846	101	10	750	23	97	4	22	2	1	9
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	773	0	0	947	0	0	1665	1671	846	1712	1749	750
Stage 1	-	-	-	-	-	-	878	878	-	770	770	-
Stage 2	-	-	-	-	-	-	787	793	-	942	979	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	838	-	-	721	-	-	~ 77	95	361	71	85	410
Stage 1	-	-	-	-	-	-	341	364	-	392	409	-
Stage 2	-	-	-	-	-	-	383	399	-	314	327	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	838	-	-	721	-	-	~ 71	89	361	61	80	410
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 71	89	-	61	80	-
Stage 1	-	-	-	-	-	-	327	349	-	376	399	-
Stage 2	-	-	-	-	-	-	365	389	-	279	314	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.2			0.1			265.7			27.8		
HCM LOS							F			D		
Minor Lane/Major Mvmt	NELn1		NELn2	NWL	NWT	NWR	SEL	SET	SERSWLn1			
Capacity (veh/h)	71		239	721	-	-	838	-	-	170		
HCM Lane V/C Ratio	1.363		0.109	0.014	-	-	0.019	-	-	0.07		
HCM Control Delay (s)	\$ 331.5		21.9	10.1	0	-	9.4	0	-	27.8		
HCM Lane LOS	F		C	B	A	-	A	A	-	D		
HCM 95th %tile Q(veh)	7.8		0.4	0	-	-	0.1	-	-	0.2		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection												
Int Delay, s/veh	10.2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕	↗		↕	↗	↘	↖			↕	
Traffic Vol, veh/h	0	1221	233	9	504	1	49	1	4	0	10	5
Future Vol, veh/h	0	1221	233	9	504	1	49	1	4	0	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	81	-	-	95	92	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	1327	253	10	548	1	53	1	4	0	11	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	549	0	0	1580	0	0	1904	1896	1327	2024	2148	548
Stage 1	-	-	-	-	-	-	1327	1327	-	568	568	-
Stage 2	-	-	-	-	-	-	577	569	-	1456	1580	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1016	-	-	413	-	-	~ 52	69	189	43	48	534
Stage 1	-	-	-	-	-	-	190	223	-	506	505	-
Stage 2	-	-	-	-	-	-	500	504	-	161	168	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1016	-	-	413	-	-	~ 41	67	189	40	46	534
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 41	67	-	40	46	-
Stage 1	-	-	-	-	-	-	190	223	-	506	487	-
Stage 2	-	-	-	-	-	-	467	486	-	157	168	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	0			0.2			\$ 362.7			76.6		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NELn1		NELn2	NWL	NWT	NWR	SEL	SET	SERS	SWLn1		
Capacity (veh/h)	41		139	413	-	-	1016	-	-	66		
HCM Lane V/C Ratio	1.299		0.039	0.024	-	-	-	-	-	0.247		
HCM Control Delay (s)	\$ 396.4		32	13.9	0	-	0	-	-	76.6		
HCM Lane LOS	F		D	B	A	-	A	-	-	F		
HCM 95th %tile Q(veh)	5.3		0.1	0.1	-	-	0	-	-	0.9		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection												
Int Delay, s/veh	739.5											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕	↗		↕	↗	↖	↖			↕	
Traffic Vol, veh/h	15	1165	93	9	1585	21	89	4	20	2	1	8
Future Vol, veh/h	15	1165	93	9	1585	21	89	4	20	2	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	81	-	-	95	92	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	1266	101	10	1723	23	97	4	22	2	1	9
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1746	0	0	1367	0	0	3058	3064	1266	3105	3142	1723
Stage 1	-	-	-	-	-	-	1298	1298	-	1743	1743	-
Stage 2	-	-	-	-	-	-	1760	1766	-	1362	1399	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	357	-	-	499	-	-	~ 8	12	205	7	11	110
Stage 1	-	-	-	-	-	-	198	231	-	109	140	-
Stage 2	-	-	-	-	-	-	107	136	-	182	206	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	357	-	-	499	-	-	~ 2	~ 3	205	-	2	110
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 2	~ 3	-	-	2	-
Stage 1	-	-	-	-	-	-	159	186	-	88	39	-
Stage 2	-	-	-	-	-	-	~ 26	37	-	128	166	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.2			0.1			\$ 19707.9					
HCM LOS							F			-		
Minor Lane/Major Mvmt	NELn1 NELn2		NWL	NWT	NWR	SEL	SET	SERSWLn1				
Capacity (veh/h)	2 17		499	-	-	357	-	-	-			
HCM Lane V/C Ratio	48.37 1.535		0.02	-	-	0.046	-	-	-			
HCM Control Delay (s)	\$ 24823.4\$ 737.9		12.4	0	-	15.6	0	-	-			
HCM Lane LOS	F F		B	A	-	C	A	-	-			
HCM 95th %tile Q(veh)	14.4 3.7		0.1	-	-	0.1	-	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection						
Intersection Delay, s/veh33.1						
Intersection LOS D						
Approach	SE		NW		NE	SW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	1580		559		58	16
Demand Flow Rate, veh/h	1628		575		60	16
Vehicles Circulating, veh/h	21		56		1367	629
Vehicles Exiting, veh/h	624		1371		282	2
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	44.3		4.7		10.4	4.6
Approach LOS	E		A		B	A
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	R	LT	TR	LTR	LTR
Assumed Moves	LT	R	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.840	0.160	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	1367	261	270	305	60	16
Cap Entry Lane, veh/h	1324	1395	1282	1354	444	832
Entry HV Adj Factor	0.971	0.969	0.972	0.971	0.966	0.980
Flow Entry, veh/h	1327	253	263	296	58	16
Cap Entry, veh/h	1285	1352	1247	1314	429	815
V/C Ratio	1.032	0.187	0.211	0.225	0.135	0.019
Control Delay, s/veh	51.9	4.2	4.7	4.7	10.4	4.6
LOS	F	A	A	A	B	A
95th %tile Queue, veh	25	1	1	1	0	0

Intersection						
Intersection Delay, s/veh24.1						
Intersection LOS C						
Approach	SE		NW		NE	SW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	1383		1756		123	12
Demand Flow Rate, veh/h	1424		1809		127	12
Vehicles Circulating, veh/h	13		120		1322	1885
Vehicles Exiting, veh/h	1884		1329		115	44
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	37.9		14.1		12.5	13.4
Approach LOS	E		B		B	B
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	R	LT	TR	LTR	LTR
Assumed Moves	LT	R	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.927	0.073	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	1320	104	850	959	127	12
Cap Entry Lane, veh/h	1334	1405	1209	1282	462	286
Entry HV Adj Factor	0.971	0.971	0.971	0.971	0.968	0.998
Flow Entry, veh/h	1282	101	825	931	123	12
Cap Entry, veh/h	1295	1364	1174	1245	447	285
V/C Ratio	0.990	0.074	0.703	0.748	0.275	0.042
Control Delay, s/veh	40.7	3.2	13.5	14.6	12.5	13.4
LOS	E	A	B	B	B	B
95th %tile Queue, veh	21	0	6	7	1	0

HCM 6th Signalized Intersection Summary

109: Hague Rd & SR 38

Existing AM Peak

12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	767	17	8	249	50	15	120	35	169	263	131
Future Volume (veh/h)	83	767	17	8	249	50	15	120	35	169	263	131
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	90	834	18	9	271	54	16	130	38	184	286	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	641	944	800	224	801	679	238	622	176	355	528	256
Arrive On Green	0.09	0.51	0.51	0.02	0.43	0.43	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	952	2713	767	1208	2304	1114
Grp Volume(v), veh/h	90	834	18	9	271	54	16	83	85	184	217	211
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	952	1763	1717	1208	1763	1655
Q Serve(g_s), s	1.3	22.9	0.3	0.2	5.5	1.2	0.9	2.2	2.3	8.3	6.2	6.4
Cycle Q Clear(g_c), s	1.3	22.9	0.3	0.2	5.5	1.2	7.3	2.2	2.3	10.6	6.2	6.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.67
Lane Grp Cap(c), veh/h	641	944	800	224	801	679	238	404	394	355	404	380
V/C Ratio(X)	0.14	0.88	0.02	0.04	0.34	0.08	0.07	0.21	0.22	0.52	0.54	0.56
Avail Cap(c_a), veh/h	693	1140	966	413	1140	966	253	433	422	375	433	407
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.4	12.5	7.0	11.8	10.8	9.5	22.6	17.7	17.8	22.1	19.3	19.4
Incr Delay (d2), s/veh	0.1	7.4	0.0	0.1	0.2	0.0	0.1	0.2	0.3	1.2	1.1	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(50%),veh/ln	0.4	8.6	0.1	0.1	1.8	0.3	0.2	0.8	0.8	2.1	2.3	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.5	19.9	7.0	11.8	11.0	9.6	22.7	18.0	18.1	23.3	20.4	20.8
LnGrp LOS	A	B	A	B	B	A	C	B	B	C	C	C
Approach Vol, veh/h	942			334			184			612		
Approach Delay, s/veh	18.3			10.8			18.4			21.4		
Approach LOS	B			B			B			C		
Timer - Assigned Phs	2		3	4		6	7	8				
Phs Duration (G+Y+Rc), s	18.1		4.9	34.0		18.1	9.3	29.6				
Change Period (Y+Rc), s	5.0		4.0	5.0		5.0	4.0	5.0				
Max Green Setting (Gmax), s	14.0		7.0	35.0		14.0	7.0	35.0				
Max Q Clear Time (g_c+l1), s	9.3		2.2	24.9		12.6	3.3	7.5				
Green Ext Time (p_c), s	0.3		0.0	4.1		0.5	0.1	1.7				
Intersection Summary												
HCM 6th Ctrl Delay												
18.0												
HCM 6th LOS												
B												

HCM 6th Signalized Intersection Summary 109: Hague Rd & SR 38

Existing PM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	285	646	32	16	571	159	84	368	57	104	215	172
Future Volume (veh/h)	285	646	32	16	571	159	84	368	57	104	215	172
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	310	702	35	17	621	173	91	400	62	113	234	187
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	412	904	766	306	714	605	244	713	110	237	443	339
Arrive On Green	0.13	0.49	0.49	0.03	0.38	0.38	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	958	3062	471	923	1901	1455
Grp Volume(v), veh/h	310	702	35	17	621	173	91	229	233	113	216	205
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	958	1763	1771	923	1763	1594
Q Serve(g_s), s	5.3	17.4	0.7	0.3	17.3	4.2	5.2	6.4	6.5	6.5	6.0	6.3
Cycle Q Clear(g_c), s	5.3	17.4	0.7	0.3	17.3	4.2	11.5	6.4	6.5	13.0	6.0	6.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.91
Lane Grp Cap(c), veh/h	412	904	766	306	714	605	244	411	412	237	411	371
V/C Ratio(X)	0.75	0.78	0.05	0.06	0.87	0.29	0.37	0.56	0.56	0.48	0.53	0.55
Avail Cap(c_a), veh/h	434	904	766	476	831	704	244	411	412	237	411	371
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	11.8	7.5	10.9	15.9	11.9	23.9	18.9	18.9	24.8	18.7	18.8
Incr Delay (d2), s/veh	6.9	4.3	0.0	0.1	8.8	0.3	0.9	1.7	1.8	1.5	1.3	1.8
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(50%),veh/ln	2.1	6.3	0.2	0.1	7.5	1.2	1.1	2.4	2.4	1.4	2.2	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.3	16.1	7.5	11.0	24.7	12.1	24.8	20.6	20.7	26.3	20.0	20.6
LnGrp LOS	B	B	A	B	C	B	C	C	C	C	B	C
Approach Vol, veh/h		1047			811			553			534	
Approach Delay, s/veh		16.5			21.7			21.3			21.6	
Approach LOS		B			C			C			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		18.0	5.6	32.2		18.0	11.3	26.5				
Change Period (Y+Rc), s		5.0	4.0	5.0		5.0	4.0	5.0				
Max Green Setting (Gmax), s		13.0	7.0	26.0		13.0	8.0	25.0				
Max Q Clear Time (g_c+l1), s		13.5	2.3	19.4		15.0	7.3	19.3				
Green Ext Time (p_c), s		0.0	0.0	2.5		0.0	0.1	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			19.7									
HCM 6th LOS			B									

Existing PM Peak 12:41 pm 08/21/2023

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HCM 6th Signalized Intersection Summary 109: Hague Rd & SR 38

Future AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	1183	536	8	428	50	147	173	35	195	515	135
Future Volume (veh/h)	85	1183	536	8	428	50	147	173	35	195	515	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		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	92	1286	583	9	465	54	160	188	38	212	560	147
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	494	1100	1051	76	1039	1060	134	434	86	352	514	135
Arrive On Green	0.05	0.59	0.59	0.01	0.56	0.56	0.08	0.15	0.15	0.11	0.19	0.19
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	2933	581	1767	2765	723
Grp Volume(v), veh/h	92	1286	583	9	465	54	160	111	115	212	356	351
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1763	1751	1767	1763	1725
Q Serve(g_s), s	3.0	86.0	28.4	0.3	21.3	1.7	11.0	8.3	8.7	14.3	27.0	27.0
Cycle Q Clear(g_c), s	3.0	86.0	28.4	0.3	21.3	1.7	11.0	8.3	8.7	14.3	27.0	27.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		0.42
Lane Grp Cap(c), veh/h	494	1100	1051	76	1039	1060	134	261	259	352	328	321
V/C Ratio(X)	0.19	1.17	0.55	0.12	0.45	0.05	1.19	0.43	0.44	0.60	1.09	1.09
Avail Cap(c_a), veh/h	497	1100	1051	135	1100	1111	134	261	259	394	328	321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	29.6	12.7	36.0	18.7	8.0	67.1	56.2	56.4	43.7	59.1	59.1
Incr Delay (d2), s/veh	0.2	86.3	0.6	0.7	0.3	0.0	139.4	1.1	1.2	2.1	74.9	77.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	61.7	9.5	0.2	9.0	0.6	10.1	3.7	3.9	6.4	18.6	18.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.3	115.9	13.3	36.6	19.0	8.0	206.4	57.3	57.5	45.9	133.9	136.3
LnGrp LOS	B	F	B	D	B	A	F	E	E	D	F	F
Approach Vol, veh/h	1961			528			386			919		
Approach Delay, s/veh	80.6			18.2			119.2			114.5		
Approach LOS	F			B			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.5	26.5	6.1	91.0	16.0	32.0	10.8	86.3				
Change Period (Y+Rc), s	5.0	5.0	4.0	5.0	5.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	20.0	18.0	7.0	86.0	11.0	27.0	7.0	86.0				
Max Q Clear Time (g_c+l1), s	16.3	10.7	2.3	88.0	13.0	29.0	5.0	23.3				
Green Ext Time (p_c), s	0.2	0.6	0.0	0.0	0.0	0.0	0.0	3.2				
Intersection Summary												
HCM 6th Ctrl Delay	84.0											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary 109: Hague Rd & SR 38

Future PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	1033	356	16	1427	198	325	518	57	104	328	175
Future Volume (veh/h)	287	1033	356	16	1427	198	325	518	57	104	328	175
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	312	1123	387	17	1551	215	353	563	62	113	357	190
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	213	1094	1137	90	965	891	236	683	75	166	283	148
Arrive On Green	0.09	0.59	0.59	0.02	0.52	0.52	0.13	0.21	0.21	0.05	0.13	0.13
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	3203	352	1767	2237	1170
Grp Volume(v), veh/h	312	1123	387	17	1551	215	353	309	316	113	280	267
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1763	1792	1767	1763	1645
Q Serve(g_s), s	14.0	88.4	13.6	0.7	78.0	10.3	20.0	25.1	25.2	7.0	19.0	19.0
Cycle Q Clear(g_c), s	14.0	88.4	13.6	0.7	78.0	10.3	20.0	25.1	25.2	7.0	19.0	19.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		0.71
Lane Grp Cap(c), veh/h	213	1094	1137	90	965	891	236	376	382	166	223	208
V/C Ratio(X)	1.47	1.03	0.34	0.19	1.61	0.24	1.50	0.82	0.83	0.68	1.25	1.28
Avail Cap(c_a), veh/h	213	1094	1137	130	965	891	236	376	382	166	223	208
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	30.8	7.6	36.0	36.0	16.3	65.0	56.3	56.3	57.5	65.5	65.5
Incr Delay (d2), s/veh	233.2	34.1	0.2	1.0	278.2	0.1	245.2	13.6	13.8	10.7	145.5	158.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.6	47.1	4.3	0.3	108.0	3.7	24.9	12.4	12.7	1.3	17.4	17.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	287.0	64.9	7.8	37.1	314.2	16.5	310.2	69.9	70.1	68.2	211.0	223.8
LnGrp LOS	F	F	A	D	F	B	F	E	E	E	F	F
Approach Vol, veh/h		1822			1783			978			660	
Approach Delay, s/veh		90.8			275.7			156.7			191.7	
Approach LOS		F			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	37.0	7.6	93.4	25.0	24.0	18.0	83.0				
Change Period (Y+Rc), s	5.0	5.0	4.0	5.0	5.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	7.0	32.0	7.0	85.0	20.0	19.0	14.0	78.0				
Max Q Clear Time (g_c+l1), s	9.0	27.2	2.7	90.4	22.0	21.0	16.0	80.0				
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			178.7									
HCM 6th LOS			F									

HCM 6th Signalized Intersection Summary 109: Hague Rd & SR 38

Future AM Peak
Mitigated - Final



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	1183	536	8	428	50	147	173	35	195	515	135
Future Volume (veh/h)	85	1183	536	8	428	50	147	173	35	195	515	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		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	92	1286	583	9	465	54	160	188	38	212	560	147
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	279	1396	768	139	1165	745	318	536	106	254	646	169
Arrive On Green	0.08	0.40	0.40	0.02	0.33	0.33	0.09	0.18	0.18	0.14	0.23	0.23
Sat Flow, veh/h	3428	3526	1572	1767	3526	1572	3428	2933	581	1767	2765	723
Grp Volume(v), veh/h	92	1286	583	9	465	54	160	111	115	212	356	351
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1767	1763	1572	1714	1763	1751	1767	1763	1725
Q Serve(g_s), s	1.8	25.2	21.9	0.2	7.4	1.4	3.2	4.0	4.1	8.5	14.1	14.2
Cycle Q Clear(g_c), s	1.8	25.2	21.9	0.2	7.4	1.4	3.2	4.0	4.1	8.5	14.1	14.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		0.42
Lane Grp Cap(c), veh/h	279	1396	768	139	1165	745	318	322	320	254	412	403
V/C Ratio(X)	0.33	0.92	0.76	0.06	0.40	0.07	0.50	0.35	0.36	0.84	0.87	0.87
Avail Cap(c_a), veh/h	331	1410	774	282	1410	854	331	322	320	292	437	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	20.8	15.1	18.6	18.7	10.4	31.3	25.9	25.9	30.2	26.7	26.7
Incr Delay (d2), s/veh	0.7	10.1	4.3	0.2	0.2	0.0	1.2	0.6	0.7	16.8	15.8	16.7
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(50%),veh/ln	0.7	10.9	7.4	0.1	2.7	0.4	1.3	1.6	1.6	4.5	7.1	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.1	31.0	19.4	18.7	18.9	10.4	32.6	26.5	26.6	47.0	42.5	43.4
LnGrp LOS	C	C	B	B	B	B	C	C	C	D	D	D
Approach Vol, veh/h	1961			528			386			919		
Approach Delay, s/veh	27.6			18.1			29.0			43.9		
Approach LOS	C			B			C			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.3	18.3	5.2	33.7	11.7	21.9	9.9	29.0				
Change Period (Y+Rc), s	5.0	5.0	4.0	5.0	5.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	12.0	13.0	7.0	29.0	7.0	18.0	7.0	29.0				
Max Q Clear Time (g_c+10), s	6.1	6.1	2.2	27.2	5.2	16.2	3.8	9.4				
Green Ext Time (p_c), s	0.1	0.6	0.0	1.5	0.1	0.8	0.1	2.9				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	30.4
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary 109: Hague Rd & SR 38

Future PM Peak
Mitigated - Final

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	1033	356	16	1427	198	325	518	57	104	328	175
Future Volume (veh/h)	287	1033	356	16	1427	198	325	518	57	104	328	175
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	312	1123	387	17	1551	215	353	563	62	113	357	190
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	305	1746	954	217	1528	804	381	605	66	137	348	182
Arrive On Green	0.09	0.50	0.50	0.03	0.43	0.43	0.11	0.19	0.19	0.08	0.16	0.16
Sat Flow, veh/h	3428	3526	1572	1767	3526	1572	3428	3203	352	1767	2237	1170
Grp Volume(v), veh/h	312	1123	387	17	1551	215	353	309	316	113	280	267
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1767	1763	1572	1714	1763	1792	1767	1763	1645
Q Serve(g_s), s	8.0	21.2	11.6	0.5	39.0	7.0	9.2	15.5	15.6	5.7	14.0	14.0
Cycle Q Clear(g_c), s	8.0	21.2	11.6	0.5	39.0	7.0	9.2	15.5	15.6	5.7	14.0	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		0.71
Lane Grp Cap(c), veh/h	305	1746	954	217	1528	804	381	333	339	137	274	256
V/C Ratio(X)	1.02	0.64	0.41	0.08	1.02	0.27	0.93	0.93	0.93	0.82	1.02	1.04
Avail Cap(c_a), veh/h	305	1746	954	307	1528	804	381	333	339	137	274	256
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	16.8	9.2	14.7	25.5	12.5	39.6	35.9	35.9	40.9	38.0	38.0
Incr Delay (d2), s/veh	57.8	0.8	0.3	0.2	26.9	0.2	28.4	31.5	32.0	31.4	59.8	68.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	7.9	3.4	0.2	20.3	2.2	5.2	9.2	9.4	3.5	10.3	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	98.8	17.6	9.5	14.8	52.4	12.6	68.0	67.4	68.0	72.2	97.8	106.1
LnGrp LOS	F	B	A	B	F	B	E	E	E	E	F	F
Approach Vol, veh/h	1822			1783			978			660		
Approach Delay, s/veh	29.8			47.2			67.8			96.8		
Approach LOS	C			D			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	22.0	6.4	49.6	15.0	19.0	12.0	44.0				
Change Period (Y+Rc), s	5.0	5.0	4.0	5.0	5.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	17.0	17.0	7.0	40.0	10.0	14.0	8.0	39.0				
Max Q Clear Time (g_c+I1), s	17.6	17.6	2.5	23.2	11.2	16.0	10.0	41.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	8.5	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh	51.3											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary

110: Gray Rd/Moontown Rd & SR 32

Existing AM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	415	20	84	745	22	30	31	86	61	72	97
Future Volume (veh/h)	10	415	20	84	745	22	30	31	86	61	72	97
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			
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	11	451	22	91	810	24	33	34	93	66	78	105
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	173	736	36	448	865	26	301	75	204	356	140	188
Arrive On Green	0.02	0.42	0.42	0.08	0.48	0.48	0.05	0.17	0.17	0.07	0.20	0.20
Sat Flow, veh/h	1767	1755	86	1767	1793	53	1767	439	1201	1767	717	965
Grp Volume(v), veh/h	11	0	473	91	0	834	33	0	127	66	0	183
Grp Sat Flow(s),veh/h/ln	1767	0	1840	1767	0	1846	1767	0	1639	1767	0	1682
Q Serve(g_s), s	0.2	0.0	14.1	1.8	0.0	30.0	1.0	0.0	4.9	2.1	0.0	6.9
Cycle Q Clear(g_c), s	0.2	0.0	14.1	1.8	0.0	30.0	1.0	0.0	4.9	2.1	0.0	6.9
Prop In Lane	1.00		0.05	1.00		0.03	1.00		0.73	1.00		0.57
Lane Grp Cap(c), veh/h	173	0	771	448	0	891	301	0	279	356	0	328
V/C Ratio(X)	0.06	0.00	0.61	0.20	0.00	0.94	0.11	0.00	0.45	0.19	0.00	0.56
Avail Cap(c_a), veh/h	315	0	941	477	0	944	393	0	280	404	0	328
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	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.9	0.0	16.0	10.2	0.0	17.2	22.2	0.0	26.3	21.2	0.0	25.6
Incr Delay (d2), s/veh	0.2	0.0	0.8	0.2	0.0	15.7	0.2	0.0	1.2	0.2	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	5.1	0.6	0.0	13.9	0.4	0.0	1.9	0.8	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	0.0	16.8	10.5	0.0	32.8	22.3	0.0	27.4	21.4	0.0	27.7
LnGrp LOS	B	A	B	B	A	C	C	A	C	C	A	C
Approach Vol, veh/h	484				925				160			
Approach Delay, s/veh	16.8				30.6				26.4			
Approach LOS	B				C				C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	9.8	34.5	7.3	18.7	5.4	39.0					
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	12.0	7.0	36.0	7.0	12.0	7.0	36.0					
Max Q Clear Time (g_c+I1), s	6.9	3.8	16.1	3.0	8.9	2.2	32.0					
Green Ext Time (p_c), s	0.0	0.2	0.0	2.6	0.0	0.2	0.0	2.0				

Intersection Summary

HCM 6th Ctrl Delay 25.9
HCM 6th LOS C

HCM 6th Signalized Intersection Summary

110: Gray Rd/Moontown Rd & SR 32

Existing PM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	867	59	85	660	46	84	115	137	70	85	54
Future Volume (veh/h)	82	867	59	85	660	46	84	115	137	70	85	54
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	89	942	64	92	717	50	91	125	149	76	92	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	327	893	61	207	892	62	271	107	128	200	143	92
Arrive On Green	0.07	0.52	0.52	0.07	0.52	0.52	0.07	0.14	0.14	0.07	0.14	0.14
Sat Flow, veh/h	1767	1718	117	1767	1714	120	1767	771	919	1767	1056	677
Grp Volume(v), veh/h	89	0	1006	92	0	767	91	0	274	76	0	151
Grp Sat Flow(s),veh/h/ln	1767	0	1835	1767	0	1834	1767	0	1690	1767	0	1734
Q Serve(g_s), s	1.9	0.0	46.0	2.0	0.0	30.5	3.8	0.0	12.3	3.2	0.0	7.3
Cycle Q Clear(g_c), s	1.9	0.0	46.0	2.0	0.0	30.5	3.8	0.0	12.3	3.2	0.0	7.3
Prop In Lane	1.00		0.06	1.00		0.07	1.00		0.54	1.00		0.39
Lane Grp Cap(c), veh/h	327	0	953	207	0	954	271	0	235	200	0	235
V/C Ratio(X)	0.27	0.00	1.06	0.45	0.00	0.80	0.34	0.00	1.16	0.38	0.00	0.64
Avail Cap(c_a), veh/h	343	0	953	221	0	954	286	0	235	221	0	235
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	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	21.3	19.8	0.0	17.5	29.7	0.0	38.1	30.2	0.0	36.2
Incr Delay (d2), s/veh	0.4	0.0	44.9	1.5	0.0	5.1	0.7	0.0	110.0	1.2	0.0	5.8
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(50%),veh/ln	0.6	0.0	28.3	0.9	0.0	12.2	1.6	0.0	12.1	1.3	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	66.1	21.3	0.0	22.6	30.5	0.0	148.1	31.4	0.0	42.1
LnGrp LOS	B	A	F	C	A	C	C	A	F	C	A	D
Approach Vol, veh/h	1095			859			365			227		
Approach Delay, s/veh	61.9			22.4			118.8			38.5		
Approach LOS	E			C			F			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	17.3	10.3	51.0	10.3	17.0	10.2	51.1				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	7.0	12.0	7.0	46.0	7.0	12.0	7.0	46.0				
Max Q Clear Time (g_c+1/2), s	14.3	14.3	4.0	48.0	5.8	9.3	3.9	32.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.2	0.0	4.2				

Intersection Summary

HCM 6th Ctrl Delay 54.7
HCM 6th LOS D

HCM 6th Signalized Intersection Summary

110: Gray Rd/Moontown Rd & SR 32

Future AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1045	67	85	844	163	87	142	137	135	108	63
Future Volume (veh/h)	93	1045	67	85	844	163	87	142	137	135	108	63
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	101	1136	73	92	917	177	95	154	149	147	117	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	138	1059	68	129	927	179	220	145	140	142	191	111
Arrive On Green	0.05	0.61	0.61	0.05	0.61	0.61	0.05	0.17	0.17	0.05	0.17	0.17
Sat Flow, veh/h	1767	1725	111	1767	1511	292	1767	866	838	1767	1101	640
Grp Volume(v), veh/h	101	0	1209	92	0	1094	95	0	303	147	0	185
Grp Sat Flow(s),veh/h/ln	1767	0	1836	1767	0	1803	1767	0	1705	1767	0	1740
Q Serve(g_s), s	3.5	0.0	92.0	3.6	0.0	89.3	6.7	0.0	25.0	8.0	0.0	14.7
Cycle Q Clear(g_c), s	3.5	0.0	92.0	3.6	0.0	89.3	6.7	0.0	25.0	8.0	0.0	14.7
Prop In Lane	1.00		0.06	1.00		0.16	1.00		0.49	1.00		0.37
Lane Grp Cap(c), veh/h	138	0	1127	129	0	1106	220	0	284	142	0	302
V/C Ratio(X)	0.73	0.00	1.07	0.71	0.00	0.99	0.43	0.00	1.07	1.03	0.00	0.61
Avail Cap(c_a), veh/h	140	0	1127	131	0	1107	220	0	284	142	0	302
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	28.9	42.3	0.0	28.4	49.7	0.0	62.4	55.7	0.0	57.3
Incr Delay (d2), s/veh	17.5	0.0	48.6	16.6	0.0	24.3	1.3	0.0	71.7	84.3	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	51.8	4.0	0.0	42.2	3.0	0.0	16.4	4.8	0.0	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.4	0.0	77.5	58.9	0.0	52.7	51.0	0.0	134.2	140.0	0.0	60.9
LnGrp LOS	E	A	F	E	A	D	D	A	F	F	A	E
Approach Vol, veh/h	1310		1186			398			332			
Approach Delay, s/veh	76.0		53.2			114.3			95.9			
Approach LOS	E		D			F			F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	2.0	30.0	10.8	97.0	11.0	31.0	10.9	97.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	25.0	25.0	7.0	92.0	7.0	26.0	7.0	92.0				
Max Q Clear Time (g_c+110), s	27.0	27.0	5.6	94.0	8.7	16.7	5.5	91.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			74.4									
HCM 6th LOS			E									

HCM 6th Signalized Intersection Summary

110: Gray Rd/Moontown Rd & SR 32

Future PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1045	67	85	844	163	87	142	137	135	108	63
Future Volume (veh/h)	93	1045	67	85	844	163	87	142	137	135	108	63
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			
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	101	1136	73	92	917	177	95	154	149	147	117	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	138	1059	68	129	927	179	220	145	140	142	191	111
Arrive On Green	0.05	0.61	0.61	0.05	0.61	0.61	0.05	0.17	0.17	0.05	0.17	0.17
Sat Flow, veh/h	1767	1725	111	1767	1511	292	1767	866	838	1767	1101	640
Grp Volume(v), veh/h	101	0	1209	92	0	1094	95	0	303	147	0	185
Grp Sat Flow(s),veh/h/ln	1767	0	1836	1767	0	1803	1767	0	1705	1767	0	1740
Q Serve(g_s), s	3.5	0.0	92.0	3.6	0.0	89.3	6.7	0.0	25.0	8.0	0.0	14.7
Cycle Q Clear(g_c), s	3.5	0.0	92.0	3.6	0.0	89.3	6.7	0.0	25.0	8.0	0.0	14.7
Prop In Lane	1.00		0.06	1.00		0.16	1.00		0.49	1.00		0.37
Lane Grp Cap(c), veh/h	138	0	1127	129	0	1106	220	0	284	142	0	302
V/C Ratio(X)	0.73	0.00	1.07	0.71	0.00	0.99	0.43	0.00	1.07	1.03	0.00	0.61
Avail Cap(c_a), veh/h	140	0	1127	131	0	1107	220	0	284	142	0	302
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	28.9	42.3	0.0	28.4	49.7	0.0	62.4	55.7	0.0	57.3
Incr Delay (d2), s/veh	17.5	0.0	48.6	16.6	0.0	24.3	1.3	0.0	71.7	84.3	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	51.8	4.0	0.0	42.2	3.0	0.0	16.4	4.8	0.0	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.4	0.0	77.5	58.9	0.0	52.7	51.0	0.0	134.2	140.0	0.0	60.9
LnGrp LOS	E	A	F	E	A	D	D	A	F	F	A	E
Approach Vol, veh/h	1310				1186		398				332	
Approach Delay, s/veh	76.0				53.2		114.3				95.9	
Approach LOS	E				D		F				F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	2.0	30.0	10.8	97.0	11.0	31.0	10.9	97.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	25.0	25.0	7.0	92.0	7.0	26.0	7.0	92.0				
Max Q Clear Time (g_c+110), s	27.0	27.0	5.6	94.0	8.7	16.7	5.5	91.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.5				

Intersection Summary

HCM 6th Ctrl Delay	74.4
HCM 6th LOS	E

Intersection						
Intersection Delay, s/veh 10.9						
Intersection LOS B						
Approach	EB		WB		NB	SB
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	627		1089		184	399
Demand Flow Rate, veh/h	646		1121		190	411
Vehicles Circulating, veh/h	376		107		789	1113
Vehicles Exiting, veh/h	1148		872		233	115
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	7.1		7.5		8.2	27.6
Approach LOS	A		A		A	D
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.471	0.529	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	304	342	527	594	190	411
Cap Entry Lane, veh/h	955	1032	1223	1297	726	551
Entry HV Adj Factor	0.970	0.972	0.971	0.971	0.971	0.970
Flow Entry, veh/h	295	332	512	577	184	399
Cap Entry, veh/h	926	1003	1188	1259	705	535
V/C Ratio	0.318	0.332	0.431	0.458	0.262	0.746
Control Delay, s/veh	7.3	7.0	7.5	7.5	8.2	27.6
LOS	A	A	A	A	A	D
95th %tile Queue, veh	1	1	2	2	1	6

Intersection						
Intersection Delay, s/veh21.0						
Intersection LOS C						
Approach	EB		WB		NB	SB
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	1310		1186		398	332
Demand Flow Rate, veh/h	1349		1222		410	342
Vehicles Circulating, veh/h	367		361		1425	1138
Vehicles Exiting, veh/h	1113		1474		291	445
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	14.4		12.2		69.0	21.1
Approach LOS	B		B		F	C
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	634	715	574	648	410	342
Cap Entry Lane, veh/h	963	1039	968	1045	423	540
Entry HV Adj Factor	0.971	0.971	0.972	0.970	0.972	0.972
Flow Entry, veh/h	616	694	558	629	398	332
Cap Entry, veh/h	935	1009	941	1014	411	525
V/C Ratio	0.658	0.688	0.593	0.620	0.970	0.634
Control Delay, s/veh	14.2	14.5	12.2	12.3	69.0	21.1
LOS	B	B	B	B	F	C
95th %tile Queue, veh	5	6	4	4	11	4

HCM 6th Signalized Intersection Summary
111: Hazel Dell Rd/Little Chicago Rd & SR 32

Existing AM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	410	99	185	594	31	81	128	264	71	432	121
Future Volume (veh/h)	31	410	99	185	594	31	81	128	264	71	432	121
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	34	446	108	201	646	34	88	139	287	77	470	132
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	243	601	647	400	710	732	325	695	480	418	677	380
Arrive On Green	0.05	0.32	0.32	0.11	0.38	0.38	0.09	0.20	0.20	0.08	0.19	0.19
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	34	446	108	201	646	34	88	139	287	77	470	132
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	0.8	13.4	2.7	4.3	20.6	0.7	2.4	2.1	9.7	2.1	7.8	4.3
Cycle Q Clear(g_c), s	0.8	13.4	2.7	4.3	20.6	0.7	2.4	2.1	9.7	2.1	7.8	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	243	601	647	400	710	732	325	695	480	418	677	380
V/C Ratio(X)	0.14	0.74	0.17	0.50	0.91	0.05	0.27	0.20	0.60	0.18	0.69	0.35
Avail Cap(c_a), veh/h	353	772	792	406	772	784	368	695	480	469	677	380
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	18.8	11.6	12.7	18.3	9.1	17.6	21.0	18.4	17.2	23.6	19.6
Incr Delay (d2), s/veh	0.3	2.8	0.1	1.0	14.1	0.0	0.4	0.1	2.0	0.2	3.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	5.3	0.8	1.4	9.9	0.2	0.9	0.8	3.3	0.7	3.1	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	21.6	11.7	13.7	32.4	9.2	18.1	21.1	20.5	17.4	26.6	20.2
LnGrp LOS	B	C	B	B	C	A	B	C	C	B	C	C
Approach Vol, veh/h	588			881			514			679		
Approach Delay, s/veh	19.5			27.2			20.2			24.3		
Approach LOS	B			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	17.3	10.8	25.3	9.5	17.0	7.1	28.9				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	12.0	7.0	26.0	7.0	12.0	7.0	26.0					
Max Q Clear Time (g_c+I14), s	11.7	6.3	15.4	4.4	9.8	2.8	22.6					
Green Ext Time (p_c), s	0.0	0.1	0.0	2.1	0.0	0.8	0.0	1.3				

Intersection Summary

HCM 6th Ctrl Delay	23.4
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary

111: Hazel Dell Rd/Little Chicago Rd & SR 32

Existing PM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	721	138	242	667	102	225	498	357	108	315	139
Future Volume (veh/h)	139	721	138	242	667	102	225	498	357	108	315	139
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	151	784	150	263	725	111	245	541	388	117	342	151
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	300	807	860	291	873	856	321	629	456	229	496	341
Arrive On Green	0.08	0.44	0.44	0.11	0.47	0.47	0.11	0.18	0.18	0.07	0.14	0.14
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	151	784	150	263	725	111	245	541	388	117	342	151
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	4.1	37.0	4.3	8.4	30.4	3.1	10.0	13.3	16.0	5.0	8.3	7.5
Cycle Q Clear(g_c), s	4.1	37.0	4.3	8.4	30.4	3.1	10.0	13.3	16.0	5.0	8.3	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	300	807	860	291	873	856	321	629	456	229	496	341
V/C Ratio(X)	0.50	0.97	0.17	0.91	0.83	0.13	0.76	0.86	0.85	0.51	0.69	0.44
Avail Cap(c_a), veh/h	304	807	860	291	873	856	321	629	456	236	511	348
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	24.8	10.2	23.5	20.6	10.0	29.1	35.7	30.0	30.3	36.6	30.4
Incr Delay (d2), s/veh	1.3	24.6	0.1	29.7	6.8	0.1	10.4	11.5	14.2	1.8	3.8	0.9
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(50%),veh/ln	1.5	19.8	1.3	5.4	13.1	0.9	5.1	6.4	9.1	2.1	3.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	49.4	10.3	53.2	27.4	10.1	39.5	47.3	44.2	32.1	40.4	31.3
LnGrp LOS	B	D	B	D	C	B	D	D	D	C	D	C
Approach Vol, veh/h	1085			1099			1174			610		
Approach Delay, s/veh	39.7			31.9			44.6			36.5		
Approach LOS	D			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	21.0	14.0	44.0	14.0	17.6	10.8	47.2				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	16.0	10.0	39.0	10.0	13.0	7.0	42.0					
Max Q Clear Time (g_c+1/10), s	17.0	18.0	10.4	39.0	12.0	10.3	6.1	32.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.7	0.0	3.4				

Intersection Summary

HCM 6th Ctrl Delay 38.5
HCM 6th LOS D

HCM 6th Signalized Intersection Summary
111: Hazel Dell Rd/Little Chicago Rd & SR 32

Future AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	938	155	313	900	136	293	703	502	248	385	139
Future Volume (veh/h)	148	938	155	313	900	136	293	703	502	248	385	139
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	161	1020	168	340	978	148	318	764	546	270	418	151
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	151	799	871	258	971	943	314	732	556	191	570	339
Arrive On Green	0.05	0.43	0.43	0.15	0.52	0.52	0.12	0.21	0.21	0.08	0.16	0.16
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	161	1020	168	340	978	148	318	764	546	270	418	151
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	7.0	56.0	6.9	19.0	68.0	5.4	16.0	27.0	27.0	10.0	14.7	10.8
Cycle Q Clear(g_c), s	7.0	56.0	6.9	19.0	68.0	5.4	16.0	27.0	27.0	10.0	14.7	10.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	799	871	258	971	943	314	732	556	191	570	339
V/C Ratio(X)	1.07	1.28	0.19	1.32	1.01	0.16	1.01	1.04	0.98	1.41	0.73	0.45
Avail Cap(c_a), veh/h	151	799	871	258	971	943	314	732	556	191	570	339
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	37.0	14.5	55.5	31.0	11.5	43.1	51.5	41.6	46.5	51.8	44.3
Incr Delay (d2), s/veh	93.1	133.9	0.1	167.1	30.8	0.1	54.4	45.1	33.3	213.1	4.9	0.9
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(50%),veh/ln	6.4	53.6	2.4	20.2	36.1	1.8	7.1	16.2	21.7	12.6	6.7	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	128.6	170.9	14.6	222.6	61.8	11.6	97.5	96.6	74.8	259.6	56.7	45.2
LnGrp LOS	F	F	B	F	F	B	F	F	E	F	E	D
Approach Vol, veh/h	1349			1466			1628			839		
Approach Delay, s/veh	146.4			94.0			89.5			119.9		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.0	32.0	23.0	61.0	20.0	26.0	11.0	73.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (G_max), s	10.0	27.0	19.0	56.0	16.0	21.0	7.0	68.0				
Max Q Clear Time (g_c+1/2C), s	12.0	29.0	21.0	58.0	18.0	16.7	9.0	70.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	110.1											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary

111: Hazel Dell Rd/Little Chicago Rd & SR 32

Future PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	938	155	313	900	136	293	703	502	248	385	139
Future Volume (veh/h)	148	938	155	313	900	136	293	703	502	248	385	139
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	161	1020	168	340	978	148	318	764	546	270	418	151
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	151	799	871	258	971	943	314	732	556	191	570	339
Arrive On Green	0.05	0.43	0.43	0.15	0.52	0.52	0.12	0.21	0.21	0.08	0.16	0.16
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	161	1020	168	340	978	148	318	764	546	270	418	151
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	7.0	56.0	6.9	19.0	68.0	5.4	16.0	27.0	27.0	10.0	14.7	10.8
Cycle Q Clear(g_c), s	7.0	56.0	6.9	19.0	68.0	5.4	16.0	27.0	27.0	10.0	14.7	10.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	799	871	258	971	943	314	732	556	191	570	339
V/C Ratio(X)	1.07	1.28	0.19	1.32	1.01	0.16	1.01	1.04	0.98	1.41	0.73	0.45
Avail Cap(c_a), veh/h	151	799	871	258	971	943	314	732	556	191	570	339
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	37.0	14.5	55.5	31.0	11.5	43.1	51.5	41.6	46.5	51.8	44.3
Incr Delay (d2), s/veh	93.1	133.9	0.1	167.1	30.8	0.1	54.4	45.1	33.3	213.1	4.9	0.9
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(50%),veh/ln	6.4	53.6	2.4	20.2	36.1	1.8	7.1	16.2	21.7	12.6	6.7	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	128.6	170.9	14.6	222.6	61.8	11.6	97.5	96.6	74.8	259.6	56.7	45.2
LnGrp LOS	F	F	B	F	F	B	F	F	E	F	E	D
Approach Vol, veh/h	1349			1466			1628			839		
Approach Delay, s/veh	146.4			94.0			89.5			119.9		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.0	32.0	23.0	61.0	20.0	26.0	11.0	73.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	10.0	27.0	19.0	56.0	16.0	21.0	7.0	68.0				
Max Q Clear Time (g_c+1/2C), s	12.0	29.0	21.0	58.0	18.0	16.7	9.0	70.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	110.1
HCM 6th LOS	F

Intersection									
Intersection Delay, s/veh24.8									
Intersection LOS C									
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	823		1191		644		846		
Demand Flow Rate, veh/h	848		1227		663		872		
Vehicles Circulating, veh/h	1006		313		810		1195		
Vehicles Exiting, veh/h	1061		1160		1044		345		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	26.8		11.3		13.2		50.8		
Approach LOS	D		B		B		F		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	TR	LT	TR	LT	R	LT	TR	
RT Channelized									
Lane Util	0.471	0.529	0.470	0.530	0.415	0.585	0.470	0.530	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	399	449	577	650	275	388	410	462	
Cap Entry Lane, veh/h	535	604	1012	1088	641	713	450	514	
Entry HV Adj Factor	0.970	0.972	0.970	0.971	0.971	0.972	0.970	0.971	
Flow Entry, veh/h	387	436	560	631	267	377	398	449	
Cap Entry, veh/h	519	587	982	1057	622	693	436	499	
V/C Ratio	0.746	0.744	0.570	0.597	0.429	0.544	0.912	0.899	
Control Delay, s/veh	28.3	25.5	11.3	11.3	12.2	13.9	54.4	47.5	
LOS	D	D	B	B	B	B	F	E	
95th %tile Queue, veh	6	6	4	4	2	3	10	10	

Intersection									
Intersection Delay, s/veh 58.4									
Intersection LOS F									
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	1349		1466		1628		839		
Demand Flow Rate, veh/h	1390		1509		1677		865		
Vehicles Circulating, veh/h	1059		1281		1495		1685		
Vehicles Exiting, veh/h	1491		1891		954		1105		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	163.3		342.6		603.0		225.1		
Approach LOS	F		F		F		F		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.470	0.530	0.470	0.530	0.470	0.530	0.471	0.529	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	653	737	709	800	788	889	407	458	
Cap Entry Lane, veh/h	510	577	415	478	341	398	287	339	
Entry HV Adj Factor	0.971	0.970	0.972	0.971	0.971	0.971	0.969	0.971	
Flow Entry, veh/h	634	715	689	777	765	863	395	445	
Cap Entry, veh/h	495	560	404	464	331	387	278	329	
V/C Ratio	1.281	1.277	1.707	1.674	2.309	2.231	1.421	1.351	
Control Delay, s/veh	166.2	160.7	352.1	334.2	623.6	584.8	243.9	208.4	
LOS	F	F	F	F	F	F	F	F	
95th %tile Queue, veh	26	29	42	45	59	65	21	22	

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	734	4	23	748	5	30	0	7	22	0	38
Future Vol, veh/h	12	734	4	23	748	5	30	0	7	22	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	534	-	-	515	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	13	798	4	25	813	5	33	0	8	24	0	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	818	0	0	802	0	0	1712	1694	800	1696	1694	816
Stage 1	-	-	-	-	-	-	826	826	-	866	866	-
Stage 2	-	-	-	-	-	-	886	868	-	830	828	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	806	-	-	817	-	-	71	92	383	73	92	375
Stage 1	-	-	-	-	-	-	365	385	-	347	369	-
Stage 2	-	-	-	-	-	-	338	368	-	363	384	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	806	-	-	817	-	-	61	88	383	69	88	375
Mov Cap-2 Maneuver	-	-	-	-	-	-	61	88	-	69	88	-
Stage 1	-	-	-	-	-	-	359	379	-	341	358	-
Stage 2	-	-	-	-	-	-	292	357	-	350	378	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.3			103.1			49.7		
HCM LOS							F			E		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	73	806	-	-	817	-	-	143
HCM Lane V/C Ratio	0.551	0.016	-	-	0.031	-	-	0.456
HCM Control Delay (s)	103.1	9.5	-	-	9.5	-	-	49.7
HCM Lane LOS	F	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	2.3	0	-	-	0.1	-	-	2.1

Intersection												
Int Delay, s/veh	8.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	1101	30	29	1012	28	8	4	31	8	1	32
Future Vol, veh/h	41	1101	30	29	1012	28	8	4	31	8	1	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	534	-	-	515	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	45	1197	33	32	1100	30	9	4	34	9	1	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1130	0	0	1230	0	0	2501	2498	1214	2502	2499	1115
Stage 1	-	-	-	-	-	-	1304	1304	-	1179	1179	-
Stage 2	-	-	-	-	-	-	1197	1194	-	1323	1320	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	615	-	-	563	-	-	19	29	220	19	29	252
Stage 1	-	-	-	-	-	-	196	229	-	231	263	-
Stage 2	-	-	-	-	-	-	226	259	-	191	225	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	615	-	-	563	-	-	14	25	220	13	25	252
Mov Cap-2 Maneuver	-	-	-	-	-	-	14	25	-	13	25	-
Stage 1	-	-	-	-	-	-	182	212	-	214	248	-
Stage 2	-	-	-	-	-	-	183	244	-	147	209	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.3	246	208.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	49	615	-	-	563	-	-	52
HCM Lane V/C Ratio	0.954	0.072	-	-	0.056	-	-	0.857
HCM Control Delay (s)	246	11.3	-	-	11.8	-	-	208.6
HCM Lane LOS	F	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	4	0.2	-	-	0.2	-	-	3.6

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	734	4	23	748	5	30	0	7	22	0	38
Future Vol, veh/h	12	734	4	23	748	5	30	0	7	22	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	534	-	-	515	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	13	798	4	25	813	5	33	0	8	24	0	41
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	818	0	0	802	0	0	1712	1694	800	1696	1694	816
Stage 1	-	-	-	-	-	-	826	826	-	866	866	-
Stage 2	-	-	-	-	-	-	886	868	-	830	828	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	806	-	-	817	-	-	71	92	383	73	92	375
Stage 1	-	-	-	-	-	-	365	385	-	347	369	-
Stage 2	-	-	-	-	-	-	338	368	-	363	384	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	806	-	-	817	-	-	61	88	383	69	88	375
Mov Cap-2 Maneuver	-	-	-	-	-	-	61	88	-	69	88	-
Stage 1	-	-	-	-	-	-	359	379	-	341	358	-
Stage 2	-	-	-	-	-	-	292	357	-	350	378	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.2			0.3			98.4			40.3		
HCM LOS							F			E		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	61	383	806	-	-	817	-	-	69	375		
HCM Lane V/C Ratio	0.535	0.02	0.016	-	-	0.031	-	-	0.347	0.11		
HCM Control Delay (s/veh)	117.9	14.6	9.5	-	-	9.5	-	-	82.6	15.8		
HCM Lane LOS	F	B	A	-	-	A	-	-	F	C		
HCM 95th %tile Q (veh)	2.1	0.1	0	-	-	0.1	-	-	1.3	0.4		

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	1101	30	29	1012	28	8	4	31	8	1	32
Future Vol, veh/h	41	1101	30	29	1012	28	8	4	31	8	1	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	534	-	-	515	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	45	1197	33	32	1100	30	9	4	34	9	1	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1130	0	0	1230	0	0	2501	2498	1214	2502	2499	1115
Stage 1	-	-	-	-	-	-	1304	1304	-	1179	1179	-
Stage 2	-	-	-	-	-	-	1197	1194	-	1323	1320	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	615	-	-	563	-	-	19	29	220	19	29	252
Stage 1	-	-	-	-	-	-	196	229	-	231	263	-
Stage 2	-	-	-	-	-	-	226	259	-	191	225	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	615	-	-	563	-	-	14	25	220	13	25	252
Mov Cap-2 Maneuver	-	-	-	-	-	-	14	25	-	13	25	-
Stage 1	-	-	-	-	-	-	182	212	-	214	248	-
Stage 2	-	-	-	-	-	-	183	244	-	147	209	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.4			0.3			126.4			120.5		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	14	116	615	-	-	563	-	-	13	198
HCM Lane V/C Ratio	0.621	0.328	0.072	-	-	0.056	-	-	0.669	0.181
HCM Control Delay (s/veh)	\$ 458.2	50.5	11.3	-	-	11.8	-	-	\$ 505.6	27.2
HCM Lane LOS	F	F	B	-	-	B	-	-	F	D
HCM 95th %tile Q (veh)	1.5	1.3	0.2	-	-	0.2	-	-	1.6	0.6

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	1593	39	194	1341	105	12	4	149	56	1	32
Future Vol, veh/h	42	1593	39	194	1341	105	12	4	149	56	1	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	534	-	-	515	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	46	1732	42	211	1458	114	13	4	162	61	1	35
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1572	0	0	1774	0	0	3800	3839	1753	3865	3803	1515
Stage 1	-	-	-	-	-	-	1845	1845	-	1937	1937	-
Stage 2	-	-	-	-	-	-	1955	1994	-	1928	1866	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	416	-	-	348	-	-	~ 2	~ 4	~ 105	~ 2	4	146
Stage 1	-	-	-	-	-	-	95	124	-	84	112	-
Stage 2	-	-	-	-	-	-	82	104	-	85	121	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	416	-	-	348	-	-	-	~ 1	~ 105	-	~ 1	146
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	~ 1	-	-	~ 1	-
Stage 1	-	-	-	-	-	-	84	110	-	75	44	-
Stage 2	-	-	-	-	-	-	24	41	-	-	108	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			3.6								
HCM LOS							-			-		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	416	-	-	348	-	-	-				
HCM Lane V/C Ratio	-	0.11	-	-	0.606	-	-	-				
HCM Control Delay (s)	-	14.7	-	-	30	-	-	-				
HCM Lane LOS	-	B	-	-	D	-	-	-				
HCM 95th %tile Q(veh)	-	0.4	-	-	3.8	-	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	1593	39	194	1341	105	12	4	149	56	1	32
Future Vol, veh/h	42	1593	39	194	1341	105	12	4	149	56	1	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	534	-	-	515	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	46	1732	42	211	1458	114	13	4	162	61	1	35
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1572	0	0	1774	0	0	3800	3839	1753	3865	3803	1515
Stage 1	-	-	-	-	-	-	1845	1845	-	1937	1937	-
Stage 2	-	-	-	-	-	-	1955	1994	-	1928	1866	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	416	-	-	348	-	-	~ 2	~ 4	~ 105	~ 2	4	146
Stage 1	-	-	-	-	-	-	95	124	-	84	112	-
Stage 2	-	-	-	-	-	-	82	104	-	85	121	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	416	-	-	348	-	-	-	~ 1	~ 105	-	~ 1	146
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	~ 1	-	-	~ 1	-
Stage 1	-	-	-	-	-	-	84	110	-	75	44	-
Stage 2	-	-	-	-	-	-	24	41	-	-	108	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			3.6								
HCM LOS							-			-		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	416	-	-	348	-	-	-				
HCM Lane V/C Ratio	-	0.11	-	-	0.606	-	-	-				
HCM Control Delay (s)	-	14.7	-	-	30	-	-	-				
HCM Lane LOS	-	B	-	-	D	-	-	-				
HCM 95th %tile Q(veh)	-	0.4	-	-	3.8	-	-	-				
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Intersection						
Intersection Delay, s/veh 9.0						
Intersection LOS A						
Approach	EB		WB		NB	SB
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	1131		1239		196	131
Demand Flow Rate, veh/h	1164		1276		202	135
Vehicles Circulating, veh/h	198		55		1249	1290
Vehicles Exiting, veh/h	1227		1396		113	41
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	8.8		7.8		14.8	12.3
Approach LOS	A		A		B	B
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	547	617	600	676	202	135
Cap Entry Lane, veh/h	1125	1200	1283	1355	491	474
Entry HV Adj Factor	0.971	0.971	0.970	0.971	0.970	0.970
Flow Entry, veh/h	531	599	582	657	196	131
Cap Entry, veh/h	1093	1166	1245	1316	477	460
V/C Ratio	0.486	0.514	0.468	0.499	0.411	0.285
Control Delay, s/veh	8.8	8.9	7.7	7.9	14.8	12.3
LOS	A	A	A	A	B	B
95th %tile Queue, veh	3	3	3	3	2	1

Intersection						
Intersection Delay, s/veh 19.9						
Intersection LOS C						
Approach	EB		WB		NB	SB
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	1820		1783		179	97
Demand Flow Rate, veh/h	1874		1836		184	100
Vehicles Circulating, veh/h	281		64		1894	1732
Vehicles Exiting, veh/h	1551		2014		261	168
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	25.3		12.7		37.5	17.9
Approach LOS	D		B		E	C
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	881	993	863	973	184	100
Cap Entry Lane, veh/h	1042	1118	1273	1345	284	326
Entry HV Adj Factor	0.971	0.971	0.971	0.971	0.972	0.970
Flow Entry, veh/h	855	965	838	945	179	97
Cap Entry, veh/h	1012	1086	1236	1306	276	316
V/C Ratio	0.845	0.888	0.678	0.723	0.648	0.307
Control Delay, s/veh	23.6	26.8	12.2	13.2	37.5	17.9
LOS	C	D	B	B	E	C
95th %tile Queue, veh	11	13	6	7	4	1

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	749	1	17	691	4	40
Future Vol, veh/h	749	1	17	691	4	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	814	1	18	751	4	43
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	815	0	1602	815
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	787	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	808	-	116	376
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	447	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	808	-	113	376
Mov Cap-2 Maneuver	-	-	-	-	113	-
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	437	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.2		18.7	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	310	-	-	808	-	
HCM Lane V/C Ratio	0.154	-	-	0.023	-	
HCM Control Delay (s)	18.7	-	-	9.6	-	
HCM Lane LOS	C	-	-	A	-	
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-	

Intersection						
Int Delay, s/veh	1.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1057	21	24	965	13	45
Future Vol, veh/h	1057	21	24	965	13	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1149	23	26	1049	14	49

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1172
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	592
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	592
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	66.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	118	-	-	592	-
HCM Lane V/C Ratio	0.534	-	-	0.044	-
HCM Control Delay (s)	66.1	-	-	11.4	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	2.5	-	-	0.1	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	749	1	17	691	4	40
Future Vol, veh/h	749	1	17	691	4	40
Conflicting Peds, #/hr	0	0	0	0	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	814	1	18	751	4	43
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	815	0	1602	815
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	787	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	808	-	116	376
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	447	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	808	-	113	376
Mov Cap-2 Maneuver	-	-	-	-	113	-
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	437	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		0.2		17.8	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	113	376	-	-	808	-
HCM Lane V/C Ratio	0.038	0.116	-	-	0.023	-
HCM Control Delay (s/veh)	38.1	15.8	-	-	9.6	-
HCM Lane LOS	E	C	-	-	A	-
HCM 95th %tile Q (veh)	0.1	0.4	-	-	0.1	-

Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱		↱	↱	↱	↱
Traffic Vol, veh/h	1057	21	24	965	13	45
Future Vol, veh/h	1057	21	24	965	13	45
Conflicting Peds, #/hr	0	0	0	0	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1149	23	26	1049	14	49
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1172	0	2262	1161
Stage 1	-	-	-	-	1161	-
Stage 2	-	-	-	-	1101	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	592	-	45	237
Stage 1	-	-	-	-	297	-
Stage 2	-	-	-	-	317	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	592	-	43	237
Mov Cap-2 Maneuver	-	-	-	-	43	-
Stage 1	-	-	-	-	297	-
Stage 2	-	-	-	-	303	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		0.3		46.8	
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	43	237	-	-	592	-
HCM Lane V/C Ratio	0.329	0.206	-	-	0.044	-
HCM Control Delay (s/veh)	125.3	24.1	-	-	11.4	-
HCM Lane LOS	F	C	-	-	B	-
HCM 95th %tile Q (veh)	1.1	0.8	-	-	0.1	-

Intersection						
Int Delay, s/veh	43.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1752	21	47	1596	14	58
Future Vol, veh/h	1752	21	47	1596	14	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1904	23	51	1735	15	63
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1927	0	3753	1916
Stage 1	-	-	-	-	1916	-
Stage 2	-	-	-	-	1837	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	303	-	~ 5	84
Stage 1	-	-	-	-	126	-
Stage 2	-	-	-	-	138	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	303	-	~ 4	84
Mov Cap-2 Maneuver	-	-	-	-	~ 4	-
Stage 1	-	-	-	-	126	-
Stage 2	-	-	-	-	115	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.6		\$ 2074.5	
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	17	-	-	303	-	
HCM Lane V/C Ratio	4.604	-	-	0.169	-	
HCM Control Delay (s)	\$ 2074.5	-	-	19.3	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	10.5	-	-	0.6	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection						
Int Delay, s/veh	43.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1752	21	47	1596	14	58
Future Vol, veh/h	1752	21	47	1596	14	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1904	23	51	1735	15	63
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1927	0	3753	1916
Stage 1	-	-	-	-	1916	-
Stage 2	-	-	-	-	1837	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	303	-	~ 5	84
Stage 1	-	-	-	-	126	-
Stage 2	-	-	-	-	138	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	303	-	~ 4	84
Mov Cap-2 Maneuver	-	-	-	-	~ 4	-
Stage 1	-	-	-	-	126	-
Stage 2	-	-	-	-	115	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.6		\$ 2074.5	
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	17	-	-	303	-	
HCM Lane V/C Ratio	4.604	-	-	0.169	-	
HCM Control Delay (s)	\$ 2074.5	-	-	19.3	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	10.5	-	-	0.6	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	1288	1	18	1065	4	57
Future Vol, veh/h	1288	1	18	1065	4	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1400	1	20	1158	4	62
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1401	0	2020	701
Stage 1	-	-	-	-	1401	-
Stage 2	-	-	-	-	619	-
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	-	-	478	-	50	379
Stage 1	-	-	-	-	192	-
Stage 2	-	-	-	-	497	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	478	-	48	379
Mov Cap-2 Maneuver	-	-	-	-	48	-
Stage 1	-	-	-	-	192	-
Stage 2	-	-	-	-	476	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		0.2		21	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	48	379	-	-	478	-
HCM Lane V/C Ratio	0.091	0.163	-	-	0.041	-
HCM Control Delay (s/veh)	87.3	16.3	-	-	12.9	-
HCM Lane LOS	F	C	-	-	B	-
HCM 95th %tile Q (veh)	0.3	0.6	-	-	0.1	-

Intersection							
Int Delay, s/veh	4.2						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↱		↱	↑↑	↱	↱	
Traffic Vol, veh/h	1752	21	47	1596	14	58	
Future Vol, veh/h	1752	21	47	1596	14	58	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	100	-	0	100	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	92	92	92	92	92	92	
Heavy Vehicles, %	3	3	3	3	3	3	
Mvmt Flow	1904	23	51	1735	15	63	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	0	1927	0	2886	964	
Stage 1	-	-	-	-	1916	-	
Stage 2	-	-	-	-	970	-	
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	-	-	298	-	~ 13	253	
Stage 1	-	-	-	-	100	-	
Stage 2	-	-	-	-	326	-	
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	298	-	~ 11	253	
Mov Cap-2 Maneuver	-	-	-	-	~ 11	-	
Stage 1	-	-	-	-	100	-	
Stage 2	-	-	-	-	270	-	
Approach	EB		WB		NB		
HCM Control Delay, s/v	0		0.6		190		
HCM LOS	F						
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	11		253	-	-	298	-
HCM Lane V/C Ratio	1.383		0.249	-	-	0.171	-
HCM Control Delay (s/veh)	\$ 878.1		23.9	-	-	19.6	-
HCM Lane LOS	F		C	-	-	C	-
HCM 95th %tile Q (veh)	2.7		1	-	-	0.6	-
Notes							
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined		*: All major volume in platoon

Intersection									
Intersection Delay, s/veh	6.0								
Intersection LOS	A								
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	892		587		0		308		
Demand Flow Rate, veh/h	918		604		0		317		
Vehicles Circulating, veh/h	47		181		965		562		
Vehicles Exiting, veh/h	832		784		0		223		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	6.0		5.5		0.0		7.2		
Approach LOS	A		A		-		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	R	
RT Channelized									
Lane Util	0.469	0.531	0.470	0.530	0.500	0.500	0.148	0.852	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	431	487	284	320	0	0	47	270	
Cap Entry Lane, veh/h	1293	1364	1143	1218	556	625	805	881	
Entry HV Adj Factor	0.972	0.970	0.971	0.972	1.000	1.000	0.979	0.970	
Flow Entry, veh/h	419	473	276	311	0	0	46	262	
Cap Entry, veh/h	1257	1324	1109	1183	556	625	788	855	
V/C Ratio	0.333	0.357	0.249	0.263	0.000	0.000	0.058	0.307	
Control Delay, s/veh	6.0	6.0	5.6	5.4	6.5	5.8	5.1	7.6	
LOS	A	A	A	A	A	A	A	A	
95th %tile Queue, veh	1	2	1	1	0	0	0	1	

Intersection									
Intersection Delay, s/veh	9.6								
Intersection LOS	A								
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	1270		1059		0		279		
Demand Flow Rate, veh/h	1309		1091		0		287		
Vehicles Circulating, veh/h	72		398		1381		928		
Vehicles Exiting, veh/h	1143		983		0		561		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	8.2		11.3		0.0		9.7		
Approach LOS	A		B		-		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	R	
RT Channelized									
Lane Util	0.470	0.530	0.470	0.530	0.500	0.500	0.251	0.749	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	615	694	513	578	0	0	72	215	
Cap Entry Lane, veh/h	1263	1336	936	1012	379	439	575	645	
Entry HV Adj Factor	0.971	0.970	0.970	0.971	1.000	1.000	0.972	0.972	
Flow Entry, veh/h	597	673	498	561	0	0	70	209	
Cap Entry, veh/h	1227	1296	908	983	379	439	559	627	
V/C Ratio	0.487	0.520	0.548	0.571	0.000	0.000	0.125	0.333	
Control Delay, s/veh	8.1	8.3	11.4	11.3	9.5	8.2	8.0	10.2	
LOS	A	A	B	B	A	A	A	B	
95th %tile Queue, veh	3	3	3	4	0	0	0	1	

Intersection									
Intersection Delay, s/veh	200.1								
Intersection LOS	F								
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	2039		1282		893		754		
Demand Flow Rate, veh/h	2100		1321		919		776		
Vehicles Circulating, veh/h	557		1333		1655		1655		
Vehicles Exiting, veh/h	1874		1241		1002		999		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	136.9		282.9		262.8		155.8		
Approach LOS	F		F		F		F		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	TR	LT	TR	L	TR	LT	TR	
RT Channelized									
Lane Util	0.470	0.530	0.470	0.530	0.541	0.459	0.470	0.530	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	987	1113	621	700	497	422	365	411	
Cap Entry Lane, veh/h	809	884	396	457	295	348	295	348	
Entry HV Adj Factor	0.971	0.971	0.970	0.971	0.972	0.971	0.971	0.972	
Flow Entry, veh/h	958	1081	603	680	483	410	354	400	
Cap Entry, veh/h	785	859	384	444	286	338	286	338	
V/C Ratio	1.221	1.258	1.568	1.531	1.687	1.213	1.239	1.182	
Control Delay, s/veh	129.8	143.2	293.6	273.4	355.2	153.9	171.0	142.2	
LOS	F	F	F	F	F	F	F	F	
95th %tile Queue, veh	33	38	34	36	31	18	17	17	

Intersection									
Intersection Delay, s/veh	200.1								
Intersection LOS	F								
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	2039		1282		893		754		
Demand Flow Rate, veh/h	2100		1321		919		776		
Vehicles Circulating, veh/h	557		1333		1655		1655		
Vehicles Exiting, veh/h	1874		1241		1002		999		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	136.9		282.9		262.8		155.8		
Approach LOS	F		F		F		F		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	TR	LT	TR	L	TR	LT	TR	
RT Channelized									
Lane Util	0.470	0.530	0.470	0.530	0.541	0.459	0.470	0.530	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	987	1113	621	700	497	422	365	411	
Cap Entry Lane, veh/h	809	884	396	457	295	348	295	348	
Entry HV Adj Factor	0.971	0.971	0.970	0.971	0.972	0.971	0.971	0.972	
Flow Entry, veh/h	958	1081	603	680	483	410	354	400	
Cap Entry, veh/h	785	859	384	444	286	338	286	338	
V/C Ratio	1.221	1.258	1.568	1.531	1.687	1.213	1.239	1.182	
Control Delay, s/veh	129.8	143.2	293.6	273.4	355.2	153.9	171.0	142.2	
LOS	F	F	F	F	F	F	F	F	
95th %tile Queue, veh	33	38	34	36	31	18	17	17	

Intersection						
Int Delay, s/veh	1					
Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	1	70	723	8	21	550
Future Vol, veh/h	1	70	723	8	21	550
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1	76	786	9	23	598
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1435	791	0	0	795	0
Stage 1	791	-	-	-	-	-
Stage 2	644	-	-	-	-	-
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	147	388	-	-	822	-
Stage 1	445	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	141	388	-	-	822	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	445	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Approach	NB	NE	SW			
HCM Control Delay, s	16.9	0	0.3			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NER	NBLn1	SWL	SWT	
Capacity (veh/h)	-	-	379	822	-	
HCM Lane V/C Ratio	-	-	0.204	0.028	-	
HCM Control Delay (s)	-	-	16.9	9.5	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	0.8	0.1	-	

Intersection						
Int Delay, s/veh	3.6					
Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	5	128	867	17	105	1041
Future Vol, veh/h	5	128	867	17	105	1041
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	5	139	942	18	114	1132
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2311	951	0	0	960	0
Stage 1	951	-	-	-	-	-
Stage 2	1360	-	-	-	-	-
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	42	314	-	-	713	-
Stage 1	374	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	24	314	-	-	713	-
Mov Cap-2 Maneuver	24	-	-	-	-	-
Stage 1	374	-	-	-	-	-
Stage 2	135	-	-	-	-	-
Approach	NB	NE	SW			
HCM Control Delay, s	50	0	1			
HCM LOS	F					
Minor Lane/Major Mvmt	NET	NER	NBLn1	SWL	SWT	
Capacity (veh/h)	-	-	216	713	-	
HCM Lane V/C Ratio	-	-	0.669	0.16	-	
HCM Control Delay (s)	-	-	50	11	0	
HCM Lane LOS	-	-	F	B	A	
HCM 95th %tile Q(veh)	-	-	4.1	0.6	-	

Intersection						
Int Delay, s/veh	30.2					
Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	5	128	1098	17	105	1246
Future Vol, veh/h	5	128	1098	17	105	1246
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	5	139	1193	18	114	1354
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2784	1202	0	0	1211	0
Stage 1	1202	-	-	-	-	-
Stage 2	1582	-	-	-	-	-
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	21	224	-	-	573	-
Stage 1	283	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 4	224	-	-	573	-
Mov Cap-2 Maneuver	~ 4	-	-	-	-	-
Stage 1	283	-	-	-	-	-
Stage 2	36	-	-	-	-	-
Approach	NB	NE	SW			
HCM Control Delay, s	579.2	0	1			
HCM LOS	F					
Minor Lane/Major Mvmt	NET	NER	NBLn1	SWL	SWT	
Capacity (veh/h)	-	-	73	573	-	
HCM Lane V/C Ratio	-	-	1.98	0.199	-	
HCM Control Delay (s)	-	-	579.2	12.8	0	
HCM Lane LOS	-	-	F	B	A	
HCM 95th %tile Q(veh)	-	-	13.1	0.7	-	
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Intersection						
Int Delay, s/veh	30.2					
Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	5	128	1098	17	105	1246
Future Vol, veh/h	5	128	1098	17	105	1246
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	5	139	1193	18	114	1354
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2784	1202	0	0	1211	0
Stage 1	1202	-	-	-	-	-
Stage 2	1582	-	-	-	-	-
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	21	224	-	-	573	-
Stage 1	283	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 4	224	-	-	573	-
Mov Cap-2 Maneuver	~ 4	-	-	-	-	-
Stage 1	283	-	-	-	-	-
Stage 2	36	-	-	-	-	-
Approach	NB	NE	SW			
HCM Control Delay, s	579.2	0	1			
HCM LOS	F					
Minor Lane/Major Mvmt	NET	NER	NBLn1	SWL	SWT	
Capacity (veh/h)	-	-	73	573	-	
HCM Lane V/C Ratio	-	-	1.98	0.199	-	
HCM Control Delay (s)	-	-	579.2	12.8	0	
HCM Lane LOS	-	-	F	B	A	
HCM 95th %tile Q(veh)	-	-	13.1	0.7	-	
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Intersection							
Intersection Delay, s/veh	6.5						
Intersection LOS	A						
Approach	EB		WB		NB		SB
Entry Lanes	2		2		2		1
Conflicting Circle Lanes	2		2		2		2
Adj Approach Flow, veh/h	789		601		156		233
Demand Flow Rate, veh/h	813		620		161		240
Vehicles Circulating, veh/h	224		156		843		598
Vehicles Exiting, veh/h	614		848		194		178
Ped Vol Crossing Leg, #/h	0		0		0		0
Ped Cap Adj	1.000		1.000		1.000		1.000
Approach Delay, s/veh	6.9		5.4		7.2		7.4
Approach LOS	A		A		A		A
Lane	Left	Right	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LT	R	LTR
Assumed Moves	LT	TR	LT	TR	LT	R	LTR
RT Channelized							
Lane Util	0.470	0.530	0.469	0.531	0.590	0.410	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.328
Entry Flow, veh/h	382	431	291	329	95	66	240
Cap Entry Lane, veh/h	1098	1174	1169	1244	622	694	854
Entry HV Adj Factor	0.971	0.970	0.971	0.969	0.972	0.970	0.971
Flow Entry, veh/h	371	418	283	319	92	64	233
Cap Entry, veh/h	1066	1139	1136	1205	604	673	829
V/C Ratio	0.348	0.367	0.249	0.265	0.153	0.095	0.281
Control Delay, s/veh	6.9	6.8	5.5	5.4	7.8	6.4	7.4
LOS	A	A	A	A	A	A	A
95th %tile Queue, veh	2	2	1	1	1	0	1

Intersection							
Intersection Delay, s/veh	11.1						
Intersection LOS	B						
Approach	EB		WB		NB		SB
Entry Lanes	2		2		2		1
Conflicting Circle Lanes	2		2		2		2
Adj Approach Flow, veh/h	1034		940		340		393
Demand Flow Rate, veh/h	1065		968		350		404
Vehicles Circulating, veh/h	257		269		1089		1034
Vehicles Exiting, veh/h	1181		1170		233		203
Ped Vol Crossing Leg, #/h	0		0		0		0
Ped Cap Adj	1.000		1.000		1.000		1.000
Approach Delay, s/veh	8.9		8.3		12.9		22.3
Approach LOS	A		A		B		C
Lane	Left	Right	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LT	R	LTR
Assumed Moves	LT	TR	LT	TR	LT	R	LTR
RT Channelized							
Lane Util	0.470	0.530	0.470	0.530	0.594	0.406	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.328
Entry Flow, veh/h	501	564	455	513	208	142	404
Cap Entry Lane, veh/h	1066	1141	1054	1130	496	563	590
Entry HV Adj Factor	0.970	0.972	0.971	0.971	0.970	0.972	0.972
Flow Entry, veh/h	486	548	442	498	202	138	393
Cap Entry, veh/h	1034	1109	1023	1097	481	547	573
V/C Ratio	0.470	0.494	0.432	0.454	0.420	0.252	0.685
Control Delay, s/veh	8.9	8.8	8.3	8.3	14.9	10.1	22.3
LOS	A	A	A	A	B	B	C
95th %tile Queue, veh	3	3	2	2	2	1	5

Intersection							
Intersection Delay, s/veh	15.2						
Intersection LOS	C						
Approach	EB		WB		NB		SB
Entry Lanes	2		2		2		1
Conflicting Circle Lanes	2		2		2		2
Adj Approach Flow, veh/h	1285		1163		340		393
Demand Flow Rate, veh/h	1323		1198		350		404
Vehicles Circulating, veh/h	257		269		1347		1264
Vehicles Exiting, veh/h	1411		1428		233		203
Ped Vol Crossing Leg, #/h	0		0		0		0
Ped Cap Adj	1.000		1.000		1.000		1.000
Approach Delay, s/veh	11.3		10.2		18.8		39.6
Approach LOS	B		B		C		E
Lane	Left	Right	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LT	R	LTR
Assumed Moves	LT	TR	LT	TR	LT	R	LTR
RT Channelized							
Lane Util	0.470	0.530	0.470	0.530	0.594	0.406	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.328
Entry Flow, veh/h	622	701	563	635	208	142	404
Cap Entry Lane, veh/h	1066	1141	1054	1130	391	452	485
Entry HV Adj Factor	0.971	0.971	0.971	0.971	0.970	0.972	0.972
Flow Entry, veh/h	604	681	547	616	202	138	393
Cap Entry, veh/h	1034	1109	1023	1097	379	439	471
V/C Ratio	0.584	0.614	0.534	0.562	0.532	0.314	0.833
Control Delay, s/veh	11.2	11.3	10.1	10.2	22.4	13.5	39.6
LOS	B	B	B	B	C	B	E
95th %tile Queue, veh	4	4	3	4	3	1	8

Intersection							
Intersection Delay, s/veh	15.2						
Intersection LOS	C						
Approach	EB		WB		NB		SB
Entry Lanes	2		2		2		1
Conflicting Circle Lanes	2		2		2		2
Adj Approach Flow, veh/h	1285		1163		340		393
Demand Flow Rate, veh/h	1323		1198		350		404
Vehicles Circulating, veh/h	257		269		1347		1264
Vehicles Exiting, veh/h	1411		1428		233		203
Ped Vol Crossing Leg, #/h	0		0		0		0
Ped Cap Adj	1.000		1.000		1.000		1.000
Approach Delay, s/veh	11.3		10.2		18.8		39.6
Approach LOS	B		B		C		E
Lane	Left	Right	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LT	R	LTR
Assumed Moves	LT	TR	LT	TR	LT	R	LTR
RT Channelized							
Lane Util	0.470	0.530	0.470	0.530	0.594	0.406	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.328
Entry Flow, veh/h	622	701	563	635	208	142	404
Cap Entry Lane, veh/h	1066	1141	1054	1130	391	452	485
Entry HV Adj Factor	0.971	0.971	0.971	0.971	0.970	0.972	0.972
Flow Entry, veh/h	604	681	547	616	202	138	393
Cap Entry, veh/h	1034	1109	1023	1097	379	439	471
V/C Ratio	0.584	0.614	0.534	0.562	0.532	0.314	0.833
Control Delay, s/veh	11.2	11.3	10.1	10.2	22.4	13.5	39.6
LOS	B	B	B	B	C	B	E
95th %tile Queue, veh	4	4	3	4	3	1	8

Intersection								
Intersection Delay, s/veh 8.4								
Intersection LOS A								
Approach	EB		WB		NB		SB	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	798		961		25		394	
Demand Flow Rate, veh/h	822		990		26		406	
Vehicles Circulating, veh/h	377		53		1105		781	
Vehicles Exiting, veh/h	810		1078		94		262	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	8.4		6.3		7.3		13.3	
Approach LOS	A		A		A		B	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	1.000	0.862	0.138	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
Entry Flow, veh/h	386	436	465	525	26	350	56	
Cap Entry Lane, veh/h	954	1031	1286	1358	555	658	731	
Entry HV Adj Factor	0.972	0.970	0.972	0.970	0.959	0.971	0.964	
Flow Entry, veh/h	375	423	452	509	25	340	54	
Cap Entry, veh/h	928	1000	1249	1317	532	639	705	
V/C Ratio	0.404	0.423	0.362	0.387	0.047	0.532	0.077	
Control Delay, s/veh	8.5	8.3	6.3	6.4	7.3	14.5	5.9	
LOS	A	A	A	A	A	B	A	
95th %tile Queue, veh	2	2	2	2	0	3	0	

Intersection								
Intersection Delay, s/veh12.4								
Intersection LOS B								
Approach	EB		WB		NB		SB	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	1304		1330		105		375	
Demand Flow Rate, veh/h	1343		1370		107		386	
Vehicles Circulating, veh/h	337		104		1653		1041	
Vehicles Exiting, veh/h	1090		1656		27		433	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	13.4		9.1		16.7		19.8	
Approach LOS	B		A		C		C	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	1.000	0.852	0.148	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
Entry Flow, veh/h	631	712	644	726	107	329	57	
Cap Entry Lane, veh/h	990	1066	1227	1300	348	518	586	
Entry HV Adj Factor	0.972	0.971	0.971	0.971	0.978	0.972	0.965	
Flow Entry, veh/h	613	691	625	705	105	320	55	
Cap Entry, veh/h	962	1035	1191	1263	341	504	566	
V/C Ratio	0.637	0.668	0.525	0.558	0.307	0.635	0.097	
Control Delay, s/veh	13.3	13.5	8.9	9.2	16.7	21.9	7.5	
LOS	B	B	A	A	C	C	A	
95th %tile Queue, veh	5	5	3	4	1	4	0	

Intersection								
Intersection Delay, s/veh 12.3								
Intersection LOS F								
Approach	EB		WB		NB		SB	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	1559		2234		105		796	
Demand Flow Rate, veh/h	1605		2300		107		820	
Vehicles Circulating, veh/h	771		104		2349		1270	
Vehicles Exiting, veh/h	1319		2352		27		1134	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	104.6		27.9		43.4		373.6	
Approach LOS	F		D		E		F	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	1.000	0.930	0.070	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
Entry Flow, veh/h	754	851	1081	1219	107	763	57	
Cap Entry Lane, veh/h	664	737	1227	1300	193	420	482	
Entry HV Adj Factor	0.972	0.971	0.971	0.971	0.978	0.971	0.965	
Flow Entry, veh/h	733	826	1050	1184	105	741	55	
Cap Entry, veh/h	645	716	1191	1262	189	407	465	
V/C Ratio	1.135	1.154	0.881	0.938	0.555	1.818	0.118	
Control Delay, s/veh	102.5	106.5	24.4	30.9	43.4	400.6	9.4	
LOS	F	F	C	D	E	F	A	
95th %tile Queue, veh	23	26	13	17	3	48	0	

Intersection								
Intersection Delay, s/veh 12.3								
Intersection LOS F								
Approach	EB		WB		NB		SB	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	1559		2234		105		796	
Demand Flow Rate, veh/h	1605		2300		107		820	
Vehicles Circulating, veh/h	771		104		2349		1270	
Vehicles Exiting, veh/h	1319		2352		27		1134	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	104.6		27.9		43.4		373.6	
Approach LOS	F		D		E		F	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	1.000	0.930	0.070	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
Entry Flow, veh/h	754	851	1081	1219	107	763	57	
Cap Entry Lane, veh/h	664	737	1227	1300	193	420	482	
Entry HV Adj Factor	0.972	0.971	0.971	0.971	0.978	0.971	0.965	
Flow Entry, veh/h	733	826	1050	1184	105	741	55	
Cap Entry, veh/h	645	716	1191	1262	189	407	465	
V/C Ratio	1.135	1.154	0.881	0.938	0.555	1.818	0.118	
Control Delay, s/veh	102.5	106.5	24.4	30.9	43.4	400.6	9.4	
LOS	F	F	C	D	E	F	A	
95th %tile Queue, veh	23	26	13	17	3	48	0	

Intersection								
Intersection Delay, s/veh	12.2							
Intersection LOS	B							
Approach	EB		WB		NB		SB	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	956		1291		25		691	
Demand Flow Rate, veh/h	984		1330		26		712	
Vehicles Circulating, veh/h	683		53		1573		921	
Vehicles Exiting, veh/h	950		1546		94		48	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	16.7		5.9		11.2		17.7	
Approach LOS	C		A		B		C	
Lane	Left	Right	Left	Right	Bypass	Left	Left	Right
Designated Moves	LT	TR	LT	TR	R	LTR	L	LTR
Assumed Moves	LT	TR	LT	TR		LTR	L	LTR
RT Channelized	Yield							
Lane Util	0.470	0.530	0.471	0.529		1.000	0.529	0.471
Follow-Up Headway, s	2.667	2.535	2.667	2.535		2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328		4.328	4.645	4.328
Entry Flow, veh/h	462	522	431	485	414	26	377	335
Cap Entry Lane, veh/h	720	795	1286	1358	1314	373	579	649
Entry HV Adj Factor	0.972	0.970	0.970	0.972	0.971	0.959	0.971	0.969
Flow Entry, veh/h	449	506	418	471	402	25	366	325
Cap Entry, veh/h	700	771	1246	1319	1276	358	562	629
V/C Ratio	0.642	0.657	0.335	0.357	0.315	0.070	0.652	0.516
Control Delay, s/veh	17.1	16.4	6.0	6.0	5.7	11.2	20.8	14.2
LOS	C	C	A	A	A	B	C	B
95th %tile Queue, veh	5	5	1	2	1	0	5	3

Intersection								
Intersection Delay, s/veh	52.7							
Intersection LOS	F							
Approach	EB		WB		NB		SB	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	1559		2234		105		796	
Demand Flow Rate, veh/h	1605		2300		107		820	
Vehicles Circulating, veh/h	771		104		2349		1270	
Vehicles Exiting, veh/h	1319		2352		27		89	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	104.6		13.3		43.4		62.8	
Approach LOS	F		B		E		F	
Lane	Left	Right	Left	Right	Bypass	Left	Left	Right
Designated Moves	LT	TR	LT	TR	R	LTR	L	LTR
Assumed Moves	LT	TR	LT	TR		LTR	L	LTR
RT Channelized	Yield							
Lane Util	0.470	0.530	0.470	0.530		1.000	0.530	0.470
Follow-Up Headway, s	2.667	2.535	2.667	2.535		2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328		4.328	4.645	4.328
Entry Flow, veh/h	754	851	590	665	1045	107	435	385
Cap Entry Lane, veh/h	664	737	1227	1300	1260	193	420	482
Entry HV Adj Factor	0.972	0.971	0.971	0.971	0.971	0.978	0.970	0.971
Flow Entry, veh/h	733	826	573	646	1015	105	422	374
Cap Entry, veh/h	645	716	1191	1263	1223	189	407	469
V/C Ratio	1.135	1.154	0.481	0.512	0.830	0.555	1.036	0.798
Control Delay, s/veh	102.5	106.5	8.2	8.4	19.4	43.4	86.8	35.7
LOS	F	F	A	A	C	E	F	E
95th %tile Queue, veh	23	26	3	3	10	3	14	7

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1024	829	9	0	16
Future Vol, veh/h	0	1024	829	9	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
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, %	3	3	3	3	3	3
Mvmt Flow	0	1113	901	10	0	17
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	-	451
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	0	0	553
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	553
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		11.7		
HCM LOS	B					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1			
Capacity (veh/h)	-	-	553			
HCM Lane V/C Ratio	-	-	0.031			
HCM Control Delay (s)	-	-	11.7			
HCM Lane LOS	-	-	B			
HCM 95th %tile Q(veh)	-	-	0.1			

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	7	1519	1225	24	0	16
Future Vol, veh/h	7	1519	1225	24	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
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, %	3	3	3	3	3	3
Mvmt Flow	8	1651	1332	26	0	17
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1332	0	-	0	-	666
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.16	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.23	-	-	-	-	3.33
Pot Cap-1 Maneuver	509	-	-	0	0	400
Stage 1	-	-	-	0	0	-
Stage 2	-	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	509	-	-	-	-	400
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		14.4		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1		
Capacity (veh/h)	509	-	-	400		
HCM Lane V/C Ratio	0.015	-	-	0.043		
HCM Control Delay (s)	12.2	-	-	14.4		
HCM Lane LOS	B	-	-	B		
HCM 95th %tile Q(veh)	0	-	-	0.1		

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	7	2140	2057	149	0	16
Future Vol, veh/h	7	2140	2057	149	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
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, %	3	3	3	3	3	3
Mvmt Flow	8	2326	2236	162	0	17
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2236	0	-	0	-	1118
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.16	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.23	-	-	-	-	3.33
Pot Cap-1 Maneuver	225	-	-	0	0	200
Stage 1	-	-	-	0	0	-
Stage 2	-	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	225	-	-	-	-	200
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		24.7		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1		
Capacity (veh/h)	225	-	-	200		
HCM Lane V/C Ratio	0.034	-	-	0.087		
HCM Control Delay (s)	21.6	-	-	24.7		
HCM Lane LOS	C	-	-	C		
HCM 95th %tile Q(veh)	0.1	-	-	0.3		

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	7	2140	2057	149	0	16
Future Vol, veh/h	7	2140	2057	149	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
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, %	3	3	3	3	3	3
Mvmt Flow	8	2326	2236	162	0	17

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	2236	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.16	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.23	-	-
Pot Cap-1 Maneuver	225	-	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	225	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	24.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	225	-	-	200
HCM Lane V/C Ratio	0.034	-	-	0.087
HCM Control Delay (s)	21.6	-	-	24.7
HCM Lane LOS	C	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	0.3

HCM 6th Signalized Intersection Summary
119: SR 32/Conner St & Cicero Rd

Existing AM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	733	0	0	884	36	0	0	0	240	18	287
Future Volume (veh/h)	131	733	0	0	884	36	0	0	0	240	18	287
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	1856	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	142	797	0	0	961	0	0	0	0	261	20	312
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	416	1907	0	0	1183		0	470	398	480	26	398
Arrive On Green	0.12	0.54	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.25	0.25	0.25
Sat Flow, veh/h	1767	3618	0	0	3711	0	0	1856	1572	1329	102	1572
Grp Volume(v), veh/h	142	797	0	0	961	0	0	0	0	281	0	312
Grp Sat Flow(s),veh/h/ln	1767	1763	0	0	1763	0	0	1856	1572	1431	0	1572
Q Serve(g_s), s	2.1	6.5	0.0	0.0	12.1	0.0	0.0	0.0	0.0	8.9	0.0	9.0
Cycle Q Clear(g_c), s	2.1	6.5	0.0	0.0	12.1	0.0	0.0	0.0	0.0	8.9	0.0	9.0
Prop In Lane	1.00		0.00	0.00		0.00	0.00		1.00	0.93		1.00
Lane Grp Cap(c), veh/h	416	1907	0	0	1183		0	470	398	505	0	398
V/C Ratio(X)	0.34	0.42	0.00	0.00	0.81		0.00	0.00	0.00	0.56	0.00	0.78
Avail Cap(c_a), veh/h	453	2106	0	0	1307		0	611	518	615	0	518
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.3	6.6	0.0	0.0	14.7	0.0	0.0	0.0	0.0	16.8	0.0	16.9
Incr Delay (d2), s/veh	0.5	0.1	0.0	0.0	3.7	0.0	0.0	0.0	0.0	1.0	0.0	5.8
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(50%),veh/ln	0.6	1.6	0.0	0.0	4.5	0.0	0.0	0.0	0.0	2.6	0.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.8	6.8	0.0	0.0	18.4	0.0	0.0	0.0	0.0	17.8	0.0	22.7
LnGrp LOS	A	A	A	A	B		A	A	A	B	A	C
Approach Vol, veh/h	939			961			0			593		
Approach Delay, s/veh	7.2			18.4			0.0			20.4		
Approach LOS	A			B						C		
Timer - Assigned Phs	2			4			6			7		
Phs Duration (G+Y+Rc), s	17.3			31.3			17.3			10.0		
Change Period (Y+Rc), s	5.0			5.0			5.0			4.0		
Max Green Setting (Gmax), s	16.0			29.0			16.0			7.0		
Max Q Clear Time (g_c+l1), s	0.0			8.5			11.0			4.1		
Green Ext Time (p_c), s	0.0			5.4			1.3			0.1		

Intersection Summary

HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Notes

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

HCM 6th Signalized Intersection Summary
119: SR 32/Conner St & Cicero Rd

Existing PM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	356	1254	0	0	1067	104	9	19	3	124	0	139
Future Volume (veh/h)	356	1254	0	0	1067	104	9	19	3	124	0	139
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	1856	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	387	1363	0	0	1160	0	10	21	3	135	0	151
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	440	2102	0	0	1277		87	129	346	132	0	346
Arrive On Green	0.16	0.60	0.00	0.00	0.36	0.00	0.22	0.22	0.22	0.22	0.00	0.22
Sat Flow, veh/h	1767	3618	0	0	3711	0	0	587	1572	0	0	1572
Grp Volume(v), veh/h	387	1363	0	0	1160	0	31	0	3	135	0	151
Grp Sat Flow(s),veh/h/ln	1767	1763	0	0	1763	0	587	0	1572	0	0	1572
Q Serve(g_s), s	6.7	13.9	0.0	0.0	17.0	0.0	0.0	0.0	0.1	0.0	0.0	4.5
Cycle Q Clear(g_c), s	6.7	13.9	0.0	0.0	17.0	0.0	12.0	0.0	0.1	12.0	0.0	4.5
Prop In Lane	1.00		0.00	0.00		0.00	0.32		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	440	2102	0	0	1277		217	0	346	132	0	346
V/C Ratio(X)	0.88	0.65	0.00	0.00	0.91		0.14	0.00	0.01	1.02	0.00	0.44
Avail Cap(c_a), veh/h	448	2136	0	0	1294		217	0	346	132	0	346
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	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.0	7.2	0.0	0.0	16.5	0.0	17.5	0.0	16.6	27.2	0.0	18.3
Incr Delay (d2), s/veh	17.8	0.7	0.0	0.0	9.5	0.0	0.3	0.0	0.0	84.1	0.0	0.9
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(50%),veh/ln	3.9	3.5	0.0	0.0	7.3	0.0	0.3	0.0	0.0	4.7	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	7.9	0.0	0.0	26.0	0.0	17.8	0.0	16.6	111.3	0.0	19.2
LnGrp LOS	C	A	A	A	C		B	A	B	F	A	B
Approach Vol, veh/h	1750			1160			34			286		
Approach Delay, s/veh	12.5			26.0			17.7			62.7		
Approach LOS	B			C			B			E		
Timer - Assigned Phs	2			4			6			7		
Phs Duration (G+Y+Rc), s	17.0			37.5			17.0			12.7		
Change Period (Y+Rc), s	5.0			5.0			5.0			4.0		
Max Green Setting (Gmax), s	12.0			33.0			12.0			9.0		
Max Q Clear Time (g_c+l1), s	14.0			15.9			14.0			8.7		
Green Ext Time (p_c), s	0.0			9.2			0.0			0.0		

Intersection Summary

HCM 6th Ctrl Delay	21.9
HCM 6th LOS	C

Notes

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

HCM 6th Signalized Intersection Summary 119: SR 32/Conner St & Cicero Rd

Future AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	382	1849	0	0	2004	104	9	19	3	124	0	159
Future Volume (veh/h)	382	1849	0	0	2004	104	9	19	3	124	0	159
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	1856	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	415	2010	0	0	2178	0	10	21	3	135	0	173
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	381	2929	0	0	2061		37	54	145	55	0	145
Arrive On Green	0.22	0.83	0.00	0.00	0.58	0.00	0.09	0.09	0.09	0.09	0.00	0.09
Sat Flow, veh/h	1767	3618	0	0	3711	0	0	587	1572	0	0	1572
Grp Volume(v), veh/h	415	2010	0	0	2178	0	31	0	3	135	0	173
Grp Sat Flow(s),veh/h/ln	1767	1763	0	0	1763	0	587	0	1572	0	0	1572
Q Serve(g_s), s	28.0	29.2	0.0	0.0	76.0	0.0	0.0	0.0	0.2	0.0	0.0	12.0
Cycle Q Clear(g_c), s	28.0	29.2	0.0	0.0	76.0	0.0	12.0	0.0	0.2	12.0	0.0	12.0
Prop In Lane	1.00		0.00	0.00		0.00	0.32		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	2929	0	0	2061		91	0	145	55	0	145
V/C Ratio(X)	1.09	0.69	0.00	0.00	1.06		0.34	0.00	0.02	2.44	0.00	1.19
Avail Cap(c_a), veh/h	381	2929	0	0	2061		91	0	145	55	0	145
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(l)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.0	4.3	0.0	0.0	27.0	0.0	54.7	0.0	53.7	65.0	0.0	59.0
Incr Delay (d2), s/veh	72.6	0.7	0.0	0.0	36.8	0.0	2.2	0.0	0.1	697.9	0.0	135.4
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(50%),veh/ln	19.9	7.3	0.0	0.0	40.0	0.0	1.0	0.0	0.1	12.6	0.0	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	123.6	5.0	0.0	0.0	63.8	0.0	56.9	0.0	53.7	762.9	0.0	194.4
LnGrp LOS	F	A	A	A	F		E	A	D	F	A	F
Approach Vol, veh/h	2425			2178			34			308		
Approach Delay, s/veh	25.3			63.8			56.6			443.6		
Approach LOS	C			E			E			F		
Timer - Assigned Phs	2			4			6			7		
Phs Duration (G+Y+Rc), s	17.0			113.0			17.0			32.0		
Change Period (Y+Rc), s	5.0			5.0			5.0			4.0		
Max Green Setting (Gmax), s	12.0			108.0			12.0			28.0		
Max Q Clear Time (g_c+l1), s	14.0			31.2			14.0			30.0		
Green Ext Time (p_c), s	0.0			34.9			0.0			0.0		
Intersection Summary												
HCM 6th Ctrl Delay			68.5									
HCM 6th LOS			E									
Notes												

HCM 6th Signalized Intersection Summary 119: SR 32/Conner St & Cicero Rd

Future PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	382	1849	0	0	2004	104	9	19	3	124	0	159
Future Volume (veh/h)	382	1849	0	0	2004	104	9	19	3	124	0	159
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	1856	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	415	2010	0	0	2178	0	10	21	3	135	0	173
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	381	2929	0	0	2061		37	54	145	55	0	145
Arrive On Green	0.22	0.83	0.00	0.00	0.58	0.00	0.09	0.09	0.09	0.09	0.00	0.09
Sat Flow, veh/h	1767	3618	0	0	3711	0	0	587	1572	0	0	1572
Grp Volume(v), veh/h	415	2010	0	0	2178	0	31	0	3	135	0	173
Grp Sat Flow(s),veh/h/ln	1767	1763	0	0	1763	0	587	0	1572	0	0	1572
Q Serve(g_s), s	28.0	29.2	0.0	0.0	76.0	0.0	0.0	0.0	0.2	0.0	0.0	12.0
Cycle Q Clear(g_c), s	28.0	29.2	0.0	0.0	76.0	0.0	12.0	0.0	0.2	12.0	0.0	12.0
Prop In Lane	1.00		0.00	0.00		0.00	0.32		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	2929	0	0	2061		91	0	145	55	0	145
V/C Ratio(X)	1.09	0.69	0.00	0.00	1.06		0.34	0.00	0.02	2.44	0.00	1.19
Avail Cap(c_a), veh/h	381	2929	0	0	2061		91	0	145	55	0	145
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	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.0	4.3	0.0	0.0	27.0	0.0	54.7	0.0	53.7	65.0	0.0	59.0
Incr Delay (d2), s/veh	72.6	0.7	0.0	0.0	36.8	0.0	2.2	0.0	0.1	697.9	0.0	135.4
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(50%),veh/ln	19.9	7.3	0.0	0.0	40.0	0.0	1.0	0.0	0.1	12.6	0.0	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	123.6	5.0	0.0	0.0	63.8	0.0	56.9	0.0	53.7	762.9	0.0	194.4
LnGrp LOS	F	A	A	A	F		E	A	D	F	A	F
Approach Vol, veh/h	2425			2178			34			308		
Approach Delay, s/veh	25.3			63.8			56.6			443.6		
Approach LOS	C			E			E			F		
Timer - Assigned Phs	2			4			6			7		
Phs Duration (G+Y+Rc), s	17.0			113.0			17.0			32.0		
Change Period (Y+Rc), s	5.0			5.0			5.0			4.0		
Max Green Setting (Gmax), s	12.0			108.0			12.0			28.0		
Max Q Clear Time (g_c+l1), s	14.0			31.2			14.0			30.0		
Green Ext Time (p_c), s	0.0			34.9			0.0			0.0		
Intersection Summary												
HCM 6th Ctrl Delay	68.5											
HCM 6th LOS	E											

HCM 6th Signalized Intersection Summary 119: SR 32/Conner St & Cicero Rd

Future AM Peak
Mitigated - Final



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰↱	↑↑			↑↑			↰↱	↰↱		↰↱	↰↱
Traffic Volume (veh/h)	139	1143	0	0	1166	36	0	0	0	240	18	309
Future Volume (veh/h)	139	1143	0	0	1166	36	0	0	0	240	18	309
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	1856	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	151	1242	0	0	1267	0	0	0	0	261	20	336
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	380	2026	0	0	1389		0	466	395	455	26	395
Arrive On Green	0.11	0.57	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.25	0.25	0.25
Sat Flow, veh/h	3428	3618	0	0	3711	0	0	1856	1572	1329	102	1572
Grp Volume(v), veh/h	151	1242	0	0	1267	0	0	0	0	281	0	336
Grp Sat Flow(s),veh/h/ln	1714	1763	0	0	1763	0	0	1856	1572	1431	0	1572
Q Serve(g_s), s	2.4	13.3	0.0	0.0	19.5	0.0	0.0	0.0	0.0	10.5	0.0	11.7
Cycle Q Clear(g_c), s	2.4	13.3	0.0	0.0	19.5	0.0	0.0	0.0	0.0	10.5	0.0	11.7
Prop In Lane	1.00		0.00	0.00		0.00	0.00		1.00	0.93		1.00
Lane Grp Cap(c), veh/h	380	2026	0	0	1389		0	466	395	480	0	395
V/C Ratio(X)	0.40	0.61	0.00	0.00	0.91		0.00	0.00	0.00	0.59	0.00	0.85
Avail Cap(c_a), veh/h	418	2088	0	0	1412		0	517	438	520	0	438
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	8.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0	20.0	0.0	20.5
Incr Delay (d2), s/veh	0.7	0.5	0.0	0.0	9.1	0.0	0.0	0.0	0.0	1.5	0.0	13.7
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(50%),veh/ln	0.9	3.7	0.0	0.0	8.2	0.0	0.0	0.0	0.0	3.4	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.4	8.5	0.0	0.0	25.6	0.0	0.0	0.0	0.0	21.5	0.0	34.2
LnGrp LOS	C	A			C					C		C
Approach Vol, veh/h	1393				1267		0		617			
Approach Delay, s/veh	10.2				25.6		0.0		28.4			
Approach LOS	B				C				C			
Timer - Assigned Phs	2		4		6		7		8			
Phs Duration (G+Y+Rc), s	19.4		38.0		19.4		10.4		27.6			
Change Period (Y+Rc), s	5.0		5.0		5.0		4.0		5.0			
Max Green Setting (Gmax), s	16.0		34.0		16.0		7.0		23.0			
Max Q Clear Time (g_c+I1), s	0.0		15.3		13.7		4.4		21.5			
Green Ext Time (p_c), s	0.0		8.8		0.7		0.1		1.1			

Intersection Summary

HCM 6th Ctrl Delay, s/veh 19.6
HCM 6th LOS B

Notes

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

HCM 6th Signalized Intersection Summary 119: SR 32/Conner St & Cicero Rd

Future PM Peak
Mitigated - Final



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑			↑↑			↔	↔		↔	↔
Traffic Volume (veh/h)	382	1849	0	0	2004	104	9	19	3	124	0	159
Future Volume (veh/h)	382	1849	0	0	2004	104	9	19	3	124	0	159
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	1856	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	415	2010	0	0	2178	0	10	21	3	135	0	173
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	406	2787	0	0	2241		43	65	186	66	0	186
Arrive On Green	0.12	0.79	0.00	0.00	0.64	0.00	0.12	0.12	0.12	0.12	0.00	0.12
Sat Flow, veh/h	3428	3618	0	0	3711	0	0	552	1572	0	0	1572
Grp Volume(v), veh/h	415	2010	0	0	2178	0	31	0	3	135	0	173
Grp Sat Flow(s),veh/h/ln	1714	1763	0	0	1763	0	552	0	1572	0	0	1572
Q Serve(g_s), s	13.0	30.5	0.0	0.0	64.7	0.0	0.0	0.0	0.2	0.0	0.0	12.0
Cycle Q Clear(g_c), s	13.0	30.5	0.0	0.0	64.7	0.0	13.0	0.0	0.2	13.0	0.0	12.0
Prop In Lane	1.00		0.00	0.00		0.00	0.32		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	406	2787	0	0	2241		109	0	186	66	0	186
V/C Ratio(X)	1.02	0.72	0.00	0.00	0.97		0.29	0.00	0.02	2.06	0.00	0.93
Avail Cap(c_a), veh/h	406	2794	0	0	2248		109	0	186	66	0	186
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	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.4	5.6	0.0	0.0	19.1	0.0	43.8	0.0	42.7	54.9	0.0	47.9
Incr Delay (d2), s/veh	50.4	0.9	0.0	0.0	13.0	0.0	1.4	0.0	0.0	524.7	0.0	46.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	8.0	0.0	0.0	26.8	0.0	0.8	0.0	0.1	11.4	0.0	12.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	98.8	6.5	0.0	0.0	32.1	0.0	45.2	0.0	42.8	579.6	0.0	94.0
LnGrp LOS	F	A			C		D		D	F		F
Approach Vol, veh/h	2425				2178		34		308			
Approach Delay, s/veh	22.3				32.1		45.0		306.8			
Approach LOS	C				C		D		F			
Timer - Assigned Phs	2		4		6		7		8			
Phs Duration (G+Y+Rc), s	18.0		91.8		18.0		17.0		74.8			
Change Period (Y+Rc), s	5.0		5.0		5.0		4.0		5.0			
Max Green Setting (Gmax), s	13.0		87.0		13.0		13.0		70.0			
Max Q Clear Time (g_c+I1), s	15.0		32.5		15.0		15.0		66.7			
Green Ext Time (p_c), s	0.0		29.9		0.0		0.0		3.1			

Intersection Summary

HCM 6th Ctrl Delay, s/veh 44.5
HCM 6th LOS D

Notes

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

HCM 6th Signalized Intersection Summary

120: 10th St & SR 32/Conner St

Existing AM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	400	44	19	644	28	104	161	31	56	196	13
Future Volume (veh/h)	6	400	44	19	644	28	104	161	31	56	196	13
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	7	435	48	21	700	30	113	175	34	61	213	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	180	725	80	344	780	33	420	578	112	371	362	24
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.10	0.38	0.38	0.21	0.21	0.21
Sat Flow, veh/h	720	1642	181	905	1766	76	1767	1509	293	1163	1722	113
Grp Volume(v), veh/h	7	0	483	21	0	730	113	0	209	61	0	227
Grp Sat Flow(s),veh/h/ln	720	0	1823	905	0	1842	1767	0	1803	1163	0	1835
Q Serve(g_s), s	0.5	0.0	11.5	1.0	0.0	20.9	2.5	0.0	4.6	2.5	0.0	6.4
Cycle Q Clear(g_c), s	21.4	0.0	11.5	12.5	0.0	20.9	2.5	0.0	4.6	2.5	0.0	6.4
Prop In Lane	1.00		0.10	1.00		0.04	1.00		0.16	1.00		0.06
Lane Grp Cap(c), veh/h	180	0	805	344	0	814	420	0	690	371	0	386
V/C Ratio(X)	0.04	0.00	0.60	0.06	0.00	0.90	0.27	0.00	0.30	0.16	0.00	0.59
Avail Cap(c_a), veh/h	216	0	895	389	0	905	475	0	854	441	0	496
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	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.6	0.0	12.1	16.8	0.0	14.7	13.6	0.0	12.3	18.8	0.0	20.3
Incr Delay (d2), s/veh	0.1	0.0	0.9	0.1	0.0	10.9	0.3	0.0	0.2	0.2	0.0	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(50%),veh/ln	0.1	0.0	4.1	0.2	0.0	9.7	1.0	0.0	1.7	0.6	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	0.0	13.0	16.9	0.0	25.6	14.0	0.0	12.5	19.0	0.0	21.7
LnGrp LOS	C	A	B	B	A	C	B	A	B	B	A	C
Approach Vol, veh/h	490		751			322			288			
Approach Delay, s/veh	13.2		25.4			13.0			21.1			
Approach LOS	B		C			B			C			
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	26.8		30.2		9.8	17.0	30.2					
Change Period (Y+Rc), s	5.0		5.0		4.0	5.0	5.0					
Max Green Setting (Gmax), s	27.0		28.0		7.6	15.4	28.0					
Max Q Clear Time (g_c+I1), s	6.6		23.4		4.5	8.4	22.9					
Green Ext Time (p_c), s	1.2		1.3		0.1	0.8	2.3					
Intersection Summary												
HCM 6th Ctrl Delay	19.3											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

120: 10th St & SR 32/Conner St

Existing PM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	695	93	23	548	49	188	433	36	80	222	31
Future Volume (veh/h)	33	695	93	23	548	49	188	433	36	80	222	31
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	36	755	101	25	596	53	204	471	39	87	241	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	278	811	108	138	850	76	345	609	50	196	327	46
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.10	0.36	0.36	0.21	0.21	0.21
Sat Flow, veh/h	776	1603	214	640	1679	149	1767	1690	140	883	1591	224
Grp Volume(v), veh/h	36	0	856	25	0	649	204	0	510	87	0	275
Grp Sat Flow(s),veh/h/ln	776	0	1817	640	0	1829	1767	0	1830	883	0	1815
Q Serve(g_s), s	2.8	0.0	33.0	2.8	0.0	20.4	6.5	0.0	18.5	7.3	0.0	10.6
Cycle Q Clear(g_c), s	23.1	0.0	33.0	35.8	0.0	20.4	6.5	0.0	18.5	14.2	0.0	10.6
Prop In Lane	1.00		0.12	1.00		0.08	1.00		0.08	1.00		0.12
Lane Grp Cap(c), veh/h	278	0	919	138	0	925	345	0	660	196	0	373
V/C Ratio(X)	0.13	0.00	0.93	0.18	0.00	0.70	0.59	0.00	0.77	0.44	0.00	0.74
Avail Cap(c_a), veh/h	279	0	922	139	0	928	345	0	660	196	0	373
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	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.0	0.0	17.3	34.0	0.0	14.2	20.1	0.0	21.2	32.7	0.0	27.9
Incr Delay (d2), s/veh	0.2	0.0	15.6	0.6	0.0	2.4	2.7	0.0	5.7	1.6	0.0	7.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	15.9	0.5	0.0	8.0	2.8	0.0	8.6	1.6	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	0.0	32.9	34.6	0.0	16.5	22.8	0.0	26.9	34.2	0.0	35.3
LnGrp LOS	C	A	C	C	A	B	C	A	C	C	A	D
Approach Vol, veh/h	892		674			714			362			
Approach Delay, s/veh	32.5		17.2			25.7			35.1			
Approach LOS	C		B			C			D			
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	32.0		42.9		11.6	20.4	42.9					
Change Period (Y+Rc), s	5.0		5.0		4.0	5.0	5.0					
Max Green Setting (Gmax), s	27.0		38.0		7.6	15.4	38.0					
Max Q Clear Time (g_c+l1), s	20.5		35.0		8.5	16.2	37.8					
Green Ext Time (p_c), s	1.8		1.8		0.0	0.0	0.1					
Intersection Summary												
HCM 6th Ctrl Delay	27.1											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary

120: 10th St & SR 32/Conner St

Future AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1290	93	23	1148	49	188	433	36	80	222	31
Future Volume (veh/h)	33	1290	93	23	1148	49	188	433	36	80	222	31
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	36	1402	101	25	1248	53	204	471	39	87	241	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	51	1063	77	51	1098	47	243	519	43	86	352	50
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.06	0.31	0.31	0.22	0.22	0.22
Sat Flow, veh/h	420	1710	123	346	1767	75	1767	1690	140	883	1591	224
Grp Volume(v), veh/h	36	0	1503	25	0	1301	204	0	510	87	0	275
Grp Sat Flow(s),veh/h/ln	420	0	1833	346	0	1842	1767	0	1830	883	0	1815
Q Serve(g_s), s	0.0	0.0	87.0	0.0	0.0	87.0	8.0	0.0	37.5	5.5	0.0	19.5
Cycle Q Clear(g_c), s	87.0	0.0	87.0	87.0	0.0	87.0	8.0	0.0	37.5	31.0	0.0	19.5
Prop In Lane	1.00		0.07	1.00		0.04	1.00		0.08	1.00		0.12
Lane Grp Cap(c), veh/h	51	0	1139	51	0	1145	243	0	562	86	0	402
V/C Ratio(X)	0.70	0.00	1.32	0.49	0.00	1.14	0.84	0.00	0.91	1.01	0.00	0.68
Avail Cap(c_a), veh/h	51	0	1139	51	0	1145	243	0	562	86	0	402
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	70.0	0.0	26.5	70.0	0.0	26.5	49.1	0.0	46.6	68.9	0.0	50.0
Incr Delay (d2), s/veh	34.5	0.0	149.9	6.9	0.0	72.5	22.4	0.0	18.5	99.1	0.0	4.7
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(50%),veh/ln	1.8	0.0	83.0	1.0	0.0	58.8	5.0	0.0	20.0	5.5	0.0	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.5	0.0	176.4	76.9	0.0	99.0	71.5	0.0	65.1	167.9	0.0	54.7
LnGrp LOS	F	A	F	E	A	F	E	A	E	F	A	D
Approach Vol, veh/h	1539					1326		714		362		
Approach Delay, s/veh	174.7					98.6		66.9		82.0		
Approach LOS	F					F		E		F		
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	48.0		92.0		12.0	36.0	92.0					
Change Period (Y+Rc), s	5.0		5.0		4.0	5.0	5.0					
Max Green Setting (Gmax), s	43.0		87.0		8.0	31.0	87.0					
Max Q Clear Time (g_c+l1), s	39.5		89.0		10.0	33.0	89.0					
Green Ext Time (p_c), s	1.1		0.0		0.0	0.0	0.0					
Intersection Summary												
HCM 6th Ctrl Delay	121.1											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary 120: 10th St & SR 32/Conner St

Future PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1290	93	23	1148	49	188	433	36	80	222	31
Future Volume (veh/h)	33	1290	93	23	1148	49	188	433	36	80	222	31
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	36	1402	101	25	1248	53	204	471	39	87	241	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	51	1063	77	51	1098	47	243	519	43	86	352	50
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.06	0.31	0.31	0.22	0.22	0.22
Sat Flow, veh/h	420	1710	123	346	1767	75	1767	1690	140	883	1591	224
Grp Volume(v), veh/h	36	0	1503	25	0	1301	204	0	510	87	0	275
Grp Sat Flow(s),veh/h/ln	420	0	1833	346	0	1842	1767	0	1830	883	0	1815
Q Serve(g_s), s	0.0	0.0	87.0	0.0	0.0	87.0	8.0	0.0	37.5	5.5	0.0	19.5
Cycle Q Clear(g_c), s	87.0	0.0	87.0	87.0	0.0	87.0	8.0	0.0	37.5	31.0	0.0	19.5
Prop In Lane	1.00		0.07	1.00		0.04	1.00		0.08	1.00		0.12
Lane Grp Cap(c), veh/h	51	0	1139	51	0	1145	243	0	562	86	0	402
V/C Ratio(X)	0.70	0.00	1.32	0.49	0.00	1.14	0.84	0.00	0.91	1.01	0.00	0.68
Avail Cap(c_a), veh/h	51	0	1139	51	0	1145	243	0	562	86	0	402
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	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	70.0	0.0	26.5	70.0	0.0	26.5	49.1	0.0	46.6	68.9	0.0	50.0
Incr Delay (d2), s/veh	34.5	0.0	149.9	6.9	0.0	72.5	22.4	0.0	18.5	99.1	0.0	4.7
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(50%),veh/ln	1.8	0.0	83.0	1.0	0.0	58.8	5.0	0.0	20.0	5.5	0.0	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.5	0.0	176.4	76.9	0.0	99.0	71.5	0.0	65.1	167.9	0.0	54.7
LnGrp LOS	F	A	F	E	A	F	E	A	E	F	A	D
Approach Vol, veh/h	1539					1326		714		362		
Approach Delay, s/veh	174.7					98.6		66.9		82.0		
Approach LOS	F					F		E		F		
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	48.0		92.0		12.0	36.0	92.0					
Change Period (Y+Rc), s	5.0		5.0		4.0	5.0	5.0					
Max Green Setting (Gmax), s	43.0		87.0		8.0	31.0	87.0					
Max Q Clear Time (g_c+I1), s	39.5		89.0		10.0	33.0	89.0					
Green Ext Time (p_c), s	1.1		0.0		0.0	0.0	0.0					
Intersection Summary												
HCM 6th Ctrl Delay	121.1											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary 120: 10th St & SR 32/Conner St

Future AM Peak
Mitigated - Final



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	981	44	19	926	28	104	161	31	56	196	13
Future Volume (veh/h)	6	981	44	19	926	28	104	161	31	56	196	13
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	7	1066	48	21	1007	30	113	175	34	61	213	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	221	1371	62	201	1395	42	463	621	121	402	392	26
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.11	0.41	0.41	0.23	0.23	0.23
Sat Flow, veh/h	540	3436	155	502	3495	104	1767	1509	293	1163	1722	113
Grp Volume(v), veh/h	7	547	567	21	508	529	113	0	209	61	0	227
Grp Sat Flow(s),veh/h/ln	540	1763	1828	502	1763	1837	1767	0	1803	1163	0	1835
Q Serve(g_s), s	0.6	14.2	14.2	2.0	12.8	12.8	2.3	0.0	4.1	2.3	0.0	5.7
Cycle Q Clear(g_c), s	13.4	14.2	14.2	16.2	12.8	12.8	2.3	0.0	4.1	2.3	0.0	5.7
Prop In Lane	1.00		0.08	1.00		0.06	1.00		0.16	1.00		0.06
Lane Grp Cap(c), veh/h	221	703	729	201	703	733	463	0	741	402	0	418
V/C Ratio(X)	0.03	0.78	0.78	0.10	0.72	0.72	0.24	0.00	0.28	0.15	0.00	0.54
Avail Cap(c_a), veh/h	241	770	798	220	770	802	528	0	924	477	0	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.0	13.8	13.8	20.9	13.4	13.4	11.7	0.0	10.3	16.6	0.0	17.9
Incr Delay (d2), s/veh	0.1	4.7	4.5	0.2	3.0	2.9	0.3	0.0	0.2	0.2	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	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	5.6	5.8	0.2	4.8	5.0	0.8	0.0	1.5	0.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.1	18.5	18.3	21.1	16.4	16.3	12.0	0.0	10.5	16.7	0.0	19.0
LnGrp LOS	B	B	B	C	B	B	B		B	B		B
Approach Vol, veh/h	1121		1058				322			288		
Approach Delay, s/veh	18.4		16.4				11.0			18.5		
Approach LOS	B		B				B			B		
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	26.7		26.0		9.7	17.0	26.0					
Change Period (Y+Rc), s	5.0		5.0		4.0	5.0	5.0					
Max Green Setting (Gmax), s	27.0		23.0		7.6	15.4	23.0					
Max Q Clear Time (g_c+I1), s	6.1		16.2		4.3	7.7	18.2					
Green Ext Time (p_c), s	1.2		3.9		0.1	0.9	2.8					
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			16.8									
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary

120: 10th St & SR 32/Conner St

Future PM Peak
Mitigated - Final



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1290	93	23	1148	49	188	433	36	80	222	31
Future Volume (veh/h)	33	1290	93	23	1148	49	188	433	36	80	222	31
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	36	1402	101	25	1248	53	204	471	39	87	241	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	180	1526	110	139	1576	67	382	641	53	241	317	45
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.11	0.38	0.38	0.20	0.20	0.20
Sat Flow, veh/h	420	3336	239	346	3446	146	1767	1690	140	883	1591	224
Grp Volume(v), veh/h	36	738	765	25	638	663	204	0	510	87	0	275
Grp Sat Flow(s),veh/h/ln	420	1763	1812	346	1763	1829	1767	0	1830	883	0	1815
Q Serve(g_s), s	4.9	23.9	24.2	3.8	18.8	18.9	5.2	0.0	14.7	5.8	0.0	8.8
Cycle Q Clear(g_c), s	23.8	23.9	24.2	28.0	18.8	18.9	5.2	0.0	14.7	9.4	0.0	8.8
Prop In Lane	1.00		0.13	1.00		0.08	1.00		0.08	1.00		0.12
Lane Grp Cap(c), veh/h	180	806	829	139	806	837	382	0	694	241	0	361
V/C Ratio(X)	0.20	0.92	0.92	0.18	0.79	0.79	0.53	0.00	0.73	0.36	0.00	0.76
Avail Cap(c_a), veh/h	180	806	829	139	806	837	399	0	807	287	0	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.2	15.5	15.6	29.0	14.1	14.1	15.9	0.0	16.4	25.1	0.0	23.1
Incr Delay (d2), s/veh	0.5	15.1	15.6	0.6	5.4	5.2	1.3	0.0	3.0	0.9	0.0	5.7
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(50%),veh/ln	0.5	11.5	12.0	0.4	7.5	7.8	2.1	0.0	6.1	1.2	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.8	30.6	31.2	29.6	19.5	19.4	17.2	0.0	19.3	26.1	0.0	28.8
LnGrp LOS	C	C	C	C	B	B	B		B	C		C
Approach Vol, veh/h	1539					1326		714		362		
Approach Delay, s/veh	30.7					19.6		18.7		28.1		
Approach LOS	C					B		B		C		
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	28.2		33.0		11.0	17.2	33.0					
Change Period (Y+Rc), s	5.0		5.0		4.0	5.0	5.0					
Max Green Setting (Gmax), s	27.0		28.0		7.6	15.4	28.0					
Max Q Clear Time (g_c+I1), s	16.7		26.2		7.2	11.4	30.0					
Green Ext Time (p_c), s	2.5		1.5		0.0	0.8	0.0					
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			24.6									
HCM 6th LOS			C									

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	17	13	5	11	35	4	609	4	18	411	1
Future Vol, veh/h	2	17	13	5	11	35	4	609	4	18	411	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	18	14	5	12	38	4	662	4	20	447	1

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1185	1162	448	1176	1160	664	448	0	0	666	0	0
Stage 1	488	488	-	672	672	-	-	-	-	-	-	-
Stage 2	697	674	-	504	488	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	165	194	609	167	195	459	1107	-	-	919	-	-
Stage 1	559	548	-	444	453	-	-	-	-	-	-	-
Stage 2	430	452	-	548	548	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	140	187	609	147	188	459	1107	-	-	919	-	-
Mov Cap-2 Maneuver	140	187	-	147	188	-	-	-	-	-	-	-
Stage 1	556	532	-	441	450	-	-	-	-	-	-	-
Stage 2	382	449	-	502	532	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB				
HCM Control Delay, s	21.5		19.6		0.1			0.4				
HCM LOS	C		C									

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1107	-	-	253 302	919	-	-
HCM Lane V/C Ratio	0.004	-	-	0.137 0.184	0.021	-	-
HCM Control Delay (s)	8.3	0	-	21.5 19.6	9	0	-
HCM Lane LOS	A	A	-	C C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5 0.7	0.1	-	-

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	17	13	5	11	35	4	609	4	18	411	1
Future Vol, veh/h	2	17	13	5	11	35	4	609	4	18	411	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	18	14	5	12	38	4	662	4	20	447	1
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1185	1162	448	1176	1160	664	448	0	0	666	0	0
Stage 1	488	488	-	672	672	-	-	-	-	-	-	-
Stage 2	697	674	-	504	488	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	165	194	609	167	195	459	1107	-	-	919	-	-
Stage 1	559	548	-	444	453	-	-	-	-	-	-	-
Stage 2	430	452	-	548	548	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	140	187	609	147	188	459	1107	-	-	919	-	-
Mov Cap-2 Maneuver	140	187	-	147	188	-	-	-	-	-	-	-
Stage 1	556	532	-	441	450	-	-	-	-	-	-	-
Stage 2	382	449	-	502	532	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	21.5		19.6			0.1			0.4			
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1107	-	-	253	302	919	-	-				
HCM Lane V/C Ratio	0.004	-	-	0.137	0.184	0.021	-	-				
HCM Control Delay (s)	8.3	0	-	21.5	19.6	9	0	-				
HCM Lane LOS	A	A	-	C	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.5	0.7	0.1	-	-				

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	17	13	5	11	35	4	609	4	18	411	1
Future Vol, veh/h	2	17	13	5	11	35	4	609	4	18	411	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	18	14	5	12	38	4	662	4	20	447	1
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1185	1162	448	1176	1160	664	448	0	0	666	0	0
Stage 1	488	488	-	672	672	-	-	-	-	-	-	-
Stage 2	697	674	-	504	488	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	165	194	609	167	195	459	1107	-	-	919	-	-
Stage 1	559	548	-	444	453	-	-	-	-	-	-	-
Stage 2	430	452	-	548	548	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	140	187	609	147	188	459	1107	-	-	919	-	-
Mov Cap-2 Maneuver	140	187	-	147	188	-	-	-	-	-	-	-
Stage 1	556	532	-	441	450	-	-	-	-	-	-	-
Stage 2	382	449	-	502	532	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	21.5		19.6		0.1		0.4					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1107	-	-	253	302	919	-	-				
HCM Lane V/C Ratio	0.004	-	-	0.137	0.184	0.021	-	-				
HCM Control Delay (s)	8.3	0	-	21.5	19.6	9	0	-				
HCM Lane LOS	A	A	-	C	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.5	0.7	0.1	-	-				

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	17	13	5	11	35	4	609	4	18	411	1
Future Vol, veh/h	2	17	13	5	11	35	4	609	4	18	411	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	18	14	5	12	38	4	662	4	20	447	1
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1185	1162	448	1176	1160	664	448	0	0	666	0	0
Stage 1	488	488	-	672	672	-	-	-	-	-	-	-
Stage 2	697	674	-	504	488	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	165	194	609	167	195	459	1107	-	-	919	-	-
Stage 1	559	548	-	444	453	-	-	-	-	-	-	-
Stage 2	430	452	-	548	548	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	140	187	609	147	188	459	1107	-	-	919	-	-
Mov Cap-2 Maneuver	140	187	-	147	188	-	-	-	-	-	-	-
Stage 1	556	532	-	441	450	-	-	-	-	-	-	-
Stage 2	382	449	-	502	532	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	21.5		19.6		0.1		0.4					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1107	-	-	253	302	919	-	-				
HCM Lane V/C Ratio	0.004	-	-	0.137	0.184	0.021	-	-				
HCM Control Delay (s)	8.3	0	-	21.5	19.6	9	0	-				
HCM Lane LOS	A	A	-	C	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.5	0.7	0.1	-	-				

HCM 6th Signalized Intersection Summary 122: 16th St & Conner St

Existing AM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	765	2	1	603	74	3	39	5	123	78	9
Future Volume (veh/h)	21	765	2	1	603	74	3	39	5	123	78	9
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	832	2	1	655	80	3	42	5	134	85	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	311	987	2	254	865	106	90	402	45	318	177	17
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	716	1850	4	653	1622	198	29	1600	181	777	706	68
Grp Volume(v), veh/h	23	0	834	1	0	735	50	0	0	229	0	0
Grp Sat Flow(s),veh/h/ln	716	0	1855	653	0	1820	1810	0	0	1551	0	0
Q Serve(g_s), s	1.2	0.0	17.7	0.1	0.0	14.7	0.0	0.0	0.0	4.4	0.0	0.0
Cycle Q Clear(g_c), s	15.9	0.0	17.7	17.8	0.0	14.7	1.0	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.11	0.06		0.10	0.59		0.04
Lane Grp Cap(c), veh/h	311	0	989	254	0	971	537	0	0	513	0	0
V/C Ratio(X)	0.07	0.00	0.84	0.00	0.00	0.76	0.09	0.00	0.00	0.45	0.00	0.00
Avail Cap(c_a), veh/h	422	0	1278	356	0	1254	588	0	0	556	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.7	0.0	9.2	16.7	0.0	8.5	13.4	0.0	0.0	15.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	4.2	0.0	0.0	2.0	0.1	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	5.9	0.0	0.0	4.4	0.4	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	0.0	13.4	16.7	0.0	10.5	13.5	0.0	0.0	15.7	0.0	0.0
LnGrp LOS	B	A	B	B	A	B	B	A	A	B	A	A
Approach Vol, veh/h	857			736			50			229		
Approach Delay, s/veh	13.4			10.5			13.5			15.7		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	16.7			29.8			16.7			29.8		
Change Period (Y+Rc), s	5.0			5.0			5.0			5.0		
Max Green Setting (Gmax), s	13.0			32.0			13.0			32.0		
Max Q Clear Time (g_c+l1), s	3.0			19.7			7.8			19.8		
Green Ext Time (p_c), s	0.1			5.1			0.6			4.2		
Intersection Summary												
HCM 6th Ctrl Delay	12.6											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary
122: 16th St & Conner St

Existing PM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	765	2	1	603	74	3	39	5	123	78	9
Future Volume (veh/h)	21	765	2	1	603	74	3	39	5	123	78	9
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	832	2	1	655	80	3	42	5	134	85	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	311	987	2	254	865	106	90	402	45	318	177	17
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	716	1850	4	653	1622	198	29	1600	181	777	706	68
Grp Volume(v), veh/h	23	0	834	1	0	735	50	0	0	229	0	0
Grp Sat Flow(s),veh/h/ln	716	0	1855	653	0	1820	1810	0	0	1551	0	0
Q Serve(g_s), s	1.2	0.0	17.7	0.1	0.0	14.7	0.0	0.0	0.0	4.4	0.0	0.0
Cycle Q Clear(g_c), s	15.9	0.0	17.7	17.8	0.0	14.7	1.0	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.11	0.06		0.10	0.59		0.04
Lane Grp Cap(c), veh/h	311	0	989	254	0	971	537	0	0	513	0	0
V/C Ratio(X)	0.07	0.00	0.84	0.00	0.00	0.76	0.09	0.00	0.00	0.45	0.00	0.00
Avail Cap(c_a), veh/h	422	0	1278	356	0	1254	588	0	0	556	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.7	0.0	9.2	16.7	0.0	8.5	13.4	0.0	0.0	15.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	4.2	0.0	0.0	2.0	0.1	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	5.9	0.0	0.0	4.4	0.4	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	0.0	13.4	16.7	0.0	10.5	13.5	0.0	0.0	15.7	0.0	0.0
LnGrp LOS	B	A	B	B	A	B	B	A	A	B	A	A
Approach Vol, veh/h	857			736			50			229		
Approach Delay, s/veh	13.4			10.5			13.5			15.7		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	16.7			29.8			16.7			29.8		
Change Period (Y+Rc), s	5.0			5.0			5.0			5.0		
Max Green Setting (Gmax), s	13.0			32.0			13.0			32.0		
Max Q Clear Time (g_c+l1), s	3.0			19.7			7.8			19.8		
Green Ext Time (p_c), s	0.1			5.1			0.6			4.2		
Intersection Summary												
HCM 6th Ctrl Delay	12.6											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary 122: 16th St & Conner St

Future AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	1360	2	1	1203	74	3	39	5	123	78	9
Future Volume (veh/h)	21	1360	2	1	1203	74	3	39	5	123	78	9
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	1478	2	1	1308	80	3	42	5	134	85	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	89	1439	2	55	1345	82	34	235	27	177	85	10
Arrive On Green	0.78	0.78	0.78	0.78	0.78	0.78	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	387	1853	3	354	1731	106	32	1609	182	912	579	68
Grp Volume(v), veh/h	23	0	1480	1	0	1388	50	0	0	229	0	0
Grp Sat Flow(s),veh/h/ln	387	0	1855	354	0	1836	1823	0	0	1559	0	0
Q Serve(g_s), s	7.5	0.0	101.0	0.0	0.0	89.8	0.0	0.0	0.0	15.9	0.0	0.0
Cycle Q Clear(g_c), s	97.3	0.0	101.0	101.0	0.0	89.8	3.1	0.0	0.0	19.0	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.06	0.06		0.10	0.59		0.04
Lane Grp Cap(c), veh/h	89	0	1441	55	0	1427	296	0	0	272	0	0
V/C Ratio(X)	0.26	0.00	1.03	0.02	0.00	0.97	0.17	0.00	0.00	0.84	0.00	0.00
Avail Cap(c_a), veh/h	89	0	1441	55	0	1427	296	0	0	272	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	57.7	0.0	14.5	65.0	0.0	13.2	48.7	0.0	0.0	55.3	0.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	30.8	0.1	0.0	17.7	0.3	0.0	0.0	20.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	45.7	0.0	0.0	36.3	1.5	0.0	0.0	9.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.2	0.0	45.3	65.1	0.0	30.9	49.0	0.0	0.0	76.0	0.0	0.0
LnGrp LOS	E	A	F	E	A	C	D	A	A	E	A	A
Approach Vol, veh/h	1503			1389			50			229		
Approach Delay, s/veh	45.5			30.9			49.0			76.0		
Approach LOS	D			C			D			E		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	24.0			106.0			24.0			106.0		
Change Period (Y+Rc), s	5.0			5.0			5.0			5.0		
Max Green Setting (Gmax), s	19.0			101.0			19.0			101.0		
Max Q Clear Time (g_c+l1), s	5.1			103.0			21.0			103.0		
Green Ext Time (p_c), s	0.1			0.0			0.0			0.0		
Intersection Summary												
HCM 6th Ctrl Delay	41.4											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary 122: 16th St & Conner St

Future PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	1360	2	1	1203	74	3	39	5	123	78	9
Future Volume (veh/h)	21	1360	2	1	1203	74	3	39	5	123	78	9
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	1478	2	1	1308	80	3	42	5	134	85	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	89	1439	2	55	1345	82	34	235	27	177	85	10
Arrive On Green	0.78	0.78	0.78	0.78	0.78	0.78	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	387	1853	3	354	1731	106	32	1609	182	912	579	68
Grp Volume(v), veh/h	23	0	1480	1	0	1388	50	0	0	229	0	0
Grp Sat Flow(s),veh/h/ln	387	0	1855	354	0	1836	1823	0	0	1559	0	0
Q Serve(g_s), s	7.5	0.0	101.0	0.0	0.0	89.8	0.0	0.0	0.0	15.9	0.0	0.0
Cycle Q Clear(g_c), s	97.3	0.0	101.0	101.0	0.0	89.8	3.1	0.0	0.0	19.0	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.06	0.06		0.10	0.59		0.04
Lane Grp Cap(c), veh/h	89	0	1441	55	0	1427	296	0	0	272	0	0
V/C Ratio(X)	0.26	0.00	1.03	0.02	0.00	0.97	0.17	0.00	0.00	0.84	0.00	0.00
Avail Cap(c_a), veh/h	89	0	1441	55	0	1427	296	0	0	272	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	57.7	0.0	14.5	65.0	0.0	13.2	48.7	0.0	0.0	55.3	0.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	30.8	0.1	0.0	17.7	0.3	0.0	0.0	20.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	45.7	0.0	0.0	36.3	1.5	0.0	0.0	9.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.2	0.0	45.3	65.1	0.0	30.9	49.0	0.0	0.0	76.0	0.0	0.0
LnGrp LOS	E	A	F	E	A	C	D	A	A	E	A	A
Approach Vol, veh/h	1503			1389			50			229		
Approach Delay, s/veh	45.5			30.9			49.0			76.0		
Approach LOS	D			C			D			E		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	24.0			106.0			24.0			106.0		
Change Period (Y+Rc), s	5.0			5.0			5.0			5.0		
Max Green Setting (Gmax), s	19.0			101.0			19.0			101.0		
Max Q Clear Time (g_c+l1), s	5.1			103.0			21.0			103.0		
Green Ext Time (p_c), s	0.1			0.0			0.0			0.0		
Intersection Summary												
HCM 6th Ctrl Delay	41.4											
HCM 6th LOS	D											

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	39	0	0	55	14	0	3	0	43	21	1
Future Vol, veh/h	0	39	0	0	55	14	0	3	0	43	21	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	42	0	0	60	15	0	3	0	47	23	1
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	75	0	0	42	0	0	122	117	42	112	110	68
Stage 1	-	-	-	-	-	-	42	42	-	68	68	-
Stage 2	-	-	-	-	-	-	80	75	-	44	42	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1518	-	-	1561	-	-	850	771	1026	863	778	992
Stage 1	-	-	-	-	-	-	970	858	-	940	836	-
Stage 2	-	-	-	-	-	-	926	831	-	968	858	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1518	-	-	1561	-	-	830	771	1026	860	778	992
Mov Cap-2 Maneuver	-	-	-	-	-	-	830	771	-	860	778	-
Stage 1	-	-	-	-	-	-	970	858	-	940	836	-
Stage 2	-	-	-	-	-	-	900	831	-	964	858	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			9.7			9.7		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	771	1518	-	-	1561	-	-	833				
HCM Lane V/C Ratio	0.004	-	-	-	-	-	-	0.085				
HCM Control Delay (s)	9.7	0	-	-	0	-	-	9.7				
HCM Lane LOS	A	A	-	-	A	-	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3				

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	39	0	0	55	14	0	3	0	43	21	1
Future Vol, veh/h	0	39	0	0	55	14	0	3	0	43	21	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	42	0	0	60	15	0	3	0	47	23	1
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	75	0	0	42	0	0	122	117	42	112	110	68
Stage 1	-	-	-	-	-	-	42	42	-	68	68	-
Stage 2	-	-	-	-	-	-	80	75	-	44	42	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1518	-	-	1561	-	-	850	771	1026	863	778	992
Stage 1	-	-	-	-	-	-	970	858	-	940	836	-
Stage 2	-	-	-	-	-	-	926	831	-	968	858	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1518	-	-	1561	-	-	830	771	1026	860	778	992
Mov Cap-2 Maneuver	-	-	-	-	-	-	830	771	-	860	778	-
Stage 1	-	-	-	-	-	-	970	858	-	940	836	-
Stage 2	-	-	-	-	-	-	900	831	-	964	858	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			9.7			9.7		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	771	1518	-	-	1561	-	-	833				
HCM Lane V/C Ratio	0.004	-	-	-	-	-	-	0.085				
HCM Control Delay (s)	9.7	0	-	-	0	-	-	9.7				
HCM Lane LOS	A	A	-	-	A	-	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3				

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	39	0	0	55	14	0	3	0	43	21	1
Future Vol, veh/h	0	39	0	0	55	14	0	3	0	43	21	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	42	0	0	60	15	0	3	0	47	23	1
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	75	0	0	42	0	0	122	117	42	112	110	68
Stage 1	-	-	-	-	-	-	42	42	-	68	68	-
Stage 2	-	-	-	-	-	-	80	75	-	44	42	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1518	-	-	1561	-	-	850	771	1026	863	778	992
Stage 1	-	-	-	-	-	-	970	858	-	940	836	-
Stage 2	-	-	-	-	-	-	926	831	-	968	858	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1518	-	-	1561	-	-	830	771	1026	860	778	992
Mov Cap-2 Maneuver	-	-	-	-	-	-	830	771	-	860	778	-
Stage 1	-	-	-	-	-	-	970	858	-	940	836	-
Stage 2	-	-	-	-	-	-	900	831	-	964	858	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			9.7			9.7		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	771	1518	-	-	1561	-	-	833				
HCM Lane V/C Ratio	0.004	-	-	-	-	-	-	0.085				
HCM Control Delay (s)	9.7	0	-	-	0	-	-	9.7				
HCM Lane LOS	A	A	-	-	A	-	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3				

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	39	0	0	55	14	0	3	0	43	21	1
Future Vol, veh/h	0	39	0	0	55	14	0	3	0	43	21	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	42	0	0	60	15	0	3	0	47	23	1
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	75	0	0	42	0	0	122	117	42	112	110	68
Stage 1	-	-	-	-	-	-	42	42	-	68	68	-
Stage 2	-	-	-	-	-	-	80	75	-	44	42	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1518	-	-	1561	-	-	850	771	1026	863	778	992
Stage 1	-	-	-	-	-	-	970	858	-	940	836	-
Stage 2	-	-	-	-	-	-	926	831	-	968	858	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1518	-	-	1561	-	-	830	771	1026	860	778	992
Mov Cap-2 Maneuver	-	-	-	-	-	-	830	771	-	860	778	-
Stage 1	-	-	-	-	-	-	970	858	-	940	836	-
Stage 2	-	-	-	-	-	-	900	831	-	964	858	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			9.7			9.7		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	771	1518	-	-	1561	-	-	833				
HCM Lane V/C Ratio	0.004	-	-	-	-	-	-	0.085				
HCM Control Delay (s)	9.7	0	-	-	0	-	-	9.7				
HCM Lane LOS	A	A	-	-	A	-	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3				

HCM 6th Signalized Intersection Summary
124: 19th St & Conner St/SR 32/38

Existing AM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	764	45	22	598	52	138	24	74	45	26	24
Future Volume (veh/h)	18	764	45	22	598	52	138	24	74	45	26	24
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	20	830	49	24	650	57	150	26	80	49	28	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	381	969	57	241	1036	878	433	96	296	384	212	197
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	735	1735	102	626	1856	1572	1339	401	1233	1278	885	822
Grp Volume(v), veh/h	20	0	879	24	650	57	150	0	106	49	0	54
Grp Sat Flow(s),veh/h/ln	735	0	1837	626	1856	1572	1339	0	1634	1278	0	1708
Q Serve(g_s), s	0.9	0.0	20.1	1.7	11.8	0.8	4.9	0.0	2.6	1.6	0.0	1.2
Cycle Q Clear(g_c), s	12.8	0.0	20.1	21.8	11.8	0.8	6.1	0.0	2.6	4.2	0.0	1.2
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.75	1.00		0.48
Lane Grp Cap(c), veh/h	381	0	1026	241	1036	878	433	0	392	384	0	410
V/C Ratio(X)	0.05	0.00	0.86	0.10	0.63	0.06	0.35	0.00	0.27	0.13	0.00	0.13
Avail Cap(c_a), veh/h	503	0	1332	346	1345	1140	489	0	461	438	0	482
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(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.8	0.0	9.3	18.5	7.4	5.0	17.2	0.0	15.3	17.1	0.0	14.8
Incr Delay (d2), s/veh	0.1	0.0	4.6	0.2	0.6	0.0	0.5	0.0	0.4	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	6.4	0.2	3.2	0.2	1.4	0.0	0.9	0.5	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.8	0.0	13.8	18.7	8.1	5.0	17.7	0.0	15.7	17.2	0.0	15.0
LnGrp LOS	B	A	B	B	A	A	B	A	B	B	A	B
Approach Vol, veh/h	899			731			256			103		
Approach Delay, s/veh	13.8			8.2			16.9			16.0		
Approach LOS	B			A			B			B		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	16.9			32.7			16.9			32.7		
Change Period (Y+Rc), s	5.0			5.0			5.0			5.0		
Max Green Setting (Gmax), s	14.0			36.0			14.0			36.0		
Max Q Clear Time (g_c+I1), s	8.1			22.1			6.2			23.8		
Green Ext Time (p_c), s	0.5			5.6			0.2			3.7		
Intersection Summary												
HCM 6th Ctrl Delay	12.2											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary
124: 19th St & Conner St/SR 32/38

Existing PM Peak
12/11/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	764	45	22	598	52	138	24	74	45	26	24
Future Volume (veh/h)	18	764	45	22	598	52	138	24	74	45	26	24
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	20	830	49	24	650	57	150	26	80	49	28	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	381	969	57	241	1036	878	433	96	296	384	212	197
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	735	1735	102	626	1856	1572	1339	401	1233	1278	885	822
Grp Volume(v), veh/h	20	0	879	24	650	57	150	0	106	49	0	54
Grp Sat Flow(s),veh/h/ln	735	0	1837	626	1856	1572	1339	0	1634	1278	0	1708
Q Serve(g_s), s	0.9	0.0	20.1	1.7	11.8	0.8	4.9	0.0	2.6	1.6	0.0	1.2
Cycle Q Clear(g_c), s	12.8	0.0	20.1	21.8	11.8	0.8	6.1	0.0	2.6	4.2	0.0	1.2
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.75	1.00		0.48
Lane Grp Cap(c), veh/h	381	0	1026	241	1036	878	433	0	392	384	0	410
V/C Ratio(X)	0.05	0.00	0.86	0.10	0.63	0.06	0.35	0.00	0.27	0.13	0.00	0.13
Avail Cap(c_a), veh/h	503	0	1332	346	1345	1140	489	0	461	438	0	482
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(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.8	0.0	9.3	18.5	7.4	5.0	17.2	0.0	15.3	17.1	0.0	14.8
Incr Delay (d2), s/veh	0.1	0.0	4.6	0.2	0.6	0.0	0.5	0.0	0.4	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	6.4	0.2	3.2	0.2	1.4	0.0	0.9	0.5	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.8	0.0	13.8	18.7	8.1	5.0	17.7	0.0	15.7	17.2	0.0	15.0
LnGrp LOS	B	A	B	B	A	A	B	A	B	B	A	B
Approach Vol, veh/h		899			731			256			103	
Approach Delay, s/veh		13.8			8.2			16.9			16.0	
Approach LOS		B			A			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.9		32.7		16.9		32.7				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		14.0		36.0		14.0		36.0				
Max Q Clear Time (g_c+l1), s		8.1		22.1		6.2		23.8				
Green Ext Time (p_c), s		0.5		5.6		0.2		3.7				
Intersection Summary												
HCM 6th Ctrl Delay				12.2								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
124: 19th St & Conner St/SR 32/38

Future AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	1359	45	22	1198	52	138	24	74	45	26	24
Future Volume (veh/h)	18	1359	45	22	1198	52	138	24	74	45	26	24
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	20	1477	49	24	1302	57	150	26	80	49	28	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	201	1454	48	51	1511	1280	166	46	141	119	101	94
Arrive On Green	0.81	0.81	0.81	0.81	0.81	0.81	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	397	1786	59	339	1856	1572	1339	401	1233	1278	885	822
Grp Volume(v), veh/h	20	0	1526	24	1302	57	150	0	106	49	0	54
Grp Sat Flow(s),veh/h/ln	397	0	1845	339	1856	1572	1339	0	1634	1278	0	1708
Q Serve(g_s), s	4.6	0.0	114.0	0.0	61.2	1.0	12.0	0.0	8.6	5.3	0.0	4.0
Cycle Q Clear(g_c), s	65.8	0.0	114.0	114.0	61.2	1.0	16.0	0.0	8.6	13.9	0.0	4.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.75	1.00		0.48
Lane Grp Cap(c), veh/h	201	0	1502	51	1511	1280	166	0	187	119	0	195
V/C Ratio(X)	0.10	0.00	1.02	0.47	0.86	0.04	0.90	0.00	0.57	0.41	0.00	0.28
Avail Cap(c_a), veh/h	201	0	1502	51	1511	1280	166	0	187	119	0	195
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(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	13.0	70.0	8.1	2.5	65.4	0.0	58.7	65.3	0.0	56.7
Incr Delay (d2), s/veh	0.2	0.0	27.2	6.4	5.4	0.0	43.6	0.0	4.0	2.3	0.0	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(50%),veh/ln	0.5	0.0	44.6	1.0	20.2	0.2	7.4	0.0	3.8	1.8	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	0.0	40.2	76.4	13.4	2.5	109.0	0.0	62.7	67.6	0.0	57.5
LnGrp LOS	C	A	F	E	B	A	F	A	E	E	A	E
Approach Vol, veh/h	1546			1383			256			103		
Approach Delay, s/veh	40.1			14.1			89.9			62.3		
Approach LOS	D			B			F			E		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	21.0			119.0			21.0			119.0		
Change Period (Y+Rc), s	5.0			5.0			5.0			5.0		
Max Green Setting (Gmax), s	16.0			114.0			16.0			114.0		
Max Q Clear Time (g_c+l1), s	18.0			116.0			15.9			116.0		
Green Ext Time (p_c), s	0.0			0.0			0.0			0.0		
Intersection Summary												
HCM 6th Ctrl Delay	33.7											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary
124: 19th St & Conner St/SR 32/38

Future PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	1359	45	22	1198	52	138	24	74	45	26	24
Future Volume (veh/h)	18	1359	45	22	1198	52	138	24	74	45	26	24
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	20	1477	49	24	1302	57	150	26	80	49	28	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	201	1454	48	51	1511	1280	166	46	141	119	101	94
Arrive On Green	0.81	0.81	0.81	0.81	0.81	0.81	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	397	1786	59	339	1856	1572	1339	401	1233	1278	885	822
Grp Volume(v), veh/h	20	0	1526	24	1302	57	150	0	106	49	0	54
Grp Sat Flow(s),veh/h/ln	397	0	1845	339	1856	1572	1339	0	1634	1278	0	1708
Q Serve(g_s), s	4.6	0.0	114.0	0.0	61.2	1.0	12.0	0.0	8.6	5.3	0.0	4.0
Cycle Q Clear(g_c), s	65.8	0.0	114.0	114.0	61.2	1.0	16.0	0.0	8.6	13.9	0.0	4.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.75	1.00		0.48
Lane Grp Cap(c), veh/h	201	0	1502	51	1511	1280	166	0	187	119	0	195
V/C Ratio(X)	0.10	0.00	1.02	0.47	0.86	0.04	0.90	0.00	0.57	0.41	0.00	0.28
Avail Cap(c_a), veh/h	201	0	1502	51	1511	1280	166	0	187	119	0	195
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(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	13.0	70.0	8.1	2.5	65.4	0.0	58.7	65.3	0.0	56.7
Incr Delay (d2), s/veh	0.2	0.0	27.2	6.4	5.4	0.0	43.6	0.0	4.0	2.3	0.0	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(50%),veh/ln	0.5	0.0	44.6	1.0	20.2	0.2	7.4	0.0	3.8	1.8	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	0.0	40.2	76.4	13.4	2.5	109.0	0.0	62.7	67.6	0.0	57.5
LnGrp LOS	C	A	F	E	B	A	F	A	E	E	A	E
Approach Vol, veh/h		1546			1383			256			103	
Approach Delay, s/veh		40.1			14.1			89.9			62.3	
Approach LOS		D			B			F			E	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.0		119.0		21.0		119.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		16.0		114.0		16.0		114.0				
Max Q Clear Time (g_c+l1), s		18.0		116.0		15.9		116.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				33.7								
HCM 6th LOS				C								

Intersection

Intersection Delay, s/veh 9.4

Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	11	63	12	33	64	66	4	154	60	61	70	0
Future Vol, veh/h	11	63	12	33	64	66	4	154	60	61	70	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	68	13	36	70	72	4	167	65	66	76	0
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	8.9	9.3	9.7	9.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	13%	20%	47%
Vol Thru, %	71%	73%	39%	53%
Vol Right, %	28%	14%	40%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	218	86	163	131
LT Vol	4	11	33	61
Through Vol	154	63	64	70
RT Vol	60	12	66	0
Lane Flow Rate	237	93	177	142
Geometry Grp	1	1	1	1
Degree of Util (X)	0.305	0.13	0.235	0.197
Departure Headway (Hd)	4.628	5.025	4.772	4.987
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	772	708	748	715
Service Time	2.684	3.096	2.834	3.051
HCM Lane V/C Ratio	0.307	0.131	0.237	0.199
HCM Control Delay	9.7	8.9	9.3	9.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.3	0.4	0.9	0.7

Intersection

Intersection Delay, s/veh 9.4

Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	63	12	33	64	66	4	154	60	61	70	0
Future Vol, veh/h	11	63	12	33	64	66	4	154	60	61	70	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	68	13	36	70	72	4	167	65	66	76	0
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	8.9	9.3	9.7	9.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	13%	20%	47%
Vol Thru, %	71%	73%	39%	53%
Vol Right, %	28%	14%	40%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	218	86	163	131
LT Vol	4	11	33	61
Through Vol	154	63	64	70
RT Vol	60	12	66	0
Lane Flow Rate	237	93	177	142
Geometry Grp	1	1	1	1
Degree of Util (X)	0.305	0.13	0.235	0.197
Departure Headway (Hd)	4.628	5.025	4.772	4.987
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	772	708	748	715
Service Time	2.684	3.096	2.834	3.051
HCM Lane V/C Ratio	0.307	0.131	0.237	0.199
HCM Control Delay	9.7	8.9	9.3	9.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.3	0.4	0.9	0.7

Intersection

Intersection Delay, s/veh 9.4

Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	63	12	33	64	66	4	154	60	61	70	0
Future Vol, veh/h	11	63	12	33	64	66	4	154	60	61	70	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	68	13	36	70	72	4	167	65	66	76	0
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	8.9	9.3	9.7	9.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	13%	20%	47%
Vol Thru, %	71%	73%	39%	53%
Vol Right, %	28%	14%	40%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	218	86	163	131
LT Vol	4	11	33	61
Through Vol	154	63	64	70
RT Vol	60	12	66	0
Lane Flow Rate	237	93	177	142
Geometry Grp	1	1	1	1
Degree of Util (X)	0.305	0.13	0.235	0.197
Departure Headway (Hd)	4.628	5.025	4.772	4.987
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	772	708	748	715
Service Time	2.684	3.096	2.834	3.051
HCM Lane V/C Ratio	0.307	0.131	0.237	0.199
HCM Control Delay	9.7	8.9	9.3	9.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.3	0.4	0.9	0.7

Intersection

Intersection Delay, s/veh 9.4

Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	63	12	33	64	66	4	154	60	61	70	0
Future Vol, veh/h	11	63	12	33	64	66	4	154	60	61	70	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	68	13	36	70	72	4	167	65	66	76	0
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	8.9	9.3	9.7	9.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	13%	20%	47%
Vol Thru, %	71%	73%	39%	53%
Vol Right, %	28%	14%	40%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	218	86	163	131
LT Vol	4	11	33	61
Through Vol	154	63	64	70
RT Vol	60	12	66	0
Lane Flow Rate	237	93	177	142
Geometry Grp	1	1	1	1
Degree of Util (X)	0.305	0.13	0.235	0.197
Departure Headway (Hd)	4.628	5.025	4.772	4.987
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	772	708	748	715
Service Time	2.684	3.096	2.834	3.051
HCM Lane V/C Ratio	0.307	0.131	0.237	0.199
HCM Control Delay	9.7	8.9	9.3	9.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.3	0.4	0.9	0.7

HCM 6th Signalized Intersection Summary

126: Cumberland Rd & SR 32/38

Existing AM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	718	80	13	625	181	96	295	87	135	163	69
Future Volume (veh/h)	90	718	80	13	625	181	96	295	87	135	163	69
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	98	780	87	14	679	197	104	321	95	147	177	75
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	1026	124	72	1154	331	450	384	326	357	405	343
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.10	0.21	0.21	0.11	0.22	0.22
Sat Flow, veh/h	154	2322	279	17	2611	748	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	455	0	510	481	0	409	104	321	95	147	177	75
Grp Sat Flow(s),veh/h/ln	1118	0	1638	1822	0	1554	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	11.4	0.0	14.6	0.0	0.0	11.6	2.5	9.6	3.0	3.6	4.8	2.3
Cycle Q Clear(g_c), s	23.0	0.0	14.6	11.3	0.0	11.6	2.5	9.6	3.0	3.6	4.8	2.3
Prop In Lane	0.22		0.17	0.03		0.48	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	569	0	724	869	0	687	450	384	326	357	405	343
V/C Ratio(X)	0.80	0.00	0.70	0.55	0.00	0.60	0.23	0.84	0.29	0.41	0.44	0.22
Avail Cap(c_a), veh/h	578	0	735	881	0	697	490	416	353	377	416	353
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	13.1	12.2	0.0	12.3	15.0	22.0	19.4	15.7	19.6	18.6
Incr Delay (d2), s/veh	7.7	0.0	3.0	0.7	0.0	1.4	0.3	13.0	0.5	0.8	0.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	5.0	4.0	0.0	3.5	0.9	5.1	1.0	1.3	1.9	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	0.0	16.1	12.9	0.0	13.6	15.3	35.0	19.9	16.5	20.3	18.9
LnGrp LOS	C	A	B	B	A	B	B	D	B	B	C	B
Approach Vol, veh/h	965		890			520			399			
Approach Delay, s/veh	19.4		13.2			28.3			18.6			
Approach LOS	B		B			C			B			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	10.3	17.0	30.6		9.7	17.7	30.6					
Change Period (Y+Rc), s	4.0	5.0	5.0		4.0	5.0	5.0					
Max Green Setting (Gmax), s	7.0	13.0	26.0		7.0	13.0	26.0					
Max Q Clear Time (g_c+1/6)	11.6	11.6	25.0		4.5	6.8	13.6					
Green Ext Time (p_c), s	0.0	0.3	0.7		0.0	0.6	4.6					

Intersection Summary

HCM 6th Ctrl Delay 19.0
HCM 6th LOS B

HCM 6th Signalized Intersection Summary 126: Cumberland Rd & SR 32/38

Existing PM Peak
12/11/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	718	80	13	625	181	96	295	87	135	163	69
Future Volume (veh/h)	90	718	80	13	625	181	96	295	87	135	163	69
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	98	780	87	14	679	197	104	321	95	147	177	75
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	1026	124	72	1154	331	450	384	326	357	405	343
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.10	0.21	0.21	0.11	0.22	0.22
Sat Flow, veh/h	154	2322	279	17	2611	748	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	455	0	510	481	0	409	104	321	95	147	177	75
Grp Sat Flow(s),veh/h/ln	1118	0	1638	1822	0	1554	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	11.4	0.0	14.6	0.0	0.0	11.6	2.5	9.6	3.0	3.6	4.8	2.3
Cycle Q Clear(g_c), s	23.0	0.0	14.6	11.3	0.0	11.6	2.5	9.6	3.0	3.6	4.8	2.3
Prop In Lane	0.22		0.17	0.03		0.48	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	569	0	724	869	0	687	450	384	326	357	405	343
V/C Ratio(X)	0.80	0.00	0.70	0.55	0.00	0.60	0.23	0.84	0.29	0.41	0.44	0.22
Avail Cap(c_a), veh/h	578	0	735	881	0	697	490	416	353	377	416	353
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	13.1	12.2	0.0	12.3	15.0	22.0	19.4	15.7	19.6	18.6
Incr Delay (d2), s/veh	7.7	0.0	3.0	0.7	0.0	1.4	0.3	13.0	0.5	0.8	0.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	5.0	4.0	0.0	3.5	0.9	5.1	1.0	1.3	1.9	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	0.0	16.1	12.9	0.0	13.6	15.3	35.0	19.9	16.5	20.3	18.9
LnGrp LOS	C	A	B	B	A	B	B	D	B	B	C	B
Approach Vol, veh/h	965		890			520			399			
Approach Delay, s/veh	19.4		13.2			28.3			18.6			
Approach LOS	B		B			C			B			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	10.3	17.0	30.6		9.7	17.7	30.6					
Change Period (Y+Rc), s	4.0	5.0	5.0		4.0	5.0	5.0					
Max Green Setting (Gmax), s	13.0	13.0	26.0		7.0	13.0	26.0					
Max Q Clear Time (g_c+I1), s	11.6	11.6	25.0		4.5	6.8	13.6					
Green Ext Time (p_c), s	0.0	0.3	0.7		0.0	0.6	4.6					

Intersection Summary

HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B