

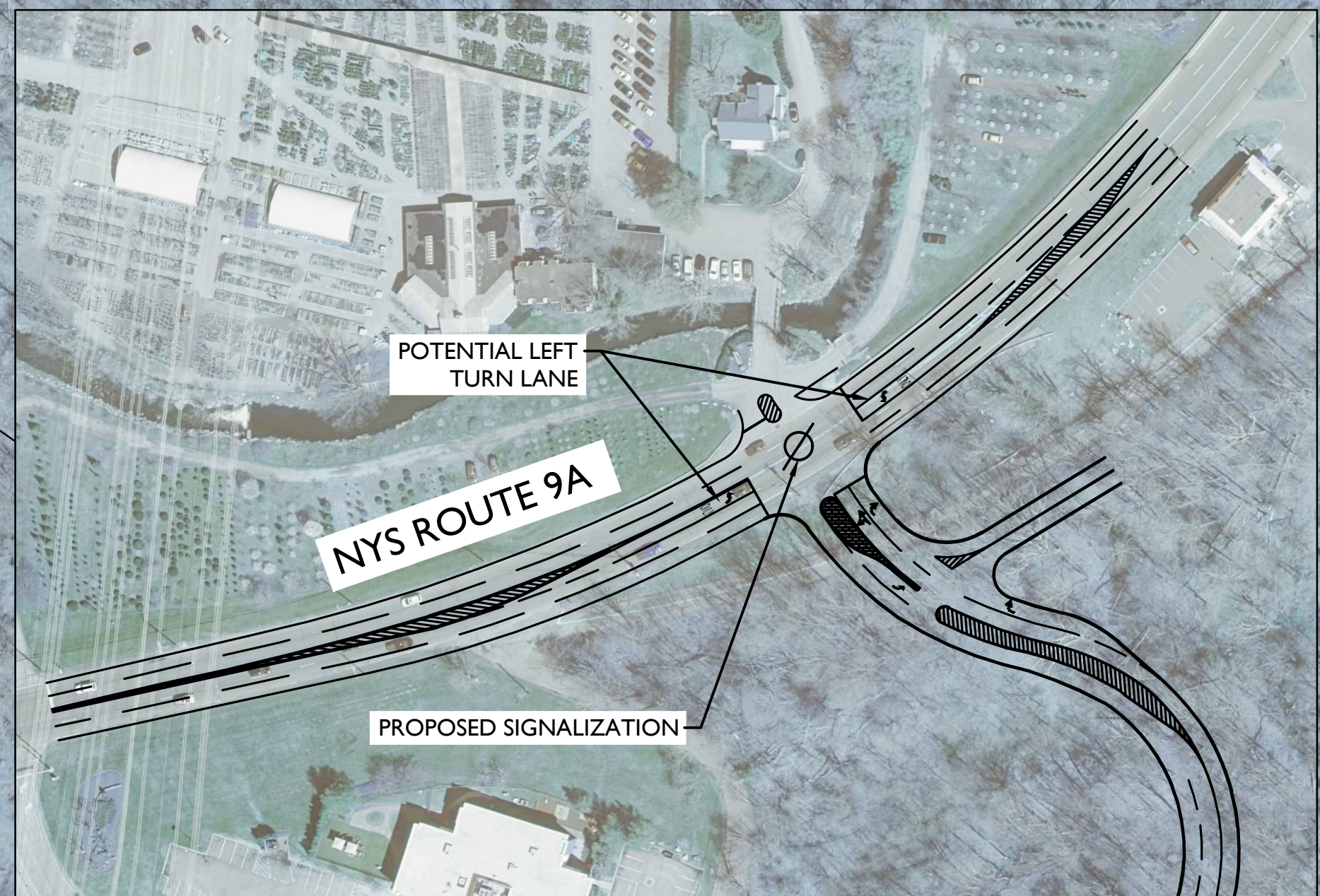
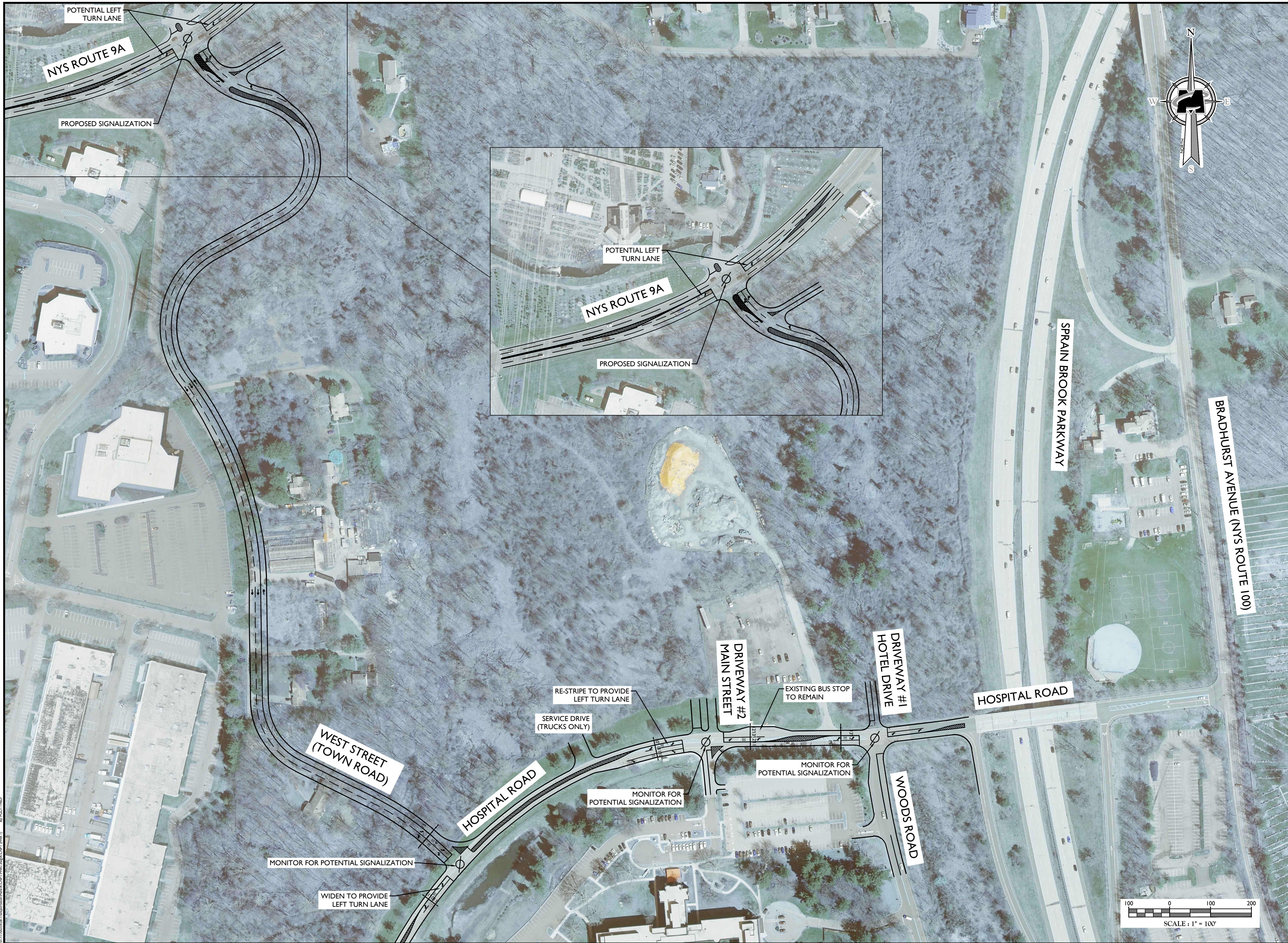


NORTH 60

ATTACHMENT 12

UPDATED CONCEPT IMPROVEMENT PLANS

UPDATED ANALYSIS – INTERSECTION #8, #9, #12



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REV.	DATE	DRAWN BY	DESCRIPTION
1	4/18/21	P.V.G.	ADDED LEFT TURN LANES AT PA & WEST STREET

CONCEPT PLAN
 PHASE I
 FOR
 THE NORTH 60

HOSPITAL ROAD &
 NYS ROUTE 9A
 TOWN OF MT. PLEASANT
 WESTCHESTER COUNTY
 NEW YORK

WESTCHESTER OFFICE
 400 Columbus Avenue
 Suite 180E
 Valhalla, NY 10595
 Phone: 914.347.7500
 Fax: 914.347.7266

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	12/9/2020	J.F.M.	J.T.C.

PROJECT NUMBER: 170035928
 DRAWING NAME: R-CNPT-PHA1
 SHEET TITLE:
CONCEPT PLAN PHASE I
 SHEET NUMBER:
 1 of 2

3017100309817.compton\pva\pva.dwg (PVA) 11/18/2021 10:00:00 AM

2024 Build Traffic Volumes
 8: WMC Lot 10/Prop. Drwy #2 & Hospital Road

Weekday Peak AM Hour
 12/04/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	189	25	65	369	245	7	0	23	118	0	124
Future Volume (vph)	181	189	25	65	369	245	7	0	23	118	0	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	15	12	12	12	12
Grade (%)		2%			-2%			0%				0%
Storage Length (ft)	100		100	100		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.940			0.898				0.931
Flt Protected	0.950			0.950				0.988				0.976
Satd. Flow (prot)	1752	1726	1567	1787	1758	0	0	1818	0	0	1693	0
Flt Permitted	0.950			0.950				0.988				0.976
Satd. Flow (perm)	1752	1726	1567	1787	1758	0	0	1818	0	0	1693	0
Link Speed (mph)		25			25			30				30
Link Distance (ft)		700			426			197				302
Travel Time (s)		19.1			11.6			4.5				6.9
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 (%)	2%	9%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	197	205	27	71	401	266	8	0	25	128	0	135
Shared Lane Traffic (%)												
Lane Group Flow (vph)	197	205	27	71	667	0	0	33	0	0	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	1.00	0.88	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop				Stop

Intersection Summary

Area Type: Other

Control Type: Unsignalized

2024 Build Traffic Volumes
8: WMC Lot 10/Prop. Drwy #2 & Hospital Road

Weekday Peak AM Hour
12/04/2020

Intersection												
Int Delay, s/veh	49.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗			↕			↕	
Traffic Vol, veh/h	181	189	25	65	369	245	7	0	23	118	0	124
Future Vol, veh/h	181	189	25	65	369	245	7	0	23	118	0	124
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	-	-	Yield	-	-	None
Storage Length	100	-	100	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-2	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	9	2	2	3	2	2	2	2	2	2	2
Mvmt Flow	197	205	27	71	401	266	8	0	25	128	0	135

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	667	0	0	232	0	0	1343	1408	205	1289	1302	534
Stage 1	-	-	-	-	-	-	599	599	-	676	676	-
Stage 2	-	-	-	-	-	-	744	809	-	613	626	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	923	-	-	1336	-	-	129	139	836	141	161	546
Stage 1	-	-	-	-	-	-	488	490	-	443	453	-
Stage 2	-	-	-	-	-	-	407	394	-	480	477	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	923	-	-	1336	-	-	78	104	836	~ 110	120	546
Mov Cap-2 Maneuver	-	-	-	-	-	-	78	104	-	~ 110	120	-
Stage 1	-	-	-	-	-	-	384	386	-	349	429	-
Stage 2	-	-	-	-	-	-	290	373	-	366	375	-

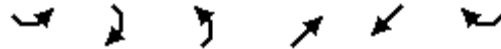
Approach	EB	WB	NB	SB
HCM Control Delay, s	4.6	0.8	16.9	262.5
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	334	923	-	-	1336	-	-	186
HCM Lane V/C Ratio	0.098	0.213	-	-	0.053	-	-	1.414
HCM Control Delay (s)	16.9	10	-	-	7.8	-	-	262.5
HCM Lane LOS	C	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.3	0.8	-	-	0.2	-	-	15.9

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

2024 Build Traffic Volumes
 9: Hospital Road & Route 9A Connector

Weekday Peak AM Hour
 12/04/2020



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	202	109	36	194	403	97
Future Volume (vph)	202	109	36	194	403	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			3%	-3%	
Storage Length (ft)	0	100	100			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.974	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1743	1717	1827	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1583	1743	1717	1827	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	964			491	700	
Travel Time (s)	21.9			13.4	19.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	9%	3%	2%
Adj. Flow (vph)	220	118	39	211	438	105
Shared Lane Traffic (%)						
Lane Group Flow (vph)	220	118	39	211	543	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.02	1.02	0.98	0.98
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
 Control Type: Unsignalized

2024 Build Traffic Volumes
 9: Hospital Road & Route 9A Connector

Weekday Peak AM Hour
 12/04/2020

Intersection						
Int Delay, s/veh	7.6					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	202	109	36	194	403	97
Future Vol, veh/h	202	109	36	194	403	97
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	100	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	3	-3	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	9	3	2
Mvmt Flow	220	118	39	211	438	105

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	780	491	438	0	-	0
Stage 1	491	-	-	-	-	-
Stage 2	289	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	364	578	1122	-	-	-
Stage 1	615	-	-	-	-	-
Stage 2	760	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	351	578	1122	-	-	-
Mov Cap-2 Maneuver	351	-	-	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	760	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	24.6	1.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	1122	-	351	578	-	-
HCM Lane V/C Ratio	0.035	-	0.626	0.205	-	-
HCM Control Delay (s)	8.3	-	30.9	12.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	4	0.8	-	-

2024 Build Traffic Volumes
8: WMC Lot 10 /Prop. Drwy #2 & Hospital Road

Weekday Peak PM Hour
12/04/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	220	9	31	194	147	34	0	57	281	0	210
Future Volume (vph)	153	220	9	31	194	147	34	0	57	281	0	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	10	12	12	12	12	12	12
Grade (%)		2%			-2%			0%				0%
Storage Length (ft)	100		100	100		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.935			0.915				0.942
Flt Protected	0.950			0.950				0.982				0.972
Satd. Flow (prot)	1635	1826	1567	1787	1721	0	0	1674	0	0	1706	0
Flt Permitted	0.950			0.950				0.982				0.972
Satd. Flow (perm)	1635	1826	1567	1787	1721	0	0	1674	0	0	1706	0
Link Speed (mph)		25			25			30				30
Link Distance (ft)		701			422			194				302
Travel Time (s)		19.1			11.5			4.4				6.9
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 (%)	2%	3%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	166	239	10	34	211	160	37	0	62	305	0	228
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	239	10	34	371	0	0	99	0	0	533	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.11	1.01	1.01	0.99	0.99	1.08	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop				Stop

Intersection Summary

Area Type: Other

Control Type: Unsignalized

2024 Build Traffic Volumes
8: WMC Lot 10 /Prop. Drwy #2 & Hospital Road

Weekday Peak PM Hour
12/04/2020

Intersection												
Int Delay, s/veh	157.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗			↕			↕	
Traffic Vol, veh/h	153	220	9	31	194	147	34	0	57	281	0	210
Future Vol, veh/h	153	220	9	31	194	147	34	0	57	281	0	210
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	-	-	Yield	-	-	None
Storage Length	100	-	100	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-2	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	3	2	2	6	2	2	2	2	2	2	2
Mvmt Flow	166	239	10	34	211	160	37	0	62	305	0	228

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	371	0	0	249	0	0	1044	1010	239	935	940	291
Stage 1	-	-	-	-	-	-	571	571	-	359	359	-
Stage 2	-	-	-	-	-	-	473	439	-	576	581	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1188	-	-	1317	-	-	207	240	800	~ 246	264	748
Stage 1	-	-	-	-	-	-	506	505	-	659	627	-
Stage 2	-	-	-	-	-	-	572	578	-	503	500	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1188	-	-	1317	-	-	126	201	800	~ 199	221	748
Mov Cap-2 Maneuver	-	-	-	-	-	-	126	201	-	~ 199	221	-
Stage 1	-	-	-	-	-	-	435	434	-	567	611	-
Stage 2	-	-	-	-	-	-	387	563	-	399	430	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.4	0.7	20.1	\$ 421
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	337	1188	-	-	1317	-	-	290
HCM Lane V/C Ratio	0.294	0.14	-	-	0.026	-	-	1.84
HCM Control Delay (s)	20.1	8.5	-	-	7.8	-	-	\$ 421
HCM Lane LOS	C	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	1.2	0.5	-	-	0.1	-	-	36

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

2024 Build Traffic Volumes
 9: Hospital Road & Route 9A Connector

Weekday Peak PM Hour
 12/04/2020



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	105	22	118	277	205	232
Future Volume (vph)	105	22	118	277	205	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			3%	-3%	
Storage Length (ft)	0	100	100			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.928	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1743	1817	1723	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1583	1743	1817	1723	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	964			491	701	
Travel Time (s)	21.9			13.4	19.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	3%	6%	2%
Adj. Flow (vph)	114	24	128	301	223	252
Shared Lane Traffic (%)						
Lane Group Flow (vph)	114	24	128	301	475	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.02	1.02	0.98	0.98
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					

Intersection						
Int Delay, s/veh	4.2					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	105	22	118	277	205	232
Future Vol, veh/h	105	22	118	277	205	232
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	100	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	3	-3	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	3	6	2
Mvmt Flow	114	24	128	301	223	252

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	906	349	223	0	-	0
Stage 1	349	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	307	694	1346	-	-	-
Stage 1	714	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	278	694	1346	-	-	-
Mov Cap-2 Maneuver	278	-	-	-	-	-
Stage 1	646	-	-	-	-	-
Stage 2	574	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	23.9	2.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	1346	-	278	694	-	-
HCM Lane V/C Ratio	0.095	-	0.411	0.034	-	-
HCM Control Delay (s)	8	-	26.7	10.4	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.9	0.1	-	-

2024 Build Traffic Volumes with Improvements
8: WMC Lot 10/Prop. Drwy #2 & Hospital Road

Weekday Peak AM Hour

12/04/2020

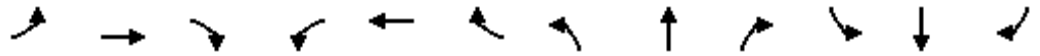


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	189	25	65	369	245	7	0	23	118	0	124
Future Volume (vph)	181	189	25	65	369	245	7	0	23	118	0	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	15	12	12	12	12
Grade (%)		2%			-2%			0%				0%
Storage Length (ft)	100		100	100		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.940			0.898				0.931
Flt Protected	0.950			0.950				0.988				0.976
Satd. Flow (prot)	1752	1726	1567	1787	1758	0	0	1818	0	0	1693	0
Flt Permitted	0.153			0.629				0.925				0.829
Satd. Flow (perm)	282	1726	1567	1183	1758	0	0	1702	0	0	1438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			27		43			76				76
Link Speed (mph)		25			25			30				30
Link Distance (ft)		695			425			233				302
Travel Time (s)		19.0			11.6			5.3				6.9
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 (%)	2%	9%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	197	205	27	71	401	266	8	0	25	128	0	135
Shared Lane Traffic (%)												
Lane Group Flow (vph)	197	205	27	71	667	0	0	33	0	0	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	1.00	0.88	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0

2024 Build Traffic Volumes with Improvements
 8: WMC Lot 10/Prop. Drwy #2 & Hospital Road

Weekday Peak AM Hour

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8				4
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	6	6		8	8		4		4
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0		4.0
Minimum Split (s)	9.0	21.0	21.0	21.0	21.0		21.0	21.0		21.0		21.0
Total Split (s)	17.0	66.0	66.0	49.0	49.0		34.0	34.0		34.0		34.0
Total Split (%)	17.0%	66.0%	66.0%	49.0%	49.0%		34.0%	34.0%		34.0%		34.0%
Maximum Green (s)	12.0	61.0	61.0	44.0	44.0		29.0	29.0		29.0		29.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0		4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0				0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0			5.0				5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0		3.0
Recall Mode	None	C-Max	C-Max	C-Max	C-Max		None	None		Max		Max
Walk Time (s)		5.0	5.0	5.0	5.0		5.0	5.0		5.0		5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0		11.0	11.0		11.0		11.0
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0		0
v/c Ratio	0.61	0.19	0.03	0.13	0.80			0.06				0.56
Control Delay	18.0	9.2	3.0	11.0	25.8			0.4				26.3
Queue Delay	0.0	0.0	0.0	0.0	0.5			0.0				0.0
Total Delay	18.0	9.2	3.0	11.0	26.4			0.4				26.3
Queue Length 50th (ft)	51	53	0	30	363			0				99
Queue Length 95th (ft)	92	87	10	m22	#563			2				183
Internal Link Dist (ft)		615			345			153				222
Turn Bay Length (ft)	100		100	100								
Base Capacity (vph)	348	1052	966	542	829			547				470
Starvation Cap Reductn	0	0	0	0	25			0				0
Spillback Cap Reductn	0	0	0	0	0			0				0
Storage Cap Reductn	0	0	0	0	0			0				0
Reduced v/c Ratio	0.57	0.19	0.03	0.13	0.83			0.06				0.56

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

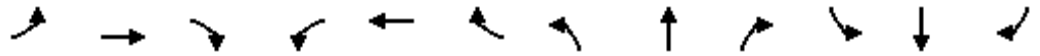
Splits and Phases: 8: WMC Lot 10/Prop. Drwy #2 & Hospital Road



2024 Build Traffic Volumes with Improvements
 8: WMC Lot 10/Prop. Drwy #2 & Hospital Road

Weekday Peak AM Hour

12/04/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	189	25	65	369	245	7	0	23	118	0	124
Future Volume (veh/h)	181	189	25	65	369	245	7	0	23	118	0	124
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	1847	1743	1847	1949	1934	1934	1870	1945	1870	1870	1870	1870
Adj Flow Rate, veh/h	197	205	27	71	401	266	8	0	0	128	0	135
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, %	2	9	2	2	3	3	2	2	2	2	2	2
Cap, veh/h	540	1063	955	652	526	349	407	0		250	18	225
Arrive On Green	0.07	0.61	0.61	0.97	0.97	0.97	0.29	0.00	0.00	0.29	0.00	0.29
Sat Flow, veh/h	1759	1743	1565	1196	1085	719	1156	0	0	676	61	777
Grp Volume(v), veh/h	197	205	27	71	0	667	8	0	0	263	0	0
Grp Sat Flow(s),veh/h/ln	1759	1743	1565	1196	0	1804	1156	0	0	1514	0	0
Q Serve(g_s), s	5.3	5.2	0.7	0.2	0.0	4.2	0.0	0.0	0.0	12.6	0.0	0.0
Cycle Q Clear(g_c), s	5.3	5.2	0.7	0.2	0.0	4.2	0.6	0.0	0.0	14.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.40	1.00		0.00	0.49		0.51
Lane Grp Cap(c), veh/h	540	1063	955	652	0	875	407	0		493	0	0
V/C Ratio(X)	0.36	0.19	0.03	0.11	0.00	0.76	0.02	0.00		0.53	0.00	0.00
Avail Cap(c_a), veh/h	619	1063	955	652	0	875	407	0		493	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.00	0.86	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.2	8.6	7.7	0.8	0.0	0.8	25.4	0.0	0.0	30.3	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.4	0.1	0.3	0.0	5.4	0.0	0.0	0.0	4.1	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	2.0	2.0	0.2	0.1	0.0	1.8	0.1	0.0	0.0	5.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.6	9.0	7.8	1.1	0.0	6.2	25.4	0.0	0.0	34.4	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	C	A		C	A	A
Approach Vol, veh/h		429			738			8	A		263	
Approach Delay, s/veh		9.7			5.7			25.4			34.4	
Approach LOS		A			A			C			C	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		66.0		34.0	12.5	53.5		34.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		61.0		29.0	12.0	44.0		29.0				
Max Q Clear Time (g_c+I1), s		7.2		16.7	7.3	6.2		2.6				
Green Ext Time (p_c), s		1.5		1.2	0.2	6.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Notes

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

2024 Build Traffic Volumes with Improvements
8: WMC Lot 10 /Prop. Drwy #2 & Hospital Road

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	220	9	31	194	147	34	0	57	281	0	210
Future Volume (vph)	153	220	9	31	194	147	34	0	57	281	0	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	10	12	12	12	12	12	12
Grade (%)		2%			-2%			0%				0%
Storage Length (ft)	100		100	100		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.935			0.915				0.942
Flt Protected	0.950			0.950				0.982				0.972
Satd. Flow (prot)	1635	1826	1567	1787	1721	0	0	1674	0	0	1706	0
Flt Permitted	0.359			0.610				0.789				0.782
Satd. Flow (perm)	618	1826	1567	1148	1721	0	0	1345	0	0	1372	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			22		45			76				76
Link Speed (mph)		25			25			30				30
Link Distance (ft)		700			428			198				302
Travel Time (s)		19.1			11.7			4.5				6.9
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 (%)	2%	3%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	166	239	10	34	211	160	37	0	62	305	0	228
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	239	10	34	371	0	0	99	0	0	533	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.11	1.01	1.01	0.99	0.99	1.08	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0

2024 Build Traffic Volumes with Improvements
8: WMC Lot 10 /Prop. Drwy #2 & Hospital Road

Weekday Peak PM Hour
12/04/2020

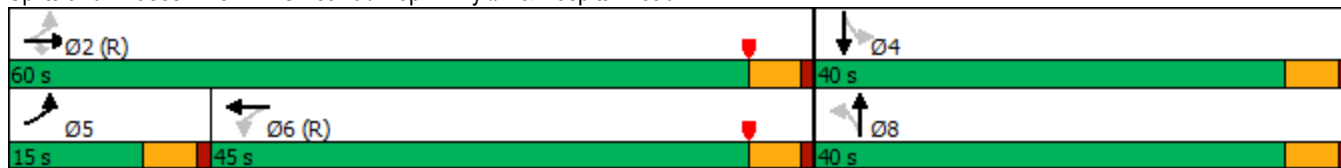


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8				4
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	6	6		8	8		4		4
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0		4.0
Minimum Split (s)	9.0	21.0	21.0	21.0	21.0		21.0	21.0		21.0		21.0
Total Split (s)	15.0	60.0	60.0	45.0	45.0		40.0	40.0		40.0		40.0
Total Split (%)	15.0%	60.0%	60.0%	45.0%	45.0%		40.0%	40.0%		40.0%		40.0%
Maximum Green (s)	10.0	55.0	55.0	40.0	40.0		35.0	35.0		35.0		35.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0		4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0				0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0			5.0				5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0		3.0
Recall Mode	None	C-Max	C-Max	C-Max	C-Max		None	None		None		None
Walk Time (s)		5.0	5.0	5.0	5.0		5.0	5.0		5.0		5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0		11.0	11.0		11.0		11.0
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0		0
v/c Ratio	0.38	0.24	0.01	0.07	0.51			0.19				1.01
Control Delay	14.0	12.4	1.9	20.1	20.7			8.8				70.4
Queue Delay	0.0	0.0	0.0	0.0	1.1			0.0				22.7
Total Delay	14.0	12.4	1.9	20.1	21.8			8.9				93.2
Queue Length 50th (ft)	50	74	0	11	104			10				~305
Queue Length 95th (ft)	85	119	4	m26	m215			45				#531
Internal Link Dist (ft)		620			348			118				222
Turn Bay Length (ft)	100		100	100								
Base Capacity (vph)	441	1004	871	467	726			520				529
Starvation Cap Reductn	0	0	0	0	164			0				0
Spillback Cap Reductn	0	0	0	0	0			34				34
Storage Cap Reductn	0	0	0	0	0			0				0
Reduced v/c Ratio	0.38	0.24	0.01	0.07	0.66			0.20				1.08

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: WMC Lot 10 /Prop. Drwy #2 & Hospital Road



2024 Build Traffic Volumes with Improvements
8: WMC Lot 10 /Prop. Drwy #2 & Hospital Road

Weekday Peak PM Hour
12/04/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	220	9	31	194	147	34	0	57	281	0	210
Future Volume (veh/h)	153	220	9	31	194	147	34	0	57	281	0	210
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	1847	1832	1847	1949	1889	1889	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	166	239	10	34	211	160	37	0	0	305	0	228
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, %	2	3	2	2	6	6	2	2	2	2	2	2
Cap, veh/h	430	1008	861	578	428	325	447	0		358	0	226
Arrive On Green	0.07	0.55	0.55	0.14	0.14	0.14	0.35	0.00	0.00	0.35	0.00	0.35
Sat Flow, veh/h	1759	1832	1565	1178	997	756	1071	0	0	862	0	645
Grp Volume(v), veh/h	166	239	10	34	0	371	37	0	0	533	0	0
Grp Sat Flow(s),veh/h/ln	1759	1832	1565	1178	0	1753	1071	0	0	1507	0	0
Q Serve(g_s), s	5.0	6.8	0.3	2.5	0.0	19.5	0.0	0.0	0.0	32.7	0.0	0.0
Cycle Q Clear(g_c), s	5.0	6.8	0.3	2.5	0.0	19.5	2.3	0.0	0.0	35.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.43	1.00		0.00	0.57		0.43
Lane Grp Cap(c), veh/h	430	1008	861	578	0	753	447	0		584	0	0
V/C Ratio(X)	0.39	0.24	0.01	0.06	0.00	0.49	0.08	0.00		0.91	0.00	0.00
Avail Cap(c_a), veh/h	482	1008	861	578	0	753	447	0		584	0	0
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.00	0.99	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.5	11.6	10.2	25.6	0.0	32.9	21.9	0.0	0.0	32.4	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.6	0.0	0.2	0.0	2.3	0.1	0.0	0.0	18.8	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	2.0	2.9	0.1	0.7	0.0	9.6	0.6	0.0	0.0	15.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	12.2	10.2	25.7	0.0	35.1	22.0	0.0	0.0	51.3	0.0	0.0
LnGrp LOS	B	B	B	C	A	D	C	A		D	A	A
Approach Vol, veh/h		415			405			37	A		533	
Approach Delay, s/veh		13.7			34.4			22.0			51.3	
Approach LOS		B			C			C			D	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		60.0		40.0	12.1	47.9		40.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		55.0		35.0	10.0	40.0		35.0				
Max Q Clear Time (g_c+I1), s		8.8		37.0	7.0	21.5		4.3				
Green Ext Time (p_c), s		1.6		0.0	0.1	2.5		0.2				

Intersection Summary

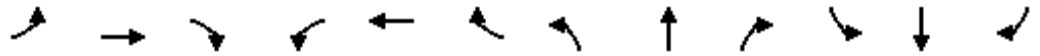
HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C

Notes

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

2024 Build Traffic Volumes with Improvements
 12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A

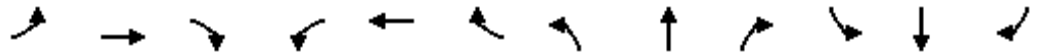
Weekday Peak AM Hour
 04/28/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	589	165	145	1346	13	57	0	76	2	0	2
Future Volume (vph)	13	589	165	145	1346	13	57	0	76	2	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	15	12
Grade (%)		-1%			4%			-8%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.967			0.999				0.850		0.932	
Flt Protected	0.950			0.950				0.950			0.976	
Satd. Flow (prot)	1719	2827	0	1619	2974	0	0	1840	1647	0	1864	0
Flt Permitted	0.159			0.297				0.755			0.863	
Satd. Flow (perm)	288	2827	0	506	2974	0	0	1463	1647	0	1648	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		62			2				131		131	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		627			979			555			134	
Travel Time (s)		9.5			14.8			12.6			3.0	
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 (%)	2%	25%	2%	2%	11%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	14	640	179	158	1463	14	62	0	83	2	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	819	0	158	1477	0	0	62	83	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.12	1.12	1.12	0.95	0.95	0.95	1.00	0.88	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

2024 Build Traffic Volumes with Improvements
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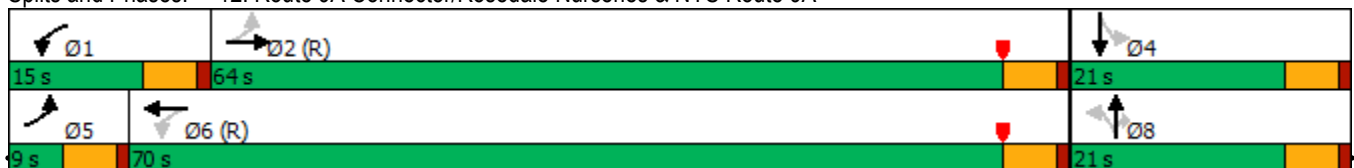


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8				4
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4		4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Minimum Split (s)	9.0	21.0		9.0	21.0		21.0	21.0	21.0	21.0		21.0
Total Split (s)	9.0	64.0		15.0	70.0		21.0	21.0	21.0	21.0		21.0
Total Split (%)	9.0%	64.0%		15.0%	70.0%		21.0%	21.0%	21.0%	21.0%		21.0%
Maximum Green (s)	4.0	59.0		10.0	65.0		16.0	16.0	16.0	16.0		16.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0			0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0			5.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	C-Max		None	C-Max		None	None	None	None		None
Walk Time (s)											5.0	5.0
Flash Dont Walk (s)											11.0	11.0
Pedestrian Calls (#/hr)											0	0
v/c Ratio	0.05	0.41		0.31	0.61			0.45	0.30			0.01
Control Delay	3.2	7.6		4.0	7.1			44.2	5.0			0.0
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0			0.0
Total Delay	3.2	7.6		4.0	7.1			44.2	5.0			0.0
Queue Length 50th (ft)	1	100		17	146			39	3			0
Queue Length 95th (ft)	6	167		37	399			m57	m12			0
Internal Link Dist (ft)		547			899			475				54
Turn Bay Length (ft)									150			
Base Capacity (vph)	299	1993		528	2418			234	373			373
Starvation Cap Reductn	0	0		0	0			0	0			0
Spillback Cap Reductn	0	0		0	0			0	0			0
Storage Cap Reductn	0	0		0	0			0	0			0
Reduced v/c Ratio	0.05	0.41		0.30	0.61			0.26	0.22			0.01

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A



2024 Build Traffic Volumes with Improvements
 12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A

Weekday Peak AM Hour
 04/28/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↕		↖	↕			↕	↗		↕	
Traffic Volume (veh/h)	13	589	165	145	1346	13	57	0	76	2	0	2
Future Volume (veh/h)	13	589	165	145	1346	13	57	0	76	2	0	2
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	1909	1564	1564	1776	1643	1643	2185	2185	2185	1870	1945	1870
Adj Flow Rate, veh/h	14	640	179	158	1463	14	62	0	83	2	0	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
Percent Heavy Veh, %	2	25	25	2	11	11	2	2	2	2	2	2
Cap, veh/h	305	1698	474	551	2442	23	194	0	122	82	16	44
Arrive On Green	0.01	0.74	0.74	0.04	0.77	0.77	0.07	0.00	0.07	0.07	0.00	0.07
Sat Flow, veh/h	1818	2294	641	1692	3168	30	1838	0	1851	423	243	666
Grp Volume(v), veh/h	14	414	405	158	720	757	62	0	83	4	0	0
Grp Sat Flow(s),veh/h/ln	1818	1486	1449	1692	1561	1637	1838	0	1851	1332	0	0
Q Serve(g_s), s	0.2	10.0	10.1	2.2	19.6	19.7	0.0	0.0	4.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	10.0	10.1	2.2	19.6	19.7	2.9	0.0	4.4	2.9	0.0	0.0
Prop In Lane	1.00		0.44	1.00		0.02	1.00		1.00	0.50		0.50
Lane Grp Cap(c), veh/h	305	1100	1073	551	1203	1262	194	0	122	142	0	0
V/C Ratio(X)	0.05	0.38	0.38	0.29	0.60	0.60	0.32	0.00	0.68	0.03	0.00	0.00
Avail Cap(c_a), veh/h	354	1100	1073	647	1203	1262	349	0	296	282	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)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.5	4.7	4.7	3.2	4.9	4.9	44.9	0.0	45.7	43.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.9	0.9	0.3	2.2	2.1	0.9	0.0	6.4	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.4	2.3	0.5	4.5	4.7	1.5	0.0	2.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.6	5.5	5.6	3.5	7.1	7.0	45.9	0.0	52.1	43.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h		833			1635			145				4
Approach Delay, s/veh		5.5			6.7			49.4				43.8
Approach LOS		A			A			D				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	79.0		11.6	6.3	82.1		11.6				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	59.0		16.0	4.0	65.0		16.0				
Max Q Clear Time (g_c+I1), s	4.2	12.1		4.9	2.2	21.7		6.4				
Green Ext Time (p_c), s	0.2	5.6		0.0	0.0	13.3		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				8.8								
HCM 6th LOS				A								

2024 Build Traffic Volumes with Improvements
 12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A

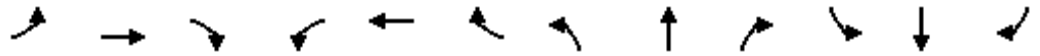
Weekday Peak PM Hour
 04/28/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕			↕	↗		↕	↗
Traffic Volume (vph)	5	1370	76	50	552	2	158	0	192	19	0	26
Future Volume (vph)	5	1370	76	50	552	2	158	0	192	19	0	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	15	12
Grade (%)		-1%			4%			-8%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992							0.850		0.923	
Flt Protected	0.950			0.950				0.950			0.979	
Satd. Flow (prot)	1719	3349	0	1619	2923	0	0	1840	1647	0	1852	0
Flt Permitted	0.424			0.090				0.812			0.835	
Satd. Flow (perm)	767	3349	0	153	2923	0	0	1573	1647	0	1579	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			1				103			76
Link Speed (mph)		45			45			30				30
Link Distance (ft)		616			981			563				177
Travel Time (s)		9.3			14.9			12.8				4.0
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 (%)	2%	4%	2%	2%	13%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	5	1489	83	54	600	2	172	0	209	21	0	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1572	0	54	602	0	0	172	209	0	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.12	1.12	1.12	0.95	0.95	0.95	1.00	0.88	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1		2
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left		Thru
Leading Detector (ft)	20	100		20	100		20	100	20	20		100
Trailing Detector (ft)	0	0		0	0		0	0	0	0		0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0		0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20		6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0

2024 Build Traffic Volumes with Improvements
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Weekday Peak PM Hour
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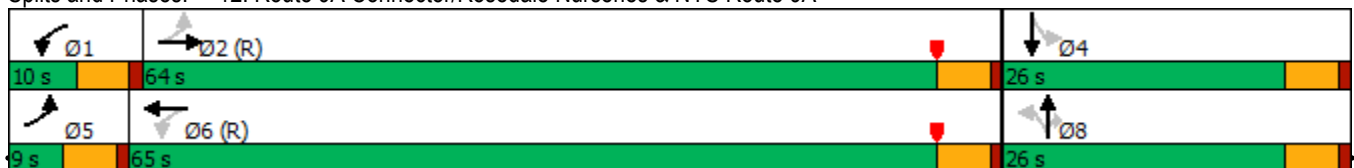


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8				4
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4		4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Minimum Split (s)	9.0	21.0		9.0	21.0		21.0	21.0	21.0	21.0		21.0
Total Split (s)	9.0	64.0		10.0	65.0		26.0	26.0	26.0	26.0		26.0
Total Split (%)	9.0%	64.0%		10.0%	65.0%		26.0%	26.0%	26.0%	26.0%		26.0%
Maximum Green (s)	4.0	59.0		5.0	60.0		21.0	21.0	21.0	21.0		21.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0			0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0			5.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	C-Max		None	C-Max		None	None	None	None		None
Walk Time (s)											5.0	5.0
Flash Dont Walk (s)											11.0	11.0
Pedestrian Calls (#/hr)											0	0
v/c Ratio	0.01	0.72		0.28	0.29			0.66	0.58			0.15
Control Delay	4.8	15.7		8.2	6.5			51.6	27.3			4.4
Queue Delay	0.0	0.6		0.0	0.0			0.0	0.0			0.0
Total Delay	4.8	16.3		8.2	6.5			51.6	27.3			4.4
Queue Length 50th (ft)	1	352		8	59			111	69			0
Queue Length 95th (ft)	4	476		21	127			m157	m125			16
Internal Link Dist (ft)		536			901			483				97
Turn Bay Length (ft)									150			
Base Capacity (vph)	574	2169		194	2089			330	427			391
Starvation Cap Reductn	0	259		0	0			0	0			0
Spillback Cap Reductn	0	0		0	0			0	0			0
Storage Cap Reductn	0	0		0	0			0	0			0
Reduced v/c Ratio	0.01	0.82		0.28	0.29			0.52	0.49			0.13

Intersection Summary

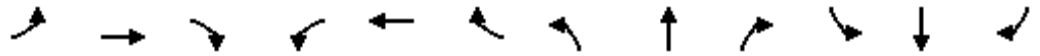
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A



2024 Build Traffic Volumes with Improvements
 12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A

Weekday Peak PM Hour
 04/28/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘			↖	↖		↖↗	
Traffic Volume (veh/h)	5	1370	76	50	552	2	158	0	192	19	0	26
Future Volume (veh/h)	5	1370	76	50	552	2	158	0	192	19	0	26
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	1909	1879	1879	1776	1613	1613	2185	2185	2185	1870	1945	1870
Adj Flow Rate, veh/h	5	1489	83	54	600	2	172	0	209	21	0	28
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, %	2	4	4	2	13	13	2	2	2	2	2	2
Cap, veh/h	558	2157	120	230	2046	7	277	0	355	67	20	47
Arrive On Green	0.01	0.63	0.63	0.03	0.65	0.65	0.19	0.00	0.19	0.19	0.00	0.19
Sat Flow, veh/h	1818	3439	191	1692	3133	10	1070	0	1851	81	105	247
Grp Volume(v), veh/h	5	770	802	54	293	309	172	0	209	49	0	0
Grp Sat Flow(s),veh/h/ln	1818	1785	1845	1692	1532	1611	1070	0	1851	432	0	0
Q Serve(g_s), s	0.1	28.3	28.7	1.1	8.2	8.2	0.0	0.0	10.3	0.5	0.0	0.0
Cycle Q Clear(g_c), s	0.1	28.3	28.7	1.1	8.2	8.2	16.7	0.0	10.3	17.2	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.01	1.00		1.00	0.43		0.57
Lane Grp Cap(c), veh/h	558	1120	1157	230	1001	1052	277	0	355	134	0	0
V/C Ratio(X)	0.01	0.69	0.69	0.23	0.29	0.29	0.62	0.00	0.59	0.36	0.00	0.00
Avail Cap(c_a), veh/h	621	1120	1157	262	1001	1052	307	0	389	160	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)	0.70	0.70	0.70	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.9	12.2	12.3	11.0	7.4	7.4	39.4	0.0	36.8	34.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.4	2.4	0.5	0.7	0.7	3.2	0.0	2.0	1.7	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	0.0	10.0	10.4	0.4	2.4	2.5	4.3	0.0	4.8	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.9	14.7	14.7	11.5	8.2	8.2	42.6	0.0	38.8	36.3	0.0	0.0
LnGrp LOS	A	B	B	B	A	A	D	A	D	D	A	A
Approach Vol, veh/h		1577			656			381				49
Approach Delay, s/veh		14.7			8.4			40.5				36.3
Approach LOS		B			A			D				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	67.7		24.2	5.5	70.3		24.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	5.0	59.0		21.0	4.0	60.0		21.0				
Max Q Clear Time (g_c+I1), s	3.1	30.7		19.2	2.1	10.2		18.7				
Green Ext Time (p_c), s	0.0	12.7		0.0	0.0	3.6		0.4				
Intersection Summary												
HCM 6th Ctrl Delay				17.2								
HCM 6th LOS				B								

2039 Build Traffic Volumes - w/ Roundabout
8: WMC Lot 10/Prop. Drwy #2 & Hospital Road

Weekday Peak AM Hour
12/04/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	293	25	65	687	431	7	0	23	183	0	101
Future Volume (vph)	115	293	25	65	687	431	7	0	23	183	0	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	15	12	12	12	12
Grade (%)		2%			-2%			0%				0%
Storage Length (ft)	100		100	100		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.942			0.898				0.952
Flt Protected	0.950			0.950				0.988				0.969
Satd. Flow (prot)	1752	3279	1567	1787	1762	0	0	1818	0	0	1718	0
Flt Permitted	0.061			0.559				0.930				0.785
Satd. Flow (perm)	112	3279	1567	1052	1762	0	0	1711	0	0	1392	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			27		56			76				76
Link Speed (mph)		25			25			30				30
Link Distance (ft)		682			434			197				302
Travel Time (s)		18.6			11.8			4.5				6.9
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 (%)	2%	9%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	125	318	27	71	747	468	8	0	25	199	0	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	125	318	27	71	1215	0	0	33	0	0	309	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	1.00	0.88	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0

2039 Build Traffic Volumes - w/ Roundabout
 8: WMC Lot 10/Prop. Drwy #2 & Hospital Road

Weekday Peak AM Hour
 12/04/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8				4
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	6	6		8	8		4		4
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0		4.0
Minimum Split (s)	9.0	21.0	21.0	21.0	21.0		20.5	20.5		21.0		21.0
Total Split (s)	10.0	75.0	75.0	65.0	65.0		25.0	25.0		25.0		25.0
Total Split (%)	10.0%	75.0%	75.0%	65.0%	65.0%		25.0%	25.0%		25.0%		25.0%
Maximum Green (s)	5.0	70.0	70.0	60.0	60.0		20.5	20.5		20.0		20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0		4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.5	0.5		1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0				0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0			4.5				5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0		3.0
Recall Mode	None	C-Max	C-Max	C-Max	C-Max		None	None		None		None
Walk Time (s)		5.0	5.0	5.0	5.0		5.0	5.0		5.0		5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0		11.0	11.0		11.0		11.0
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0		0
v/c Ratio	0.75	0.14	0.02	0.11	1.12			0.08				0.94
Control Delay	42.0	10.1	5.8	5.7	81.2			0.6				67.0
Queue Delay	0.0	0.0	0.0	0.0	0.8			0.0				0.0
Total Delay	42.0	10.1	5.8	5.7	82.1			0.6				67.0
Queue Length 50th (ft)	41	58	3	16	~778			0				150
Queue Length 95th (ft)	#130	77	m16	m9	m#1125			3				#313
Internal Link Dist (ft)		602			354			117				222
Turn Bay Length (ft)	100		100	100								
Base Capacity (vph)	167	2318	1116	634	1084			411				339
Starvation Cap Reductn	0	0	0	0	169			0				0
Spillback Cap Reductn	0	0	0	0	0			0				0
Storage Cap Reductn	0	0	0	0	0			0				0
Reduced v/c Ratio	0.75	0.14	0.02	0.11	1.33			0.08				0.91

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: WMC Lot 10/Prop. Drwy #2 & Hospital Road



2039 Build Traffic Volumes - w/ Roundabout
8: WMC Lot 10/Prop. Drwy #2 & Hospital Road

Weekday Peak AM Hour
12/04/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘		↕			↕	
Traffic Volume (veh/h)	115	293	25	65	687	431	7	0	23	183	0	101
Future Volume (veh/h)	115	293	25	65	687	431	7	0	23	183	0	101
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	1847	1743	1847	1949	1934	1934	1870	1945	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	318	27	71	747	468	8	0	0	199	0	110
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, %	2	9	2	2	3	3	2	2	2	2	2	2
Cap, veh/h	156	2318	1096	725	673	422	323	0		250	0	105
Arrive On Green	0.04	0.70	0.70	1.00	1.00	1.00	0.20	0.00	0.00	0.20	0.00	0.20
Sat Flow, veh/h	1759	3312	1565	1079	1112	697	1257	0	0	954	0	527
Grp Volume(v), veh/h	125	318	27	71	0	1215	8	0	0	309	0	0
Grp Sat Flow(s),veh/h/ln	1759	1656	1565	1079	0	1808	1257	0	0	1482	0	0
Q Serve(g_s), s	2.6	3.2	0.5	0.0	0.0	60.3	0.0	0.0	0.0	19.5	0.0	0.0
Cycle Q Clear(g_c), s	2.6	3.2	0.5	0.1	0.0	60.3	0.5	0.0	0.0	20.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.39	1.00		0.00	0.64		0.36
Lane Grp Cap(c), veh/h	156	2318	1096	725	0	1095	323	0		356	0	0
V/C Ratio(X)	0.80	0.14	0.02	0.10	0.00	1.11	0.02	0.00		0.87	0.00	0.00
Avail Cap(c_a), veh/h	165	2318	1096	725	0	1095	330	0		356	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.33	0.00	0.33	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.7	5.0	4.6	0.0	0.0	0.0	32.2	0.0	0.0	40.4	0.0	0.0
Incr Delay (d2), s/veh	21.7	0.1	0.0	0.1	0.0	54.4	0.0	0.0	0.0	20.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	1.0	0.2	0.0	0.0	16.6	0.2	0.0	0.0	9.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.4	5.1	4.6	0.1	0.0	54.4	32.2	0.0	0.0	60.3	0.0	0.0
LnGrp LOS	D	A	A	A	A	F	C	A		E	A	A
Approach Vol, veh/h		470			1286			8	A		309	
Approach Delay, s/veh		16.3			51.4			32.2			60.3	
Approach LOS		B			D			C			E	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		75.0		25.0	9.5	65.5		25.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		* 5				
Max Green Setting (Gmax), s		70.0		20.0	5.0	60.0		* 21				
Max Q Clear Time (g_c+I1), s		5.2		22.0	4.6	62.3		2.5				
Green Ext Time (p_c), s		2.6		0.0	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	44.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

2039 Build Traffic Volumes - w/ Roundabout
 9: Hospital Road & Route 9A Connector

Weekday Peak AM Hour
 12/04/2020



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	205	159	138	229	399	396
Future Volume (vph)	205	159	138	229	399	396
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			3%	-3%	
Storage Length (ft)	0	100	100			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Fr _t		0.850			0.933	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1743	3262	1755	0
Fl _t Permitted	0.950		0.132			
Satd. Flow (perm)	1770	1583	242	3262	1755	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		173			61	
Link Speed (mph)	30			25	25	
Link Distance (ft)	964			491	682	
Travel Time (s)	21.9			13.4	18.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	9%	3%	2%
Adj. Flow (vph)	223	173	150	249	434	430
Shared Lane Traffic (%)						
Lane Group Flow (vph)	223	173	150	249	864	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.02	1.02	0.98	0.98
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (ft)	20	20	20	100	100	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	20	20	6	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	

2039 Build Traffic Volumes - w/ Roundabout
 9: Hospital Road & Route 9A Connector

Weekday Peak AM Hour
 12/04/2020



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	
Total Split (s)	32.0	32.0	21.0	68.0	47.0	
Total Split (%)	32.0%	32.0%	21.0%	68.0%	47.0%	
Maximum Green (s)	27.0	27.0	16.0	63.0	42.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	C-Max	C-Max	
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
v/c Ratio	0.71	0.41	0.48	0.11	0.83	
Control Delay	50.5	8.1	10.3	4.9	23.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.5	8.1	10.3	4.9	23.5	
Queue Length 50th (ft)	135	0	25	21	374	
Queue Length 95th (ft)	199	52	56	42	m343	
Internal Link Dist (ft)	884			411	602	
Turn Bay Length (ft)		100	100			
Base Capacity (vph)	477	553	414	2354	1042	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.47	0.31	0.36	0.11	0.83	

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Hospital Road & Route 9A Connector



2039 Build Traffic Volumes - w/ Roundabout
 9: Hospital Road & Route 9A Connector

Weekday Peak AM Hour
 12/04/2020



Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	205	159	138	229	399	396
Future Volume (veh/h)	205	159	138	229	399	396
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	1870	1870	1817	1714	1973	1973
Adj Flow Rate, veh/h	223	173	150	249	434	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	9	3	3
Cap, veh/h	270	241	667	2436	1280	
Arrive On Green	0.15	0.15	0.05	0.75	0.65	0.00
Sat Flow, veh/h	1781	1585	1731	3342	1973	0
Grp Volume(v), veh/h	223	173	150	249	434	0
Grp Sat Flow(s),veh/h/ln	1781	1585	1731	1628	1973	0
Q Serve(g_s), s	12.1	10.4	2.7	2.1	9.9	0.0
Cycle Q Clear(g_c), s	12.1	10.4	2.7	2.1	9.9	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	270	241	667	2436	1280	
V/C Ratio(X)	0.82	0.72	0.22	0.10	0.34	
Avail Cap(c_a), veh/h	481	428	859	2436	1280	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.09	0.00
Uniform Delay (d), s/veh	41.1	40.4	5.2	3.4	7.9	0.0
Incr Delay (d2), s/veh	6.3	4.0	0.2	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	9.1	0.9	0.6	4.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	47.4	44.4	5.4	3.5	8.0	0.0
LnGrp LOS	D	D	A	A	A	
Approach Vol, veh/h	396			399	434	A
Approach Delay, s/veh	46.1			4.2	8.0	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		79.8		20.2	10.0	69.9
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		63.0		27.0	16.0	42.0
Max Q Clear Time (g_c+I1), s		4.1		14.1	4.7	11.9
Green Ext Time (p_c), s		1.9		1.0	0.3	3.1
Intersection Summary						
HCM 6th Ctrl Delay			19.0			
HCM 6th LOS			B			
Notes						
Unsignalized Delay for [SWR] is excluded from calculations of the approach delay and intersection delay.						

2039 Build Traffic Volumes
8: WMC Lot 10/Prop. Drwy #2 & Hospital Road

Weekday Peak PM Hour
12/04/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	606	9	31	238	269	34	0	57	483	0	112
Future Volume (vph)	160	606	9	31	238	269	34	0	57	483	0	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	10	12	12	12	12	12	12
Grade (%)		2%			-2%			0%				0%
Storage Length (ft)	100		100	100		0	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.921			0.915				0.974
Flt Protected	0.950			0.950				0.982				0.961
Satd. Flow (prot)	1635	3470	1567	1787	1701	0	0	1674	0	0	1744	0
Flt Permitted	0.167			0.401				0.785				0.715
Satd. Flow (perm)	287	3470	1567	754	1701	0	0	1338	0	0	1297	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			22		65			76				76
Link Speed (mph)		25			25			30				30
Link Distance (ft)		695			431			260				302
Travel Time (s)		19.0			11.8			5.9				6.9
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	0.91
Heavy Vehicles (%)	2%	3%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	174	659	10	34	259	292	37	0	62	525	0	123
Shared Lane Traffic (%)												
Lane Group Flow (vph)	174	659	10	34	551	0	0	99	0	0	648	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.11	1.01	1.01	0.99	0.99	1.08	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0

2039 Build Traffic Volumes
8: WMC Lot 10/Prop. Drwy #2 & Hospital Road

Weekday Peak PM Hour
12/04/2020

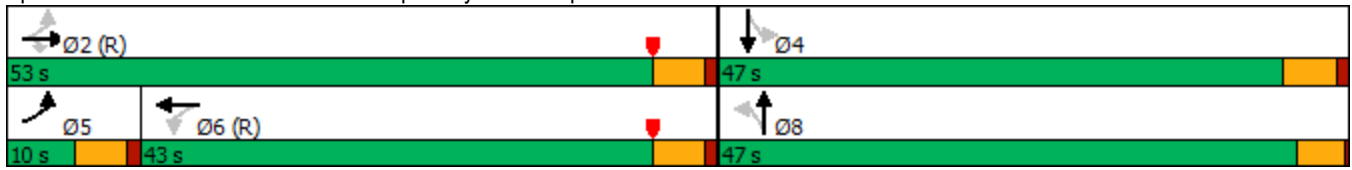


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8				4
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	6	6		8	8		4		4
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0		4.0
Minimum Split (s)	9.0	21.0	21.0	21.0	21.0		20.0	20.0		21.0		21.0
Total Split (s)	10.0	53.0	53.0	43.0	43.0		47.0	47.0		47.0		47.0
Total Split (%)	10.0%	53.0%	53.0%	43.0%	43.0%		47.0%	47.0%		47.0%		47.0%
Maximum Green (s)	5.0	48.0	48.0	38.0	38.0		43.0	43.0		42.0		42.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.5	3.5		4.0		4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.5	0.5		1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0				0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0			4.0				5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0		3.0
Recall Mode	None	C-Max	C-Max	C-Max	C-Max		None	None		None		None
Walk Time (s)		5.0	5.0	5.0	5.0		5.0	5.0		5.0		5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0		11.0	11.0		11.0		11.0
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0		0
v/c Ratio	0.85	0.40	0.01	0.12	0.80			0.16				1.10
Control Delay	48.4	9.3	2.2	21.5	31.9			6.7				94.7
Queue Delay	0.0	0.0	0.0	0.0	4.2			0.0				0.9
Total Delay	48.4	9.3	2.2	21.5	36.1			6.8				95.6
Queue Length 50th (ft)	26	44	0	8	108			8				~443
Queue Length 95th (ft)	m#131	135	m0	m31	#469			39				#662
Internal Link Dist (ft)		615			351			180				222
Turn Bay Length (ft)	100		100	100								
Base Capacity (vph)	205	1665	763	286	686			618				588
Starvation Cap Reductn	0	0	0	0	78			0				0
Spillback Cap Reductn	0	2	0	0	0			66				64
Storage Cap Reductn	0	0	0	0	0			0				0
Reduced v/c Ratio	0.85	0.40	0.01	0.12	0.91			0.18				1.24

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: WMC Lot 10/Prop. Drwy #2 & Hospital Road



2039 Build Traffic Volumes
8: WMC Lot 10/Prop. Drwy #2 & Hospital Road

Weekday Peak PM Hour
12/04/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	606	9	31	238	269	34	0	57	483	0	112
Future Volume (veh/h)	160	606	9	31	238	269	34	0	57	483	0	112
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	1847	1832	1847	1949	1889	1889	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	659	10	34	259	292	37	0	0	525	0	123
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	0.91
Percent Heavy Veh, %	2	3	2	2	6	6	2	2	2	2	2	2
Cap, veh/h	217	1671	751	359	308	347	708	0		562	0	116
Arrive On Green	0.05	0.48	0.48	0.13	0.13	0.13	0.42	0.00	0.00	0.42	0.00	0.42
Sat Flow, veh/h	1759	3481	1565	800	810	914	1515	0	0	1182	0	277
Grp Volume(v), veh/h	174	659	10	34	0	551	37	0	0	648	0	0
Grp Sat Flow(s),veh/h/ln	1759	1740	1565	800	0	1724	1515	0	0	1459	0	0
Q Serve(g_s), s	5.0	12.1	0.3	3.8	0.0	31.2	0.0	0.0	0.0	40.5	0.0	0.0
Cycle Q Clear(g_c), s	5.0	12.1	0.3	5.9	0.0	31.2	1.5	0.0	0.0	42.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.53	1.00		0.00	0.81		0.19
Lane Grp Cap(c), veh/h	217	1671	751	359	0	655	708	0		678	0	0
V/C Ratio(X)	0.80	0.39	0.01	0.09	0.00	0.84	0.05	0.00		0.96	0.00	0.00
Avail Cap(c_a), veh/h	217	1671	751	359	0	655	721	0		678	0	0
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	0.96	0.00	0.96	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.4	16.7	13.6	30.7	0.0	40.8	17.2	0.0	0.0	30.0	0.0	0.0
Incr Delay (d2), s/veh	15.7	0.6	0.0	0.5	0.0	12.0	0.0	0.0	0.0	24.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	4.9	0.1	0.8	0.0	16.6	0.5	0.0	0.0	19.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	17.2	13.6	31.2	0.0	52.7	17.3	0.0	0.0	54.2	0.0	0.0
LnGrp LOS	D	B	B	C	A	D	B	A		D	A	A
Approach Vol, veh/h		843			585			37	A		648	
Approach Delay, s/veh		22.5			51.5			17.3			54.2	
Approach LOS		C			D			B			D	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		53.0		47.0	10.0	43.0		47.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		* 5				
Max Green Setting (Gmax), s		48.0		42.0	5.0	38.0		* 43				
Max Q Clear Time (g_c+I1), s		14.1		44.0	7.0	33.2		3.5				
Green Ext Time (p_c), s		5.5		0.0	0.0	1.8		0.2				

Intersection Summary

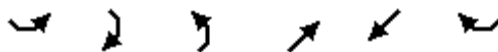
HCM 6th Ctrl Delay	40.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

2039 Build Traffic Volumes
 9: Hospital Road & Route 9A Connector

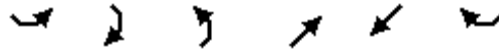
Weekday Peak PM Hour
 12/04/2020



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	470	172	136	305	216	168
Future Volume (vph)	470	172	136	305	216	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			3%	-3%	
Storage Length (ft)	0	0	100			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Fr _t		0.850			0.941	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1743	3452	1741	0
Fl _t Permitted	0.950		0.310			
Satd. Flow (perm)	1770	1583	569	3452	1741	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		187			37	
Link Speed (mph)	30			25	25	
Link Distance (ft)	964			491	695	
Travel Time (s)	21.9			13.4	19.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	3%	6%	2%
Adj. Flow (vph)	511	187	148	332	235	183
Shared Lane Traffic (%)						
Lane Group Flow (vph)	511	187	148	332	418	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.02	1.02	0.98	0.98
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (ft)	20	20	20	100	100	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	20	20	6	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	

2039 Build Traffic Volumes
 9: Hospital Road & Route 9A Connector

Weekday Peak PM Hour
 12/04/2020

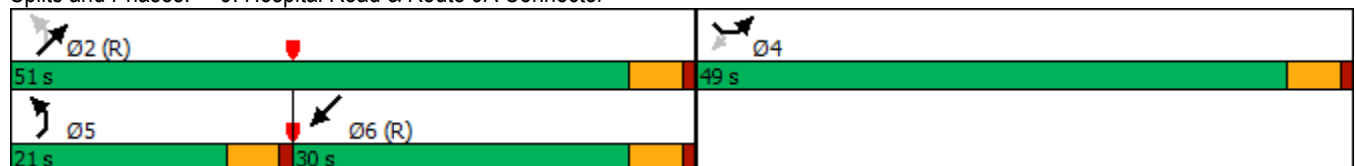


Lane Group	SEL	SER	NEL	NET	SWT	SWR
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	
Total Split (s)	49.0	49.0	21.0	51.0	30.0	
Total Split (%)	49.0%	49.0%	21.0%	51.0%	30.0%	
Maximum Green (s)	44.0	44.0	16.0	46.0	25.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	C-Max	C-Max	
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
v/c Ratio	0.83	0.28	0.34	0.17	0.58	
Control Delay	41.0	3.8	15.1	12.7	21.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	41.0	3.8	15.1	12.7	21.9	
Queue Length 50th (ft)	294	0	44	52	147	
Queue Length 95th (ft)	368	38	93	93	m296	
Internal Link Dist (ft)	884			411	615	
Turn Bay Length (ft)			100			
Base Capacity (vph)	778	801	501	1900	720	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.66	0.23	0.30	0.17	0.58	

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Hospital Road & Route 9A Connector



2039 Build Traffic Volumes
9: Hospital Road & Route 9A Connector

Weekday Peak PM Hour
12/04/2020



Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	470	172	136	305	216	168
Future Volume (veh/h)	470	172	136	305	216	168
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	1870	1870	1817	1803	1928	1928
Adj Flow Rate, veh/h	511	187	148	332	235	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	6	6
Cap, veh/h	563	501	624	1999	905	
Arrive On Green	0.32	0.32	0.06	0.58	0.47	0.00
Sat Flow, veh/h	1781	1585	1731	3515	1928	0
Grp Volume(v), veh/h	511	187	148	332	235	0
Grp Sat Flow(s),veh/h/ln	1781	1585	1731	1712	1928	0
Q Serve(g_s), s	27.5	9.1	4.2	4.5	7.4	0.0
Cycle Q Clear(g_c), s	27.5	9.1	4.2	4.5	7.4	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	563	501	624	1999	905	
V/C Ratio(X)	0.91	0.37	0.24	0.17	0.26	
Avail Cap(c_a), veh/h	784	697	789	1999	905	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.49	0.00
Uniform Delay (d), s/veh	32.8	26.5	11.4	9.6	16.0	0.0
Incr Delay (d2), s/veh	11.2	0.5	0.2	0.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.3	8.8	1.6	1.7	3.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.9	27.0	11.6	9.8	16.4	0.0
LnGrp LOS	D	C	B	A	B	
Approach Vol, veh/h	698			480	235	A
Approach Delay, s/veh	39.4			10.3	16.4	
Approach LOS	D			B	B	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		63.4		36.6	11.4	51.9
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		46.0		44.0	16.0	25.0
Max Q Clear Time (g_c+I1), s		6.5		29.5	6.2	9.4
Green Ext Time (p_c), s		2.5		2.1	0.3	1.2
Intersection Summary						
HCM 6th Ctrl Delay			25.7			
HCM 6th LOS			C			
Notes						
Unsignalized Delay for [SWR] is excluded from calculations of the approach delay and intersection delay.						

2039 Build Traffic Volumes - w/ Roundabout
 12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A

Weekday Peak AM Hour
 04/28/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	602	349	237	1380	13	119	0	107	2	0	2
Future Volume (vph)	13	602	349	237	1380	13	119	0	107	2	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	15	12
Grade (%)		-1%			4%			-8%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.945			0.999				0.850		0.932	
Flt Protected	0.950			0.950				0.950			0.976	
Satd. Flow (prot)	1719	2861	0	1651	2974	0	0	1877	1680	0	1864	0
Flt Permitted	0.144			0.208				0.755			0.885	
Satd. Flow (perm)	261	2861	0	361	2974	0	0	1492	1680	0	1690	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		180			2				131		131	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		637			968			574			256	
Travel Time (s)		9.7			14.7			13.0			5.8	
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 (%)	2%	25%	0%	0%	11%	2%	0%	2%	0%	2%	2%	2%
Adj. Flow (vph)	14	654	379	258	1500	14	129	0	116	2	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	1033	0	258	1514	0	0	129	116	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.12	1.12	1.12	0.95	0.95	0.95	1.00	0.88	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

2039 Build Traffic Volumes - w/ Roundabout
 12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A

Weekday Peak AM Hour
 04/28/2021

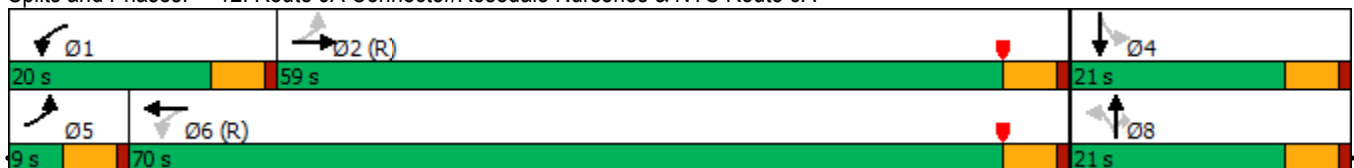


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8				4
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4		4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Minimum Split (s)	9.0	21.0		9.0	21.0		21.0	21.0	21.0	21.0		21.0
Total Split (s)	9.0	59.0		20.0	70.0		21.0	21.0	21.0	21.0		21.0
Total Split (%)	9.0%	59.0%		20.0%	70.0%		21.0%	21.0%	21.0%	21.0%		21.0%
Maximum Green (s)	4.0	54.0		15.0	65.0		16.0	16.0	16.0	16.0		16.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0			0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0			5.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	C-Max		None	C-Max		None	None	None	None		None
Walk Time (s)											5.0	5.0
Flash Dont Walk (s)											11.0	11.0
Pedestrian Calls (#/hr)											0	0
v/c Ratio	0.06	0.57		0.63	0.69		0.66	0.35				0.01
Control Delay	4.8	11.4		11.3	10.9		61.2	12.1				0.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0				0.0
Total Delay	4.8	11.4		11.3	10.9		61.2	12.1				0.0
Queue Length 50th (ft)	2	154		38	202		85	7				0
Queue Length 95th (ft)	7	256		75	425		m126	m39				0
Internal Link Dist (ft)		557			888			494				176
Turn Bay Length (ft)									150			
Base Capacity (vph)	245	1828		470	2179		238	378				380
Starvation Cap Reductn	0	0		0	0		0	0				0
Spillback Cap Reductn	0	0		0	0		0	0				0
Storage Cap Reductn	0	0		0	0		0	0				0
Reduced v/c Ratio	0.06	0.57		0.55	0.69		0.54	0.31				0.01

Intersection Summary

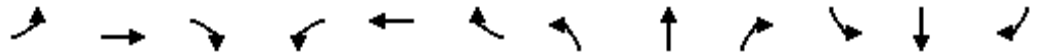
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A



2039 Build Traffic Volumes - w/ Roundabout
 12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A

Weekday Peak AM Hour
 04/28/2021



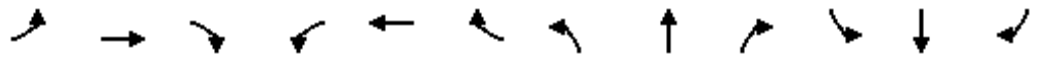
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↕		↖	↕			↕	↗		↕	
Traffic Volume (veh/h)	13	602	349	237	1380	13	119	0	107	2	0	2
Future Volume (veh/h)	13	602	349	237	1380	13	119	0	107	2	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1909	1564	1564	1806	1643	1643	2185	2185	2215	1870	1945	1870
Adj Flow Rate, veh/h	14	654	379	258	1500	14	129	0	116	2	0	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
Percent Heavy Veh, %	2	25	25	0	11	11	2	2	0	2	2	2
Cap, veh/h	257	1195	692	437	2267	21	237	0	228	71	18	35
Arrive On Green	0.01	0.66	0.66	0.07	0.72	0.72	0.12	0.00	0.12	0.12	0.00	0.12
Sat Flow, veh/h	1818	1812	1049	1720	3168	30	1358	0	1877	144	145	288
Grp Volume(v), veh/h	14	536	497	258	738	776	129	0	116	4	0	0
Grp Sat Flow(s),veh/h/ln	1818	1486	1375	1720	1561	1637	1358	0	1877	577	0	0
Q Serve(g_s), s	0.3	19.2	19.3	4.4	25.6	25.6	0.0	0.0	5.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.3	19.2	19.3	4.4	25.6	25.6	9.8	0.0	5.8	9.8	0.0	0.0
Prop In Lane	1.00		0.76	1.00		0.02	1.00		1.00	0.50		0.50
Lane Grp Cap(c), veh/h	257	980	907	437	1117	1172	237	0	228	124	0	0
V/C Ratio(X)	0.05	0.55	0.55	0.59	0.66	0.66	0.54	0.00	0.51	0.03	0.00	0.00
Avail Cap(c_a), veh/h	307	980	907	576	1117	1172	301	0	300	181	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)	0.80	0.80	0.80	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.5	9.1	9.1	8.1	7.7	7.7	42.9	0.0	41.1	39.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.8	1.9	1.3	3.1	3.0	1.9	0.0	1.7	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	5.4	5.1	1.3	7.1	7.4	3.2	0.0	2.8	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.6	10.8	11.0	9.4	10.8	10.6	44.8	0.0	42.9	39.1	0.0	0.0
LnGrp LOS	A	B	B	A	B	B	D	A	D	D	A	A
Approach Vol, veh/h		1047			1772			245				4
Approach Delay, s/veh		10.9			10.5			43.9				39.1
Approach LOS		B			B			D				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	70.9		17.2	6.3	76.5		17.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	54.0		16.0	4.0	65.0		16.0				
Max Q Clear Time (g_c+I1), s	6.4	21.3		11.8	2.3	27.6		11.8				
Green Ext Time (p_c), s	0.5	7.6		0.0	0.0	13.4		0.4				
Intersection Summary												
HCM 6th Ctrl Delay				13.3								
HCM 6th LOS				B								

2039 Build Traffic Volumes

Weekday Peak PM Hour

12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A

04/28/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↕		↘	↕		↘	↕	↗		↕	↗
Traffic Volume (vph)	5	1377	137	80	554	2	372	0	299	19	0	26
Future Volume (vph)	5	1377	137	80	554	2	372	0	299	19	0	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	15	12
Grade (%)		-1%			4%			-8%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986							0.850		0.923	
Flt Protected	0.950			0.950			0.950				0.979	
Satd. Flow (prot)	1719	3331	0	1619	2923	0	1840	1937	1647	0	1852	0
Flt Permitted	0.404			0.074			0.725				0.913	
Satd. Flow (perm)	731	3331	0	126	2923	0	1405	1937	1647	0	1727	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15							98			76
Link Speed (mph)		45			45			30				30
Link Distance (ft)		631			968			571				189
Travel Time (s)		9.6			14.7			13.0				4.3
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 (%)	2%	4%	2%	2%	13%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	5	1497	149	87	602	2	404	0	325	21	0	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1646	0	87	604	0	404	0	325	0	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.12	1.12	1.12	0.95	0.95	0.95	1.00	0.88	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1		2
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left		Thru
Leading Detector (ft)	20	100		20	100		20	100	20	20		100
Trailing Detector (ft)	0	0		0	0		0	0	0	0		0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0		0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20		6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0

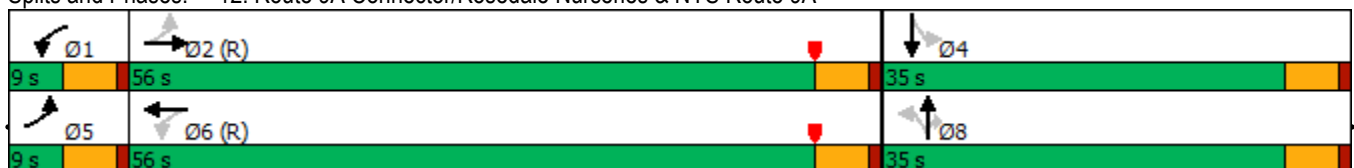


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm		Perm	Perm	NA	
Protected Phases	5	2		1	6			8				4
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4		4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Minimum Split (s)	9.0	21.0		9.0	21.0		21.0	21.0	21.0	21.0		21.0
Total Split (s)	9.0	56.0		9.0	56.0		35.0	35.0	35.0	35.0		35.0
Total Split (%)	9.0%	56.0%		9.0%	56.0%		35.0%	35.0%	35.0%	35.0%		35.0%
Maximum Green (s)	4.0	51.0		4.0	51.0		30.0	30.0	30.0	30.0		30.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0			5.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	C-Max		None	C-Max		None	None	None	None		None
Walk Time (s)											5.0	5.0
Flash Dont Walk (s)											11.0	11.0
Pedestrian Calls (#/hr)											0	0
v/c Ratio	0.01	0.93		0.64	0.35		0.97		0.58			0.09
Control Delay	8.2	33.1		33.9	12.2		75.6		29.2			3.0
Queue Delay	0.0	1.9		0.0	0.0		0.0		0.0			0.0
Total Delay	8.2	35.0		33.9	12.2		75.6		29.2			3.0
Queue Length 50th (ft)	1	506		22	94		257		119			0
Queue Length 95th (ft)	6	#693		#85	162		#435		215			14
Internal Link Dist (ft)		551			888			491				109
Turn Bay Length (ft)									150			
Base Capacity (vph)	452	1773		137	1707		421		562			571
Starvation Cap Reductn	0	53		0	0		0		0			0
Spillback Cap Reductn	0	0		0	0		0		0			0
Storage Cap Reductn	0	0		0	0		0		0			0
Reduced v/c Ratio	0.01	0.96		0.64	0.35		0.96		0.58			0.09

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A



2039 Build Traffic Volumes

Weekday Peak PM Hour

12: Route 9A Connector/Rosedale Nurseries & NYS Route 9A

04/28/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘		↗	↑	↗		↘↗	
Traffic Volume (veh/h)	5	1377	137	80	554	2	372	0	299	19	0	26
Future Volume (veh/h)	5	1377	137	80	554	2	372	0	299	19	0	26
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	1909	1879	1879	1776	1613	1613	2185	2185	2185	1870	1945	1870
Adj Flow Rate, veh/h	5	1497	149	87	602	2	404	0	325	21	0	28
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, %	2	4	4	2	13	13	2	2	2	2	2	2
Cap, veh/h	478	1784	176	182	1808	6	514	585	496	192	20	214
Arrive On Green	0.01	0.54	0.54	0.04	0.58	0.58	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	1818	3282	324	1692	3133	10	1614	2185	1851	523	75	798
Grp Volume(v), veh/h	5	809	837	87	294	310	404	0	325	49	0	0
Grp Sat Flow(s),veh/h/ln	1818	1785	1821	1692	1532	1611	1614	2185	1851	1397	0	0
Q Serve(g_s), s	0.1	37.8	38.9	2.2	10.1	10.1	21.5	0.0	15.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	37.8	38.9	2.2	10.1	10.1	23.6	0.0	15.6	2.1	0.0	0.0
Prop In Lane	1.00		0.18	1.00		0.01	1.00		1.00	0.43		0.57
Lane Grp Cap(c), veh/h	478	970	990	182	884	930	514	585	496	425	0	0
V/C Ratio(X)	0.01	0.83	0.85	0.48	0.33	0.33	0.79	0.00	0.66	0.12	0.00	0.00
Avail Cap(c_a), veh/h	541	970	990	184	884	930	566	655	555	469	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)	0.66	0.66	0.66	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.4	19.0	19.3	20.0	11.1	11.1	35.2	0.0	32.5	27.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.7	6.1	1.9	1.0	1.0	6.6	0.0	2.4	0.1	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	0.0	15.0	15.8	1.0	3.2	3.4	10.3	0.0	7.2	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.4	24.7	25.3	22.0	12.1	12.0	41.8	0.0	34.9	27.7	0.0	0.0
LnGrp LOS	B	C	C	C	B	B	D	A	C	C	A	A
Approach Vol, veh/h		1651			691			729				49
Approach Delay, s/veh		25.0			13.3			38.7				27.7
Approach LOS		C			B			D				C
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	59.4		31.8	5.5	62.7		31.8				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	4.0	51.0		30.0	4.0	51.0		30.0				
Max Q Clear Time (g_c+I1), s	4.2	40.9		4.1	2.1	12.1		25.6				
Green Ext Time (p_c), s	0.0	7.0		0.2	0.0	3.6		1.1				
Intersection Summary												
HCM 6th Ctrl Delay				25.7								
HCM 6th LOS				C								