













Volume

2: Access Dr. East & FREELAND ST.

CA-50 BALD HILL ESTATES  
MONROE, NEW YORK

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	24	8	4	739	6	174	40	531	505	96	552	7
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.95	0.92	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	26	9	4	778	7	183	43	559	532	101	581	8
Lane Group Flow (vph)	0	39	0	778	190	0	0	602	532	101	589	0
Intersection Summary												

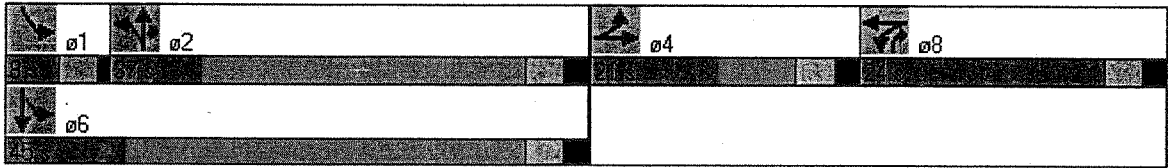
Lane Group	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations								
Volume (vph)	8	739	6	40	531	505	96	552
Turn Type		Split		Perm		pm+ov	pm+pt	
Protected Phases	4	8	8		2	8	1	6
Permitted Phases				2		2	6	
Detector Phases	4	8	8	2	2	8	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	8.0	21.0
Total Split (s)	21.0	24.0	24.0	37.0	37.0	24.0	8.0	45.0
Total Split (%)	23.3%	26.7%	26.7%	41.1%	41.1%	26.7%	8.9%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0
Lead/Lag				Lag	Lag		Lead	
Lead-Lag Optimize?				Yes	Yes		Yes	
Recall Mode	None	None	None	Max	Max	None	None	Max
Act Effct Green (s)	8.1	20.2	20.2		35.0	57.9	41.2	41.3
Actuated g/C Ratio	0.10	0.26	0.26		0.46	0.75	0.52	0.54
v/c Ratio	0.21	0.86	0.45		0.83	0.40	0.54	0.59
Control Delay	33.7	40.4	29.6		33.9	1.3	23.1	16.5
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	33.7	40.4	29.6		33.9	1.3	23.1	16.5
LOS	C	D	C		C	A	C	B
Approach Delay	33.7		38.3		18.6			17.4
Approach LOS	C		D		B			B

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 76.9  
 Natural Cycle: 90  
 Control Type: Semi Act-Uncoord  
 Maximum v/c Ratio: 0.86  
 Intersection Signal Delay: 25.2  
 Intersection Capacity Utilization 97.4%  
 Analysis Period (min) 15

Intersection LOS: C  
 ICU Level of Service F

















Splits and Phases: 2: Access Dr. East & FREELAND ST.



Lanes and Geometrics

3: Access Dr West & FREELAND ST.

0A-52 BALD HILL ESTATES  
MONROE, NEW YORK













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor			0.865		0.887						0.998	
Frt												
Frt Protected					0.992							
Satd. Flow (prot)	0	0	1611	0	1639	0	0	3539	0	0	3532	0
Frt Permitted					0.992							
Satd. Flow (perm)	0	0	1611	0	1639	0	0	3539	0	0	3532	0
Headway 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
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		329			277			931			476	
Travel Time (s)		7.5			6.3			21.2			10.8	

Intersection Summary

Area Type: Other

Volume  
3: Access Dr West & FREELAND ST.

CA-53 BALD HILL ESTATES  
MONROE, NEW YORK










												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	0	46	1	0	5	0	1065	2	7	1271	17
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.97	0.92	0.97	0.92	0.97	0.97	0.97	0.97	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	50	1	0	5	0	1098	2	7	1310	18
Lane Group Flow (vph)	0	0	50	0	6	0	0	1100	0	0	1335	0
Intersection Summary												

HCM Unsignalized Intersection Capacity Analysis  
 3: Access Dr West & FREELAND ST.

CA-54 BALD HILL ESTATES  
 MONROE, NEW YORK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	46	1	0	5	0	1065	2	7	1271	17
Peak Hour Factor	0.92	0.92	0.92	0.97	0.92	0.97	0.92	0.97	0.97	0.97	0.97	0.92
Hourly flow rate (vph)	0	0	50	1	0	5	0	1098	2	7	1310	18
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)											476	
pX, platoon unblocked												
vC, conflicting volume	1888	2434	664	1819	2442	550	1329			1100		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1888	2434	664	1819	2442	550	1329			1100		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	88	98	100	99	100			99		
cM capacity (veh/h)	42	31	403	42	31	479	515			630		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	50	6	732	368	662	674						
Volume Left	0	1	0	0	7	0						
Volume Right	50	5	0	2	0	18						
cSH	403	176	1700	1700	630	1700						
Volume to Capacity	0.12	0.04	0.43	0.22	0.01	0.40						
Queue Length 95th (ft)	11	3	0	0	1	0						
Control Delay (s)	15.2	26.3	0.0	0.0	0.3	0.0						
Lane LOS	C	D			A							
Approach Delay (s)	15.2	26.3	0.0		0.2							
Approach LOS	C	D										
Intersection Summary												
Average Delay			0.5									
Intersection Capacity Utilization			52.5%		ICU Level of Service					A		
Analysis Period (min)			15									

CA-55

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Turning Speed (mph)	15	9		9	15	
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor						
Frt	0.968		0.997			
FIt Protected	0.963					
Satd. Flow (prot)	1736	0	3529	0	0	3539
FIt Permitted	0.963					
Satd. Flow (perm)	1736	0	3529	0	0	3539
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	30		30			30
Link Distance (ft)	377		845			931
Travel Time (s)	8.6		19.2			21.2







Intersection Summary













Area Type: Other

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	15	5	1064	19	8	1310
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	16	5	1120	20	8	1379
Lane Group Flow (vph)	21	0	1140	0	0	1387
Intersection Summary						

HCM Unsignalized Intersection Capacity Analysis  
 5: OLD COUNTRY RD. & FREELAND ST.







CA 57 BALD HILL ESTATES  
 MONROE, NEW YORK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑			↑↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	15	5	1064	19	8	1310
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	16	5	1120	20	8	1379
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh						
Upstream signal (ft)			845			
pX, platoon unblocked						
vC, conflicting volume	1836	570			1140	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1836	570			1140	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	76	99			99	
cM capacity (veh/h)	66	465			609	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	21	747	393	468	919	
Volume Left	16	0	0	8	0	
Volume Right	5	0	20	0	0	
cSH	84	1700	1700	609	1700	
Volume to Capacity	0.25	0.44	0.23	0.01	0.54	
Queue Length 95th (ft)	22	0	0	1	0	
Control Delay (s)	61.3	0.0	0.0	0.4	0.0	
Lane LOS	F			A		
Approach Delay (s)	61.3	0.0		0.1		
Approach LOS	F					
<b>Intersection Summary</b>						
Average Delay			0.6			
Intersection Capacity Utilization			51.8%		ICU Level of Service	A
Analysis Period (min)			15			

Lane Group						
	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	1			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	5	5	5
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.118			
Satd. Flow (perm)	1770	1583	220	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		81				540
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	30			30	30	
Link Distance (ft)	316			394	845	
Travel Time (s)	7.2			9.0	19.2	
<b>Intersection Summary</b>						
Area Type:	Other					

Volume  
6: SPRING ST & FREELAND ST.

CA-59 BALD HILL ESTATES  
MONROE, NEW YORK

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Volume (vph)	422	77	181	661	683	652
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicies (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	444	81	191	696	719	686
Lane Group Flow (vph)	444	81	191	696	719	686
Intersection Summary						

Timings  
6: SPRING ST & FREELAND ST.

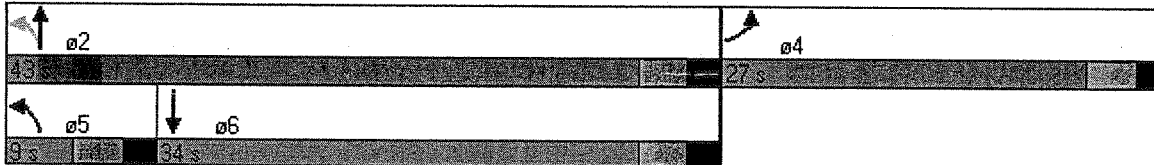
CA-60 BALD HILL ESTATES  
MONROE, NEW YORK

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	422	77	181	661	683	652
Turn Type		Free	pm+pt			Free
Protected Phases	4		5	2	6	
Permitted Phases		Free	2			Free
Detector Phases	4		5	2	6	
Minimum Initial (s)	4.0		4.0	4.0	4.0	
Minimum Split (s)	21.0		9.0	21.0	21.0	
Total Split (s)	27.0	0.0	9.0	43.0	34.0	0.0
Total Split (%)	38.6%	0.0%	12.9%	61.4%	48.6%	0.0%
Yellow Time (s)	3.0		3.0	3.0	3.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	Max	Max	
Act Effct Green (s)	20.7	67.8	39.1	39.1	30.0	67.8
Actuated g/C Ratio	0.31	1.00	0.58	0.58	0.44	1.00
v/c Ratio	0.82	0.05	0.79	0.65	0.87	0.43
Control Delay	36.0	0.1	36.3	13.9	32.1	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.0	0.1	36.3	13.9	32.1	0.9
LOS	D	A	D	B	C	A
Approach Delay	30.4			18.7	16.8	
Approach LOS	C			B	B	

Intersection Summary

Cycle Length: 70  
 Actuated Cycle Length: 67.8  
 Natural Cycle: 75  
 Control Type: Semi Act-Uncoord  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay: 20.0  
 Intersection Capacity Utilization 79.4%  
 Analysis Period (min) 15  
 Intersection LOS: B  
 ICU Level of Service D

Splits and Phases: 6: SPRING ST & FREELAND ST.



Lanes and Geometrics

2: Access Dr. East & FREELAND ST.

CA-61 BALD HILL ESTATES  
MONROE, NEW YORK

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕	↕	↕	↕	
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	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	2		0	0		1	1		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	5	5	50	5	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Fr <sub>t</sub>		0.983			0.859				0.850		0.997	
Fl <sub>t</sub> Protected		0.968		0.950				0.995		0.950		
Satd. Flow (prot)	0	1772	0	3433	1600	0	0	1853	1583	1770	1857	0
Fl <sub>t</sub> Permitted		0.968		0.950				0.904		0.098		
Satd. Flow (perm)	0	1772	0	3433	1600	0	0	1684	1583	183	1857	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		3							806		2	
Headway 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
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		398			536			476			1205	
Travel Time (s)		9.0			12.2			10.8			27.4	

Intersection Summary













Area Type: Other

Volume

2: Access Dr. East & FREELAND ST.

CA-62

BALD HILL ESTATES  
MONROE, NEW YORK

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	15	5	3	855	10	164	59	568	850	145	468	10
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.95	0.92	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	16	5	3	900	11	173	64	598	895	153	493	11
Lane Group Flow (vph)	0	24	0	900	184	0	0	662	895	153	504	0
Intersection Summary												

Timings  
2: Access Dr. East & FREELAND ST.

CA-63

BALD HILL ESTATES  
MONROE, NEW YORK

	→	↖	←	↙	↑	↗	↘	↓
Lane Group	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↕	↖↗	↖		↕	↗	↘	↖
Volume (vph)	5	855	10	59	568	850	145	468
Turn Type		Split		Perm		pm+ov	pm+pt	
Protected Phases	4	8	8		2	8	1	6
Permitted Phases				2		2	6	
Detector Phases	4	8	8	2	2	8	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	8.0	21.0
Total Split (s)	21.0	28.0	28.0	41.0	41.0	28.0	10.0	51.0
Total Split (%)	21.0%	28.0%	28.0%	41.0%	41.0%	28.0%	10.0%	51.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0
Lead/Lag				Lag	Lag		Lead	
Lead-Lag Optimize?				Yes	Yes		Yes	
Recall Mode	None	None	None	Max	Max	None	None	Max
Act Effct Green (s)	7.7	24.1	24.1		37.2	63.9	47.3	47.3
Actuated g/C Ratio	0.08	0.29	0.29		0.44	0.76	0.56	0.56
v/c Ratio	0.16	0.91	0.40		0.89	0.64	0.71	0.48
Control Delay	37.3	45.5	28.9		39.6	2.8	32.4	14.2
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	37.3	45.5	28.9		39.6	2.8	32.4	14.2
LOS	D	D	C		D	A	C	B
Approach Delay	37.3		42.7		18.4			18.4
Approach LOS	D		D		B			B

Intersection Summary

Cycle Length: 100  
 Actuated Cycle Length: 84.2  
 Natural Cycle: 110  
 Control Type: Semi Act-Uncoord  
 Maximum v/c Ratio: 0.91  
 Intersection Signal Delay: 26.5  
 Intersection Capacity Utilization 99.5%  
 Analysis Period (min) 15

















Intersection LOS: C  
 ICU Level of Service F

Splits and Phases: 2: Access Dr. East & FREELAND ST.

↖ ø1	↕ ø2	↗ ø4	↘ ø8
0 s	41 s	21 s	28 s
↙ ø6			
0 s			

Lanes and Geometrics  
 3: Access Dr. West & FREELAND ST.

*CA 604* BALD HILL ESTATES  
 MONROE, NEW YORK

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt			0.865		0.902						0.997	
Flt Protected					0.987							
Satd. Flow (prot)	0	0	1611	0	1658	0	0	3539	0	0	3529	0
Flt Permitted					0.987							
Satd. Flow (perm)	0	0	1611	0	1658	0	0	3539	0	0	3529	0
Headway 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
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		314			277			931			476	
Travel Time (s)		7.1			6.3			21.2			10.8	

Intersection Summary

Area Type: Other

Volume

3: Access Dr. West & FREELAND ST.

CA-65 BALD HILL ESTATES  
MONROE, NEW YORK

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	0	28	3	0	8	0	1458	4	10	1294	24
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.97	0.92	0.97	0.92	0.97	0.97	0.97	0.97	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	30	3	0	8	0	1503	4	10	1334	26
Lane Group Flow (vph)	0	0	30	0	11	0	0	1507	0	0	1370	0
Intersection Summary												










HCM Unsignalized Intersection Capacity Analysis  
 3: Access Dr. West & FREELAND ST.

*CA-66* BALD HILL ESTATES  
 MONROE, NEW YORK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	28	3	0	8	0	1458	4	10	1294	24
Peak Hour Factor	0.92	0.92	0.92	0.97	0.92	0.97	0.92	0.97	0.97	0.97	0.97	0.92
Hourly flow rate (vph)	0	0	30	3	0	8	0	1503	4	10	1334	26
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)											476	
pX, platoon unblocked												
vC, conflicting volume	2127	2875	680	2223	2886	754	1360			1507		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2127	2875	680	2223	2886	754	1360			1507		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	92	86	100	98	100			98		
cM capacity (veh/h)	27	16	393	22	16	352	501			440		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	30	11	1002	505	677	693						
Volume Left	0	3	0	0	10	0						
Volume Right	30	8	0	4	0	26						
cSH	393	68	1700	1700	440	1700						
Volume to Capacity	0.08	0.17	0.59	0.30	0.02	0.41						
Queue Length 95th (ft)	6	14	0	0	2	0						
Control Delay (s)	14.9	68.2	0.0	0.0	0.7	0.0						
Lane LOS	B	F			A							
Approach Delay (s)	14.9	68.2	0.0		0.4							
Approach LOS	B	F										
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			53.6%		ICU Level of Service				A			
Analysis Period (min)			15									







Lanes and Geometrics  
 5: OLD COUNTRY RD. & FREELAND ST.

CA-67 BALD HILL ESTATES  
 MONROE, NEW YORK

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Turning Speed (mph)	15	9		9	15	
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor						
Frt	0.941		0.997			
FIt Protected	0.972					
Satd. Flow (prot)	1704	0	3529	0	0	3539
FIt Permitted	0.972					
Satd. Flow (perm)	1704	0	3529	0	0	3539
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	30		30			30
Link Distance (ft)	377		845			931
Travel Time (s)	8.6		19.2			21.2

Intersection Summary










Area Type: Other

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	16	12	1450	27	11	1314
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	17	13	1526	28	12	1383
Lane Group Flow (vph)	30	0	1554	0	0	1395
Intersection Summary						

HCM Unsignalized Intersection Capacity Analysis  
 5: OLD COUNTRY RD. & FREELAND ST.

CA-69













BALD HILL ESTATES  
 MONROE, NEW YORK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	16	12	1450	27	11	1314
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	17	13	1526	28	12	1383
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh						
Upstream signal (ft)			845			
pX, platoon unblocked						
vC, conflicting volume	2255	777			1555	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2255	777			1555	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	50	96			97	
cM capacity (veh/h)	34	339			422	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	29	1018	537	473	922	
Volume Left	17	0	0	12	0	
Volume Right	13	0	28	0	0	
cSH	55	1700	1700	422	1700	
Volume to Capacity	0.53	0.60	0.32	0.03	0.54	
Queue Length 95th (ft)	52	0	0	2	0	
Control Delay (s)	128.4	0.0	0.0	0.8	0.0	
Lane LOS	F			A		
Approach Delay (s)	128.4	0.0		0.3		
Approach LOS	F					
Intersection Summary						
Average Delay			1.4			
Intersection Capacity Utilization			54.0%		ICU Level of Service	A
Analysis Period (min)			15			

Lanes and Geometrics  
 6: SPRING ST & FREELAND ST.







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BALD HILL ESTATES  
 MONROE, NEW YORK

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	1			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.091			
Satd. Flow (perm)	1770	1583	170	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		131				369
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	30			30	30	
Link Distance (ft)	316			394	845	
Travel Time (s)	7.2			9.0	19.2	













Intersection Summary

Area Type: Other

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Volume (vph)	597	178	53	880	720	604
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	628	187	56	926	758	636
Lane Group Flow (vph)	628	187	56	926	758	636
Intersection Summary						

Timings  
6: SPRING ST & FREELAND ST.





CA-92 BALD HILL ESTATES  
MONROE, NEW YORK

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	597	178	53	880	720	604
Turn Type		Free	pm+pt			Free
Protected Phases	4		5	2	6	
Permitted Phases		Free	2			Free
Detector Phases	4		5	2	6	
Minimum Initial (s)	4.0		4.0	4.0	4.0	
Minimum Split (s)	20.0		8.0	20.0	20.0	
Total Split (s)	38.0	0.0	8.0	52.0	44.0	0.0
Total Split (%)	42.2%	0.0%	8.9%	57.8%	48.9%	0.0%
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Max		Max	Max	Max	
Act Effct Green (s)	34.0	90.0	48.0	48.0	40.0	90.0
Actuated g/C Ratio	0.38	1.00	0.53	0.53	0.44	1.00
v/c Ratio	0.94	0.12	0.35	0.93	0.92	0.40
Control Delay	51.3	0.2	16.1	37.2	41.3	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	0.2	16.1	37.2	41.3	0.8
LOS	D	A	B	D	D	A
Approach Delay	39.6			36.0	22.8	
Approach LOS	D			D	C	

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 90  
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Pretimed  
 Maximum v/c Ratio: 0.94  
 Intersection Signal Delay: 31.2  
 Intersection Capacity Utilization 86.1%  
 Analysis Period (min) 15  
 Intersection LOS: C  
 ICU Level of Service E

Splits and Phases: 6: SPRING ST & FREELAND ST.

 02	 04
52 s	38 s
 05	 06
0 s	44 s