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January 13, 2022

Dominick J. Thomas, Jr.  
 Cohen and Thomas  
 315 Main Street  
 Derby, CT 06418

**Reference: 265 Bridgeport Avenue, Shelton, Connecticut**

Dear Mr. Thomas:

I'm including in this letter updated traffic analysis results reflecting the revised driveway configurations approved by CTDOT: one full-access driveway on Cots Street and one right-in-right-out driveway on Bridgeport Avenue.

Table 1 shows that both site driveways will operate at favorable LOS A or B during the three peak hours. Traffic turning from Cots Street to Bridgeport Avenue will experience some delays during the peak hours; outside the peak hours when traffic on Bridgeport Avenue is not as heavy, much shorter delays can be expected for these vehicles exiting Cots Street.

**Table 1 Capacity Analyses for Build Conditions with Right-In-Right-Out Driveway on Bridgeport Avenue (Scenario 3)**

Intersection	2023 Build Conditions with Right-In-Right-Out Driveway on Bridgeport Ave. (Scenario 3)					
	Weekday Morning Peak Hour of Adjacent Streets		Weekday Afternoon Peak Hour of Adjacent Streets		Saturday Midday Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
<b>Rt. 714 (Bridgeport Ave.) and Cots St. (Unsignalized)</b>						
EB Cots St.	>100	F	>100	F	75.6	F
NB Rt. 714 Left Lane	4.2	A	3.5	A	3.3	A
<b>Rt. 714 and Driveway #2 (Unsignalized)</b>						
EB Driveway #2	13.1	B	12.6	B	11.8	B
<b>Cots St. and Driveway #1 (Unsignalized)</b>						
EB Cots St.	0.0	A	0.0	A	0.0	A
SB Driveway #1	9.2	A	9.2	A	9.2	A

EB Eastbound  
 WB Westbound  
 NB Northbound  
 SB Southbound  
 LOS Level of Service



Page 2 of 2

Reference: 265 Bridgeport Avenue, Shelton, Connecticut

Should you have any questions or need additional information, please feel free to contact me.

Sincerely,

**KWH Enterprise, LLC**

*Kermit Hua*

Kermit Hua, PE, PTOE

Principal

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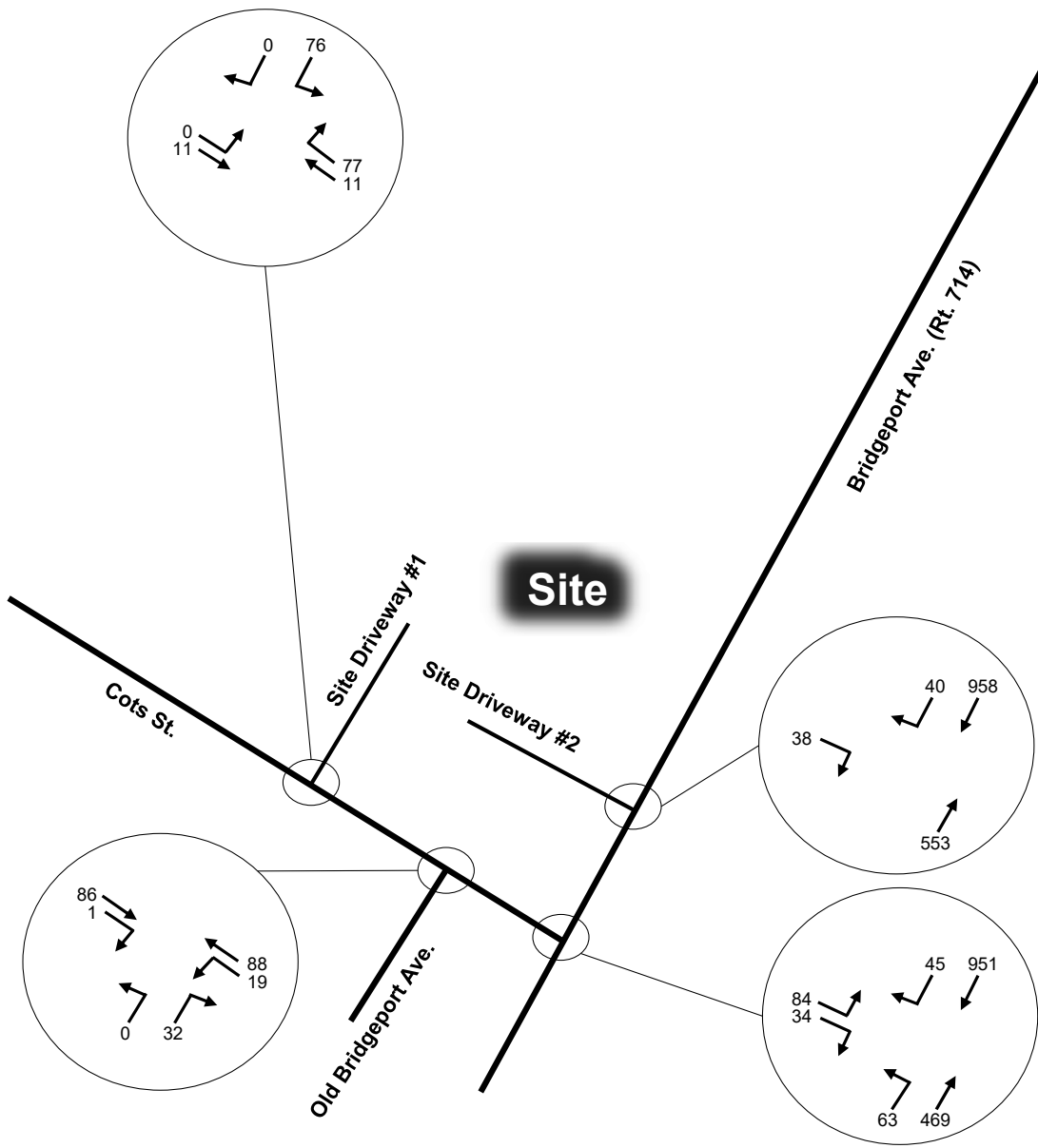


Figure 10c Year 2023 Build Traffic Volumes, Scenario 3  
Weekday Morning Peak Hour of Adjacent Streets

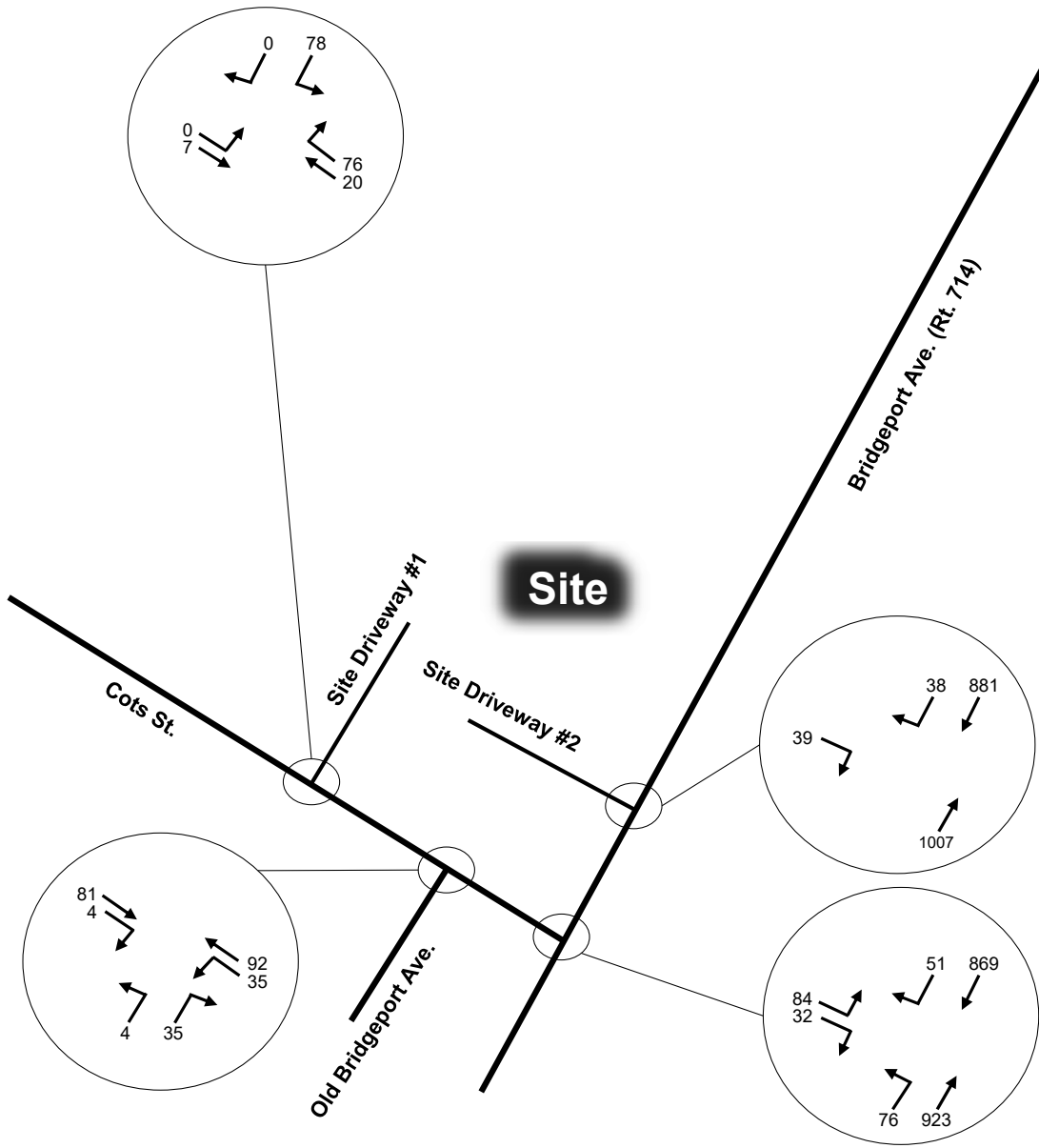
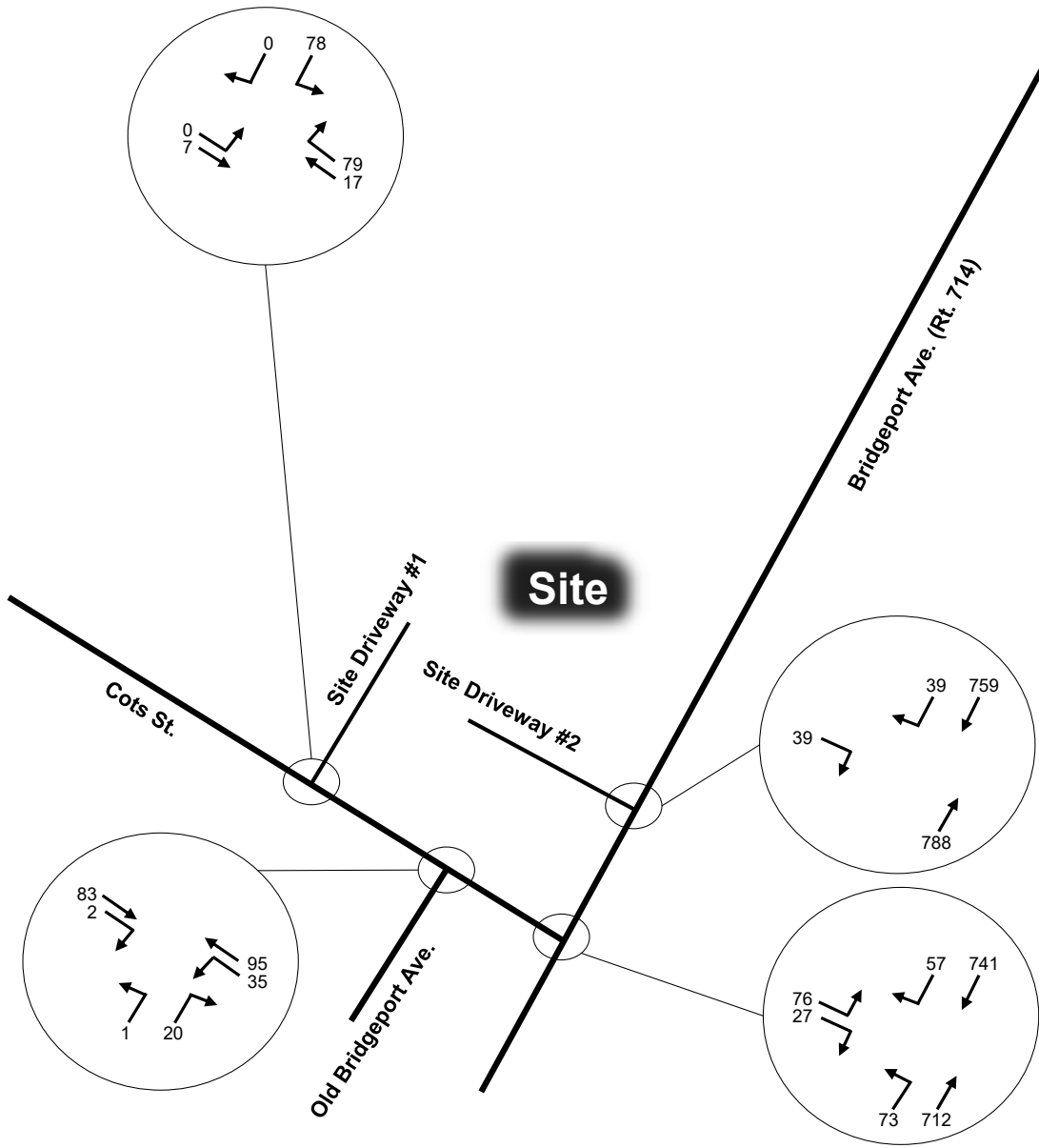


Figure 11c Year 2023 Build Traffic Volumes, Scenario 3  
Weekday Afternoon Peak Hour of Adjacent Streets



**Figure 12c Year 2023 Build Traffic Volumes, Scenario 3  
Saturday Midday Peak Hour of Adjacent Streets**

# HCM Unsignalized Intersection Capacity Analysis

## 4: Bridgeport Ave. (Rt. 714) & Cots St.

01/10/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	84	34	63	469	951	45
Future Volume (Veh/h)	84	34	63	469	951	45
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	91	37	68	510	1034	49
<b>Pedestrians</b>						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1450	542	1083			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1450	542	1083			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	16	92	89			
cM capacity (veh/h)	109	485	640			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>	
Volume Total	128	238	340	689	394	
Volume Left	91	68	0	0	0	
Volume Right	37	0	0	0	49	
cSH	140	640	1700	1700	1700	
Volume to Capacity	0.91	0.11	0.20	0.41	0.23	
Queue Length 95th (ft)	155	9	0	0	0	
Control Delay (s)	115.4	4.2	0.0	0.0	0.0	
Lane LOS	F	A				
Approach Delay (s)	115.4	1.7		0.0		
Approach LOS	F					
<b>Intersection Summary</b>						
Average Delay	8.8					
Intersection Capacity Utilization	59.2%			ICU Level of Service	B	
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

## 8: Bridgeport Ave. (Rt. 714) & Driveway #2

01/10/2022

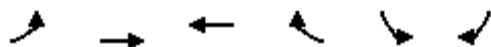


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	↘
Traffic Volume (veh/h)	0	38	0	553	958	40
Future Volume (Veh/h)	0	38	0	553	958	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	41	0	601	1041	43
<b>Pedestrians</b>						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1363	542	1084			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1363	542	1084			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	92	100			
cM capacity (veh/h)	139	485	639			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>	
Volume Total	41	300	300	694	390	
Volume Left	0	0	0	0	0	
Volume Right	41	0	0	0	43	
cSH	485	1700	1700	1700	1700	
Volume to Capacity	0.08	0.18	0.18	0.41	0.23	
Queue Length 95th (ft)	7	0	0	0	0	
Control Delay (s)	13.1	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	13.1	0.0		0.0		
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay	0.3					
Intersection Capacity Utilization	37.8%			ICU Level of Service	A	
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

## 9: Cots St. & Driveway #1

01/10/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Volume (veh/h)	0	11	11	77	76	0
Future Volume (Veh/h)	0	11	11	77	76	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	12	12	84	83	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	96				66	54
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	96				66	54
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				91	100
cM capacity (veh/h)	1498				939	1013
Direction, Lane #						
	EB 1	WB 1	SB 1			
Volume Total	12	96	83			
Volume Left	0	0	83			
Volume Right	0	84	0			
cSH	1498	1700	939			
Volume to Capacity	0.00	0.06	0.09			
Queue Length 95th (ft)	0	0	7			
Control Delay (s)	0.0	0.0	9.2			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	9.2			
Approach LOS			A			
Intersection Summary						
Average Delay			4.0			
Intersection Capacity Utilization			16.2%	ICU Level of Service		A
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 4: Bridgeport Ave. (Rt. 714) & Cots St.

01/12/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	84	32	76	923	869	51
Future Volume (Veh/h)	84	32	76	923	869	51
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	91	35	83	1003	945	55
<b>Pedestrians</b>						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1640	500	1000			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1640	500	1000			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	93	88			
cM capacity (veh/h)	80	516	688			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>	
Volume Total	126	417	669	630	370	
Volume Left	91	83	0	0	0	
Volume Right	35	0	0	0	55	
cSH	105	688	1700	1700	1700	
Volume to Capacity	1.20	0.12	0.39	0.37	0.22	
Queue Length 95th (ft)	209	10	0	0	0	
Control Delay (s)	229.7	3.5	0.0	0.0	0.0	
Lane LOS	F	A				
Approach Delay (s)	229.7	1.3		0.0		
Approach LOS	F					
<b>Intersection Summary</b>						
Average Delay			13.7			
Intersection Capacity Utilization			70.0%	ICU Level of Service	C	
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 8: Bridgeport Ave. (Rt. 714) & Driveway #2

01/12/2022

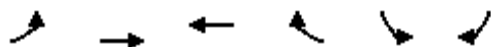


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	↘
Traffic Volume (veh/h)	0	39	0	1007	881	38
Future Volume (Veh/h)	0	39	0	1007	881	38
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	42	0	1095	958	41
<b>Pedestrians</b>						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1526	500	999			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1526	500	999			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	92	100			
cM capacity (veh/h)	108	517	689			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>	
Volume Total	42	548	548	639	360	
Volume Left	0	0	0	0	0	
Volume Right	42	0	0	0	41	
cSH	517	1700	1700	1700	1700	
Volume to Capacity	0.08	0.32	0.32	0.38	0.21	
Queue Length 95th (ft)	7	0	0	0	0	
Control Delay (s)	12.6	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	12.6	0.0		0.0		
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay	0.2					
Intersection Capacity Utilization	35.6%			ICU Level of Service	A	
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

## 9: Cots St. & Driveway #1

01/12/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Volume (veh/h)	0	7	20	76	78	0
Future Volume (Veh/h)	0	7	20	76	78	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	8	22	83	85	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	105				72	64
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	105				72	64
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				91	100
cM capacity (veh/h)	1486				933	1001
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	8	105	85			
Volume Left	0	0	85			
Volume Right	0	83	0			
cSH	1486	1700	933			
Volume to Capacity	0.00	0.06	0.09			
Queue Length 95th (ft)	0	0	7			
Control Delay (s)	0.0	0.0	9.2			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	9.2			
Approach LOS			A			
Intersection Summary						
Average Delay			4.0			
Intersection Capacity Utilization		16.7%		ICU Level of Service		A
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 4: Bridgeport Ave. (Rt. 714) & Cots St.

01/12/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	76	27	73	712	741	57
Future Volume (Veh/h)	76	27	73	712	741	57
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	83	29	79	774	805	62
<b>Pedestrians</b>						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1381	434	867			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1381	434	867			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	32	95	90			
cM capacity (veh/h)	121	570	772			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>	
Volume Total	112	337	516	537	330	
Volume Left	83	79	0	0	0	
Volume Right	29	0	0	0	62	
cSH	152	772	1700	1700	1700	
Volume to Capacity	0.73	0.10	0.30	0.32	0.19	
Queue Length 95th (ft)	111	9	0	0	0	
Control Delay (s)	75.6	3.3	0.0	0.0	0.0	
Lane LOS	F	A				
Approach Delay (s)	75.6	1.3		0.0		
Approach LOS	F					
<b>Intersection Summary</b>						
Average Delay	5.2					
Intersection Capacity Utilization	60.0%			ICU Level of Service	B	
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

## 8: Bridgeport Ave. (Rt. 714) & Driveway #2

01/12/2022

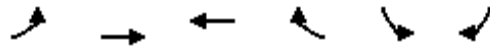


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑↗	
Traffic Volume (veh/h)	0	39	0	788	759	39
Future Volume (Veh/h)	0	39	0	788	759	39
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	42	0	857	825	42
<b>Pedestrians</b>						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1274	434	867			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1274	434	867			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	93	100			
cM capacity (veh/h)	159	570	772			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>	
Volume Total	42	428	428	550	317	
Volume Left	0	0	0	0	0	
Volume Right	42	0	0	0	42	
cSH	570	1700	1700	1700	1700	
Volume to Capacity	0.07	0.25	0.25	0.32	0.19	
Queue Length 95th (ft)	6	0	0	0	0	
Control Delay (s)	11.8	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.8	0.0		0.0		
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay	0.3					
Intersection Capacity Utilization	32.2%			ICU Level of Service	A	
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

## 9: Cots St. & Driveway #1

01/12/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↩	↩		↩	
Traffic Volume (veh/h)	0	7	17	79	78	0
Future Volume (Veh/h)	0	7	17	79	78	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	8	18	86	85	0
<b>Pedestrians</b>						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	104				69	61
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	104				69	61
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				91	100
cM capacity (veh/h)	1488				936	1004
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	8	104	85			
Volume Left	0	0	85			
Volume Right	0	86	0			
cSH	1488	1700	936			
Volume to Capacity	0.00	0.06	0.09			
Queue Length 95th (ft)	0	0	7			
Control Delay (s)	0.0	0.0	9.2			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	9.2			
Approach LOS			A			
<b>Intersection Summary</b>						
Average Delay			4.0			
Intersection Capacity Utilization			16.8%	ICU Level of Service	A	
Analysis Period (min)			15			