Canal at Main Futur	re No E	Build A	M Pea	k				
	ŕ	*	t	1	4	ţ		
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9	
Lane Configurations	5	1	† ₽		5	+		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	60	0		0	160			
Storage Lanes	1	1		0	1			
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		
Turning Speed (mph)	15	9		9	15			
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00		
Ped Bike Factor			0.99					
Frt		0.850	0.921					
Flt Protected	0.950				0.950			
Satd. Flow (prot)	1770	1583	3221	0	1770	1863		
Flt Permitted	0.950				0.406			
Satd. Flow (perm)	1770	1583	3221	0	756	1863		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		349	174					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Link Speed (mph)	30		30			30		
Link Distance (ft)	2430		3472			2064		
Travel Time (s)	55.2		78.9			46.9		
Volume (vph)	134	307	119	134	144	86		
Confl. Peds. (#/hr)	0.00	0.00	0.77	1	0.04	0.04		
Peak Hour Factor	0.88	0.88	0.77	0.77	0.84	0.84		
Adj. Flow (vph)	152	349	155	174	171	102		
Lane Group Flow (vph)	152	349	329	0	171	102		
Turn Type	4	Perm	2		pm+pt	0	0	
Protected Phases	4		2		1	6	9	
Permitted Phases Minimum Split (s)	21.0	4 21.0	21.0		13.0	21.0	11.0	
Total Split (s)	27.0	27.0	24.0	0.0	18.0	42.0	11.0	
Total Split (%)	34%	34%	30%	0.0	23%	53%	14%	
	22.0	22.0	19.0	0.76	15.0	37.0	6.0	
Maximum Green (s) Yellow Time (s)	3.0	3.0	3.0		3.0	37.0	3.0	
All-Red Time (s)	2.0	2.0	2.0		0.0	2.0	2.0	
Lead/Lag	2.0	2.0	Lag		Lead	2.0	2.0	
Lead-Lag Optimize?			Yes		Yes			
Walk Time (s)	5.0	5.0	5.0		103	5.0		
Flash Dont Walk (s)	11.0	11.0	11.0			11.0		
Pedestrian Calls (#/hr)	0	0	0			0		
Act Effct Green (s)	23.0	23.0	20.0		38.0	38.0		
Actuated g/C Ratio	0.29	0.29	0.25		0.48	0.48		
v/c Ratio	0.30	0.50	0.35		0.32	0.12		
Uniform Delay, d1	22.2	0.0	11.2		12.2	11.7		
Delay	22.7	3.0	11.5		12.5	11.9		
LOS	C	A	В		B	B		
Approach Delay	9.0		11.5		-	12.3		
Approach LOS	A		B			B		
Queue Length 50th (ft)	59	0	30		47	27		
Queue Length 95th (ft)	105	53	47		78	50		
Internal Link Dist (ft)	2350		3392			1984		

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9	
50th Up Block Time (%))							
95th Up Block Time (%)								
Turn Bay Length (ft)	60				160			
50th Bay Block Time %	6%							
95th Bay Block Time %	35%	5%						
Queuing Penalty (veh)	143	3						
Intersection Summary								
Area Type: (Other							
Cycle Length: 80								
Actuated Cycle Length:	80							
Offset: 0 (0%), Referen	ced to p	hase 2:N	VBT and	d 6:SBTI	L, Start	of Greer	1 I	
Natural Cycle: 70								
Control Type: Pretimed								
Maximum v/c Ratio: 0.5	0							
Intersection Signal Dela	y: 10.5			In	tersecti	ion LOS:	В	
Intersection Capacity Ut	tilization	41.6%		IC	U Leve	l of Serv	rice A	
Splits and Phases: 1:	Canal	St & Mai	n St					
	4							2.9
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Canal at Main Futur	e No E	Build P	M Pea	k			
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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9
Lane Configurations	5	1	† ⊅		5	+	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	60	0		0	160		
Storage Lanes	1	1		0	1		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Turning Speed (mph)	15	9		9	15		
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00	
Frt		0.850	0.928				
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1770	1583	3284	0	1770	1863	
FIt Permitted	0.950				0.406		
Satd. Flow (perm)	1770	1583	3284	0	756	1863	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		394	156				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)	30		30			30	
Link Distance (ft)	2430		3472			2064	
Travel Time (s)	55.2		78.9			46.9	
Volume (vph)	192	331	131	122	302	140	
Peak Hour Factor	0.84	0.84	0.78	0.78	0.92	0.92	
Adj. Flow (vph)	229	394	168	156	328	152	
Lane Group Flow (vph)	229	394	324	0	328	152	
Turn Type		Perm			pm+pt		
Protected Phases	4		2		1	6	9
Permitted Phases		4			6		
Minimum Split (s)	21.0	21.0	21.0		13.0	21.0	10.0
Total Split (s)	27.0	27.0	24.0	0.0	18.0	42.0	13.0
Total Split (%)	33%	33%	29%	0%	22%	51%	16%
Maximum Green (s)	22.0	22.0	19.0		15.0	37.0	9.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		0.0	2.0	1.0
Lead/Lag			Lag		Lead		
Lead-Lag Optimize?			Yes		Yes		
Walk Time (s)	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0			0	
Act Effct Green (s)	23.0	23.0	20.0		38.0	38.0	
Actuated g/C Ratio	0.28	0.28	0.24		0.46	0.46	
v/c Ratio	0.46	0.54	0.35		0.63	0.18	
Uniform Delay, d1	24.4	0.0	12.8		14.5	12.8	
Delay	25.0	2.9	13.1		15.0	13.1	
LOS	С	Α	В		В	В	
Approach Delay	11.0		13.1			14.4	
Approach LOS	В		В			В	
Queue Length 50th (ft)	97	0	34		106	44	
Queue Length 95th (ft)	150	45	53		171	79	
Internal Link Dist (ft)	2350		3392			1984	
50th Up Block Time (%)							
95th Up Block Time (%)							

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ane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9	
urn Bay Length (ft)	60				160			
th Bay Block Time %	32%							
5th Bay Block Time %	46%	3%			10%			
ueuing Penalty (veh)	307				7			
tersection Summary								
ea Type: O	ther							
cle Length: 82								
tuated Cycle Length: 8	82							
fset: 0 (0%), Reference	ed to p	hase 2:N	IBT and	6:SBT	L, Start	of Greer	1 I	
atural Cycle: 65								
ontrol Type: Pretimed								
aximum v/c Ratio: 0.63	3							
tersection Signal Delay	12.6			In	tersecti	on LOS:	B	
tersection Capacity Uti	lization	50.5%		IC	U Leve	l of Serv	vice A	
olits and Phases: 1:	Canal	St & Mai	n St	4			68 au	



Canal at Main Futur	re No E	Build S	at Pea	k				
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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9	
Lane Configurations	5		† ‡		5	+		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	60	0		0	160			
Storage Lanes	1	1		0	1			
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		
Turning Speed (mph)	15	9		9	15			
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00		
Ped Bike Factor	1.00		0.99	0.00				
Frt		0.850						
Flt Protected	0.950	0.000	0.021		0.950			
Satd. Flow (prot)	1770	1583	3245	0	1770	1863		
Flt Permitted	0.950				0.377			
Satd. Flow (perm)	1765	1583	3245	0	702	1863		
Right Turn on Red		Yes	0210	Yes				
Satd. Flow (RTOR)		386	171	100				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Link Speed (mph)	30	1.00	30	1.00	1.00	30		
Link Distance (ft)	2430		3472			2064		
Travel Time (s)	55.2		78.9			46.9		
Volume (vph)	169	328	150	144	225	150		
Confl. Peds. (#/hr)	103	520	150	1	225	150		
Peak Hour Factor	0.85	0.85	0.84	0.84	0.93	0.93		
Adj. Flow (vph)	199	386	179	171	242	161		
Lane Group Flow (vph)	199	386	350	0	242	161		
Turn Type	199	Perm	330	U		101		
Protected Phases	4	Feim	2		pm+pt 1	6	9	
Permitted Phases	4	4	2		6	0	5	
	21.0	21.0	21.0		13.0	21.0	10.0	
Minimum Split (s)	27.0	27.0	24.0	0.0	18.0	42.0	15.0	
Total Split (s)			29%		21%	50%	18%	
Total Split (%)	32%	32%		0%				
Maximum Green (s)	22.0	22.0	19.0		15.0	37.0	10.0	
Yellow Time (s)	3.0	3.0	3.0 2.0		3.0	3.0 2.0	3.0	
All-Red Time (s) Lead/Lag	2.0	2.0	Lag		Lead	2.0	2.0	
Lead-Lag Optimize?			Yes		Yes			
	5.0	5.0	5.0		res	5.0		
Walk Time (s)								
Flash Dont Walk (s)	11.0	11.0	11.0			11.0		
Pedestrian Calls (#/hr)	0	0	0		20.0	0		
Act Effct Green (s)	23.0 0.27	23.0 0.27	20.0 0.24		38.0 0.45	38.0 0.45		
Actuated g/C Ratio v/c Ratio								
	0.41	0.54	0.39		0.49	0.19		
Uniform Delay, d1	24.9	0.0	13.2		14.6	13.8		
Delay	25.5	3.0	13.5		14.9	14.1		
LOS	C	A	B		В	B		
Approach Delay	10.7		13.5			14.6		
Approach LOS	B		B		70	B		
Queue Length 50th (ft)	86	0	38		78	49		
Queue Length 95th (ft)	137	49	65		130	87		
Internal Link Dist (ft)	2350		3392			1984		

Canal at Main Future	e No E	Build Sa	at Pea	k					
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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9		
50th Up Block Time (%)									
95th Up Block Time (%)									
Turn Bay Length (ft)	60				160				
50th Bay Block Time %	27%								
95th Bay Block Time %	44%	4%							
Queuing Penalty (veh)	273								
Intersection Summary									
Area Type: O	ther								
Cycle Length: 84									
Actuated Cycle Length: 8	34								
Offset: 0 (0%), Reference	ed to pl	hase 2:M	IBT and	6:SBTI	L, Start	of Greer	1		
Natural Cycle: 65									
Control Type: Pretimed									
Maximum v/c Ratio: 0.54									
Intersection Signal Delay						ion LOS:	-		
Intersection Capacity Uti	lization	47.8%		IC	CU Leve	of Serv	rice A		
Splits and Phases: 1:	Canal	St & Mai	n St						
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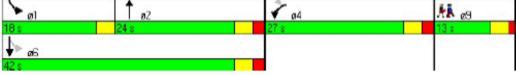
Canal at Main Futur	re Build	d AM F	Peak					
	ŕ	×	t	1	5	ţ		
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9	
Lane Configurations	5		† ‡		5	+		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	60	0		0	160			
Storage Lanes	1	1		0	1			
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		
Turning Speed (mph)	15	9		9	15			
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00		
Ped Bike Factor			0.99					
Frt		0.850	0.920					
Flt Protected	0.950				0.950			
Satd. Flow (prot)	1770	1583	3217	0	1770	1863		
Flt Permitted	0.950				0.405			
Satd. Flow (perm)	1770	1583	3217	0	754	1863		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		356	175					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Link Speed (mph)	30		30			30		
Link Distance (ft)	2430		3472			2064		
Travel Time (s)	55.2		78.9			46.9		
Volume (vph)	137	313	119	135	145	86		
Confl. Peds. (#/hr)				1				
Peak Hour Factor	0.88	0.88	0.77	0.77	0.84	0.84		
Adj. Flow (vph)	156	356	155	175	173	102		
Lane Group Flow (vph)	156	356	330	0	173	102		
Turn Type		Perm			pm+pt			
Protected Phases	4		2		1	6	9	
Permitted Phases		4			6			
Minimum Split (s)	21.0	21.0	21.0		13.0	21.0	11.0	
Total Split (s)	27.0	27.0	24.0	0.0	18.0	42.0	11.0	
Total Split (%)	34%	34%	30%	0%	23%	53%	14%	
Maximum Green (s)	22.0	22.0	19.0		15.0	37.0	6.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0		0.0	2.0	2.0	
Lead/Lag			Lag		Lead			
Lead-Lag Optimize?			Yes		Yes			
Walk Time (s)	5.0	5.0	5.0			5.0		
Flash Dont Walk (s)	11.0	11.0	11.0			11.0		
Pedestrian Calls (#/hr)	0	0	0			0		
Act Effct Green (s)	23.0	23.0	20.0		38.0	38.0		
Actuated g/C Ratio	0.29	0.29	0.25		0.48	0.48		
v/c Ratio	0.31	0.50	0.35		0.32	0.12		
Uniform Delay, d1	22.3	0.0	11.1		12.2	11.7		
Delay	22.8	2.9	11.4		12.5	11.9		
LOS	С	Α	В		В	В		
Approach Delay	9.0		11.4			12.3		
Approach LOS	А		В			В		
Queue Length 50th (ft)	61	0	30		48	27		
Queue Length 95th (ft)	108	53	47		79	50		
Internal Link Dist (ft)	2350		3392			1984		

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ane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9	
50th Up Block Time (%)								
5th Up Block Time (%)								
Furn Bay Length (ft)	60				160			
50th Bay Block Time %	8%							
95th Bay Block Time %	36%	5%						
Queuing Penalty (veh)	156	4						
ntersection Summary								
krea Type: C	ther							
cycle Length: 80								
ctuated Cycle Length:	80							
Offset: 0 (0%), Reference	ed to p	hase 2:N	IBT and	6:SBTI	., Start	of Green		
latural Cycle: 70								
Control Type: Pretimed								
Maximum v/c Ratio: 0.50	0							
ntersection Signal Delay	y: 10.5			In	tersecti	on LOS:	В	
ntersection Capacity Ut	ilization	42.0%		IC	U Leve	l of Servi	ice A	
Splits and Phases: 1:	Canal S	St & Mai	n St					
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Canal at Main Futur	e Buik	d PM F	Peak					
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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9	
Lane Configurations	5	1	† ⊅		5	+		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	60	0		0	160			
Storage Lanes	1	1		0	1			
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		
Turning Speed (mph)	15	9		9	15			
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00		
Frt		0.850	0.927					
Flt Protected	0.950				0.950			
Satd. Flow (prot)	1770	1583	3281	0	1770	1863		
Flt Permitted	0.950				0.403			
Satd. Flow (perm)	1770	1583	3281	0	751	1863		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		398	159					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Link Speed (mph)	30		30			30		
Link Distance (ft)	2430		3472			2064		
Travel Time (s)	55.2		78.9			46.9		
Volume (vph)	194	334	131	124	306	140		
Peak Hour Factor	0.84	0.84	0.78	0.78	0.92	0.92		
Adj. Flow (vph)	231	398	168	159	333	152		
Lane Group Flow (vph)	231	398	327	0	333	152		
Turn Type		Perm			pm+pt			
Protected Phases	4		2		1	6	9	
Permitted Phases	01.5	4	04.0		6		40.0	
Minimum Split (s)	21.0	21.0	21.0		13.0	21.0	10.0	
Total Split (s)	27.0	27.0	24.0	0.0	18.0	42.0	13.0	
Total Split (%)	33%	33%	29%	0%	22%	51%	16%	
Maximum Green (s)	22.0	22.0	19.0		15.0	37.0	9.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0		0.0	2.0	1.0	
Lead/Lag			Lag		Lead			
Lead-Lag Optimize?	5.0	5.0	Yes 5.0		Yes	5.0		
Walk Time (s)	5.0	11.0	5.0					
Flash Dont Walk (s)	11.0 0	11.0	11.0			11.0 0		
Pedestrian Calls (#/hr)		23.0	20.0		29.0			
Act Effct Green (s)	23.0				38.0	38.0		
Actuated g/C Ratio	0.28	0.28	0.24		0.46	0.46		
v/c Ratio Uniform Delay, d1	0.47 24.4	0.55	0.36		14.5	0.18		
and the second	24.4				14.5			
Delay LOS	25.0 C	2.9 A	13.0 B		15.1 B	13.1 B		
	11.0	A	13.0		D	14.5		
Approach Delay Approach LOS	B		13.U B			14.5 B		
Queue Length 50th (ft)		0	34		108	44		
Queue Length 95th (ft)	98 151	45	53		173	79		
Internal Link Dist (ft)	2350	40	3392		115	1984		
50th Up Block Time (%)			5552			1304		
95th Up Block Time (%)								
sour op block Time (%)								

Canal at Main Futur	e Build	1 PM P	eak						
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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9		
Turn Bay Length (ft)	60				160				
50th Bay Block Time %	32%								
95th Bay Block Time %	46%	3%			11%				
Queuing Penalty (veh)	313				8				
ntersection Summary									
Area Type: O)ther								
Cycle Length: 82									
ctuated Cycle Length: 8	82								
Offset: 0 (0%), Reference	ed to p	hase 2:N	IBT and	d 6:SBTI	L, Start	of Green	1		
Vatural Cycle: 65									
Control Type: Pretimed									
Maximum v/c Ratio: 0.64	4								
Intersection Signal Delay	y: 12.6			In	tersect	ion LOS:	В		
Intersection Capacity Uti	ilization	51.0%		IC	U Leve	el of Serv	ice A		
Splits and Phases: 1:	Canal S	St & Mair	n St						
	+			2	1.			6.2	



Canal at Main Futu	re Buik	d Sat F	Peak				
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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9
Lane Configurations	5	1	† ⊅		5	+	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	60	0		0	160		
Storage Lanes	1	1		0	1		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Turning Speed (mph)	15	9		9	15		
Lane Util, Factor	1.00	1.00	0.95	0.95	1.00	1.00	
Ped Bike Factor	1.00		0.99				
Frt		0.850	0.926				
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1770	1583	3241	0	1770	1863	
Flt Permitted	0.950				0.375		
Satd. Flow (perm)	1765	1583	3241	0	699	1863	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		392	174				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)	30	1.00	30	1.00	1.00	30	
Link Distance (ft)	2430		3472			2064	
Travel Time (s)	55.2		78.9			46.9	
Volume (vph)	172	333	150	146	227	150	
Confl. Peds. (#/hr)	1/2	555	150	140	221	150	
Peak Hour Factor	0.85	0.85	0.84	0.84	0.93	0.93	
	202	392	179	174	244	161	
Adj. Flow (vph)		392		0			
Lane Group Flow (vph)	202		353	U	244	161	
Turn Type		Perm	2		pm+pt	0	0
Protected Phases	4		2		1	6	9
Permitted Phases	24.0	4	24.0		6	24.0	40.0
Minimum Split (s)	21.0	21.0	21.0		13.0	21.0	10.0
Total Split (s)	27.0	27.0	24.0	0.0	18.0	42.0	15.0
Total Split (%)	32%	32%	29%	0%	21%	50%	18%
Maximum Green (s)	22.0	22.0	19.0		15.0	37.0	10.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		0.0	2.0	2.0
Lead/Lag			Lag		Lead		
Lead-Lag Optimize?			Yes		Yes		
Walk Time (s)	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0			0	
Act Effct Green (s)	23.0	23.0	20.0		38.0	38.0	
Actuated g/C Ratio	0.27	0.27	0.24		0.45	0.45	
v/c Ratio	0.42	0.55	0.39		0.49	0.19	
Uniform Delay, d1	25.0	0.0	13.1		14.6	13.8	
Delay	25.6	3.0	13.4		15.0	14.1	
LOS	С	A	В		В	В	
Approach Delay	10.7		13.4			14.6	
Approach LOS	B		B			B	
Queue Length 50th (ft)	87	0	38		79	49	
Queue Length 95th (ft)		49	65		130	87	
Internal Link Dist (ft)	2350	45	3392		100	1984	
internal Link Dist (it)	2350		3392			1904	

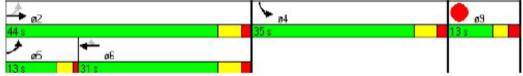
	+	*	1	1	5	ŧ		
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø9	
50th Up Block Time (%)	5							
95th Up Block Time (%)								
Turn Bay Length (ft)	60				160			
50th Bay Block Time %	27%							
95th Bay Block Time %	44%	4%						
Queuing Penalty (veh)	281	3						
Intersection Summary								
Area Type: C	ther)							
Cycle Length: 84								
Actuated Cycle Length:	84							
Offset: 0 (0%), Reference	ed to pl	hase 2:N	IBT and	16:SBTI	., Start	of Green	i i i i i i i i i i i i i i i i i i i	
Natural Cycle: 65								
Control Type: Pretimed								
Maximum v/c Ratio: 0.55	5							
Intersection Signal Delay	y: 12.6			In	tersecti	on LOS:	В	
Intersection Capacity Ut	ilization	48.1%		IC	U Leve	l of Serv	ice A	
Splits and Phases: 1:	Canal S	St & Maii	n St					
► _{a1} 1	ø2			1	٨		A.	

> øl	1 az	✓ 04	A . 09
18 s	24 *	27 s	15 s
↓ _{ø6}			
42 s			1 1

Canal at Howe Ave	Existir	ng AM	Peak				
	٦	-	-	*	5	1	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9
Lane Configurations	٦	†	†	1	Y.		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	100			50	0	0	
Storage Lanes	1			1	1	0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		
Trailing Detector (ft)	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	
Frt				0.850	0.902		
Flt Protected	0.950				0.987		
Satd. Flow (prot)	1770	1863	1863	1583	1658	0	
Flt Permitted	0.292				0.987		
Satd. Flow (perm)	544	1863	1863	1583	1658	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				37	157		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		30	30		30		
Link Distance (ft)		3808	4752		3058		
Travel Time (s)		86.5	108.0		69.5		
Volume (vph)	115	140	294	65	46	123	
Peak Hour Factor	0.91	0.91	0.88	0.88	0.77	0.77	
Adj. Flow (vph)	126	154	334	74	60	160	
Lane Group Flow (vph)	126	154	334	74	220	0	
Turn Type	pm+pt			Perm			
Protected Phases	5	2	6		4		9
Permitted Phases	2			6			
Detector Phases	5	2	6	6	4		
Minimum Initial (s)	8.0	10.0	10.0	10.0	10.0		8.0
Minimum Split (s)	12.0	30.0	30.0	30.0	35.0		13.0
Total Split (s)	13.0	44.0	31.0	31.0	35.0	0.0	13.0
Total Split (%)	14%	48%	34%	34%	38%	0%	14%
Maximum Green (s)	9.0	38.0	25.0	25.0	29.0		8.0
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0		3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0		2.0
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
Recall Mode	None	None	None	None	None		None
Walk Time (s)	Hone	5.0	5.0	5.0	5.0		Horito
Flash Dont Walk (s)		11.0	11.0	11.0	11.0		
Pedestrian Calls (#/hr)		0	0	0	0		
Act Effct Green (s)	30.6	25.9	16.4	16.4	13.0		
Actuated g/C Ratio	0.58	0.54	0.34	0.34	0.27		
v/c Ratio	0.24	0.15	0.52	0.13	0.39		
Uniform Delay, d1	4.1	4.2	11.5	4.8	3.5		
Delay	4.7	4.8	13.1	7.1	6.7		
LOS	A	A	B	A	A		
Approach Delay		4.7	12.0		6.7		

Canal at	Howe	Ave	Existing	AM Peak	

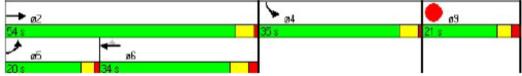
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	٠	-	-	*	6	1		
					2226			
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Approach LOS		Α	В		A			
90th %ile Green (s)	9.0	35.2	22.2	22.2	13.5		0.0	
90th %ile Term Code	Max	Hold	Gap	Gap	Gap		Skip	
70th %ile Green (s)	9.0	29.2	16.2	16.2	10.0		0.0	
70th %ile Term Code	Max	Hold	Gap	Gap	Min		Skip	
50th %ile Green (s)	8.2	25.8	13.6	13.6	10.0		0.0	
50th %ile Term Code	Gap	Hold	Gap	Gap	Min		Skip	
30th %ile Green (s)	8.0	23.1	11.1	11.1	10.0		0.0	
30th %ile Term Code	Min	Hold	Gap	Gap	Min		Skip	
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0		0.0	
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip		Skip	
Queue Length 50th (ft)	13	16	74	5	14			
Queue Length 95th (ft)	34	40	144	24	47			
Internal Link Dist (ft)		3728	4672		2978			
50th Up Block Time (%)								
95th Up Block Time (%)								
Turn Bay Length (ft)	100			50				
50th Bay Block Time %			30%					
95th Bay Block Time %			43%					
Queuing Penalty (veh)			27					
Intersection Summary								
	ther							
Cycle Length: 92								
Actuated Cycle Length: 4	44.5							
Natural Cycle: 90								
Control Type: Actuated-U	Uncoord	dinated						
Maximum v/c Ratio: 0.52								
Intersection Signal Delay	: 8.5			Ir	ntersecti	ion LOS	: A	
Intersection Capacity Uti		47.7%		IC	CU Leve	of Ser	vice A	
90th %ile Actuated Cycle								
70th %ile Actuated Cycle								
50th %ile Actuated Cycle								
30th %ile Actuated Cycle								
10th %ile Actuated Cycle								
in the state of the								



Canal at Howe Ave	Existin	ig PM	Peak					
	٠	→	+	*	4	~		
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Lane Configurations	5	*	+	1	14			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			50	0	0		
Storage Lanes	1			1	1	0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		
Leading Detector (ft)	50	50	50	50	50			
Trailing Detector (ft)	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		
Frt				0.850	0.904			
Fit Protected	0.950				0.986			
Satd. Flow (prot)	1770	1863	1863	1583	1660	0		
Flt Permitted	0.950				0.986			
Satd. Flow (perm)	1770	1863	1863	1583	1660	0		
Right Turn on Red			0.0000000	Yes		Yes		
Satd. Flow (RTOR)				30	111			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Link Speed (mph)		30	30		30			
Link Distance (ft)		3808	4752		3058			
Travel Time (s)		86.5	108.0		69.5			
Volume (vph)	112	301	302	68	72	175		
Peak Hour Factor	0.86	0.86	0.80	0.80	0.91	0.91		
Adj. Flow (vph)	130	350	378	85	79	192		
Lane Group Flow (vph)	130	350	378	85	271	0		
	custom			Perm				
Protected Phases	5	2	6		4		9	
Permitted Phases	5			6				
Detector Phases	5	2	6	6	4			
Minimum Initial (s)	8.0	10.0	10.0	10.0	10.0		8.0	
Minimum Split (s)	14.0	30.0	30.0	30.0	30.0		13.0	
Total Split (s)	20.0	54.0	34.0	34.0	35.0	0.0	21.0	
Total Split (%)	18%	49%	31%	31%	32%	0%	19%	
Maximum Green (s)	16.0	49.0	28.0	28.0	30.0		16.0	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0		3.0	
All-Red Time (s)	1.0	1.0	2.0	2.0	1.0		2.0	
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	
Recall Mode	None		None	None	None		None	
Walk Time (s)		5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			
Pedestrian Calls (#/hr)		0	0	0	0			
Act Effct Green (s)	11.2	29.5	19.3	19.3	14.7			
Actuated g/C Ratio	0.22	0.57	0.37	0.37	0.29			
v/c Ratio	0.33	0.33	0.54	0.14	0.49			
Uniform Delay, d1	16.2	4.5	12.3	6.5	8.5			
Delay	23.0	5.5	15.3	10.0	12.5			
LOS	С	A	В	A	В			
Approach Delay		10.3	14.3		12.5			

Canal at Howe Ave Existing PM Peak

	٠		-	4	5	1	
	1	-		-			
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9
Approach LOS		В	В		В		
90th %ile Green (s)	15.2	48.2	28.0	28.0	20.3		0.0
90th %ile Term Code	Gap	Hold	Max	Max	Gap		Skip
70th %ile Green (s)	11.1	35.7	19.6	19.6	13.8		0.0
70th %ile Term Code	Gap	Hold	Gap	Gap	Gap		Skip
50th %ile Green (s)	8.9	28.9	15.0	15.0	10.2		0.0
50th %ile Term Code	Gap	Hold	Gap	Gap	Gap		Skip
30th %ile Green (s)	8.0	25.1	12.1	12.1	10.0		0.0
30th %ile Term Code	Min	Hold	Gap	Gap	Min		Skip
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0		0.0
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip		Skip
Queue Length 50th (ft)	33	40	86	8	39		
Queue Length 95th (ft)	101	105	189	35	134		
Internal Link Dist (ft)		3728	4672		2978		
50th Up Block Time (%)							
95th Up Block Time (%)							
Turn Bay Length (ft)	100			50			
50th Bay Block Time %			34%				
95th Bay Block Time %	8%	9%	48%				
Queuing Penalty (veh)	14	6	34				
Intersection Summary							
	ther						
Cycle Length: 110							
Actuated Cycle Length: 4	8.4						
Natural Cycle: 90							
Control Type: Actuated-U	Incoord	dinated					
Maximum v/c Ratio: 0.54							
Intersection Signal Delay				Ir	ntersecti	on LOS	: В
Intersection Capacity Util		53.3%		IC	CU Leve	l of Sen	vice A
90th %ile Actuated Cycle							
70th %ile Actuated Cycle							
50th %ile Actuated Cycle							
30th %ile Actuated Cycle							
10th %ile Actuated Cycle							



Canal at Howe Ave	e Existir	ng Sat	Peak				
	٨	-	-	*	5	~	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9
Lane Configurations	5	†	†	1	¥.		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	100			50	0	0	
Storage Lanes	1			1	1	0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		
Trailing Detector (ft)	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	
Frt				0.850	0.911		
Fit Protected	0.950				0.983		
Satd. Flow (prot)	1770	1863	1863	1583	1668	0	
Flt Permitted	0.950				0.983		
Satd. Flow (perm)	1770	1863	1863	1583	1668	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				44	93		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		30	30		30		
Link Distance (ft)		3808	4752		3058		
Travel Time (s)		86.5	108.0		69.5		
Volume (vph)	134	235	308	92	80	154	
Peak Hour Factor	0.86	0.86	0.80	0.80	0.91	0.91	
Adj. Flow (vph)	156	273	385	115	88	169	
Lane Group Flow (vph)		273	385	115	257	0	
	custom			ustom			
Protected Phases	5	2	6		4		9
Permitted Phases	5			4			
Detector Phases	5	2	6	4	4		
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		5.0
Minimum Split (s)	23.0	30.0	25.0	30.0	30.0		10.0
Total Split (s)	23.0	55.0	32.0	35.0	35.0	0.0	15.0
Total Split (%)	22%	52%	30%	33%	33%	0%	14%
Maximum Green (s)	18.0	50.0	26.0	30.0	30.0	0.0	10.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0
All-Red Time (s)	1.0	1.0	2.0	1.0	1.0		2.0
Lead/Lag	Lead		Lag	1.0	1.0		2.0
Lead-Lag Optimize?	Yes		Yes				
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	Min	None	None		None
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		None
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		
Pedestrian Calls (#/hr)	0	0	0	0	0		
			27.4	13.9	13.9		
Act Effct Green (s)	12.9	40.5					
Actuated g/C Ratio	0.21	0.70	0.47	0.23	0.23		
v/c Ratio	0.42	0.21	0.44	0.29	0.57		
Uniform Delay, d1	22.4	3.6	11.8	12.7	14.0		
Delay	22.0	5.1	16.5	13.9	13.8		
LOS	С	A	В	В	В		
Approach Delay		11.2	15.9		13.8		

Canal at Howe Ave Existing Sat Peak ۶ 6 7 EBT WBT Lane Group EBL WBR SBL SBR ø9 в В Approach LOS В 90th %ile Green (s) 16.8 48.8 0.0 26.0 20.1 20.1 90th %ile Term Code Gap Hold Max Gap Gap Skip 70th %ile Green (s) 39.9 21.3 0.0 12.6 14.4 14.4 70th %ile Term Code Skip Gap Hold Gap Gap Gap 50th %ile Green (s) 10.0 32.4 16.4 10.8 10.8 0.0 50th %ile Term Code Min Hold Gap Gap Gap Skip 30th %ile Green (s) 10.0 29.4 13.4 10.0 10.0 0.0 30th %ile Term Code Min Hold Gap Min Min Skip 10th %ile Green (s) 0.0 37.5 36.5 0.0 0.0 0.0 10th %ile Term Code Skip Dwell Dwell Skip Skip Skip Queue Length 50th (ft) 43 31 97 18 45 Queue Length 95th (ft) 114 80 203 57 136 Internal Link Dist (ft) 3728 4672 2978 50th Up Block Time (%) 95th Up Block Time (%) Turn Bay Length (ft) 100 50 50th Bay Block Time % 37% 95th Bay Block Time % 16% 51% 15% Queuing Penalty (veh) 21 50 29 Intersection Summary Area Type: Other Cycle Length: 105

cycle Longin. rec		
Actuated Cycle Length: 57.7		
Natural Cycle: 90		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.57		
Intersection Signal Delay: 13.8	Intersection LOS: B	
Intersection Capacity Utilization 54.2%	ICU Level of Service A	
90th %ile Actuated Cycle: 78.9		
70th %ile Actuated Cycle: 64.3		
50th %ile Actuated Cycle: 53.2		
30th %ile Actuated Cycle: 49.4		

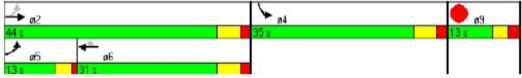
10th %ile Actuated Cycle: 42.5





Lane Configurations EBL EBT WBT WBR SBL SBR a9 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 Storage Length (ft) 100 50 50 0 0 0 Storage Length (ft) 50 50 50 50 50 50 Trailing Detector (ft) 50 50 50 50 50 51 Trailing Detector (ft) 0 0 0 0 0 0 Trailing Detector (ft) 0.251 9 15 9 Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 Fit Permitted 0.251 0.986 5345 1657 0 101 Statd. Flow (pert) 1770 1863 1863 1653 1657 0 101 Link Speed (mph) 30 30 30 30 30 30 30 Link Speed (mph)	Canal at Howe Ave	Future	No B	uild Al	/ Peal	(
Lane Configurations N		٦	→	+	*	4	~		
Lane Configurations N A N N Ideal Flow (vphp) 1900 1900 1900 1900 1900 Storage Lanes 1 1 1 0 Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0 Leading Detector (ft) 50 50 50 50 Trailing Detector (ft) 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 Fit Permitted 0.251 0.986 0.986 53td. Flow (port) 1770 1863 1863 1657 0 Fit Permitted 0.251 0.986 37 156 14eadway Factor 1.00 <t< th=""><th>Lane Group</th><th>EBL</th><th>EBT</th><th>WBT</th><th>WBR</th><th>SBL</th><th>SBR</th><th>ø9</th><th></th></t<>	Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Ideal Flow (vphpl) 1900 1900 1900 1900 1900 Storage Length (ft) 100 50 0 0 Storage Lanes 1 1 1 0 Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0 4.0 Leading Detector (ft) 0 0 0 0 0 0 Turning Speed (mph) 15 9 15 9 1.00 </td <td></td> <td>5</td> <td>+</td> <td>+</td> <td>1</td> <td>14</td> <td></td> <td></td> <td></td>		5	+	+	1	14			
Storage Langth (ft) 100 50 0 0 Storage Lanes 1 1 1 0 Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0 Leading Detector (ft) 50 50 50 50 50 Trailing Detector (ft) 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 Fit Protected 0.950 0.986 53dt.Flow (port) 1770 1863 1583 1657 0 Stat. Flow (perm) 468 1863 1583 1657 0 1.00 <	-		1900	1900			1900		
Storage Lanes 1 1 1 0 Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0 4.0 Leading Detector (ft) 50 50 50 50 50 Trailing Detector (ft) 0 0 0 0 0 0 Turning Speed (mph) 15 9 15 9 15 9 Lane Util, Factor 1.00 1.00 1.00 1.00 1.00 1.00 Fit Pernitted 0.251 0.986 0.902 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.986 0.00 1.00<		100			50	0	0		
Leading Detector (ft) 50 50 50 50 Trailing Detector (ft) 0 0 0 0 Turning Speed (mph) 15 9 15 9 Lane Uil. Factor 1.00 1.00 1.00 1.00 1.00 Frt 0.850 0.902 0.986 0.986 Satd. Flow (prot) 1770 1863 1863 1583 1657 0 Right Turn on Red 251 0.986 0.80 0.986 0.80 0.99 0.981 0.88 0.88 0.77 </td <td></td> <td>1</td> <td></td> <td></td> <td>1</td> <td>1</td> <td>0</td> <td></td> <td></td>		1			1	1	0		
Trailing Detector (t) 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 Fit Protected 0.950 0.986 Satd. Flow (prot) 1770 1863 1863 1583 1657 0 Fit Permitted 0.251 0.986 0.986 0.986 0.986 0.986 Satd. Flow (perm) 468 1863 1663 1583 1657 0 Right Turn on Red Yes Yes Yes Yes Stat 1.00	Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		
Turning Speed (mph) 15 9 15 9 Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 1.00 Frt 0.850 0.902 0.986 0.986 0.986 0.986 Satd. Flow (prot) 1770 1863 1863 1583 1657 0 Fit Protected 0.251 0.986 0.986 0.986 0.986 Satd. Flow (perm) 468 1863 1863 1583 1657 0 Right Tum on Red Yes Yes Yes Yes Satd. Flow (RTOR) 37 156 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 Link Distance (ft) 3808 4752 3058 Travel Time (s) 86.5 108.0 69.5 Volume (vph) 138 169 367 81 66 175 Lane Group Flow (vph) 138 169 367 81 241 0 Turm Type <	Leading Detector (ft)	50	50	50	50	50			
Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 1.00 Fit 0.850 0.902 0.986 0.986 0.986 Satd. Flow (prot) 1770 1863 1683 1683 1657 0 Right Tum on Red 0.251 0.986 0.986 0.986 Satd. Flow (perm) 468 1863 1683 1687 0 Right Tum on Red Yes Yes Yes Yes Yes Satd. Flow (RTOR) 30 30 30 30 1.0 1.0 <td< td=""><td>Trailing Detector (ft)</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td></td><td></td><td></td></td<>	Trailing Detector (ft)	0	0	0	0	0			
Frit 0.850 0.902 Fit Protected 0.950 0.986 Satd. Flow (prot) 1770 1863 1863 1583 1657 0 Fit Permitted 0.251 0.986 0.986 0.986 0.986 0.986 0.986 Satd. Flow (perm) 468 1863 1583 1657 0 0 Right Turn on Red Yes Yes Yes Satd. Flow (RTOR) 37 156 10.00 1.0 1.0	Turning Speed (mph)	15			9	15	9		
Fit Protected 0.950 0.986 Satd. Flow (prot) 1770 1863 1863 1583 1657 0 Fit Permitted 0.251 0.986 0.986 0.986 0.986 0.986 Satd. Flow (perm) 468 1863 1863 1583 1657 0 0 Right Turn on Red Yes Yes Yes Yes Stat. 100 1.00	Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Satd. Flow (prot) 1770 1863 1863 1583 1657 0 Fit Permitted 0.251 0.986 0.91 0.00 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	Frt				0.850	0.902			
Fit Permitted 0.251 0.986 Satd. Flow (perm) 468 1863 1583 1657 0 Right Turn on Red Yes Yes Yes Ses Satd. Flow (RTOR) 37 156 156 156 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 30 30 30 30 30 30 Link Distance (ft) 3808 4752 3058 71 51 135 Peak Hour Factor 0.91 0.81 0.88 0.77 0.77 Adj. Flow (vph) 138 169 367 81 241 0 Turn Type pm+pt Perm Permited Phases 2 6 4 9 Permited Phases 5 2 6 4 9 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13	Flt Protected	0.950				0.986			
Satd. Flow (perm) 468 1863 1863 1583 1657 0 Right Turn on Red Yes Yes Yes Yes Satd. Flow (RTOR) 37 156 100 1.01 1.01	Satd. Flow (prot)	1770	1863	1863	1583	1657	0		
Right Tum on Red Yes Yes Satd. Flow (RTOR) 37 156 Headway Factor 1.00 1.00 1.00 1.00 Link Speed (mph) 30 30 30 30 Link Distance (ft) 3808 4752 3058 Travel Time (s) 86.5 108.0 69.5 Volume (vph) 126 154 323 71 51 135 Peak Hour Factor 0.91 0.88 0.88 0.77 0.77 Adj. Flow (vph) 138 169 367 81 66 175 Lane Group Flow (vph) 138 169 367 81 241 0 Turn Type pm+pt Perm Permitted Phases 2 6 4 9 Permitted Phases 5 2 6 6 4 9 Itum Type mu+pt Perm Permitted Phases 2 6 6 4 Minimum Split (s) 12.0 30.0 <td< td=""><td></td><td>0.251</td><td></td><td></td><td></td><td>0.986</td><td></td><td></td><td></td></td<>		0.251				0.986			
Satd. Flow (RTOR) 37 156 Headway Factor 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 30 30 30 30 Link Distance (ft) 3808 4752 3058 Travel Time (s) 86.5 108.0 69.5 Volume (vph) 126 154 323 71 51 135 Peak Hour Factor 0.91 0.91 0.88 0.88 0.77 0.77 Adj. Flow (vph) 138 169 367 81 66 175 Lane Group Flow (vph) 138 169 367 81 241 0 Turn Type pm+pt Perm Perm Protected Phases 5 2 6 4 9 Permitted Phases 5 2 6 6 4 10.0 10.0 10.0 13.0 Total Split (s) 13.0 44.0 31.0 35.0 0.0 13.0 Total Split (%) <td>Satd. Flow (perm)</td> <td>468</td> <td>1863</td> <td>1863</td> <td>1583</td> <td>1657</td> <td>0</td> <td></td> <td></td>	Satd. Flow (perm)	468	1863	1863	1583	1657	0		
Headway Factor 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 30 30 30 30 Link Distance (ft) 3808 4752 3058 Travel Time (s) 86.5 108.0 69.5 Volume (vph) 126 154 323 71 51 135 Peak Hour Factor 0.91 0.91 0.88 0.77 0.77 Adj. Flow (vph) 138 169 367 81 66 175 Lane Group Flow (vph) 138 169 367 81 241 0 Turn Type pm+pt Perm Permitted Phases 2 6 4 9 Petector Phases 5 2 6 6 4 10.0 10.0 13.0 Total Split (s) 13.0 44.0 31.0 31.0 35.0 0.0 13.0 Total Split (%) 14% 48% 34% 38% 0% 14% Maximum Green (s) 9.0 3.0 3.0 3.0 3.0 3.0					Yes		Yes		
Link Speed (mph) 30 30 30 30 Link Distance (ft) 3808 4752 3058 Travel Time (s) 86.5 108.0 69.5 Volume (vph) 126 154 323 71 51 135 Peak Hour Factor 0.91 0.91 0.88 0.88 0.77 0.77 Adj. Flow (vph) 138 169 367 81 66 175 Lane Group Flow (vph) 138 169 367 81 241 0 Turn Type pm+pt Perm Perm Permitted Phases 2 6 4 9 Permitted Phases 5 2 6 6 4 10.0 10.0 10.0 13.0 13.0 Total Split (s) 13.0 44.0 31.0 35.0 0.0 13.0 Total Split (%) 14% 48% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0	Satd. Flow (RTOR)				37	156			
Link Distance (ft) 3808 4752 3058 Travel Time (s) 86.5 108.0 69.5 Volume (vph) 126 154 323 71 51 135 Peak Hour Factor 0.91 0.91 0.88 0.88 0.77 0.77 Adj. Flow (vph) 138 169 367 81 66 175 Lane Group Flow (vph) 138 169 367 81 241 0 Turn Type pm+pt Perm Perm Protected Phases 5 2 6 4 9 Permitted Phases 2 6 6 4 9 13.0 10.0 10.0 10.0 8.0 Minimum Initial (s) 8.0 10.0 10.0 10.0 13.0 13.0 Total Split (s) 13.0 44.0 31.0 35.0 0.0 13.0 Yellow Time (s) 3.0 4.0 4.0 4.0 3.0 3.0 3.0	Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Travel Time (s) 86.5 108.0 69.5 Volume (vph) 126 154 323 71 51 135 Peak Hour Factor 0.91 0.91 0.88 0.88 0.77 0.77 Adj. Flow (vph) 138 169 367 81 66 175 Lane Group Flow (vph) 138 169 367 81 241 0 Turn Type pm+pt Perm Perm Permitted Phases 2 6 0 Detector Phases 5 2 6 6 4 9 Optector Phases 5 2 6 6 4 9 Detector Phases 5 2 6 6 4 13.0 10.0 10.0 10.0 8.0 Minimum Initial (s) 8.0 10.0 10.0 10.0 13.0 13.0 Total Split (s) 13.0 44.0 31.0 31.0 35.0 0.0 13.0 Total Split (%) 14% 48% 34% 34% 38% 0% 14%	Link Speed (mph)					30			
Volume (vph) 126 154 323 71 51 135 Peak Hour Factor 0.91 0.91 0.88 0.88 0.77 0.77 Adj. Flow (vph) 138 169 367 81 66 175 Lane Group Flow (vph) 138 169 367 81 241 0 Turn Type pm+pt Perm Perm Perm 0	Link Distance (ft)		3808	4752		3058			
Peak Hour Factor 0.91 0.91 0.88 0.88 0.77 0.77 Adj. Flow (vph) 138 169 367 81 66 175 Lane Group Flow (vph) 138 169 367 81 241 0 Turn Type pm+pt Permited Phases 5 2 6 4 9 Permitted Phases 5 2 6 6 4 9 Detector Phases 5 2 6 6 4 9 Minimum Initial (s) 8.0 10.0 10.0 10.0 8.0 13.0 Total Split (s) 13.0 44.0 31.0 35.0 0.0 13.0 Total Split (%) 14% 48% 34% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0 29.0 8.0 Yellow Time (s) 1.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag	Travel Time (s)		86.5	108.0		69.5			
Adj. Flow (vph) 138 169 367 81 66 175 Lane Group Flow (vph) 138 169 367 81 241 0 Turn Type pm+pt Perm Permitted Phases 5 2 6 4 9 Permitted Phases 2 6 6 4 9 Detector Phases 5 2 6 6 4 Minimum Initial (s) 8.0 10.0 10.0 10.0 10.0 8.0 Minimum Split (s) 12.0 30.0 30.0 35.0 13.0 13.0 Total Split (s) 13.0 44.0 31.0 31.0 35.0 0.0 13.0 Total Split (%) 14% 48% 34% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0 25.0 29.0 8.0 Yellow Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag Lag Lag Lag Lag Lag Lag <td>Volume (vph)</td> <td>126</td> <td>154</td> <td>323</td> <td>71</td> <td>51</td> <td>135</td> <td></td> <td></td>	Volume (vph)	126	154	323	71	51	135		
Lane Group Flow (vph) 138 169 367 81 241 0 Turn Type pm+pt Perm Permitted Phases 5 2 6 4 9 Permitted Phases 2 6 6 4 9 Detector Phases 5 2 6 6 4 Minimum Initial (s) 8.0 10.0 10.0 10.0 10.0 8.0 Minimum Split (s) 12.0 30.0 30.0 35.0 13.0 13.0 Total Split (s) 13.0 44.0 31.0 31.0 35.0 0.0 13.0 Total Split (%) 14% 48% 34% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0 29.0 8.0 14% Yellow Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag Lag Lag Lag Lag S.0 5.0	Peak Hour Factor	0.91	0.91	0.88	0.88	0.77	0.77		
Turn Type pm+pt Permitted Protected Phases 5 2 6 4 9 Permitted Phases 2 6 6 4 9 Detector Phases 5 2 6 6 4 Minimum Initial (s) 8.0 10.0 10.0 10.0 8.0 Minimum Split (s) 12.0 30.0 30.0 35.0 13.0 Total Split (s) 13.0 44.0 31.0 35.0 0.0 13.0 Total Split (%) 14% 48% 34% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0 29.0 8.0 14% Maximum Green (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag Lag <td>Adj. Flow (vph)</td> <td>138</td> <td>169</td> <td>367</td> <td>81</td> <td>66</td> <td>175</td> <td></td> <td></td>	Adj. Flow (vph)	138	169	367	81	66	175		
Protected Phases 5 2 6 4 9 Permitted Phases 2 6 6 4 9 Detector Phases 5 2 6 6 4 9 Minimum Initial (s) 8.0 10.0 10.0 10.0 10.0 8.0 Minimum Split (s) 12.0 30.0 30.0 30.0 35.0 13.0 Total Split (s) 13.0 44.0 31.0 31.0 35.0 0.0 13.0 Total Split (%) 14% 48% 34% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0 25.0 29.0 8.0 Yellow Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag Lag <t< td=""><td>Lane Group Flow (vph)</td><td>138</td><td>169</td><td>367</td><td>81</td><td>241</td><td>0</td><td></td><td></td></t<>	Lane Group Flow (vph)	138	169	367	81	241	0		
Permitted Phases 2 6 Detector Phases 5 2 6 6 Minimum Initial (s) 8.0 10.0 10.0 10.0 10.0 Minimum Split (s) 12.0 30.0 30.0 35.0 13.0 Total Split (s) 13.0 44.0 31.0 31.0 35.0 0.0 13.0 Total Split (s) 13.0 44.0 31.0 31.0 35.0 0.0 13.0 Total Split (%) 14% 48% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0 25.0 29.0 8.0 Yellow Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag	Turn Type	pm+pt			Perm				
Detector Phases 5 2 6 6 4 Minimum Initial (s) 8.0 10.0 10.0 10.0 10.0 8.0 Minimum Split (s) 12.0 30.0 30.0 30.0 35.0 13.0 Total Split (s) 13.0 44.0 31.0 31.0 35.0 0.0 13.0 Total Split (s) 14% 48% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0 25.0 29.0 8.0 Yellow Time (s) 3.0 4.0 4.0 4.0 4.0 3.0 All-Red Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag	Protected Phases	5	2	6		4		9	
Minimum Initial (s) 8.0 10.0 10.0 10.0 10.0 8.0 Minimum Split (s) 12.0 30.0 30.0 30.0 35.0 13.0 Total Split (s) 13.0 44.0 31.0 31.0 35.0 0.0 13.0 Total Split (s) 14% 48% 34% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0 25.0 29.0 8.0 Yellow Time (s) 3.0 4.0 4.0 4.0 4.0 3.0 All-Red Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag Las S.0 3.0 3.0 3.0 3.0 3.0 3.0 S.0 S.0 S.0 S.0 S.0 S.0 S.0 S.0 S.0	Permitted Phases								
Minimum Split (s) 12.0 30.0 30.0 30.0 35.0 13.0 Total Split (s) 13.0 44.0 31.0 31.0 35.0 0.0 13.0 Total Split (s) 14% 48% 34% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0 25.0 29.0 8.0 Yellow Time (s) 3.0 4.0 4.0 4.0 4.0 3.0 All-Red Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag Lag Lag Lag Lead Lag Lag Lead Lag	Detector Phases								
Total Split (s) 13.0 44.0 31.0 31.0 35.0 0.0 13.0 Total Split (%) 14% 48% 34% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0 25.0 29.0 8.0 Yellow Time (s) 3.0 4.0 4.0 4.0 4.0 3.0 All-Red Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag Lag Lag Lead Lo S.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 S.0	Minimum Initial (s)	8.0	10.0	10.0	10.0	10.0		8.0	
Total Split (%) 14% 48% 34% 34% 38% 0% 14% Maximum Green (s) 9.0 38.0 25.0 29.0 8.0 Yellow Time (s) 3.0 4.0 4.0 4.0 4.0 3.0 All-Red Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag Lag Lag Lag Lead Lead Lead Maximum Signature	Minimum Split (s)	12.0	30.0	30.0	30.0	35.0		13.0	
Maximum Green (s) 9.0 38.0 25.0 29.0 8.0 Yellow Time (s) 3.0 4.0 4.0 4.0 4.0 3.0 All-Red Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag Lag Lag Lag Lag Lead-Lag Optimize? Yes Yes Yes Yes Yes Yes Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 Recall Mode None None None None None None None Walk Time (s) 5.0 5.0 5.0 5.0 5.0 Flash Dont Walk (s) 11.0	Total Split (s)	13.0	44.0	31.0	31.0	35.0	0.0	13.0	
Yellow Time (s) 3.0 4.0 4.0 4.0 4.0 3.0 All-Red Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag Lag Lag Lag Lag Lag Lead-Lag Optimize? Yes Yes Yes Yes Yes Yes Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 Recall Mode None None None None None None None Walk Time (s) 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 Pedestrian Calls (#/hr) 0 0 0 0 0 0 Act Effect Green (s) 31.8 27.0 17.6 17.6 13.6 Actuated g/C Ratio 0.59 0.55 0.36 0.36 0.28 v/c Ratio 0.42 0.14 0.42 Uniform Delay, d1 4.2 4.2 11.6 <td></td> <td>14%</td> <td>48%</td> <td>34%</td> <td>34%</td> <td>38%</td> <td>0%</td> <td>14%</td> <td></td>		14%	48%	34%	34%	38%	0%	14%	
All-Red Time (s) 1.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag Lead Lag Lag Lag Lag Lead-Lag Optimize? Yes Yes Yes Yes Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 Recall Mode None None None None None None 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 Pedestrian Calls (#/hr) 0 0 0 0 Act Effct Green (s) 31.8 27.0 17.6 17.6 13.6 Actuated g/C Ratio 0.59 0.55 0.36 0.36 0.28 v/c Ratio 0.28 0.16 0.54 0.14 0.42 Uniform Delay, d1 4.2 4.2 11.6 5.2 4.5 Delay 4.8 4.9 13.4 7.5 7.6 LOS A A B A A </td <td>Maximum Green (s)</td> <td>9.0</td> <td>38.0</td> <td>25.0</td> <td>25.0</td> <td>29.0</td> <td></td> <td></td> <td></td>	Maximum Green (s)	9.0	38.0	25.0	25.0	29.0			
Lead/Lag Lead Lag Lag Lead-Lag Optimize? Yes Yes Yes Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 Recall Mode None None None None None None 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 Pedestrian Calls (#/hr) 0 0 0 0 0 0 Act Effct Green (s) 31.8 27.0 17.6 17.6 13.6 Actuated g/C Ratio 0.59 0.55 0.36 0.28 0.28 v/c Ratio 0.28 0.16 0.54 0.14 0.42 Uniform Delay, d1 4.2 4.2 11.6 5.2 4.5 Delay 4.8 4.9 13.4 7.5 7.6 LOS A A B A A	Yellow Time (s)	3.0	4.0	4.0	4.0	4.0		3.0	
Lead-Lag Optimize? Yes Yes Yes Vehicle Extension (s) 3.0 Recall Mode None None <td></td> <td>1.0</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> <td></td> <td>2.0</td> <td></td>		1.0	2.0	2.0	2.0	2.0		2.0	
Vehicle Extension (s) 3.0 Recall Mode None None <t< td=""><td>Lead/Lag</td><td>Lead</td><td></td><td></td><td>Lag</td><td></td><td></td><td></td><td></td></t<>	Lead/Lag	Lead			Lag				
Vehicle Extension (s) 3.0 Recall Mode None <		Yes		Yes	Yes				
Recall Mode None			3.0			3.0		3.0	
Walk Time (s) 5.0 5.0 5.0 5.0 Flash Dont Walk (s) 11.0 11.0 11.0 11.0 Pedestrian Calls (#/hr) 0 0 0 0 Act Effct Green (s) 31.8 27.0 17.6 17.6 13.6 Actuated g/C Ratio 0.59 0.55 0.36 0.36 0.28 v/c Ratio 0.28 0.16 0.54 0.14 0.42 Uniform Delay, d1 4.2 4.2 11.6 5.2 4.5 Delay 4.8 4.9 13.4 7.5 7.6 LOS A A B A A									
Flash Dont Walk (s) 11.0 11.0 11.0 11.0 11.0 Pedestrian Calls (#/hr) 0 0 0 0 0 Act Effct Green (s) 31.8 27.0 17.6 17.6 13.6 Actuated g/C Ratio 0.59 0.55 0.36 0.36 0.28 v/c Ratio 0.28 0.16 0.54 0.14 0.42 Uniform Delay, d1 4.2 4.2 11.6 5.2 4.5 Delay 4.8 4.9 13.4 7.5 7.6 LOS A A B A A	Walk Time (s)		5.0	5.0					
Pedestrian Calls (#/hr) 0 0 0 0 0 Act Effct Green (s) 31.8 27.0 17.6 17.6 13.6 Actuated g/C Ratio 0.59 0.55 0.36 0.36 0.28 v/c Ratio 0.28 0.16 0.54 0.14 0.42 Uniform Delay, d1 4.2 4.2 11.6 5.2 4.5 Delay 4.8 4.9 13.4 7.5 7.6 LOS A A B A A			11.0	11.0	11.0	11.0			
Actuated g/C Ratio 0.59 0.55 0.36 0.36 0.28 v/c Ratio 0.28 0.16 0.54 0.14 0.42 Uniform Delay, d1 4.2 4.2 11.6 5.2 4.5 Delay 4.8 4.9 13.4 7.5 7.6 LOS A A B A A	Pedestrian Calls (#/hr)		0	0	0	0			
v/c Ratio 0.28 0.16 0.54 0.14 0.42 Uniform Delay, d1 4.2 4.2 11.6 5.2 4.5 Delay 4.8 4.9 13.4 7.5 7.6 LOS A A B A A	Act Effct Green (s)	31.8	27.0	17.6	17.6	13.6			
v/c Ratio 0.28 0.16 0.54 0.14 0.42 Uniform Delay, d1 4.2 4.2 11.6 5.2 4.5 Delay 4.8 4.9 13.4 7.5 7.6 LOS A A B A A									
Uniform Delay, d1 4.2 4.2 11.6 5.2 4.5 Delay 4.8 4.9 13.4 7.5 7.6 LOS A A B A A									
Delay 4.8 4.9 13.4 7.5 7.6 LOS A A B A A									
LOS A A B A A									
	Approach Delay		4.9	12.3		7.6			

Canal at Howe Ave	Future	No B	uild AN	/ Peak	(
	١	-	+	×	5	~		
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Approach LOS		Α	В		Α			
90th %ile Green (s)	9.0	37.3	24.3	24.3	15.1		0.0	
90th %ile Term Code	Max	Hold	Gap	Gap	Gap		Skip	
70th %ile Green (s)	9.0	30.7	17.7	17.7	10.6		0.0	
70th %ile Term Code	Max	Hold	Gap	Gap	Gap		Skip	
50th %ile Green (s)	8.6	27.2	14.6	14.6	10.0		0.0	
50th %ile Term Code	Gap	Hold	Gap	Gap	Min		Skip	
30th %ile Green (s)	8.0	23.9	11.9	11.9	10.0		0.0	
30th %ile Term Code	Min	Hold	Gap	Gap	Min		Skip	
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0		0.0	
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip		Skip	
Queue Length 50th (ft)	15	18	85	6	19			
Queue Length 95th (ft)	39	47	165	27	57			
Internal Link Dist (ft)		3728	4672		2978			
50th Up Block Time (%)								
95th Up Block Time (%)								
Turn Bay Length (ft)	100			50				
50th Bay Block Time %			34%					
95th Bay Block Time %			44%					
Queuing Penalty (veh)			32					
Intersection Summary								
Area Type: O	ther							
Cycle Length: 92								
Actuated Cycle Length: 4	15.5							
Natural Cycle: 90								
Control Type: Actuated-U	Incoord	dinated						
Maximum v/c Ratio: 0.54								
Intersection Signal Delay	: 8.9			li II	ntersecti	ion LOS	: A	
Intersection Capacity Util	lization	51.5%		10	CU Leve	of Ser	vice A	
90th %ile Actuated Cycle	: 64.4							
70th %ile Actuated Cycle	: 53.3							
50th %ile Actuated Cycle	: 49.2							
30th %ile Actuated Cycle	: 45.9							
10th %ile Actuated Cycle	: 14.5							



Canal at Howe Ave	Future	No B	uild PN	/ Peak	(
	٠	-+	+	*	5	1		
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Lane Configurations	5				**			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100	1000	1000	50	0	0		
Storage Lanes	1			1	1	ő		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		
Leading Detector (ft)	50	50	50	50	50	1.0		
Trailing Detector (ft)	0	0	0	0	0			
Turning Speed (mph)	15	Ŭ	Ŭ	9	15	9		
Lane Util, Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Frt	1.00	1.00	1.00	0.850	0.904	1.00		
Fit Protected	0.950				0.986			
Satd. Flow (prot)	1770	1863	1863	1583	1660	0		
Flt Permitted	0.950				0.986			
Satd. Flow (perm)	1770	1863	1863	1583	1660	0		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)				31	111			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Link Speed (mph)		30	30		30			
Link Distance (ft)		3808	4752		3058			
Travel Time (s)		86.5	108.0		69.5			
Volume (vph)	123	331	332	75	79	192		
Peak Hour Factor	0.86	0.86	0.80	0.80	0.91	0.91		
Adj. Flow (vph)	143	385	415	94	87	211		
Lane Group Flow (vph)	143	385	415	94	298	0		
	custom			Perm				
Protected Phases	5	2	6		4		9	
Permitted Phases	5			6				
Detector Phases	5	2	6	6	4			
Minimum Initial (s)	8.0	10.0	10.0	10.0	10.0		8.0	
Minimum Split (s)	14.0	30.0	30.0	30.0	30.0		13.0	
Total Split (s)	20.0	54.0	34.0	34.0	35.0	0.0	21.0	
Total Split (%)	18%	49%	31%	31%	32%	0%	19%	
Maximum Green (s)	16.0	49.0	28.0	28.0	30.0		16.0	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0		3.0	
All-Red Time (s)	1.0	1.0	2.0	2.0	1.0		2.0	
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	
Recall Mode	None	None	None	None	None		None	
Walk Time (s)		5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			
Pedestrian Calls (#/hr)		0	0	0	0			
Act Effct Green (s)	11.2	33.8	23.2	23.2	15.3			
Actuated g/C Ratio	0.20	0.63	0.44	0.44	0.27			
v/c Ratio	0.40	0.33	0.51	0.13	0.56			
Uniform Delay, d1	21.2	4.3	11.5	6.2	12.0			
Delay	24.9	5.9	16.3	10.8	13.8			
LOS	С	A	В	В	В			
Approach Delay		11.1	15.3		13.8			

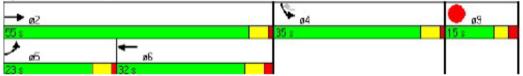
Canal at Howe Ave	Future	No B	uild PN	/ Peak	(
	٠	-	-	×	5	~		
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Approach LOS		В	В		В			
90th %ile Green (s)	16.0	49.0	28.0	28.0	22.4		0.0	
90th %ile Term Code	Max	Hold	Max	Max	Gap		Skip	
70th %ile Green (s)	12.4	41.7	24.3	24.3	16.2		0.0	
70th %ile Term Code	Gap	Hold	Gap	Gap	Gap		Skip	
50th %ile Green (s)	9.6	32.3	17.7	17.7	11.6		0.0	
50th %ile Term Code	Gap	Hold	Gap	Gap	Gap		Skip	
30th %ile Green (s)	8.0	26.8	13.8	13.8	10.0		0.0	
30th %ile Term Code	Min	Hold	Gap	Gap	Min		Skip	
10th %ile Green (s)	0.0	11.0	10.0	10.0	0.0		0.0	
10th %ile Term Code	Skip	Hold	Min	Min	Skip		Skip	
Queue Length 50th (ft)	41	49	105	10	52			
Queue Length 95th (ft)	112	126	222	42	154			
Internal Link Dist (ft)		3728	4672		2978			
50th Up Block Time (%)								
95th Up Block Time (%)								
Turn Bay Length (ft)	100			50				
50th Bay Block Time %			38%					
95th Bay Block Time %	15%	14%	51%	1%				
Queuing Penalty (veh)	29	10	42					
Intersection Summary								
Area Type: O	ther							
Cycle Length: 110								
Actuated Cycle Length: 5	53.3							
Natural Cycle: 90								
Control Type: Actuated-U		dinated						
Maximum v/c Ratio: 0.56								
Intersection Signal Delay				li	ntersecti	on LOS	: В	
Intersection Capacity Uti	lization	57.6%		10	CU Leve	l of Ser	vice A	
90th %ile Actuated Cycle	e: 81.4							
70th %ile Actuated Cycle	e: 67.9							
50th %ile Actuated Cycle	e: 53.9							
30th %ile Actuated Cycle	e: 46.8							
10th %ile Actuated Cycle	e: 16.7							

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54 s		35 s	21 s
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20.s	34 s		I I

Lane Configurations EBI WBT WBR SBL SBR o9 Ideal Flow (vphp) 1900 1900 1900 1900 1900 1900 Storage Lanes 1 1 0 0 0 0 Storage Lanes 1 1 0 0 0 0 Icading Detector (ft) 0 0 0 0 0 0 Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 1.00 Fit Protected 0.950 0.983 584 1668 0 1.00 Fit Premitted 0.950 0.983 584 1668 0 1.00 Stdt. Flow (prot) 1770 1863 1863 1583 1668 0 Stdt. Flow (RTOR) 43 93 1.00 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 30 30 30 30 1.01 1.01 1.01 1.01 <td< th=""><th>Canal at Howe Ave</th><th>Future</th><th>No B</th><th>uild Sa</th><th>t Peal</th><th>(</th><th></th><th></th><th></th></td<>	Canal at Howe Ave	Future	No B	uild Sa	t Peal	(
Lane Configurations N A P V ideal Flow (vphp) 1900 1900 1900 1900 Storage Lanes 1 1 1 0 Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0 Leading Detector (ft) 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 Fit Promited 0.950 0.983 0.983 0.983 0.983 Satd. Flow (pern) 1770 1863 1863 1583 1668 0 Right Tum on Red Yes Yes Yes Yes Satd. Flow (RTOR) 43 93 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Link Distance (ft) 3808 4752 3058 Travel Time (s) 46.5 108.0 0.91 Adj. Flow (vph)		٦	→	-	*	5	~		
Lane Configurations N A P N ideal Flow (vphpi) 1900 1900 1900 1900 Storage Lanes 1 1 1 0 Total Lost Time (s) 4.0 4.0 4.0 4.0 Leading Detector (ft) 50 50 50 50 Trailing Detector (ft) 0 0 0 0 0 Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 1.00 Fit Premitted 0.950 0.983 0.983 0.983 0.983 0.983 Satd. Flow (pern) 1770 1863 1863 1583 1668 0 Right Tum on Red Yes Yes Yes Yes Yes Satd. Flow (pern) 1.00 1.00 1.00 1.00 1.00 1.00 Link Distance (ft) 3808 4752 3058 Travel Time (s) 460 90 0.91 Peak Hour Factor 0.86 0.80	Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Ideal Flow (vphpi) 1900 1900 1900 1900 1900 Storage Length (ft) 100 50 0 0 Storage Lanes 1 1 0 Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0 Leading Detector (ft) 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 Fit Protected 0.950 0.983 0.983 0.983 Statd. Flow (prot) 1770 1863 1863 1668 0 Right Tum on Red Yes Yes Yes Yes Stad. Flow (RTOR) 43 93 Headway Factor 1.00 1.00 1.00 1.00 Link Speed (mph) 30 30 30 30 30 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.0		5	+	+	1	14			
Storage Length (ft) 100 50 0 0 Storage Lanes 1 1 1 0 Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0 Leading Detector (ft) 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 Ft 0.850 0.911 0.863 0.863 0.863 Satd, Flow (prot) 1770 1863 1863 1583 1668 0 Ftl Permitted 0.950 0.983 0.983 0 0.983 0 0.983 0 Satd, Flow (prot) 1770 1863 1863 1583 1668 0 0 0 0 0 0 0 1.00 1		_		1900	1900		1900		
Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0 Leading Detector (ft) 50 50 50 50 Trailing Detector (ft) 0 0 0 0 Turning Speed (mph) 15 9 15 9 Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 Fit 683 0.983 583 583 1668 0 Stdt. Flow (prot) 1770 1863 1863 1583 1668 0 Right Tum on Red Yes Yes Yes Yes Std. Flow (RTOR) 43 93 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Link Distance (ft) 3808 4752 3058 50 50 50 Volume (vph) 147 258 339 101 88 169 Peak Hour Factor 0.86 0.80 0.80 0.91 Adj. Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph)		100			50	0	0		
Leading Detector (ft) 50 50 50 50 Trailing Detector (ft) 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 Fit Protected 0.950 0.983 Satd, Flow (pert) 1770 1863 1863 1583 1668 0 Right Turn on Red Yes Yes Yes Yes Satd. Flow (pert) 1.00 1.0	Storage Lanes	1			1	1	0		
Trailing Detector (ft) 0 0 0 0 Turning Speed (mph) 15 9 15 9 Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 Fit 0.850 0.983 0.983 0.983 Satd. Flow (port) 1770 1863 1863 1583 1668 0 Fit Permitted 0.950 0.983 0.983 0.983 0.983 0.983 Satd. Flow (perm) 1770 1863 1863 1583 1668 0 Right Turn on Red Yes Yes Yes Satd. Flow (RTOR) 43 93 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Link Distance (ft) 3808 4752 3058 17ravel Time (s) 86.5 108.0 69.5 Volume (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 25.	Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		
Turning Speed (mph) 15 9 15 9 Lane Util, Factor 1.00 1.00 1.00 1.00 1.00 Fit 0.850 0.983 Satd, Flow (prot) 1770 1863 1863 1583 1668 0 Fit Permitted 0.950 0.983 0.983 0.983 0.983 0.983 Satd, Flow (pern) 1770 1863 1863 1583 1668 0 Right Turn on Red Yes Yes Yes Yes Std. Flow (pern) 1.00 1.00 1.00 Link Distance (ft) 30808 4752 3058 Travel Time (s) 86.5 108.0 69.5 Volume (vph) 147 258 339 101 88 169 Peak Hour Factor 0.86 0.80 0.80 0.91 0.91 Adj. Flow (vph) 147 258 339 101 88 169 Peak Hour Factor 0.86 0.80 0.80 0.91 0.91 Adj. Flow (vph) 171 300 424 126 97 186	Leading Detector (ft)	50	50	50	50	50			
Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 1.00 Frt 0.850 0.983 0.983 Satd. Flow (pot) 1770 1863 1863 1583 1668 0 Flt Permitted 0.950 0.983 0.983 0.983 0.983 Satd. Flow (perm) 1770 1863 1863 1583 1668 0 Right Tum on Red Yes Yes Yes Satd. Flow (RTOR) 43 93 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 30 30 30 100 1.00 1.00 Link Distance (ft) 3808 4752 3058 169 0.91 Peak Hour Factor 0.86 0.80 0.80 0.91 0.91 Adj. Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 <	Trailing Detector (ft)	0	0	0	0	0			
Frt 0.850 0.911 Flt Protected 0.950 0.983 Satd. Flow (prot) 1770 1863 1863 1583 1668 0 Fit Permitted 0.950 0.983 0.983 0.983 0.983 0.983 Satd. Flow (perm) 1770 1863 1663 1583 1668 0 Right Turn on Red Yes Yes Yes Yes Satd. Flow (RTOR) 43 93 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Link Distance (ft) 3808 4752 3058 Travel Time (s) 86.5 108.0 69.5 Volume (vph) 147 258 339 101 88 169 Peak Hour Factor 0.86 0.80 0.80 0.91 Adj. Flow (vph) 171 300 424 126 283 0 Turn Type custom custom custom 180 30.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 <t< td=""><td>Turning Speed (mph)</td><td>15</td><td></td><td></td><td>9</td><td>15</td><td>9</td><td></td><td></td></t<>	Turning Speed (mph)	15			9	15	9		
Fit Protected 0.950 0.983 Satd, Flow (prot) 1770 1863 1863 1583 1668 0 Fit Permitted 0.950 0.983 0.983 0.983 Satd, Flow (perm) 1770 1863 1863 1583 1668 0 Right Turn on Red Yes Yes Yes Yes Std. Flow (RTOR) 43 93 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 30 30 30 30 30 30 Volume (vph) 147 258 339 101 88 169 Peak Hour Factor 0.86 0.80 0.80 0.91 0.91 Adj. Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 97 186 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Satd. Flow (prot) 1770 1863 1863 1583 1668 0 Fit Permitted 0.950 0.983 0.983 0 0.983 0 0.983 0 0.983 0 0.983 0 0.983 0 0.983 0 0.983 0 0 0.983 0 0 0 0 0 0 0.983 0 1.00 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	Frt				0.850	0.911			
Fit Permitted 0.950 0.983 Satd. Flow (perm) 1770 1863 1863 1583 1668 0 Right Turn on Red Yes Yes Yes Yes Satd. Flow (RTOR) 43 93 Headway Factor 1.00 1.00 1.00 1.00 1.00 Link Distance (ft) 3808 4752 3058 Travel Time (s) 86.5 108.0 69.5 Volume (vph) 147 258 339 101 88 169 Peak Hour Factor 0.86 0.86 0.80 0.91 0.91 Adj. Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 283 0 100 10.0	Flt Protected	0.950				0.983			
Satd. Flow (perm) 1770 1863 1863 1583 1668 0 Right Turn on Red Yes Yes Yes Yes Satd. Flow (RTOR) 43 93 Headway Factor 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 30 30 30 30 30 30 Link Distance (ft) 3808 4752 3058 3058 100 1.00 1.00 1.00 Volume (vph) 147 258 339 101 88 169 Peak Hour Factor 0.86 0.80 0.80 0.91 0.91 Adj. Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vp	Satd. Flow (prot)	1770	1863	1863	1583	1668	0		
Right Turn on Red Yes Yes Satd. Flow (RTOR) 43 93 Headway Factor 1.00 1.00 1.00 1.00 Link Speed (mph) 30 30 30 30 Link Distance (ft) 3808 4752 3058 Travel Time (s) 86.5 108.0 69.5 Volume (vph) 147 258 339 101 88 169 Peak Hour Factor 0.86 0.80 0.80 0.91 0.91 Adj. Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 00 10.0 10.0 10.0 10.0 Total Split (9hases 5 2									
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Headway Factor 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 30 30 30 30 Link Distance (ft) 3808 4752 3058 Travel Time (s) 86.5 108.0 69.5 Volume (vph) 147 258 339 101 88 169 Peak Hour Factor 0.86 0.80 0.80 0.91 0.91 Adj. Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 98 0 Protected Phases 5 2 6 4 9 Permitted Phases 5 4 0 0.0 10.0 10.0 10.0 10.0 10.0 Total Split (s) 23.0 30.0 25.0 32.0 35.0 0.0 15.0 Total Split (%) 22% 52% 30% 33% 33% 0% 14%	-						Yes		
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Peak Hour Factor 0.86 0.86 0.80 0.80 0.91 0.91 Adj. Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 283 0 Turn Type custom custom - - - - Protected Phases 5 2 6 4 9 - Detector Phases 5 2 6 4 - - Minimum Initial (s) 10.0 10.0 10.0 10.0 5.0 - Minimum Split (s) 23.0 30.0 25.0 30.0 30.0 15.0 Total Split (s) 23.0 55.0 32.0 35.0 0.0 15.0 Total Split (%) 22% 52% 30% 33% 33% 0% 14% Maximum Green (s) 18.0 50.0 26.0 30.0 30.0 10.0 Lead/Lag Lead									
Adj. Flow (vph) 171 300 424 126 97 186 Lane Group Flow (vph) 171 300 424 126 283 0 Turn Type custom custom custom 9 Protected Phases 5 2 6 4 9 Detector Phases 5 2 6 4 4 Minimum Initial (s) 10.0 10.0 10.0 10.0 5.0 Minimum Split (s) 23.0 30.0 25.0 30.0 35.0 0.0 15.0 Total Split (s) 23.0 55.0 32.0 35.0 0.0 15.0 Total Split (%) 22% 52% 30% 33% 33% 0% 14% Maximum Green (s) 18.0 50.0 26.0 30.0 30.0 10.0 10.0 Yellow Time (s) 1.0 1.0 2.0 1.0 1.0 2.0 2.0 Lead/Lag Lead Lag Lag Vehicle Extension (s) 3.0 3.0 3.0 3.0 Re									
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Permitted Phases 5 4 Detector Phases 5 2 6 4 4 Minimum Initial (s) 10.0 10.0 10.0 10.0 10.0 5.0 Minimum Split (s) 23.0 30.0 25.0 30.0 30.0 10.0 Total Split (s) 23.0 55.0 32.0 35.0 0.0 15.0 Total Split (%) 22% 52% 30% 33% 33% 0% 14% Maximum Green (s) 18.0 50.0 26.0 30.0 30.0 10.0 Yellow Time (s) 4.0 4.0 4.0 4.0 3.0 3.0 All-Red Time (s) 1.0 1.0 2.0 1.0 1.0 2.0 Lead/Lag Lead Lag Lead-LagOptimize? Yes Yes Yes Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 Recall Mode None None Min None No					sustom				
Detector Phases 5 2 6 4 4 Minimum Initial (s) 10.0 10.0 10.0 10.0 5.0 Minimum Split (s) 23.0 30.0 25.0 30.0 30.0 10.0 Total Split (s) 23.0 55.0 32.0 35.0 35.0 0.0 15.0 Total Split (%) 22% 52% 30% 33% 33% 0% 14% Maximum Green (s) 18.0 50.0 26.0 30.0 30.0 10.0 Yellow Time (s) 4.0 4.0 4.0 4.0 3.0 30.0 All-Red Time (s) 1.0 1.0 2.0 1.0 1.0 2.0 Lead/Lag Lead Lag Lead Lag 2.0 2.0 Lead/Lag Optimize? Yes Yes Yes Yes Yes Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 Recall Mode None None			2	6		4		9	
Minimum Initial (s) 10.0 10.0 10.0 10.0 10.0 5.0 Minimum Split (s) 23.0 30.0 25.0 30.0 30.0 10.0 Total Split (s) 23.0 55.0 32.0 35.0 30.0 10.0 Total Split (%) 22% 52% 30% 33% 33% 0% 14% Maximum Green (s) 18.0 50.0 26.0 30.0 30.0 10.0 Yellow Time (s) 4.0 4.0 4.0 4.0 3.0 30 All-Red Time (s) 1.0 1.0 2.0 1.0 1.0 2.0 Lead/Lag Lead Lag Lead Lag Vehicle Extension (s) 3.0 3.0 3.0 3.0 Recall Mode None None Min None None None Walk Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Flash Dont Walk (s) 11.0			2	6					
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Total Split (%) 22% 52% 30% 33% 33% 0% 14% Maximum Green (s) 18.0 50.0 26.0 30.0 30.0 10.0 Yellow Time (s) 4.0 4.0 4.0 4.0 4.0 3.0 All-Red Time (s) 1.0 1.0 2.0 1.0 1.0 2.0 Lead/Lag Lead Lag							0.0		
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Yellow Time (s) 4.0 4.0 4.0 4.0 3.0 All-Red Time (s) 1.0 1.0 2.0 1.0 1.0 2.0 Lead/Lag Lead Lag Lag Lead-Lag Optimize? Yes Yes Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 Recall Mode None None Min None None None Walk Time (s) 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 Pedestrian Calls (#/hr) 0 0 0 0 0 0 Act Effct Green (s) 13.6 42.0 28.8 15.1 15.1 Actuated g/C Ratio 0.22 0.71 0.48 0.24 0.24 v/c Ratio 0.45 0.23 0.47 0.30 0.60 Uniform Delay, d1 23.4 3.8 12.3 13.9 15.2 Delay 24.0 5.6 18.0							0%		
All-Red Time (s) 1.0 1.0 2.0 1.0 1.0 2.0 Lead/Lag Lead Lag Lag Lead-Lag Optimize? Yes Yes Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 Recall Mode None None Min None None None Walk Time (s) 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 Pedestrian Calls (#/hr) 0 0 0 0 0 Act Effct Green (s) 13.6 42.0 28.8 15.1 15.1 Actuated g/C Ratio 0.22 0.71 0.48 0.24 0.24 v/c Ratio 0.45 0.23 0.47 0.30 0.60 Uniform Delay, d1 23.4 3.8 12.3 13.9 15.2 Delay 24.0 5.6 18.0 15.3 15.3 LOS C A B B B									
Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 Recall Mode None None Min None None None Walk Time (s) 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 Pedestrian Calls (#/hr) 0 0 0 0 0 0 Act Effct Green (s) 13.6 42.0 28.8 15.1 15.1 Actuated g/C Ratio 0.22 0.71 0.48 0.24 0.24 v/c Ratio 0.45 0.23 0.47 0.30 0.60 Uniform Delay, d1 23.4 3.8 12.3 13.9 15.2 Delay 24.0 5.6 18.0 15.3 15.3 LOS C A B B B									
Lead-Lag Optimize? Yes Yes Vehicle Extension (s) 3.0 <			1.0		1.0	1.0		2.0	
Vehicle Extension (s) 3.0 Recall Mode None None <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>									
Recall Mode None None Min None None None None Walk Time (s) 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 Pedestrian Calls (#/hr) 0 0 0 0 0 0 Act Effct Green (s) 13.6 42.0 28.8 15.1 15.1 Actuated g/C Ratio 0.22 0.71 0.48 0.24 0.24 v/c Ratio 0.45 0.23 0.47 0.30 0.60 Uniform Delay, d1 23.4 3.8 12.3 13.9 15.2 Delay 24.0 5.6 18.0 15.3 15.3 LOS C A B B B			3.0		3.0	3.0		3.0	
Walk Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 Flash Dont Walk (s) 11.0 12.0 12.0 12.0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
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Pedestrian Calls (#/hr) 0									
Act Effct Green (s) 13.6 42.0 28.8 15.1 15.1 Actuated g/C Ratio 0.22 0.71 0.48 0.24 0.24 v/c Ratio 0.45 0.23 0.47 0.30 0.60 Uniform Delay, d1 23.4 3.8 12.3 13.9 15.2 Delay 24.0 5.6 18.0 15.3 15.3 LOS C A B B B									
Actuated g/C Ratio 0.22 0.71 0.48 0.24 0.24 v/c Ratio 0.45 0.23 0.47 0.30 0.60 Uniform Delay, d1 23.4 3.8 12.3 13.9 15.2 Delay 24.0 5.6 18.0 15.3 15.3 LOS C A B B B									
v/c Ratio 0.45 0.23 0.47 0.30 0.60 Uniform Delay, d1 23.4 3.8 12.3 13.9 15.2 Delay 24.0 5.6 18.0 15.3 15.3 LOS C A B B B									
Uniform Delay, d1 23.4 3.8 12.3 13.9 15.2 Delay 24.0 5.6 18.0 15.3 15.3 LOS C A B B B	-								
Delay 24.0 5.6 18.0 15.3 15.3 LOS C A B B B									
LOS C A B B B									
Approach Dolay 12.0 11.4 10.0	Approach Delay		12.3	17.4		15.3			

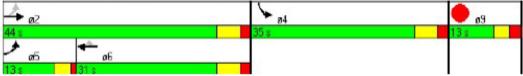
Canal at Howe Ave	Future	e No B	uild Sa	t Peak	(
	٠	→	+	×	5	~		
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Approach LOS		В	В		В			
90th %ile Green (s)	18.0	50.0	26.0	23.1	23.1		0.0	
90th %ile Term Code	Max	Hold	Max	Gap	Gap		Skip	
70th %ile Green (s)	14.0	45.2	25.2	16.5	16.5		0.0	
70th %ile Term Code	Gap	Hold	Gap	Gap	Gap		Skip	
50th %ile Green (s)	10.9	36.4	19.5	12.2	12.2		0.0	
50th %ile Term Code	Gap	Hold	Gap	Gap	Gap		Skip	
30th %ile Green (s)	10.0	31.5	15.5	10.0	10.0		0.0	
30th %ile Term Code	Min	Hold	Gap	Min	Min		Skip	
10th %ile Green (s)	0.0	27.5	26.5	0.0	0.0		0.0	
10th %ile Term Code	Skip	Dwell	Dwell	Skip	Skip		Skip	
Queue Length 50th (ft)	54	38	119	24	59			
Queue Length 95th (ft)	128	98	245	63	155			
Internal Link Dist (ft)		3728	4672		2978			
50th Up Block Time (%)								
95th Up Block Time (%)								
Turn Bay Length (ft)	100			50				
50th Bay Block Time %			41%					
95th Bay Block Time %	23%	7%	54%	20%				
Queuing Penalty (veh)	34	5	60	42				
Intersection Summary								
Area Type: O	ther							
Cycle Length: 105								
Actuated Cycle Length: 5	59.5							
Natural Cycle: 90								
Control Type: Actuated-U	Incoor	dinated						
Maximum v/c Ratio: 0.60)							
Intersection Signal Delay	: 15.1			Ir	ntersecti	ion LOS	: B	
Intersection Capacity Uti	lization	58.6%		10	CU Leve	of Ser	vice A	
90th %ile Actuated Cycle	: 83.1							
70th %ile Actuated Cycle	: 71.7							
50th %ile Actuated Cycle	: 58.6							
30th %ile Actuated Cycle	: 51.5							
10th %ile Actuated Cycle	: 32.5							





Canal at Howe Ave	Future	e Build	AM P	eak				
	١	-	+	*	4	1		
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Lane Configurations	5			1	W	ODIX	00	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100	1500	1000	50	0	0		
Storage Lanes	1			1	1	Ő		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		
Leading Detector (ft)	50	50	50	50	50			
Trailing Detector (ft)	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		
Frt				0.850	0.902			
Flt Protected	0.950				0.986			
Satd. Flow (prot)	1770	1863	1863	1583	1657	0		
Flt Permitted	0.239				0.986			
Satd. Flow (perm)	445	1863	1863	1583	1657	0		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)				37	156			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Link Speed (mph)		30	30		30			
Link Distance (ft)		3808	4752		3058			
Travel Time (s)		86.5	108.0		69.5			
Volume (vph)	126	156	332	73	51	135		
Peak Hour Factor	0.91	0.91	0.88	0.88	0.77	0.77		
Adj. Flow (vph)	138	171	377	83	66	175		
Lane Group Flow (vph)	138	171	377	83	241	0		
Turn Type	pm+pt			Perm				
Protected Phases	5	2	6		4		9	
Permitted Phases	2			6				
Detector Phases	5	2	6	6	4			
Minimum Initial (s)	8.0	10.0	10.0	10.0	10.0		8.0	
Minimum Split (s)	12.0	30.0	30.0	30.0	35.0		13.0	
Total Split (s)	13.0	44.0	31.0	31.0	35.0	0.0	13.0	
Total Split (%)	14%	48%	34%	34%	38%	0%	14%	
Maximum Green (s)	9.0	38.0	25.0	25.0	29.0		8.0	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0		3.0	
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0		2.0	
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	
Recall Mode	None	None	None	None	None		None	
Walk Time (s)		5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			
Pedestrian Calls (#/hr)	22.4	0	0	0	0			
Act Effct Green (s)	32.1	27.3	18.0	18.0	13.7			
Actuated g/C Ratio	0.60	0.56	0.37	0.37	0.28			
v/c Ratio	0.29	0.16	0.55	0.14	0.42			
Uniform Delay, d1	4.1	4.1	11.6	5.3	4.6			
Delay	4.8	4.9	13.3	7.5	7.8			
LOS Approach Delay	A	A	B	A	A			
Approach Delay		4.8	12.3		7.8			

Canal at Howe Ave F	Future	Build	AM Pe	eak				
	۶	→	+	*	5	~		
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Approach LOS		А	В		А			
90th %ile Green (s)	9.0	38.0	25.0	25.0	15.0		0.0	
90th %ile Term Code	Max	Hold	Max	Max	Gap		Skip	
70th %ile Green (s)	9.0	31.1	18.1	18.1	10.6		0.0	
70th %ile Term Code	Max	Hold	Gap	Gap	Gap		Skip	
50th %ile Green (s)	8.7	27.7	15.0	15.0	10.0		0.0	
50th %ile Term Code	Gap	Hold	Gap	Gap	Min		Skip	
30th %ile Green (s)	8.0	24.1	12.1	12.1	10.0		0.0	
30th %ile Term Code	Min	Hold	Gap	Gap	Min		Skip	
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0		0.0	
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip		Skip	
Queue Length 50th (ft)	15	18	88	7	20			
Queue Length 95th (ft)	39	47	170	28	57			
Internal Link Dist (ft)		3728	4672		2978			
50th Up Block Time (%)								
95th Up Block Time (%)								
Turn Bay Length (ft)	100			50				
50th Bay Block Time %			35%					
95th Bay Block Time %			44%					
Queuing Penalty (veh)			33					
Intersection Summary								
Area Type: Of	ther							
Cycle Length: 92								
Actuated Cycle Length: 4	5.7							
Natural Cycle: 90								
Control Type: Actuated-U	Incoord	dinated						
Maximum v/c Ratio: 0.55	k.							
Intersection Signal Delay	: 8.9			Ir	ntersecti	on LOS	: A	
Intersection Capacity Util		52.0%		10	CU Leve	l of Ser	vice A	
90th %ile Actuated Cycle	: 65							
70th %ile Actuated Cycle	: 53.7							
50th %ile Actuated Cycle	: 49.7							
30th %ile Actuated Cycle	: 46.1							
10th %ile Actuated Cycle	: 14							



Canal at Howe Ave	Future	Build	PM Pe	eak				
	۶	→	+	*	4	~		
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Lane Configurations	5	+	+	1	14			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			50	0	0		
Storage Lanes	1			1	1	0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		
Leading Detector (ft)	50	50	50	50	50			
Trailing Detector (ft)	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		
Frt				0.850	0.905			
Flt Protected	0.950				0.985			
Satd. Flow (prot)	1770	1863	1863	1583	1660	0		
Flt Permitted	0.950				0.985			
Satd. Flow (perm)	1770	1863	1863	1583	1660	0		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)				30	108			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Link Speed (mph)		30	30		30			
Link Distance (ft)		3808	4752		3058			
Travel Time (s)		86.5	108.0		69.5			
Volume (vph)	123	337	337	76	81	192		
Peak Hour Factor	0.86	0.86	0.80	0.80	0.91	0.91		
Adj. Flow (vph)	143	392	421	95	89	211		
Lane Group Flow (vph)	143	392	421	95	300	0		
	custom			Perm		-		
Protected Phases	5	2	6		4		9	
Permitted Phases	5			6			100	
Detector Phases	5	2	6	6	4			
Minimum Initial (s)	8.0	10.0	10.0	10.0	10.0		8.0	
Minimum Split (s)	14.0	30.0	30.0	30.0	30.0		13.0	
Total Split (s)	20.0	54.0	34.0	34.0	35.0	0.0	21.0	
Total Split (%)	18%	49%	31%	31%	32%	0%	19%	
Maximum Green (s)	16.0	49.0	28.0	28.0	30.0		16.0	
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0		3.0	
All-Red Time (s)	1.0	1.0	2.0	2.0	1.0		2.0	
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	
Recall Mode	None	None	None	None	None		None	
Walk Time (s)		5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			
Pedestrian Calls (#/hr)		0	0	0	0			
Act Effct Green (s)	11.3	34.2	23.6	23.6	15.5			
Actuated g/C Ratio	0.20	0.64	0.44	0.44	0.27			
v/c Ratio	0.40	0.33	0.52	0.13	0.57			
Uniform Delay, d1	21.4	4.3	11.5	6.4	12.3			
Delay	25.2	6.0	16.4	11.0	14.1			
LOS	C	A	В	В	В			
Approach Delay		11.2	15.4	-	14.1			
- approach order		11.2	19.4		1.1.1			

Canal at Howe Ave	Future	Build	PM P	eak				
	٠	-	+	×	5	~		
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Approach LOS		В	В		В			
90th %ile Green (s)	16.0	49.0	28.0	28.0	22.7		0.0	
90th %ile Term Code	Max	Hold	Max	Max	Gap		Skip	
70th %ile Green (s)	12.5	42.4	24.9	24.9	16.5		0.0	
70th %ile Term Code	Gap	Hold	Gap	Gap	Gap		Skip	
50th %ile Green (s)	9.7	32.8	18.1	18.1	11.9		0.0	
50th %ile Term Code	Gap	Hold	Gap	Gap	Gap		Skip	
30th %ile Green (s)	8.0	27.1	14.1	14.1	10.0		0.0	
30th %ile Term Code	Min	Hold	Gap	Gap	Min		Skip	
10th %ile Green (s)	0.0	11.0	10.0	10.0	0.0		0.0	
10th %ile Term Code	Skip	Hold	Min	Min	Skip		Skip	
Queue Length 50th (ft)	42	51	108	11	54			
Queue Length 95th (ft)	113	130	227	43	157			
Internal Link Dist (ft)		3728	4672		2978			
50th Up Block Time (%)								
95th Up Block Time (%)								
Turn Bay Length (ft)	100			50				
50th Bay Block Time %			39%					
95th Bay Block Time %	16%	15%	51%	2%				
Queuing Penalty (veh)	30	10	42					
Intersection Summary								
Area Type: O	ther							
Cycle Length: 110								
Actuated Cycle Length: 5	53.8							
Natural Cycle: 90								
Control Type: Actuated-U	Incoord	dinated						
Maximum v/c Ratio: 0.57	1							
Intersection Signal Delay	: 13.4			Ir	ntersecti	ion LOS	: В	
Intersection Capacity Util	lization	58.0%		IC	CU Leve	of Ser	vice A	
90th %ile Actuated Cycle								
70th %ile Actuated Cycle								
50th %ile Actuated Cycle	: 54.7							
30th %ile Actuated Cycle	: 47.1							
10th %ile Actuated Cycle	: 16.6							

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54 s		35 s	21 s
€ م	a 6		
20 s	34 s		I I

Canal at Howe Ave	Future	e Build	Sat P	eak			
	٦	-	+	*	5	~	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9
Lane Configurations	5	+	+	1	14		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	100			50	0	0	
Storage Lanes	1			1	1	0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		
Trailing Detector (ft)	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	
Frt				0.850	0.912		
Flt Protected	0.950				0.983		
Satd. Flow (prot)	1770	1863	1863	1583	1670	0	
Flt Permitted	0.950				0.983		
Satd. Flow (perm)	1770	1863	1863	1583	1670	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				43	91		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		30	30		30		
Link Distance (ft)		3808	4752		3058		
Travel Time (s)		86.5	108.0		69.5		
Volume (vph)	147	262	347	103	90	169	
Peak Hour Factor	0.86	0.86	0.80	0.80	0.91	0.91	
Adj. Flow (vph)	171	305	434	129	99	186	
Lane Group Flow (vph)		305	434	129	285	0	
· · · · · · · · · · · · · · · · · · ·	custom			ustom			
Protected Phases	5	2	6		4		9
Permitted Phases	5			4			
Detector Phases	5	2	6	4	4		
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		5.0
Minimum Split (s)	23.0	30.0	25.0	30.0	30.0		10.0
Total Split (s)	23.0	55.0	32.0	35.0	35.0	0.0	15.0
Total Split (%)	22%	52%	30%	33%	33%	0%	14%
Maximum Green (s)	18.0	50.0	26.0	30.0	30.0		10.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0
All-Red Time (s)	1.0	1.0	2.0	1.0	1.0		2.0
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?	Yes		Yes				
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	Min	None	None		None
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		
Act Effct Green (s)	13.7	42.6	29.5	15.2	15.2		
Actuated g/C Ratio	0.22	0.71	0.49	0.24	0.24		
v/c Ratio	0.45	0.23	0.48	0.31	0.60		
Uniform Delay, d1	23.7	3.8	12.4	14.3	15.7		
Delay	24.5	5.6	18.1	15.7	15.7		
LOS	С	A	B	В	B		
Approach Delay		12.4	17.6		15.7		

Canal at Howe Ave	Future	e Build	Sat Pe	eak				
	۶	-	+	×	5	~		
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø9	
Approach LOS		В	В		В			
90th %ile Green (s)	18.0	50.0	26.0	23.3	23.3		0.0	
90th %ile Term Code	Max	Hold	Max	Gap	Gap		Skip	
70th %ile Green (s)	14.2	46.2	26.0	16.8	16.8		0.0	
70th %ile Term Code	Gap	Hold	Max	Gap	Gap		Skip	
50th %ile Green (s)	11.1	37.9	20.8	12.6	12.6		0.0	
50th %ile Term Code	Gap	Hold	Gap	Gap	Gap		Skip	
30th %ile Green (s)	10.0	32.3	16.3	10.0	10.0		0.0	
30th %ile Term Code	Min	Hold	Gap	Min	Min		Skip	
10th %ile Green (s)	0.0	26.9	25.9	0.0	0.0		0.0	
10th %ile Term Code	Skip	Dwell	Dwell	Skip	Skip		Skip	
Queue Length 50th (ft)	56	40	125	26	62			
Queue Length 95th (ft)	128	101	252	65	157			
Internal Link Dist (ft)		3728	4672		2978			
50th Up Block Time (%)								
95th Up Block Time (%)								
Turn Bay Length (ft)	100			50				
50th Bay Block Time %			41%					
95th Bay Block Time %	22%	7%	55%	21%				
Queuing Penalty (veh)	34	6	61	46				
Intersection Summary								
Area Type: O	ther							
Cycle Length: 105								
Actuated Cycle Length: 6	50.2							
Natural Cycle: 90								
Control Type: Actuated-U		dinated						
Maximum v/c Ratio: 0.60								
Intersection Signal Delay	r: 15.3				ntersecti			
Intersection Capacity Util		59.2%		IC	CU Leve	l of Sen	vice A	
90th %ile Actuated Cycle								
70th %ile Actuated Cycle								
50th %ile Actuated Cycle								
30th %ile Actuated Cycle								
10th %ile Actuated Cycle	: 31.9							



Canal at Elm Existin												
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			र्भ	1		4		1	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		70	0		0	130		0
Storage Lanes	0		0	0		1	0		0	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	50	50		50	50	
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt		0.985				0.850					0.944	
Fit Protected		0.994			0.994			0.950		0.950		
Satd. Flow (prot)	0	1824	0	0	1852	1583	0	1770	0	1770	1758	0
Flt Permitted		0.947			0.936			0.731		0.755		
Satd. Flow (perm)	0	1738	0	0	1743	1583	0	1362	0	1406	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				246					15	
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)		4681			4275			1643			3107	
Travel Time (s)		106.4			97.2			37.3			70.6	
Volume (vph)	30	200	29	27	184	281	1	0	0	131	20	12
Confl. Peds. (#/hr)				1								
Peak Hour Factor	0.84	0.84	0.84	0.91	0.91	0.91	0.25	0.25	0.25	0.81	0.81	0.81
Adj. Flow (vph)	36	238	35	30	202	309	4	0	0	162	25	15
Lane Group Flow (vph)	0	309	0	0	232	309	0	4	0	162	40	0
Turn Type	Perm			Perm		Free	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		Free	2			6		
Detector Phases	4	4		8	8		2	2		6	6	
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	28.0	28.0		20.0	20.0		26.0	26.0		26.0	26.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	43%	43%	0%	43%	43%	0%	39%	39%	0%	39%	39%	0%
Maximum Green (s)	28.0	28.0		28.0	28.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
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	
Act Effct Green (s)		10.4			10.4	27.1		12.7		12.7	12.7	
Actuated g/C Ratio		0.35			0.35	1.00		0.47		0.47	0.47	
v/c Ratio		0.50			0.38	0.20		0.01		0.25	0.05	
Uniform Delay, d1		8.1			8.0	0.0		4.8		5.3	3.0	
Delay		7.0			6.8	0.0		7.0		7.9	5.6	

Lane Group EBL EBT EBR WBL WBR NBL NBR NBR SBL SBT SBF LOS A	Canal at Elm Existin	g AM	Peak										
LOS A		٠	-	¥	*	+	•	1	t	1	4	ŧ	~
Approach Delay 7.0 2.9 7.0 7.5 Approach LOS A A A A A Oth %ile Green (s) 11.3	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS A B B B B B CULL Level of Service A B A B <td>LOS</td> <td></td> <td>А</td> <td></td> <td></td> <td>А</td> <td>А</td> <td></td> <td>Α</td> <td></td> <td>А</td> <td>А</td> <td></td>	LOS		А			А	А		Α		А	А	
90th %ile Green (s) 15.5 15.5 15.5 13.2 13.2 13.2 13.2 90th %ile Term Code Gap Gap Hold Gap	Approach Delay		7.0			2.9			7.0			7.5	
90th %ile Term Code Gap Gap Hold Hold Hold Hold Hold Gap Gap 70th %ile Green (s) 11.3 11.3 11.3 9.7 9.7 9.7 9.7 70th %ile Green (s) 9.3 9.3 9.3 9.3 8.1 8.1 8.1 8.1 50th %ile Green (s) 9.3 9.3 9.3 8.1 8.1 8.1 8.1 50th %ile Green (s) 8.0	Approach LOS		А			A			A			A	
70th %ile Green (s) 11.3 11.3 11.3 11.3 9.7 9.7 9.7 9.7 70th %ile Term Code Gap Gap Gap Gap Gap Gap 50th %ile Green (s) 9.3 9.3 9.3 9.3 8.1 8.1 8.1 8.1 50th %ile Green (s) 8.0	90th %ile Green (s)	15.5	15.5		15.5	15.5		13.2	13.2		13.2	13.2	
70th %ile Term Code Gap	90th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
50th %ile Green (s) 9.3 9.3 9.3 9.3 8.1 8.0 30h 93 93 9.3 8.1 8.1 8.1 8.1 8.1 8.0 30h 30h 30h 8.0 100 <td>70th %ile Green (s)</td> <td>11.3</td> <td>11.3</td> <td></td> <td>11.3</td> <td>11.3</td> <td></td> <td>9.7</td> <td>9.7</td> <td></td> <td>9.7</td> <td>9.7</td> <td></td>	70th %ile Green (s)	11.3	11.3		11.3	11.3		9.7	9.7		9.7	9.7	
50th %ile Term Code Gap Gap Hold Hold Hold Hold Gap Gap <thgap< th=""> <thgap< th=""> Gap</thgap<></thgap<>	70th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
Solt %ile Green (s) 8.0	50th %ile Green (s)	9.3	9.3		9.3	9.3		8.1	8.1		8.1	8.1	
30th %ile Term Code Min	50th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
10th %ile Green (s) 0.0 0.0 0.0 16.3 16.	30th %ile Green (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
10th %ile Term Code Skip Skip Skip Dwell	30th %ile Term Code	Min	Min		Min	Min		Min	Min		Min	Min	
Queue Length 50th (ft) 24 19 0 0 14 0 Queue Length 95th (ft) 70 59 0 1 45 0 Internal Link Dist (ft) 4601 4195 1563 3027 50th Up Block Time (%) 95th OB Block Time (%) 95th Bay Block Time (%) 95th Bay Block Time % 95th Bay Block Time % <t< td=""><td>10th %ile Green (s)</td><td>0.0</td><td>0.0</td><td></td><td>0.0</td><td>0.0</td><td></td><td>16.3</td><td>16.3</td><td></td><td>16.3</td><td>16.3</td><td></td></t<>	10th %ile Green (s)	0.0	0.0		0.0	0.0		16.3	16.3		16.3	16.3	
Queue Length 95th (ft) 70 59 0 1 45 0 Internal Link Dist (ft) 4601 4195 1563 3027 50th Up Block Time (%) 95th 0p Block Time (%) 70 130 95th Bay Block Time (%) 70 130 50th Bay Block Time % 8% 95th Bay Block Time % 95th Bay Block Time % Queuing Penalty (veh) 13 1 1 1 Intersection Summary Area Type: Other 0 1 Cycle Length: 74 Actuated Cycle Length: 27.1 Natural Cycle: 70 1 1 Control Type: Actuated-Uncoordinated Maximum vic Ratio: 0.50 Intersection LOS: A 1 1 Intersection Capacity Utilization 54.5% ICU Level of Service A 9 9 9 9 1	10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	
Internal Link Dist (ft) 4801 4195 1583 3027 50th Up Block Time (%) 95th Up Block Time (%) 70 130 50th Bay Block Time % 8% 95th Bay Block Time % 8% Queuing Penalty (veh) 13 13 Intersection Summary 13 13 Area Type: Other Cycle Length: 74 Actuated Cycle Length: 27.1 Natural Cycle: 70 70 Control Type: Actuated-Uncoordinated Intersection LOS: A 1 Intersection Signal Delay: 5.0 Intersection LOS: A 1 Intersection Capacity Utilization 54.5% ICU Level of Service A 90th %ile Actuated Cycle: 38.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Queue Length 50th (ft)		24			19	0		0		14	0	
50th Up Block Time (%) 95th Up Block Time (%) Tum Bay Length (ft) 70 50th Bay Block Time % 95th Bay Block Time % 90th ? 05th Say Block Time % 90th %ile Actuated Cycle: 30.7 70th %ile Actuated Cycle: 20 90th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Queue Length 95th (ft)		70			59	0		1		45	0	
95th Up Block Time (%) Turn Bay Length (ft) 70 130 50th Bay Block Time % 95th Bay Block Time % 8% Queuing Penalty (veh) 13 Intersection Summary Area Type: Other Cycle Length: 74 Actuated Cycle Length: 27.1 Natural Cycle: 70 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.50 Intersection LOS: A Intersection Capacity Utilization 54.5% ICU Level of Service A 90th %ile Actuated Cycle: 38.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Internal Link Dist (ft)		4601			4195			1563			3027	
Turn Bay Length (ft) 70 130 50th Bay Block Time % 8% 95th Bay Block Time % 8% Queuing Penalty (veh) 13 Intersection Summary Area Type: Other Cycle Length: 74 Actuated Cycle Length: 27.1 Natural Cycle: 70 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.50 Intersection LOS: A Intersection Capacity Utilization 54.5% ICU Level of Service A 90th %ile Actuated Cycle: 28.7 70th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24 504	50th Up Block Time (%)												
50th Bay Block Time % 8% 95th Bay Block Time % 8% Queuing Penalty (veh) 13 Intersection Summary Area Type: Other Cycle Length: 74 Cycle Length: 27.1 Natural Cycle: 70 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.50 Intersection LOS: A Intersection Capacity Utilization 54.5% ICU Level of Service A 90th %ile Actuated Cycle: 28.7 70th %ile Actuated Cycle: 29.5 50th %ile Actuated Cycle: 24 24.4	95th Up Block Time (%)												
95th Bay Block Time % 8% Queuing Penalty (veh) 13 Intersection Summary Area Type: Other Cycle Length: 74 Cycle Length: 27.1 Natural Cycle: 70 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.50 Intersection LOS: A Intersection Capacity Utilization 54.5% ICU Level of Service A 90th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 29. 50th %ile Actuated Cycle: 24 24	Turn Bay Length (ft)						70				130		
Queuing Penalty (veh) 13 Intersection Summary Area Type: Other Area Type: Other Other Cycle Length: 74 Actuated Cycle Length: 27.1 Natural Cycle: 70 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.50 Intersection LOS: A Intersection Signal Delay: 5.0 Intersection LOS: A Intersection Capacity Utilization 54.5% 90th %ile Actuated Cycle: 38.7 TOth %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24 Soth %ile Actuated Cycle: 24	50th Bay Block Time %												
Intersection Summary Area Type: Other Cycle Length: 74 Actuated Cycle Length: 27.1 Natural Cycle: 70 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.50 Intersection Signal Delay: 5.0 Intersection LOS: A Intersection Capacity Utilization 54.5% 90th %ile Actuated Cycle: 38.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	95th Bay Block Time %					8%							
Area Type: Other Cycle Length: 74 Actuated Cycle Length: 27.1 Natural Cycle: 70 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.50 Intersection Signal Delay: 5.0 Intersection Capacity Utilization 54.5% 90th %ile Actuated Cycle: 38.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Queuing Penalty (veh)					13							
Cycle Length: 74 Actuated Cycle Length: 27.1 Natural Cycle: 70 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.50 Intersection Signal Delay: 5.0 Intersection LOS: A Intersection Capacity Utilization 54.5% ICU Level of Service A 90th %ile Actuated Cycle: 38.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Intersection Summary												
Actuated Cycle Length: 27.1 Natural Cycle: 70 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.50 Intersection Signal Delay: 5.0 Intersection Capacity Utilization 54.5% 90th %ile Actuated Cycle: 36.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Area Type: O	ther											
Natural Cycle: 70 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.50 Intersection Signal Delay: 5.0 Intersection LOS: A Intersection Capacity Utilization 54.5% ICU Level of Service A 90th %ile Actuated Cycle: 36.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Cycle Length: 74												
Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.50 Intersection Signal Delay: 5.0 Intersection LOS: A Intersection Capacity Utilization 54.5% 90th %ile Actuated Cycle: 38.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Actuated Cycle Length: 2	27.1											
Maximum v/c Ratio: 0.50 Intersection LOS: A Intersection Signal Delay: 5.0 Intersection LOS: A Intersection Capacity Utilization 54.5% ICU Level of Service A 90th %ile Actuated Cycle: 38.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Natural Cycle: 70												
Intersection Signal Delay: 5.0 Intersection LOS: A Intersection Capacity Utilization 54.5% ICU Level of Service A 90th %ile Actuated Cycle: 38.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Control Type: Actuated-U	Incoord	dinated										
Intersection Capacity Utilization 54.5% ICU Level of Service A 90th %ile Actuated Cycle: 36.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Maximum v/c Ratio: 0.50)											
Intersection Capacity Utilization 54.5% ICU Level of Service A 90th %ile Actuated Cycle: 36.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24	Intersection Signal Delay	r: 5.0			li li	ntersect	ion LOS	S: A					
90th %ile Actuated Cycle: 38.7 70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24			54.5%		10	CU Lew	el of Sei	rvice A					
70th %ile Actuated Cycle: 29 50th %ile Actuated Cycle: 25.4 30th %ile Actuated Cycle: 24													
30th %ile Actuated Cycle: 24													
	50th %ile Actuated Cycle	: 25.4											
10th %ile Actuated Cycle: 20.3	30th %ile Actuated Cycle	24											
	10th %ile Actuated Cycle	e: 20.3											

Splits and Phases: 2: Elm St & Canal St

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Canal at Elm Existin	ng PM	Peak										
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			4	1		\$		5	1.	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		70	0		0	130		0
Storage Lanes	0		0	0		1	0		0	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	50	50		50	50	
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.997				0.850		0.932			0.877	
Fit Protected		0.995			0.999			0.976		0.950		
Satd. Flow (prot)	0	1847	0	0	1861	1583	0	1694	0	1770	1634	0
Flt Permitted		0.943			0.989			0.949		0.755		
Satd. Flow (perm)	0	1750	0	0	1842	1583	0	1648	0	1406	1634	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	4.00	2	4.00	4.00	4.00	193	4.00	2	4.00	4.00	51	4.00
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)		4681			4275			1643			3107	
Travel Time (s)	20	106.4	0		97.2	242		37.3		224	70.6	40
Volume (vph)	30	253	6	9	292	313	1	0	1	324	10	46
Confl. Peds. (#/hr)			1									
Confl. Bikes (#/hr)	0.02	0.92	0.92	0.90	0.90	0.90	0.50	0.50	0.50	0.91	0.91	0.91
Peak Hour Factor Adj. Flow (vph)	0.92	275	0.92	10	324	348	0.50	0.50	0.50	356	11	51
	0	315	0	0	334	348	0	4	0	356	62	0
Lane Group Flow (vph) Turn Type	Perm	515	U	Perm	554	Free	Perm	4	0	Perm	02	0
Protected Phases	Form	4		r onn	8	1100	r chin	2		- Cum	6	
Permitted Phases	4	-		8		Free	2	-		6		
Detector Phases	4	4		8	8	1100	2	2		6	6	
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		26.0	26.0		26.0	26.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	43%	43%	0%	43%	43%	0%	39%	39%	0%	39%	39%	0%
Maximum Green (s)	28.0	28.0		28.0	28.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
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	
Act Effct Green (s)		12.1			12.1	33.5		18.3		18.3	18.3	
Actuated g/C Ratio		0.34			0.34	1.00		0.55		0.55	0.55	
v/c Ratio		0.53			0.54	0.22		0.00		0.46	0.07	
Uniform Delay, d1		10.8			10.9	0.0		2.2		5.9	0.8	

Canal at Elm Existin	g PM	Peak										
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Delay		10.7			10.8	0.0		6.0		8.6	3.3	
LOS		В			В	А		A		А	A	
Approach Delay		10.7			5.3			6.0			7.8	
Approach LOS		В			А			А			А	
90th %ile Green (s)	19.7	19.7		19.7	19.7		25.0	25.0		25.0	25.0	
90th %ile Term Code	Gap	Gap		Gap	Gap		Hold	Hold		Max	Max	
70th %ile Green (s)	14.2	14.2		14.2	14.2		18.1	18.1		18.1	18.1	
70th %ile Term Code	Hold	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
50th %ile Green (s)	10.9	10.9		10.9	10.9		13.7	13.7		13.7	13.7	
50th %ile Term Code	Gap	Gap		Gap	Gap		Hold	Hold		Gap	Gap	
30th %ile Green (s)	8.7	8.7		8.7	8.7		10.7	10.7		10.7	10.7	
30th %ile Term Code	Hold	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	0.0		0.0	0.0		10.6	10.6		10.6	10.6	
10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	
Queue Length 50th (ft)		41			45	0		0		43	0	
Queue Length 95th (ft)		131			137	0		0		137	0	
Internal Link Dist (ft)		4601			4195			1563			3027	
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)						70				130		
50th Bay Block Time %												
95th Bay Block Time %					37%					13%		
Queuing Penalty (veh)					63					4		
Intersection Summary												
Area Type: O	ther											
Cycle Length: 74												
Actuated Cycle Length: 3	33.5											
Natural Cycle: 60												
Control Type: Actuated-I	Uncoord	dinated										
Maximum v/c Ratio: 0.54	-											
Intersection Signal Delay	y: 7.2			Ir	ntersect	ion LOS	5: A					
Intersection Capacity Uti	lization	65.6%		IC	CU Leve	el of Ser	vice B					
90th %ile Actuated Cycle	e: 52.7											
70th %ile Actuated Cycle	e: 40.3											
50th %ile Actuated Cycle	e: 32.6											
30th %ile Actuated Cycle	e: 27.4											
10th %ile Actuated Cycle	e: 14.6											

Splits and Phases: 2: Elm St & Canal St

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Canal at Elm Existin	ng Sat	Peak										
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4	1		4		ሻ	ţ.	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		70	0		0	130		0
Storage Lanes	0		0	0		1	0		0	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	50	50		50	50	
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00		1.00		
Frt		0.987				0.850					0.915	
Flt Protected		0.992			0.997			0.950		0.950		
Satd. Flow (prot)	0	1820	0	0	1857	1583	0	1770	0	1770	1704	0
Flt Permitted		0.917			0.972			0.717		0.752		
Satd. Flow (perm)	0	1682	0	0	1811	1583	0	1333	0	1398	1704	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				228					35	
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)		4681			4275			1643			3107	
Travel Time (s)		106.4			97.2			37.3			70.6	
Volume (vph)	42	210	26	17	257	338	2	0	0	272	25	32
Confl. Peds. (#/hr)			1				1			1		_
Confl. Bikes (#/hr)	0.00	0.00	1	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.00
Peak Hour Factor	0.88	0.88	0.88	0.95	0.95	0.95	0.25	0.25	0.25	0.92	0.92	0.92
Adj. Flow (vph)	48	239	30	18	271	356	8	0	0	296	27	35
Lane Group Flow (vph)	Dorm	317	0	0 Perm	289	356 Free	0 Perm	8	0	296 Perm	62	0
Turn Type Protected Phases	Perm			Penn	8	Fiee	Penn	2		Perm	6	
Permitted Phases	4	4		8	0	Free	2	2		6	0	
Detector Phases	4	4		8	8	Fiee	2	2		6	6	
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	28.0	28.0		20.0	20.0		26.0	26.0		26.0	26.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	43%	43%	0%	43%	43%	0%	39%	39%	0%	39%	39%	0%
Maximum Green (s)	28.0	28.0	0.70	28.0	28.0	0.70	25.0	25.0	0.10	25.0	25.0	0.10
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
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	
Act Effct Green (s)	5	11.7		5	11.7	31.5	5	16.3		16.3	16.3	
Actuated g/C Ratio		0.35			0.35	1.00		0.52		0.52	0.52	
v/c Ratio		0.54			0.46	0.22		0.01		0.41	0.07	
Uniform Delay, d1		9.7			9.6	0.0		4.6		5.8	2.0	
		2			2.0	2.2				0.0		

Canal at Elm Existin	g Sat	Peak										_
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Delay		9.4			9.3	0.0		7.0		8.5	4.5	
LOS		Α			Α	Α		А		А	A	
Approach Delay		9.4			4.2			7.0			7.8	
Approach LOS		А			А			А			A	
90th %ile Green (s)	19.5	19.5		19.5	19.5		22.6	22.6		22.6	22.6	
90th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
70th %ile Green (s)	13.5	13.5		13.5	13.5		14.6	14.6		14.6	14.6	
70th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
50th %ile Green (s)	10.4	10.4		10.4	10.4		11.1	11.1		11.1	11.1	
50th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
30th %ile Green (s)	8.4	8.4		8.4	8.4		8.8	8.8		8.8	8.8	
30th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	0.0		0.0	0.0		12.5	12.5		12.5	12.5	
10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	
Queue Length 50th (ft)		34			31	0		1		32	0	
Queue Length 95th (ft)		118			110	0		2		110	0	
Internal Link Dist (ft)		4601			4195			1563			3027	
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)						70				130		
50th Bay Block Time %												
95th Bay Block Time %					30%					4%		
Queuing Penalty (veh)					53							
Intersection Summary												
Area Type: O	ther											
Cycle Length: 74												
Actuated Cycle Length: 3	31.5											
Natural Cycle: 70												
Control Type: Actuated-U	Jncoord	linated										
Maximum v/c Ratio: 0.54	1											
Intersection Signal Delay				Ir	ntersect	ion LOS	S: A					
Intersection Capacity Uti		65.3%		IC	CU Leve	el of Ser	rvice B					
90th %ile Actuated Cycle												
70th %ile Actuated Cycle	e: 36.1											
50th %ile Actuated Cycle	: 29.5											
30th %ile Actuated Cycle	e: 25.2											
10th %ile Actuated Cycle	e: 16.5											

Splits and Phases: 2: Elm St & Canal St

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Lane Group EBL EBL EBR WBL WBT WBR NBT NBT NBR SBL SBT SBR Lane Configurations +	Canal at Elm Future	No B	uild AN	1 Peak	(
Lane Configurations		٦	→	7	ŕ	+	×	1	t	1	4	ţ	1
ideal Flow (rphpl) 1900 <th>Lane Group</th> <th>EBL</th> <th>EBT</th> <th>EBR</th> <th>WBL</th> <th>WBT</th> <th>WBR</th> <th>NBL</th> <th>NBT</th> <th>NBR</th> <th>SBL</th> <th>SBT</th> <th>SBR</th>	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
ideal Flow (rphpl) 1900 <th>Lane Configurations</th> <th></th> <th>4</th> <th></th> <th></th> <th>4</th> <th>1</th> <th></th> <th>4</th> <th></th> <th></th> <th>1.</th> <th></th>	Lane Configurations		4			4	1		4			1.	
Storage Length (ft) 0 0 0 70 0 0 130 0 Storage Length (ft) 0 4.0		1900		1900	1900			1900		1900			1900
Total Lost Time (s) 4.0 0 <th< td=""><td></td><td>0</td><td></td><td>0</td><td>0</td><td></td><td>70</td><td>0</td><td></td><td>0</td><td>130</td><td></td><td>0</td></th<>		0		0	0		70	0		0	130		0
Leading Detector (t) 50 50 50 50 50 50 50 50 50 50 50 50 50	Storage Lanes	0		0	0		1	0		0	1		0
Trailing Detector (ft) 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
Turning Speed (mph) 15 9 15 9 15 9 15 9 15 9 15 9 15 9 15 9 15 9 15 9 15 9 15 9 15 9 15 9 15 9 15 9 15 10 100 <th< td=""><td>Leading Detector (ft)</td><td>50</td><td>50</td><td></td><td>50</td><td>50</td><td>50</td><td>50</td><td>50</td><td></td><td>50</td><td>50</td><td></td></th<>	Leading Detector (ft)	50	50		50	50	50	50	50		50	50	
Lane Util, Factor 1.00 0.994 0.994 0.950 0.944 Fit Protected 0.994 0.994 0.950 0.729 0.755 0 0 1738 1583 0 1406 1758 0 Right Tum on Red Yes	Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Ped Bike Factor 1.00 Frt 0.984 0.850 0.950 Fit Protected 0.994 0.950 0.950 Satd. Flow (prot) 0 1822 0 0 1852 1583 0 1770 0 1770 1758 0 Fit Permitted 0.940 0.933 0.729 0.755 5 7 6 Satd. Flow (perm) 0 1723 0 0 1358 0 1.04 1.01	Turning Speed (mph)	15		9	15		9	15		9	15		9
Frit 0.984 0.850 0.944 Fit Protected 0.994 0.994 0.950 0.950 Stadt, Flow (port) 0 1822 0 0 1853 0 1770 0 1700 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fit Protected 0.994 0.994 0.950 0.950 Satd. Flow (prot) 0 1822 0 0 1852 1583 0 1770 0 1776 1758 0 Fit Permitted 0.940 0.933 0.729 0.755 783 0 1738 1583 0 1358 0 1406 1758 0 Right Tum on Red Yes Yes<	Ped Bike Factor					1.00							
Satd. Flow (prot) 0 1822 0 0 1852 1583 0 1770 0 1770 1758 0 Fit Permitted 0.940 0.933 0.729 0.755	Frt		0.984				0.850					0.944	
Fit Permitted 0.940 0.933 0.729 0.755 Satd. Flow (perm) 0 1723 0 0 1738 1583 0 1406 1758 0 Satd. Flow (RTOR) 11 246 Yes Yes Yes Yes Yes Satd. Flow (RTOR) 11 246 16 16 16 Headway Factor 1.00 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.0	Flt Protected										0.950		
Satd. Flow (perm) 0 1723 0 0 1738 1583 0 1358 0 1406 1758 0 Right Turn on Red Yes	Satd. Flow (prot)	0		0	0		1583	0		0		1758	0
Right Turn on Red Yes			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								0.755		
Satd. Flow (RTOR) 11 246 16 Headway Factor 1.00 </td <td></td> <td>0</td> <td>1723</td> <td></td> <td>0</td> <td>1738</td> <td></td> <td>0</td> <td>1358</td> <td>0</td> <td>1406</td> <td>1758</td> <td>0</td>		0	1723		0	1738		0	1358	0	1406	1758	0
Headway Factor 1.00<				Yes						Yes			Yes
Link Speed (mph) 30 30 30 30 30 Link Distance (ft) 4681 4275 1643 3107 Travel Time (s) 106.4 97.2 37.3 70.6 Volume (vph) 33 200 32 30 202 309 1 0 0 144 22 13 Confl. Peds. (#/hr) 1 0 0 144 0 0 178 27 16 Lane Group Flow (vph) 0 315 0 0 255 340 4 0 178 27 16 Lare Group Flow (vph) 0 315 0 0 255 340 0 4 0 178 43 0 Pure tocted Phases 4 8 Free 2 6 6 0 0 18 30 10.0 10 10 14 22 2 6 6 0 0 22 6 0													
Link Distance (ft) 4681 4275 1643 3107 Travel Time (s) 106.4 97.2 37.3 70.6 Volume (vph) 33 200 32 30 202 309 1 0 0 144 22 13 Confl. Peck (#hr) 1		1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Travel Time (s) 106.4 97.2 37.3 70.6 Volume (vph) 33 200 32 30 202 309 1 0 0 144 22 13 Confl. Peds. (#/hr) 1 <													
Volume (vph) 33 200 32 30 202 309 1 0 0 144 22 13 Peak Hour Factor 0.84 0.84 0.84 0.91 0.91 0.25 0.25 0.25 0.81 0.81 0.81 Adj. Flow (vph) 039 238 38 33 222 340 4 0 0 178 27 16 Lane Group Flow (vph) 0 315 0 0 255 340 0 4 0 178 43 0 Turn Type Perm Perm Free Perm Perm Perm 6 Detector Phases 4 8 8 2 2 6 6 Minimum Initial (s) 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 0.0 0.0 0.0													
Confl. Peds. (#/hr) 1 Peak Hour Factor 0.84 0.84 0.91 0.91 0.25 0.25 0.25 0.81 0.81 0.81 Adj. Flow (vph) 39 238 38 33 222 340 4 0 0 178 27 16 Lane Group Flow (vph) 0 315 0 0 255 340 0 4 0 178 27 16 Lane Group Flow (vph) 0 315 0 0 255 340 0 4 0 178 27 16 Lane Group Flow (vph) 0 315 0 0 255 340 0 43 0 Permitted Phases 4 8 8 2 6 6 6 Minimum Initial (s) 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 70 10 10 10 10 10 <													
Peak Hour Factor 0.84 0.84 0.91 0.91 0.25 0.25 0.25 0.81 0.81 0.81 Adj. Flow (vph) 39 238 38 33 222 340 4 0 0 178 27 16 Lane Group Flow (vph) 0 315 0 0 255 340 0 4 0 178 43 0 Turn Type Perm Perm Free Perm		33	200	32		202	309	1	0	0	144	22	13
Adj. Flow (vph) 39 238 38 33 222 340 4 0 0 178 27 16 Lane Group Flow (vph) 0 315 0 0 255 340 0 4 0 178 43 0 Turn Type Perm Perm Free Perm													
Lane Group Flow (vph) 0 315 0 0 255 340 0 4 0 178 43 0 Turn Type Perm Perm Free Perm Perm Perm Perm Perm Protected Phases 4 8 Free 2 6 6 Detector Phases 4 4 8 8 2 2 6 6 Minimum Initial (s) 8.0													
Turn Type Perm Free Perm Free Perm Perm Protected Phases 4 8 7 6 Permitted Phases 4 8 8 2 6 Detector Phases 4 4 8 8 2 2 6 Detector Phases 4 4 8 8 2 2 6 6 Minimum Initial (s) 8.0 7.0													
Protected Phases 4 8 2 6 Permitted Phases 4 8 Free 2 6 Detector Phases 4 4 8 8 2 2 6 6 Minimum Initial (s) 8.0 9.0		-	315	U	-	255			4	U		43	U
Permitted Phases 4 8 Free 2 6 Detector Phases 4 4 8 8 2 2 6 6 Minimum Initial (s) 8.0 7.0 29		Perm	4		Perm	0	Free	Perm	2		Perm	6	
Detector Phases 4 4 8 8 2 2 6 6 Minimum Initial (s) 8.0 26.0 26.0 26.0 26.0 29.0 0.0 29.0 29.0 0.0 700			4			0	Eree	2	2		6	0	
Minimum Initial (s) 8.0			4			0	Fiee		2			c	
Minimum Split (s) 28.0 28.0 20.0 20.0 26.0 28.0 <td></td>													
Total Split (s) 32.0 32.0 0.0 32.0 32.0 0.0 29.0													
Total Split (%) 43% 43% 0% 43% 43% 0% 39% 39% 0% 30% 30% 3.0				0.0			0.0			0.0			0.0
Maximum Green (s) 28.0 28.0 28.0 28.0 25.0 3.0 </td <td></td>													
Yellow Time (s) 3.0 1.0				0.0			0.0			0,0			0.0
All-Red Time (s) 1.0													
Lead/Lag Lead-Lag Optimize? Vehicle Extension (s) 3.0													
Lead-Lag Optimize? Vehicle Extension (s) 3.0 Recall Mode None None None Min Min <td></td> <td>1.0</td> <td>1.0</td> <td></td> <td>1.0</td> <td>1.0</td> <td></td> <td>1.0</td> <td>1.0</td> <td></td> <td>1.0</td> <td>1.0</td> <td></td>		1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Vehicle Extension (s) 3.0 Recall Mode None None None Min Min <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>													
Recall Mode None None None None Min Min Min Min Walk Time (s) 5.0		3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Walk Time (s) 5.0 Flash Dont Walk (s) 11.0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
Flash Dont Walk (s) 11.0 </td <td></td>													
Pedestrian Calls (#/hr) 0													
Act Effct Green (s) 10.6 10.6 27.4 12.9 12.9 12.9 Actuated g/C Ratio 0.36 0.36 1.00 0.47 0.47 0.47 v/c Ratio 0.51 0.41 0.21 0.01 0.27 0.05 Uniform Delay, d1 8.1 8.1 0.0 4.8 5.4 3.0													
Actuated g/C Ratio 0.36 0.36 1.00 0.47 0.47 0.47 v/c Ratio 0.51 0.41 0.21 0.01 0.27 0.05 Uniform Delay, d1 8.1 8.1 0.0 4.8 5.4 3.0							27.4						
v/c Ratio 0.51 0.41 0.21 0.01 0.27 0.05 Uniform Delay, d1 8.1 8.1 0.0 4.8 5.4 3.0													
Uniform Delay, d1 8.1 8.1 0.0 4.8 5.4 3.0													
	Delay		7.2			7.1	0.0		7.0		8.1	5.7	

Canal at Elm Future	No B	uild AN	1 Peak									
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		А			А	А		Α		А	А	
Approach Delay		7.2			3.0			7.0			7.6	
Approach LOS		A			A			Α			А	
90th %ile Green (s)	16.3	16.3		16.3	16.3		14.1	14.1		14.1	14.1	
90th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
70th %ile Green (s)	11.7	11.7		11.7	11.7		10.2	10.2		10.2	10.2	
70th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
50th %ile Green (s)	9.6	9.6		9.6	9.6		8.4	8.4		8.4	8.4	
50th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
30th %ile Green (s)	8.1	8.1		8.1	8.1		8.0	8.0		8.0	8.0	
30th %ile Term Code	Gap	Gap		Hold	Hold		Min	Min		Min	Min	
10th %ile Green (s)	0.0	0.0		0.0	0.0		14.4	14.4		14.4	14.4	
10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	
Queue Length 50th (ft)		26			22	0		0		17	0	
Queue Length 95th (ft)		76			69	0		1		51	0	
Internal Link Dist (ft)		4601			4195			1563			3027	
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)						70				130		
50th Bay Block Time %												
95th Bay Block Time %					15%							
Queuing Penalty (veh)					25							
Intersection Summary												
Area Type: O	ther											
Cycle Length: 74												
Actuated Cycle Length: 2	27.4											
Natural Cycle: 70												
Control Type: Actuated-U	Incoord	dinated										
Maximum v/c Ratio: 0.51												
Intersection Signal Delay	: 5.1			Ir	ntersect	ion LOS	5: A					
Intersection Capacity Util	lization	57.0%		10	CU Leve	el of Ser	vice A					
90th %ile Actuated Cycle	: 38.4											
70th %ile Actuated Cycle	: 29.9											
50th %ile Actuated Cycle	: 26											
30th %ile Actuated Cycle	: 24.1											
10th %ile Actuated Cycle	: 18.4											

Splits and Phases: 2: Elm St & Canal St

1 o2	- a4	A #8
29 s	32 s	13 s
↓ a6	* a8	
29 s	32 s	

Canal at Elm Future	No B	uild PN	1 Peak	(
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			4	1		\$		5	ţ.	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		70	0		0	130		0
Storage Lanes	0		0	0		1	0		0	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	50	50		50	50	
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.997				0.850		0.932			0.876	
Flt Protected		0.995			0.999			0.976		0.950		
Satd. Flow (prot)	0	1847	0	0	1861	1583	0	1694	0	1770	1632	0
Flt Permitted		0.938			0.988			0.948		0.755		
Satd. Flow (perm)	0	1741	0	0	1840	1583	0	1646	0	1406	1632	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				192		2			56	
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)		4681			4275			1643			3107	
Travel Time (s)		106.4			97.2			37.3			70.6	
Volume (vph)	33	278	7	10	321	344	1	0	1	356	11	51
Confl. Peds. (#/hr)			1									
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90	0.50	0.50	0.50	0.91	0.91	0.91
Adj. Flow (vph)	36	302	8	11	357	382	2	0	2	391	12	56
Lane Group Flow (vph)	0	346	0	0	368	382	0	4	0	391	68	0
Turn Type	Perm			Perm		Free	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		Free	2			6		
Detector Phases	4	4		8	8		2	2		6	6	
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		26.0	26.0		26.0	26.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	43%	43%	0%	43%	43%	0%	39%	39%	0%	39%	39%	0%
Maximum Green (s)	28.0	28.0		28.0	28.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
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	
Act Effct Green (s)		13.2			13.2	38.4		16.6		16.6	16.6	
Actuated g/C Ratio		0.34			0.34	1.00		0.43		0.43	0.43	
v/c Ratio		0.58			0.58	0.24		0.01		0.64	0.09	
Uniform Delay, d1		9.9			10.0	0.0		3.0		8.2	1.1	

Canal at Elm Future	No Bu	uild PN	I Peak	(
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Delay		11.5			11.6	0.0		6.5		9.8	3.5	
LOS		в			в	А		А		А	А	
Approach Delay		11.5			5.7			6.5			8.8	
Approach LOS		В			A			A			A	
90th %ile Green (s)	21.4	21.4		21.4	21.4		25.0	25.0		25.0	25.0	
90th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Max	Max	
70th %ile Green (s)	16.1	16.1		16.1	16.1		21.4	21.4		21.4	21.4	
70th %ile Term Code	Hold	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
50th %ile Green (s)	12.3	12.3		12.3	12.3		16.3	16.3		16.3	16.3	
50th %ile Term Code	Hold	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
30th %ile Green (s)	9.5	9.5		9.5	9.5		12.6	12.6		12.6	12.6	
30th %ile Term Code	Hold	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
10th %ile Green (s)	8.0	8.0		8.0	8.0		9.3	9.3		9.3	9.3	
10th %ile Term Code	Hold	Hold		Min	Min		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)		54			58	0		0		54	0	
Queue Length 95th (ft)		145			152	0		0		165	0	
Internal Link Dist (ft)		4601			4195			1563			3027	
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)						70				130		
50th Bay Block Time %					6%							
95th Bay Block Time %					38%					20%		
Queuing Penalty (veh)					72					7		
Intersection Summary												
Area Type: O)ther											
Cycle Length: 74												
Actuated Cycle Length: 3	38.4											
Natural Cycle: 60												
Control Type: Actuated-U	Uncoord	dinated										
Maximum v/c Ratio: 0.64	4											
Intersection Signal Delay				li li	ntersect	ion LOS	: A					
Intersection Capacity Uti	ilization	75.7%		10	CU Leve	el of Ser	vice C					
90th %ile Actuated Cycle	e: 54.4											
70th %ile Actuated Cycle	e: 45.5											
50th %ile Actuated Cycle	e: 36.6											
30th %ile Actuated Cycle	e: 30.1											

Splits and Phases: 2: Eln	n St & Canal St	
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29 s	32 s	13 s
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29 s	32 s	

Canal at Elm Future	No B	uild Sa	t Peak	1								
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			4	1		\$		5	ţ.	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		70	0		0	130		0
Storage Lanes	0		0	0		1	0		0	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	50	50		50	50	
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00		1.00		
Frt		0.988				0.850					0.915	
Flt Protected		0.993			0.997			0.950		0.950		
Satd. Flow (prot)	0	1824	0	0	1857	1583	0	1770	0	1770	1704	0
Flt Permitted		0.914			0.969			0.713		0.752		
Satd. Flow (perm)	0	1679	0	0	1805	1583	0	1325	0	1398	1704	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				228					38	
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)		4681			4275			1643			3107	
Travel Time (s)		106.4			97.2			37.3			70.6	
Volume (vph)	46	241	29	19	283	372	2	0	0	299	27	35
Confl. Peds. (#/hr)			1				1			1		
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.88	0.88	0.88	0.95	0.95	0.95	0.25	0.25	0.25	0.92	0.92	0.92
Adj. Flow (vph)	52	274	33	20	298	392	8	0	0	325	29	38
Lane Group Flow (vph)	0	359	0	0	318	392	0	8	0	325	67	0
Turn Type	Perm			Perm		Free	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		Free	2			6		
Detector Phases	4	4		8	8		2	2		6	6	
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	28.0	28.0		20.0	20.0		26.0	26.0		26.0	26.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	43%	43%	0%	43%	43%	0%	39%	39%	0%	39%	39%	0%
Maximum Green (s)	28.0	28.0		28.0	28.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
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	
Act Effct Green (s)		13.1			13.1	33.8		17.7		17.7	17.7	
Actuated g/C Ratio		0.36			0.36	1.00		0.52		0.52	0.52	
v/c Ratio		0.59			0.49	0.25		0.01		0.44	0.07	
Uniform Delay, d1		10.3			10.1	0.0		4.9		6.3	2.1	

Canal at Elm Future	No Bu	uild Sa	t Peak									
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Delay		10.2			9.9	0.0		8.0		9.4	4.8	
LOS		В			А	А		А		А	A	
Approach Delay		10.2			4.4			8.0			8.6	
Approach LOS		в			А			А			A	
90th %ile Green (s)	22.7	22.7		22.7	22.7		25.0	25.0		25.0	25.0	
90th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Max	Max	
70th %ile Green (s)	15.6	15.6		15.6	15.6		16.8	16.8		16.8	16.8	
70th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
50th %ile Green (s)	11.7	11.7		11.7	11.7		12.5	12.5		12.5	12.5	
50th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
30th %ile Green (s)	9.2	9.2		9.2	9.2		9.7	9.7		9.7	9.7	
30th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	0.0		0.0	0.0		9.7	9.7		9.7	9.7	
10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	
Queue Length 50th (ft)		44			39	0		1		40	0	
Queue Length 95th (ft)		145			129	0		2		136	0	
Internal Link Dist (ft)		4601			4195			1563			3027	
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)						70				130		
50th Bay Block Time %												
95th Bay Block Time %					33%					13%		
Queuing Penalty (veh)					64					4		
Intersection Summary												
	ther											
Cycle Length: 74												
Actuated Cycle Length: 3	33.8											
Natural Cycle: 70												
Control Type: Actuated-U	Jncoord	dinated										
Maximum v/c Ratio: 0.59												
Intersection Signal Delay						ion LOS						
Intersection Capacity Uti		70.8%		IC	CU Leve	el of Ser	vice C					
90th %ile Actuated Cycle												
70th %ile Actuated Cycle												
50th %ile Actuated Cycle												
30th %ile Actuated Cycle												
10th %ile Actuated Cycle	e: 13.7											

Splits and Phases: 2: Eli	m St & Canal St	
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Canal at Elm Future B	ulid AM Pea	IK 🛛
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			र्भ	1		\$		٦	ţ.	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		70	0		0	130		0
Storage Lanes	0		0	0		1	0		0	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	50	50		50	50	
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt		0.984				0.850					0.944	
Flt Protected		0.994			0.994			0.950		0.950		
Satd. Flow (prot)	0	1822	0	0	1852	1583	0	1770	0	1770	1758	0
Flt Permitted		0.940			0.933			0.729		0.755		
Satd. Flow (perm)	0	1723	0	0	1738	1583	0	1358	0	1406	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11				249					16	
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)		4681			4275			1643			3107	
Travel Time (s)		106.4			97.2			37.3			70.6	
Volume (vph)	33	200	32	30	202	312	1	0	0	149	22	13
Confl. Peds. (#/hr)				1								
Peak Hour Factor	0.84	0.84	0.84	0.91	0.91	0.91	0.25	0.25	0.25	0.81	0.81	0.81
Adj. Flow (vph)	39	238	38	33	222	343	4	0	0	184	27	16
Lane Group Flow (vph)	0	315	0	0	255	343	0	4	0	184	43	0
Turn Type	Perm			Perm		Free	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		Free	2			6		
Detector Phases	4	4		8	8		2	2		6	6	
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	28.0	28.0		20.0	20.0		26.0	26.0		26.0	26.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	43%	43%	0%	43%	43%	0%	39%	39%	0%	39%	39%	0%
Maximum Green (s)	28.0	28.0		28.0	28.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
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	
Act Effct Green (s)		10.6			10.6	27.5		13.1		13.1	13.1	
Actuated g/C Ratio		0.35			0.35	1.00		0.48		0.48	0.48	
v/c Ratio		0.51			0.41	0.22		0.01		0.28	0.05	_
Uniform Delay, d1		8.2			8.2	0.0		4.8		5.4	3.0	
Delay		7.3			7.2	0.0		7.0		8.1	5.7	

Canal at Elm Future	Build	AM Pe	eak									
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		А			Α	А		Α		А	А	
Approach Delay		7.3			3.1			7.0			7.6	
Approach LOS		A			Α			Α			Α	
90th %ile Green (s)	16.4	16.4		16.4	16.4		14.5	14.5		14.5	14.5	
90th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
70th %ile Green (s)	11.7	11.7		11.7	11.7		10.4	10.4		10.4	10.4	
70th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
50th %ile Green (s)	9.6	9.6		9.6	9.6		8.5	8.5		8.5	8.5	
50th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
30th %ile Green (s)	8.1	8.1		8.1	8.1		8.0	8.0		8.0	8.0	
30th %ile Term Code	Gap	Gap		Hold	Hold		Min	Min		Min	Min	
10th %ile Green (s)	0.0	0.0		0.0	0.0		14.4	14.4		14.4	14.4	
10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	
Queue Length 50th (ft)		26			22	0		0		17	0	
Queue Length 95th (ft)		78			70	0		1		53	0	
Internal Link Dist (ft)		4601			4195			1563			3027	
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)						70				130		
50th Bay Block Time %												
95th Bay Block Time %					16%							
Queuing Penalty (veh)					27							
Intersection Summary												
Area Type: O	ther											
Cycle Length: 74												
Actuated Cycle Length: 2	27.5											
Natural Cycle: 70												
Control Type: Actuated-U	Jncoord	dinated										
Maximum v/c Ratio: 0.51												
Intersection Signal Delay	r: 5.1			Ir	ntersect	ion LOS	S: A					
Intersection Capacity Uti	lization	57.4%		IC	CU Leve	el of Ser	rvice A					
90th %ile Actuated Cycle	: 38.9											
70th %ile Actuated Cycle	e: 30.1											
50th %ile Actuated Cycle	e: 26.1											
30th %ile Actuated Cycle	: 24.1											
10th %ile Actuated Cycle	: 18.4											

Splits and Phases: 2: Elm St & Canal St

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29 s	32 s	13 s
↓ m6	₩ a8	
29 s	32 \$	

Canal at Elm Fut	ure Build PM Peak
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			ন	1		\$		ካ	Ĵ⇒	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		70	0		0	130		0
Storage Lanes	0		0	0		1	0		0	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	50	50		50	50	
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.997				0.850		0.932			0.876	
Fit Protected		0.995			0.999			0.976		0.950		
Satd. Flow (prot)	0	1847	0	0	1861	1583	0	1694	0	1770	1632	0
Flt Permitted		0.936			0.988			0.948		0.755		
Satd. Flow (perm)	0	1737	0	0	1840	1583	0	1646	0	1406	1632	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				196		2			57	
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)		4681			4275			1643			3107	
Travel Time (s)		106.4	_		97.2			37.3			70.6	
Volume (vph)	34	278	7	10	321	351	1	0	1	360	11	52
Confl. Peds. (#/hr)			1									
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90	0.50	0.50	0.50	0.91	0.91	0.91
Adj. Flow (vph)	37	302	8	11	357	390	2	0	2	396	12	57
Lane Group Flow (vph)	0	347	0	0	368	390	0	4	0	396	69	0
Turn Type	Perm			Perm		Free	Perm			Perm		
Protected Phases		4			8	-	-	2			6	
Permitted Phases	4			8		Free	2			6		
Detector Phases	4	4		8	8		2	2		6	6	_
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		26.0	26.0		26.0	26.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	43%	43%	0%	43%	43%	0%	39%	39%	0%	39%	39%	0%
Maximum Green (s)	28.0	28.0		28.0	28.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag												
Lead-Lag Optimize?								2.0		2.0	2.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	_
Recall Mode	None	None		None	None		Min	Min		Min	Min	
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	20.0	0	0		0	0	
Act Effct Green (s)		13.2			13.2	38.8		17.0		17.0	17.0	
Actuated g/C Ratio		0.34			0.34	1.00		0.44		0.44	0.44	
v/c Ratio		0.59			0.59	0.25		0.01		0.64	0.09	
Uniform Delay, d1		10.1			10.2	0.0		3.0		8.2	1.0	

Canal at Elm Future	Build	PM Pe	eak									
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Delay		11.7			11.7	0.0		6.5		9.8	3.4	
LOS		В			В	А		А		А	A	
Approach Delay		11.7			5.7			6.5			8.9	
Approach LOS		В			A			А			A	
90th %ile Green (s)	21.5	21.5		21.5	21.5		25.0	25.0		25.0	25.0	
90th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Max	Max	
70th %ile Green (s)	16.2	16.2		16.2	16.2		21.9	21.9		21.9	21.9	
70th %ile Term Code	Gap	Gap		Gap	Gap		Hold	Hold		Gap	Gap	
50th %ile Green (s)	12.4	12.4		12.4	12.4		16.9	16.9		16.9	16.9	
50th %ile Term Code	Gap	Gap		Gap	Gap		Hold	Hold		Gap	Gap	
30th %ile Green (s)	9.6	9.6		9.6	9.6		13.0	13.0		13.0	13.0	
30th %ile Term Code	Hold	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
10th %ile Green (s)	8.0	8.0		8.0	8.0		9.6	9.6		9.6	9.6	
10th %ile Term Code	Hold	Hold		Min	Min		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)		56			60	0		0		55	0	
Queue Length 95th (ft)		145			152	0		0		169	0	
Internal Link Dist (ft)		4601			4195			1563			3027	
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)						70				130		
50th Bay Block Time %					8%							
95th Bay Block Time %					38%					21%		
Queuing Penalty (veh)					73					7		
Intersection Summary												
Area Type: O	ther											
Cycle Length: 74												
Actuated Cycle Length: 3	38.8											
Natural Cycle: 60												
Control Type: Actuated-U	Jncoord	linated										
Maximum v/c Ratio: 0.64	1											
Intersection Signal Delay	r. 7.9			li li	ntersect	ion LOS	: A					
Intersection Capacity Uti	lization	76.4%		10	CU Leve	el of Ser	vice C					
90th %ile Actuated Cycle	e: 54.5											
70th %ile Actuated Cycle	e: 46.1											
50th %ile Actuated Cycle	e: 37.3											
30th %ile Actuated Cycle	e: 30.6											
10th %ile Actuated Cycle	e: 25.6											

Splits and Phases: 2: Eln	n St & Canal St	
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29 s	32 s	13 s
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Canal at Elm Future	e Build	Sat Pe	eak									
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			4	1		\$		5	ţ.	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		70	0		0	130		0
Storage Lanes	0		0	0		1	0		0	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	50	50		50	50	
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00		1.00		
Frt		0.988				0.850					0.914	
Flt Protected		0.993			0.997			0.950		0.950		
Satd. Flow (prot)	0	1824	0	0	1857	1583	0	1770	0	1770	1703	0
Flt Permitted		0.912			0.969			0.713		0.752		
Satd. Flow (perm)	0	1675	0	0	1805	1583	0	1325	0	1398	1703	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				233					39	
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)		4681			4275			1643			3107	
Travel Time (s)		106.4		10	97.2			37.3			70.6	
Volume (vph)	47	241	29	19	283	380	2	0	0	305	27	36
Confl. Peds. (#/hr)			1				1			1		
Confl. Bikes (#/hr)	0.00	0.00	1	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.00
Peak Hour Factor	0.88	0.88	0.88	0.95	0.95	0.95	0.25	0.25	0.25	0.92	0.92	0.92
Adj. Flow (vph)		274	33	20	298	400	8	0	0	332	29	39
Lane Group Flow (vph)	0 Perm	360	U	0 Perm	318	400 Free	0 Perm	8	U	332 Perm	68	0
Turn Type Protected Phases	Feim	4		Pelli	8	Fiee	Penn	2		Feim	6	
Permitted Phases	4	4		8	0	Free	2	2		6	0	
Detector Phases	4	4		8	8	1100	2	2		6	6	
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	28.0	28.0		20.0	20.0		26.0	26.0		26.0	26.0	
Total Split (s)	32.0	32.0	0.0	32.0	32.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0
Total Split (%)	43%	43%	0%	43%	43%	0%	39%	39%	0%	39%	39%	0%
Maximum Green (s)	28.0	28.0	0.70	28.0	28.0	0.70	25.0	25.0	0,0	25.0	25.0	0.00
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None			None	None		Min	Min		Min	Min	
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	
Act Effct Green (s)	-	13.2		-	13.2	34.1	-	17.9		17.9	17.9	
Actuated g/C Ratio		0.36			0.36	1.00		0.52		0.52	0.52	
v/c Ratio		0.59			0.49	0.25		0.01		0.45	0.07	
Uniform Delay, d1		10.4			10.2	0.0		4.9		6.3	2.1	

Canal at Elm Future	Build	Sat Pe	eak									
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Delay		10.3			10.0	0.0		8.0		9.5	4.8	
LOS		В			в	А		А		А	А	
Approach Delay		10.3			4.4			8.0			8.7	
Approach LOS		В			А			A			A	
90th %ile Green (s)	22.8	22.8		22.8	22.8		25.0	25.0		25.0	25.0	
90th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Max	Max	
70th %ile Green (s)	15.8	15.8		15.8	15.8		17.4	17.4		17.4	17.4	
70th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
50th %ile Green (s)	11.9	11.9		11.9	11.9		12.9	12.9		12.9	12.9	
50th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
30th %ile Green (s)	9.2	9.2		9.2	9.2		10.0	10.0		10.0	10.0	
30th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	0.0		0.0	0.0		9.7	9.7		9.7	9.7	
10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	
Queue Length 50th (ft)		46			40	0		1		42	0	
Queue Length 95th (ft)		146			129	0		2		141	0	
Internal Link Dist (ft)		4601			4195			1563			3027	
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)						70				130		
50th Bay Block Time %												
95th Bay Block Time %					33%					14%		
Queuing Penalty (veh)					66					5		
Intersection Summary												
Area Type: O	ther											
Cycle Length: 74												
Actuated Cycle Length: 3	34.1											
Natural Cycle: 70												
Control Type: Actuated-U	Incoord	linated										
Maximum v/c Ratio: 0.59	9											
Intersection Signal Delay	7.0			Ir	ntersect	ion LOS	S: A					
Intersection Capacity Uti	lization	71.2%		IC	CU Leve	el of Ser	vice C					
90th %ile Actuated Cycle	e: 55.8											
70th %ile Actuated Cycle	e: 41.2											
50th %ile Actuated Cycle	e: 32.8											
30th %ile Actuated Cycle	e: 27.2											

Splits and	Phases:	2: Elm	St &	Canal	St

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29 s	32 s	13 s
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29 s	32 \$	

Canal at Church Exi	sting /	AM Pe	ak				
	-	7	f	+	1	1	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	+			+	14		
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Volume (veh/h)	185	0	0	352	11	12	
Peak Hour Factor	0.87	0.87	0.92	0.89	0.92	0.92	
Hourly flow rate (veh/h)	213	0	0	396	12	13	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
vC, conflicting volume			213		608	213	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
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		97	98	
cM capacity (veh/h)			1358		459	827	
Direction, Lane #	EB 1	WB1	NB 1				
Volume Total	213	396	25				
Volume Left	0	0	12				
Volume Right	0	0	13				
cSH	1700	1700	598				
Volume to Capacity	0.13	0.23	0.04				
Queue Length (ft)	0	0	3				
Control Delay (s)	0.0	0.0	11.3				
Lane LOS			В				
Approach Delay (s)	0.0	0.0	11.3				
Approach LOS			В				
Intersection Summary							
Average Delay			0.4				
Intersection Capacity Uti	ilization		30.8%	1	CU Leve	el of Service	

Canal at Church Exi	sting F	PM Pe	ak				
	-	7	F	+	1	1	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	+			+	**		
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Volume (veh/h)	370	0	0	363	13	14	
Peak Hour Factor	0.87	0.87	0.92	0.83	0.84	0.84	
Hourly flow rate (veh/h)	425	0	0	437	15	17	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
vC, conflicting volume			425		863	425	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
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		95	97	
cM capacity (veh/h)			1134		325	629	
Direction, Lane #	EB 1	WB1	NB 1				
Volume Total	425	437	32				
Volume Left	425	457	15				
Volume Right	0	0	17				
cSH	1700	1700	434				
Volume to Capacity	0.25	0.26	0.07				
Queue Length (ft)	0.20	0	6				
Control Delay (s)	0.0	0.0	14.0				
Lane LOS	0.0	0.0	14.0 B				
Approach Delay (s)	0.0	0.0	14.0				
Approach LOS	0.0	0.0	14.0 B				
			U				
Intersection Summary							
Average Delay			0.5				
Intersection Capacity Uti	lization		33.0%	IC	CU Leve	el of Service	

Canal at Church Exi	isting S	Sat Pe	ak				
	→	7	ŕ	+	1	1	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	+			+	1		
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Volume (veh/h)	311	0	0	394	13	12	
Peak Hour Factor	0.89	0.87	0.92	0.90	0.92	0.92	
Hourly flow rate (veh/h)	349	0	0	438	14	13	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
vC, conflicting volume			349		787	349	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
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		96	98	
cM capacity (veh/h)			1209		360	694	
Direction, Lane #	EB 1	WB1	NB 1				
Volume Total	349	438	27				
Volume Left	0	0	14				
Volume Right	0	0	13				
cSH	1700	1700	468				
Volume to Capacity	0.21	0.26	0.06				
Queue Length (ft)	0	0	5				
Control Delay (s)	0.0	0.0	13.2				
Lane LOS			В				
Approach Delay (s)	0.0	0.0	13.2				
Approach LOS			В				
Intersection Summary							
Average Delay			0.4				
Intersection Capacity Ut	ilization		33.0%	IC	CU Leve	el of Service	Α

Canal at Church Fu							
	-	7	4	+	1	1	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	•			†	1		
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Volume (veh/h)	203	0	0	387	12	13	
Peak Hour Factor	0.87	0.87	0.92	0.89	0.92	0.92	
Hourly flow rate (veh/h)	233	0	0	435	13	14	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
vC, conflicting volume			233		668	233	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
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		97	98	
cM capacity (veh/h)			1334		423	806	
Direction, Lane #	EB 1	WB1	NB 1				
Volume Total	233	435	27				
Volume Left	235	400	13				
Volume Right	0	ő	14				
cSH	1700	1700	562				
Volume to Capacity	0.14	0.26	0.05				
Queue Length (ft)	0.14	0.20	4				
Control Delay (s)	0.0	0.0	11.7				
Lane LOS	0.0	0.0	В				
Approach Delay (s)	0.0	0.0	11.7				
Approach LOS	0.0	5.0	B				
			5				
Intersection Summary							
Average Delay			0.5				
Intersection Capacity Ut	ilization		32.9%	10	CU Leve	el of Service	A

Canal at Church Fut								
	-	7	ŕ	+	1	1		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	+			+	1			
Sign Control	Free			Free	Stop			
Grade	0%			0%	0%			
Volume (veh/h)	407	0	0	399	14	15		
Peak Hour Factor	0.87	0.87	0.92	0.83	0.84	0.84		
Hourly flow rate (veh/h)	468	0	0	481	17	18		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type					None			
Median storage veh)								
vC, conflicting volume			468		949	468		
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
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		94	97		
cM capacity (veh/h)			1094		289	595		
Direction, Lane #	EB 1	WB1	NB 1					
Volume Total	468	481	35					
Volume Left	0	0	17					
Volume Right	0	0	18					
cSH	1700	1700	394					
Volume to Capacity	0.28	0.28	0.09					
Queue Length (ft)	0	0	7					
Control Delay (s)	0.0	0.0	15.0					
Lane LOS			С					
Approach Delay (s)	0.0	0.0	15.0					
Approach LOS			С					
Intersection Summary								
Average Delay			0.5					
Intersection Capacity Uti	ilization		35.3%	10	CU Leve	el of Service	A	

Canal at Church Fu							
	-	7	ŕ	+	1	1	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	•			†	×.		
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Volume (veh/h)	342	0	0	433	14	13	
Peak Hour Factor	0.89	0.87	0.92	0.90	0.92	0.92	
Hourly flow rate (veh/h)	384	0	0	481	15	14	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
vC, conflicting volume			384		865	384	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
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		95	98	
cM capacity (veh/h)			1174		324	663	
Direction, Lane #	EB 1	WB1	NB 1				
Volume Total	384	481	29				
Volume Left	0	401	15				
Volume Right	0	Ő	14				
cSH	1700	1700	430				
Volume to Capacity	0.23	0.28	0.07				
Queue Length (ft)	0.20	0.20	5				
Control Delay (s)	0.0	0.0	14.0				
Lane LOS	0.0	0.0	B				
Approach Delay (s)	0.0	0.0	14.0				
Approach LOS	0.0	0.0	B				
			0				
Intersection Summary							
Average Delay			0.5				
Intersection Capacity Ut	tilization		35.3%	10	CU Leve	el of Service	А

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Canal at Church Fut	anal at Church Future Build AM Peak											
	٠	→	7	ŕ	+	*	1	t	1	5	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			\$			\$			\$	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	203	0	0	387	3	12	0	13	5	0	11
Peak Hour Factor	0.92	0.87	0.92	0.92	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	2	233	0	0	435	3	13	0	14	5	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
vC, conflicting volume	438			233			686	676	233	688	674	436
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			96	100	98	98	100	98
cM capacity (veh/h)	1122			1334			354	374	806	354	375	620
Direction, Lane #	EB 1	WB1	NB 1	SB 1								
Volume Total	236	438	27	17								
Volume Left	2	0	13	5								
Volume Right	0	3	14	12								
cSH	1122	1334	500	502								
Volume to Capacity	0.00	0.00	0.05	0.03								
Queue Length (ft)	0	0	4	3								
Control Delay (s)	0.1	0.0	12.6	12.4								
Lane LOS	A		В	В								
Approach Delay (s)	0.1	0.0	12.6	12.4								
Approach LOS			В	В								
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Uti	ilization		33.1%	10	CU Leve	el of Ser	vice		А			

Canal at Church Fut	anal at Church Future Build PM Peak											
	٠	→	7	ŕ	+	×	1	t	1	4	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			\$			\$			\$	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	8	415	0	0	399	8	14	0	15	5	0	6
Peak Hour Factor	0.92	0.87	0.87	0.92	0.83	0.92	0.84	0.92	0.84	0.92	0.92	0.92
Hourly flow rate (veh/h)	9	477	0	0	481	9	17	0	18	5	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
vC, conflicting volume	489			477			986	984	477	997	979	485
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF(s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			93	100	97	97	100	99
cM capacity (veh/h)	1074			1085			223	246	588	215	248	582
Direction, Lane #	EB 1	WB1	NB 1	SB 1								
Volume Total	486	489	35	12								
Volume Left	9	0	17	5								
Volume Right	0	9	18	7								
cSH	1074	1085	328	327								
Volume to Capacity	0.01	0.00	0.11	0.04								
Queue Length (ft)	1	0	9	3								
Control Delay (s)	0.2	0.0	17.2	16.4								
Lane LOS	A		С	С								
Approach Delay (s)	0.2	0.0	17.2	16.4								
Approach LOS			С	С								
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Uti	ilization		39.4%	10	CU Leve	el of Ser	vice		А			
interession suparity of									-			

Canal at Church Fut	anal at Church Future Build Sat Peak											
	٨	-	7	ŕ	-	×	1	t	1	5	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			\$			\$			\$	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	6	348	0	0	433	9	14	0	13	7	0	10
Peak Hour Factor	0.92	0.89	0.87	0.92	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	7	391	0	0	481	10	15	0	14	8	0	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
vC, conflicting volume	491			391			901	895	391	904	890	486
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			94	100	98	97	100	98
cM capacity (veh/h)	1072			1168			253	278	658	251	280	581
Direction, Lane #	EB 1	WB1	NB 1	SB 1								
Volume Total	398	491	29	18								
Volume Left	7	0	15	8								
Volume Right	0	10	14	11								
cSH	1072	1168	360	377								
Volume to Capacity	0.01	0.00	0.08	0.05								
Queue Length (ft)	0	0	7	4								
Control Delay (s)	0.2	0.0	15.9	15.0								
Lane LOS	А		С	С								
Approach Delay (s)	0.2	0.0	15.9	15.0								
Approach LOS			С	С								
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Ut	ilization		35.9%	10	CU Lev	el of Ser	vice		А			