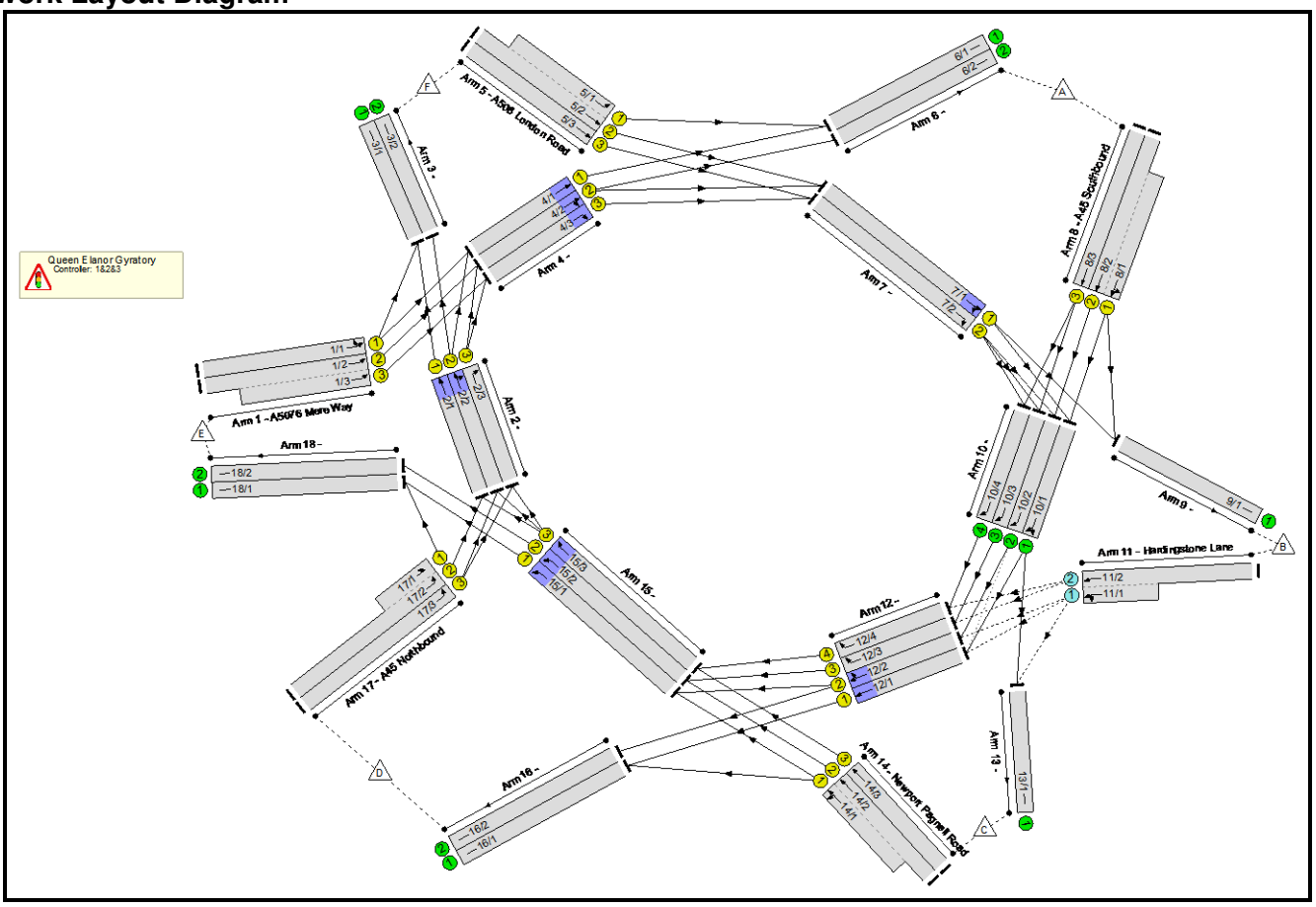
Appendix 61
A45 Queen Eleanor Opening Year assessment results

User and Project Details

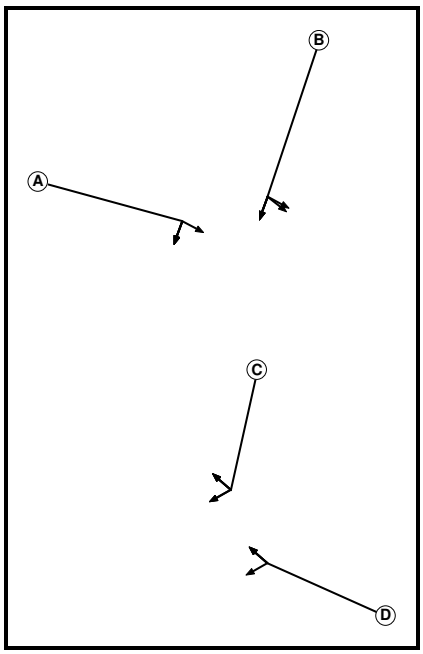
Project:	**Northampton Gateway SRFI**
Title:	**Queen Elanor Gyratory - Opening Year**
File name:	180206 Queen Elanor Gyratory.lsg3x
Author:	Mark Higgins
Company:	ADC Infrastructure
Address:	Western House, Nottingham

Network Layout Diagram



C1 - Queen Elanor A B

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7

Phase Intergreens Matrix

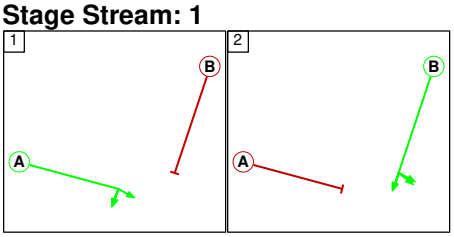
Terminating Phase	Starting Phase				
		A	B	C	D
	A		7	-	-
	B	7		-	-
	C	-	-		5
	D	-	-	5	

Phases in Stage

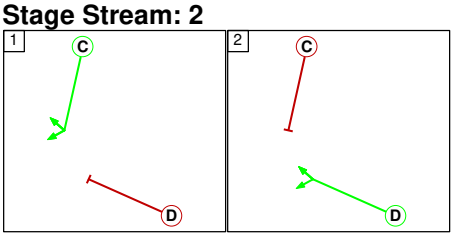
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D

Stage Diagram

Stage Stream: 1

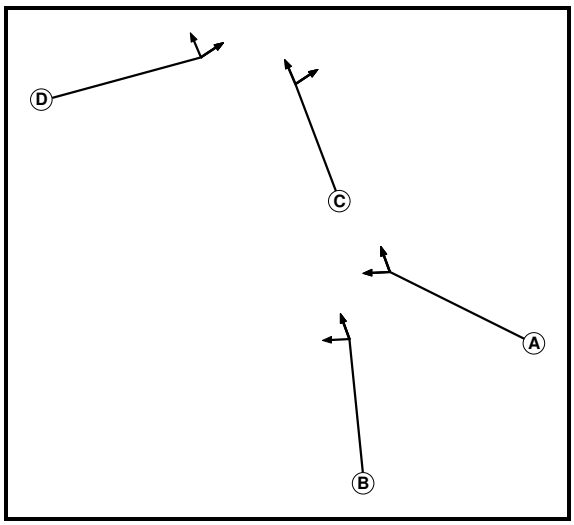


Stage Stream: 2



C2 - Queen Elanor C D

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7

Phase Intergreens Matrix

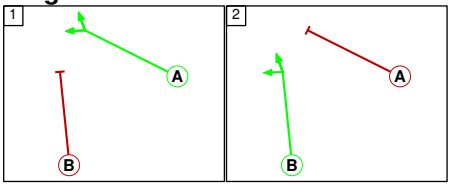
		Starting Phase			
		A	B	C	D
Terminating Phase	A		5	-	-
	B	5		-	-
	C	-	-		6
	D	-	-	6	

Phases in Stage

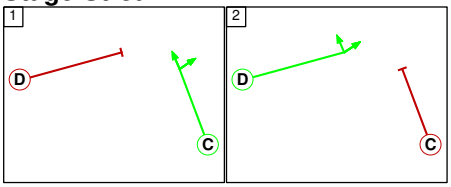
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D

Stage Diagram

Stage Stream: 1

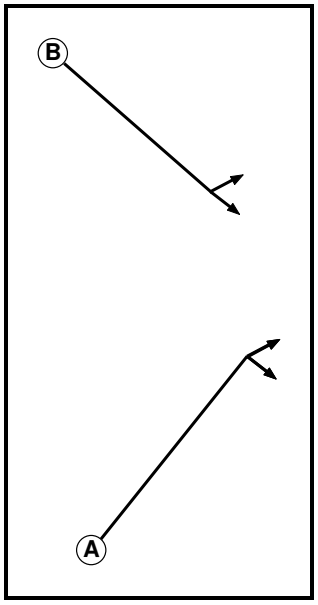


Stage Stream: 2



C3 - London Road

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7

Phase Intergreens Matrix

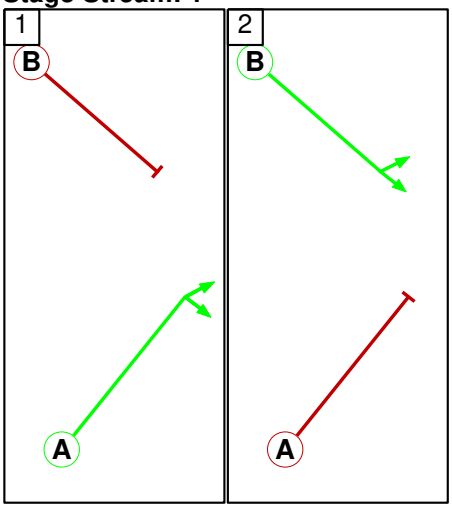
		Starting Phase	
		A	B
Terminating Phase	A		6
	B	6	

Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	A
1	2	B

Stage Diagram

Stage Stream: 1



Give-Way Lane Input Data

Junction: Queen Elanor Gyratory											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
11/1 (Hardingstone Lane)	12/1 (Ahead)	1006	0	10/1	0.25	All	-	-	-	-	-
				10/2	0.25	All					
	12/2 (Ahead)	1006	0	10/1	0.25	All					
				10/2	0.25	All					
	13/1 (Left)	1006	0	10/1	0.25	All					
11/2 (Hardingstone Lane)	12/3 (Ahead)	1006	0	10/1	0.25	All	-	-	-	-	-
				10/2	0.25	All					
				10/3	0.25	All					
				10/4	0.25	All					
	12/4 (Ahead)	1006	0	10/1	0.25	All					
				10/2	0.25	All					
				10/3	0.25	All					
				10/4	0.25	All					

Lane Input Data

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A5076 Mere Way)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 3 Left	20.00
											Arm 4 Ahead	Inf
½ (A5076 Mere Way)	U	D	2	3	60.0	Geom	-	3.50	0.00	N	Arm 4 Ahead	Inf
1/3 (A5076 Mere Way)	U	D	2	3	12.2	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
2/1	U	C	2	3	12.2	User	1900	-	-	-	-	-
2/2	U	C	2	3	12.2	User	1900	-	-	-	-	-
2/3	U	C	2	3	12.2	User	1900	-	-	-	-	-
3/1	U		2	3	3.0	Inf	-	-	-	-	-	-
3/2	U		2	3	3.0	Inf	-	-	-	-	-	-
4/1	U	A	2	3	9.6	User	1900	-	-	-	-	-
4/2	U	A	2	3	9.6	User	1900	-	-	-	-	-
4/3	U	A	2	3	9.6	User	1900	-	-	-	-	-
5/1 (A508 London Road)	U	B	2	3	15.7	Geom	-	3.50	0.00	Y	Arm 6 Left	Inf
5/2 (A508 London Road)	U	B	2	3	60.0	Geom	-	3.50	0.00	N	Arm 7 Ahead	Inf
5/3 (A508 London Road)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 7 Ahead	Inf
6/1	U		2	3	3.0	Inf	-	-	-	-	-	-
6/2	U		2	3	3.0	Inf	-	-	-	-	-	-
7/1	U	A	2	3	20.9	User	1900	-	-	-	-	-
7/2	U	A	2	3	20.9	User	1900	-	-	-	-	-
8/1 (A45 Southbound)	U	B	2	3	15.7	Geom	-	3.65	0.00	Y	Arm 9 Left	30.00
											Arm 10 Ahead	Inf
8/2 (A45 Southbound)	U	B	2	3	60.0	Geom	-	3.65	0.00	N	Arm 10 Ahead	Inf
8/3 (A45 Southbound)	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 10 Ahead	Inf
9/1	U		2	3	3.0	Inf	-	-	-	-	-	-
10/1	U		2	3	12.2	Inf	-	-	-	-	-	-
10/2	U		2	3	12.2	Inf	-	-	-	-	-	-
10/3	U		2	3	12.2	User	3000	-	-	-	-	-
10/4	U		2	3	12.2	User	3000	-	-	-	-	-
11/1 (Hardingstone Lane)	O		2	3	7.0	Inf	-	-	-	-	-	-
11/2 (Hardingstone Lane)	O		2	3	60.0	Inf	-	-	-	-	-	-
12/1	U	C	2	3	7.8	User	1900	-	-	-	-	-

12/2	U	C	2	3	7.8	User	1900	-	-	-	-	-
12/3	U	C	2	3	7.8	User	1900	-	-	-	-	-
12/4	U	C	2	3	7.8	User	1900	-	-	-	-	-
13/1	U		2	3	3.0	Inf	-	-	-	-	-	-
14/1 (Newport Pagnell Road)	U	D	2	3	10.0	Geom	-	3.50	0.00	Y	Arm 15 Ahead Arm 16 Left	Inf 20.00
14/2 (Newport Pagnell Road)	U	D	2	3	60.0	Geom	-	3.50	0.00	N	Arm 15 Ahead	30.00
14/3 (Newport Pagnell Road)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 15 Ahead	50.00
15/1	U	A	2	3	22.6	User	1900	-	-	-	-	-
15/2	U	A	2	3	22.6	User	1900	-	-	-	-	-
15/3	U	A	2	3	22.6	User	1900	-	-	-	-	-
16/1	U		2	3	3.0	Inf	-	-	-	-	-	-
16/2	U		2	3	3.0	Inf	-	-	-	-	-	-
17/1 (A45 Northbound)	U	B	2	3	6.0	Geom	-	3.65	0.00	Y	Arm 18 U-Turn	Inf
17/2 (A45 Northbound)	U	B	2	3	60.0	Geom	-	3.65	0.00	N	Arm 2 Left	Inf
17/3 (A45 Northbound)	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 2 Left	Inf
18/1	U		2	3	3.0	Inf	-	-	-	-	-	-
18/2	U		2	3	3.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
9: '2021 B1 Ref AM'	08:00	09:00	01:00	
10: '2021 B1 Ref PM'	17:00	18:00	01:00	
11: '2021 H1 Ref AM'	08:00	09:00	01:00	
12: '2021 H1 Ref PM'	17:00	18:00	01:00	

Scenario 9: '2021 B1 Ref AM' (FG9: '2021 B1 Ref AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
Origin		A	B	C	D	E	F	Tot.
	A	0	83	150	0	1298	480	2011
	B	234	0	0	9	87	173	503
	C	228	0	0	0	324	525	1077
	D	0	0	0	0	24	573	597
	E	1929	18	338	183	0	3	2471
	F	328	10	270	535	8	0	1151
	Tot.	2719	111	758	727	1741	1754	7810

Traffic Lane Flows

Lane	Scenario 9: 2021 B1 Ref AM
1/1	1197
½ (with short)	1274(In) 1274(Out)
1/3 (short)	0
2/1	944
2/2	901
2/3	368
3/1	947
3/2	807
4/1	1288
4/2	1642
4/3	0
5/1 (short)	328
5/2 (with short)	634(In) 306(Out)
5/3	517
6/1	1616
6/2	1103
7/1	845
7/2	517
8/1 (short)	233
8/2 (with short)	1153(In) 920(Out)
8/3	858
9/1	111
10/1	967
10/2	1429
10/3	386
10/4	480
11/1 (short)	96
11/2 (with short)	503(In) 407(Out)
12/1	560
12/2	1174
12/3	386
12/4	887
13/1	758
14/1 (short)	131
14/2 (with short)	324(In) 193(Out)
14/3	753
15/1	1138
15/2	579
15/3	1640
16/1	560
16/2	167
17/1 (short)	24
17/2 (with short)	321(In) 297(Out)
17/3	276
18/1	1162
18/2	579

Lane Saturation Flows

Junction: Queen Elanor Gyratory								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A5076 Mere Way)	3.50	0.00	Y	Arm 3 Left Arm 4 Ahead	20.00 Inf	0.3 % 99.7 %	1965	1965
1/2 (A5076 Mere Way)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
1/3 (A5076 Mere Way)	3.50	0.00	Y	Arm 4 Ahead	Inf	0.0 %	1965	1965
2/1	This lane uses a directly entered Saturation Flow						1900	1900
2/2	This lane uses a directly entered Saturation Flow						1900	1900
2/3	This lane uses a directly entered Saturation Flow						1900	1900
3/1	Infinite Saturation Flow						Inf	Inf
3/2	Infinite Saturation Flow						Inf	Inf
4/1	This lane uses a directly entered Saturation Flow						1900	1900
4/2	This lane uses a directly entered Saturation Flow						1900	1900
4/3	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (A508 London Road)	3.50	0.00	Y	Arm 6 Left	Inf	100.0 %	1965	1965
5/2 (A508 London Road)	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
5/3 (A508 London Road)	3.50	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1965	1965
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	This lane uses a directly entered Saturation Flow						1900	1900
7/2	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (A45 Southbound)	3.65	0.00	Y	Arm 9 Left Arm 10 Ahead	30.00 Inf	35.6 % 64.4 %	1945	1945
8/2 (A45 Southbound)	3.65	0.00	N	Arm 10 Ahead	Inf	100.0 %	2120	2120
8/3 (A45 Southbound)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	This lane uses a directly entered Saturation Flow						3000	3000
10/4	This lane uses a directly entered Saturation Flow						3000	3000
11/1 (Hardingstone Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
11/2 (Hardingstone Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
12/1	This lane uses a directly entered Saturation Flow						1900	1900
12/2	This lane uses a directly entered Saturation Flow						1900	1900
12/3	This lane uses a directly entered Saturation Flow						1900	1900
12/4	This lane uses a directly entered Saturation Flow						1900	1900

13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Newport Pagnell Road)	3.50	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1965	1965
				Arm 16 Left	20.00	0.0 %		
14/2 (Newport Pagnell Road)	3.50	0.00	N	Arm 15 Ahead	30.00	100.0 %	2005	2005
14/3 (Newport Pagnell Road)	3.50	0.00	Y	Arm 15 Ahead	50.00	100.0 %	1908	1908
15/1	This lane uses a directly entered Saturation Flow						1900	1900
15/2	This lane uses a directly entered Saturation Flow						1900	1900
15/3	This lane uses a directly entered Saturation Flow						1900	1900
16/1	Infinite Saturation Flow						Inf	Inf
16/2	Infinite Saturation Flow						Inf	Inf
17/1 (A45 Northbound)	3.65	0.00	Y	Arm 18 U-Turn	Inf	100.0 %	1980	1980
17/2 (A45 Northbound)	3.65	0.00	N	Arm 2 Left	Inf	100.0 %	2120	2120
17/3 (A45 Northbound)	3.65	0.00	Y	Arm 2 Left	Inf	100.0 %	1980	1980
18/1	Infinite Saturation Flow						Inf	Inf
18/2	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2021 H1 Ref AM' (FG11: '2021 H1 Ref AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	7	81	113	0	1251	422	1874
	B	231	0	0	16	89	167	503
	C	295	0	0	0	307	464	1066
	D	0	0	0	0	62	716	778
	E	1886	19	354	233	0	3	2495
	F	404	8	238	459	12	0	1121
	Tot.	2823	108	705	708	1721	1772	7837

Traffic Lane Flows

Lane	Scenario 10: 2021 H1 Ref AM
1/1	1210
½ (with short)	1285(In) 1285(Out)
1/3 (short)	0
2/1	983
2/2	950
2/3	369
3/1	986
3/2	786
4/1	1371
4/2	1654
4/3	0
5/1 (short)	404
5/2 (with short)	650(In) 246(Out)
5/3	471
6/1	1775
6/2	1048
7/1	852
7/2	471
8/1 (short)	194
8/2 (with short)	1063(In) 869(Out)
8/3	811
9/1	108
10/1	938
10/2	1328
10/3	394
10/4	429
11/1 (short)	105
11/2 (with short)	503(In) 398(Out)
12/1	540
12/2	1126
12/3	394
12/4	827
13/1	705
14/1 (short)	122
14/2 (with short)	307(In) 185(Out)
14/3	759
15/1	1080
15/2	579
15/3	1586
16/1	540
16/2	168
17/1 (short)	62
17/2 (with short)	427(In) 365(Out)
17/3	351
18/1	1142
18/2	579

Lane Saturation Flows

Junction: Queen Elanor Gyratory								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A5076 Mere Way)	3.50	0.00	Y	Arm 3 Left	20.00	0.2 %	1965	1965
				Arm 4 Ahead	Inf	99.8 %		
1/2 (A5076 Mere Way)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
1/3 (A5076 Mere Way)	3.50	0.00	Y	Arm 4 Ahead	Inf	0.0 %	1965	1965
2/1	This lane uses a directly entered Saturation Flow						1900	1900
2/2	This lane uses a directly entered Saturation Flow						1900	1900
2/3	This lane uses a directly entered Saturation Flow						1900	1900
3/1	Infinite Saturation Flow						Inf	Inf
3/2	Infinite Saturation Flow						Inf	Inf
4/1	This lane uses a directly entered Saturation Flow						1900	1900
4/2	This lane uses a directly entered Saturation Flow						1900	1900
4/3	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (A508 London Road)	3.50	0.00	Y	Arm 6 Left	Inf	100.0 %	1965	1965
5/2 (A508 London Road)	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
5/3 (A508 London Road)	3.50	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1965	1965
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	This lane uses a directly entered Saturation Flow						1900	1900
7/2	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (A45 Southbound)	3.65	0.00	Y	Arm 9 Left	30.00	41.8 %	1940	1940
				Arm 10 Ahead	Inf	58.2 %		
8/2 (A45 Southbound)	3.65	0.00	N	Arm 10 Ahead	Inf	100.0 %	2120	2120
8/3 (A45 Southbound)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	This lane uses a directly entered Saturation Flow						3000	3000
10/4	This lane uses a directly entered Saturation Flow						3000	3000
11/1 (Hardingstone Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
11/2 (Hardingstone Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
12/1	This lane uses a directly entered Saturation Flow						1900	1900
12/2	This lane uses a directly entered Saturation Flow						1900	1900
12/3	This lane uses a directly entered Saturation Flow						1900	1900
12/4	This lane uses a directly entered Saturation Flow						1900	1900

13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Newport Pagnell Road)	3.50	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1965	1965
				Arm 16 Left	20.00	0.0 %		
14/2 (Newport Pagnell Road)	3.50	0.00	N	Arm 15 Ahead	30.00	100.0 %	2005	2005
14/3 (Newport Pagnell Road)	3.50	0.00	Y	Arm 15 Ahead	50.00	100.0 %	1908	1908
15/1	This lane uses a directly entered Saturation Flow						1900	1900
15/2	This lane uses a directly entered Saturation Flow						1900	1900
15/3	This lane uses a directly entered Saturation Flow						1900	1900
16/1	Infinite Saturation Flow						Inf	Inf
16/2	Infinite Saturation Flow						Inf	Inf
17/1 (A45 Northbound)	3.65	0.00	Y	Arm 18 U-Turn	Inf	100.0 %	1980	1980
17/2 (A45 Northbound)	3.65	0.00	N	Arm 2 Left	Inf	100.0 %	2120	2120
17/3 (A45 Northbound)	3.65	0.00	Y	Arm 2 Left	Inf	100.0 %	1980	1980
18/1	Infinite Saturation Flow						Inf	Inf
18/2	Infinite Saturation Flow						Inf	Inf

Scenario 11: '2021 B1 Ref PM' (FG10: '2021 B1 Ref PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	566	58	0	1208	179	2011
	B	487	0	0	12	43	171	713
	C	184	0	0	2	787	475	1448
	D	0	24	3	0	115	600	742
	E	1869	63	344	386	0	5	2667
	F	557	109	187	485	34	0	1372
	Tot.	3097	762	592	885	2187	1430	8953

Traffic Lane Flows

Lane	Scenario 11: 2021 B1 Ref PM
1/1	1293
½ (with short)	1374(In) 1374(Out)
1/3 (short)	0
2/1	872
2/2	811
2/3	440
3/1	877
3/2	553
4/1	1546
4/2	1814
4/3	0
5/1 (short)	557
5/2 (with short)	853(In) 296(Out)
5/3	519
6/1	2103
6/2	994
7/1	1116
7/2	519
8/1 (short)	624
8/2 (with short)	1342(In) 718(Out)
8/3	669
9/1	762
10/1	978
10/2	1204
10/3	523
10/4	179
11/1 (short)	55
11/2 (with short)	713(In) 658(Out)
12/1	780
12/2	865
12/3	523
12/4	837
13/1	592
14/1 (short)	374
14/2 (with short)	789(In) 415(Out)
14/3	659
15/1	1134
15/2	938
15/3	1496
16/1	782
16/2	103
17/1 (short)	115
17/2 (with short)	432(In) 317(Out)
17/3	310
18/1	1249
18/2	938

Lane Saturation Flows

Junction: Queen Elanor Gyratory								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A5076 Mere Way)	3.50	0.00	Y	Arm 3 Left Arm 4 Ahead	20.00 Inf	0.4 % 99.6 %	1964	1964
1/2 (A5076 Mere Way)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
1/3 (A5076 Mere Way)	3.50	0.00	Y	Arm 4 Ahead	Inf	0.0 %	1965	1965
2/1	This lane uses a directly entered Saturation Flow						1900	1900
2/2	This lane uses a directly entered Saturation Flow						1900	1900
2/3	This lane uses a directly entered Saturation Flow						1900	1900
3/1	Infinite Saturation Flow						Inf	Inf
3/2	Infinite Saturation Flow						Inf	Inf
4/1	This lane uses a directly entered Saturation Flow						1900	1900
4/2	This lane uses a directly entered Saturation Flow						1900	1900
4/3	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (A508 London Road)	3.50	0.00	Y	Arm 6 Left	Inf	100.0 %	1965	1965
5/2 (A508 London Road)	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
5/3 (A508 London Road)	3.50	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1965	1965
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	This lane uses a directly entered Saturation Flow						1900	1900
7/2	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (A45 Southbound)	3.65	0.00	Y	Arm 9 Left Arm 10 Ahead	30.00 Inf	90.7 % 9.3 %	1894	1894
8/2 (A45 Southbound)	3.65	0.00	N	Arm 10 Ahead	Inf	100.0 %	2120	2120
8/3 (A45 Southbound)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	This lane uses a directly entered Saturation Flow						3000	3000
10/4	This lane uses a directly entered Saturation Flow						3000	3000
11/1 (Hardingstone Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
11/2 (Hardingstone Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
12/1	This lane uses a directly entered Saturation Flow						1900	1900
12/2	This lane uses a directly entered Saturation Flow						1900	1900
12/3	This lane uses a directly entered Saturation Flow						1900	1900
12/4	This lane uses a directly entered Saturation Flow						1900	1900

13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Newport Pagnell Road)	3.50	0.00	Y	Arm 15 Ahead	Inf	99.5 %	1964	1964
				Arm 16 Left	20.00	0.5 %		
14/2 (Newport Pagnell Road)	3.50	0.00	N	Arm 15 Ahead	30.00	100.0 %	2005	2005
14/3 (Newport Pagnell Road)	3.50	0.00	Y	Arm 15 Ahead	50.00	100.0 %	1908	1908
15/1	This lane uses a directly entered Saturation Flow						1900	1900
15/2	This lane uses a directly entered Saturation Flow						1900	1900
15/3	This lane uses a directly entered Saturation Flow						1900	1900
16/1	Infinite Saturation Flow						Inf	Inf
16/2	Infinite Saturation Flow						Inf	Inf
17/1 (A45 Northbound)	3.65	0.00	Y	Arm 18 U-Turn	Inf	100.0 %	1980	1980
17/2 (A45 Northbound)	3.65	0.00	N	Arm 2 Left	Inf	100.0 %	2120	2120
17/3 (A45 Northbound)	3.65	0.00	Y	Arm 2 Left	Inf	100.0 %	1980	1980
18/1	Infinite Saturation Flow						Inf	Inf
18/2	Infinite Saturation Flow						Inf	Inf

Scenario 12: '2021 H1 Ref PM' (FG12: '2021 H1 Ref PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	486	68	0	1203	256	2013
	B	474	0	0	28	32	169	703
	C	168	0	0	2	808	449	1427
	D	0	22	6	0	133	611	772
	E	1825	87	380	399	0	5	2696
	F	601	84	174	461	46	0	1366
	Tot.	3068	679	628	890	2222	1490	8977

Traffic Lane Flows

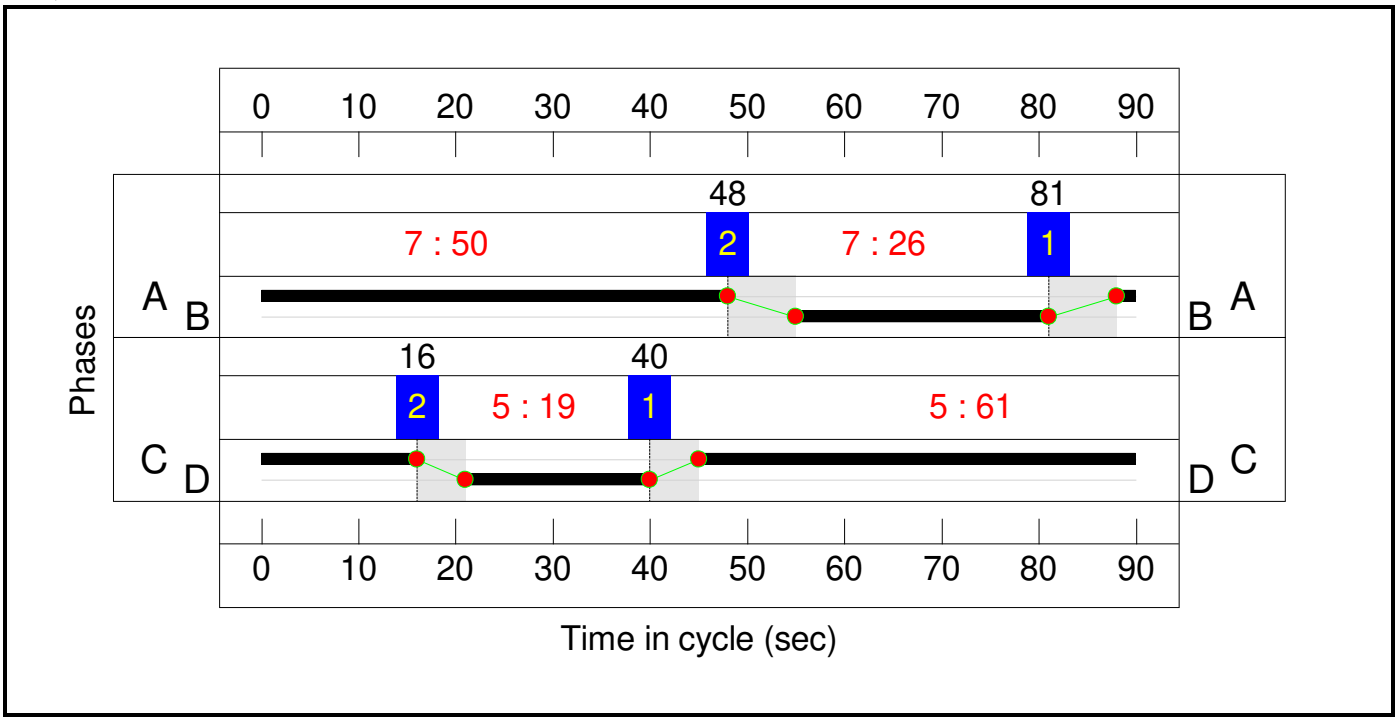
Lane	Scenario 12: 2021 H1 Ref PM
1/1	1307
1/2(with short)	1389(In) 1389(Out)
1/3 (short)	0
2/1	888
2/2	837
2/3	430
3/1	893
3/2	597
4/1	1542
4/2	1819
4/3	0
5/1 (short)	601
5/2 (with short)	859(In) 258(Out)
5/3	507
6/1	2143
6/2	925
7/1	1152
7/2	507
8/1 (short)	554
8/2 (with short)	1308(In) 754(Out)
8/3	705
9/1	679
10/1	1027
10/2	1215
10/3	495
10/4	256
11/1 (short)	60
11/2 (with short)	703(In) 643(Out)
12/1	796
12/2	878
12/3	495
12/4	899
13/1	628
14/1 (short)	377
14/2 (with short)	810(In) 433(Out)
14/3	617
15/1	1161
15/2	928
15/3	1516
16/1	798
16/2	92
17/1 (short)	133
17/2 (with short)	455(In) 322(Out)
17/3	317
18/1	1294
18/2	928

Lane Saturation Flows

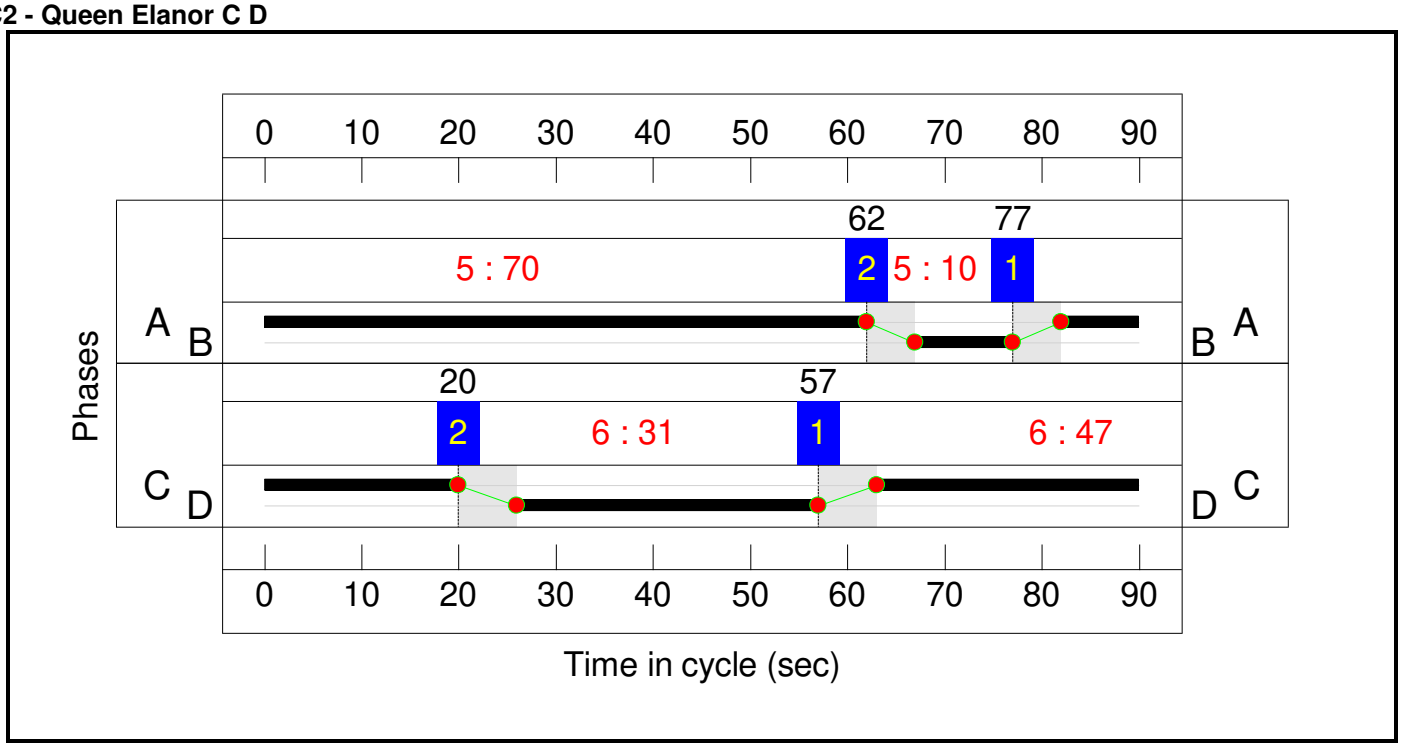
Junction: Queen Elanor Gyratory								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A5076 Mere Way)	3.50	0.00	Y	Arm 3 Left Arm 4 Ahead	20.00 Inf	0.4 % 99.6 %	1964	1964
1/2 (A5076 Mere Way)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
1/3 (A5076 Mere Way)	3.50	0.00	Y	Arm 4 Ahead	Inf	0.0 %	1965	1965
2/1	This lane uses a directly entered Saturation Flow						1900	1900
2/2	This lane uses a directly entered Saturation Flow						1900	1900
2/3	This lane uses a directly entered Saturation Flow						1900	1900
3/1	Infinite Saturation Flow						Inf	Inf
3/2	Infinite Saturation Flow						Inf	Inf
4/1	This lane uses a directly entered Saturation Flow						1900	1900
4/2	This lane uses a directly entered Saturation Flow						1900	1900
4/3	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (A508 London Road)	3.50	0.00	Y	Arm 6 Left	Inf	100.0 %	1965	1965
5/2 (A508 London Road)	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
5/3 (A508 London Road)	3.50	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1965	1965
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	This lane uses a directly entered Saturation Flow						1900	1900
7/2	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (A45 Southbound)	3.65	0.00	Y	Arm 9 Left Arm 10 Ahead	30.00 Inf	87.7 % 12.3 %	1897	1897
8/2 (A45 Southbound)	3.65	0.00	N	Arm 10 Ahead	Inf	100.0 %	2120	2120
8/3 (A45 Southbound)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	This lane uses a directly entered Saturation Flow						3000	3000
10/4	This lane uses a directly entered Saturation Flow						3000	3000
11/1 (Hardingstone Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
11/2 (Hardingstone Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
12/1	This lane uses a directly entered Saturation Flow						1900	1900
12/2	This lane uses a directly entered Saturation Flow						1900	1900
12/3	This lane uses a directly entered Saturation Flow						1900	1900
12/4	This lane uses a directly entered Saturation Flow						1900	1900

13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Newport Pagnell Road)	3.50	0.00	Y	Arm 15 Ahead	Inf	99.5 %	1964	1964
				Arm 16 Left	20.00	0.5 %		
14/2 (Newport Pagnell Road)	3.50	0.00	N	Arm 15 Ahead	30.00	100.0 %	2005	2005
14/3 (Newport Pagnell Road)	3.50	0.00	Y	Arm 15 Ahead	50.00	100.0 %	1908	1908
15/1	This lane uses a directly entered Saturation Flow						1900	1900
15/2	This lane uses a directly entered Saturation Flow						1900	1900
15/3	This lane uses a directly entered Saturation Flow						1900	1900
16/1	Infinite Saturation Flow						Inf	Inf
16/2	Infinite Saturation Flow						Inf	Inf
17/1 (A45 Northbound)	3.65	0.00	Y	Arm 18 U-Turn	Inf	100.0 %	1980	1980
17/2 (A45 Northbound)	3.65	0.00	N	Arm 2 Left	Inf	100.0 %	2120	2120
17/3 (A45 Northbound)	3.65	0.00	Y	Arm 2 Left	Inf	100.0 %	1980	1980
18/1	Infinite Saturation Flow						Inf	Inf
18/2	Infinite Saturation Flow						Inf	Inf

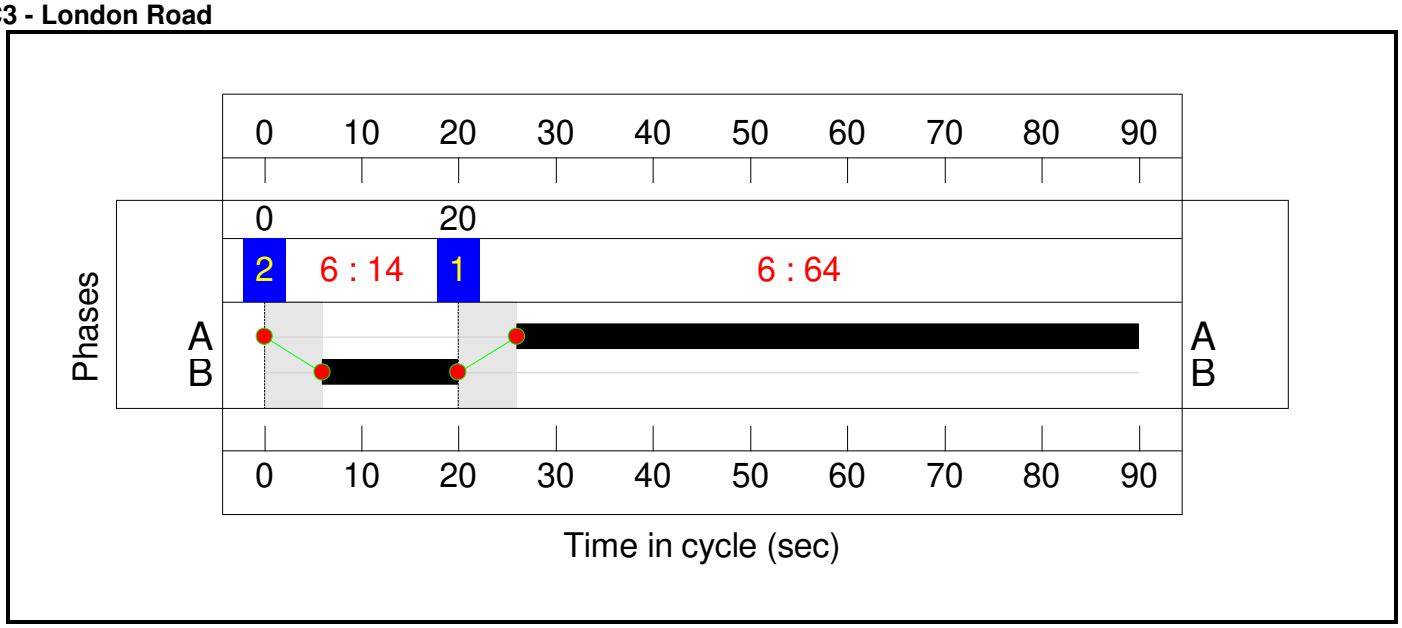
Signal Timings Diagram
Scenario 9: '2021 B1 Ref AM' (FG9: '2021 B1 Ref AM', Plan 1: 'Network Control Plan 1')
C1 - Queen Elanor A B



C2 - Queen Elanor C D



C3 - London Road



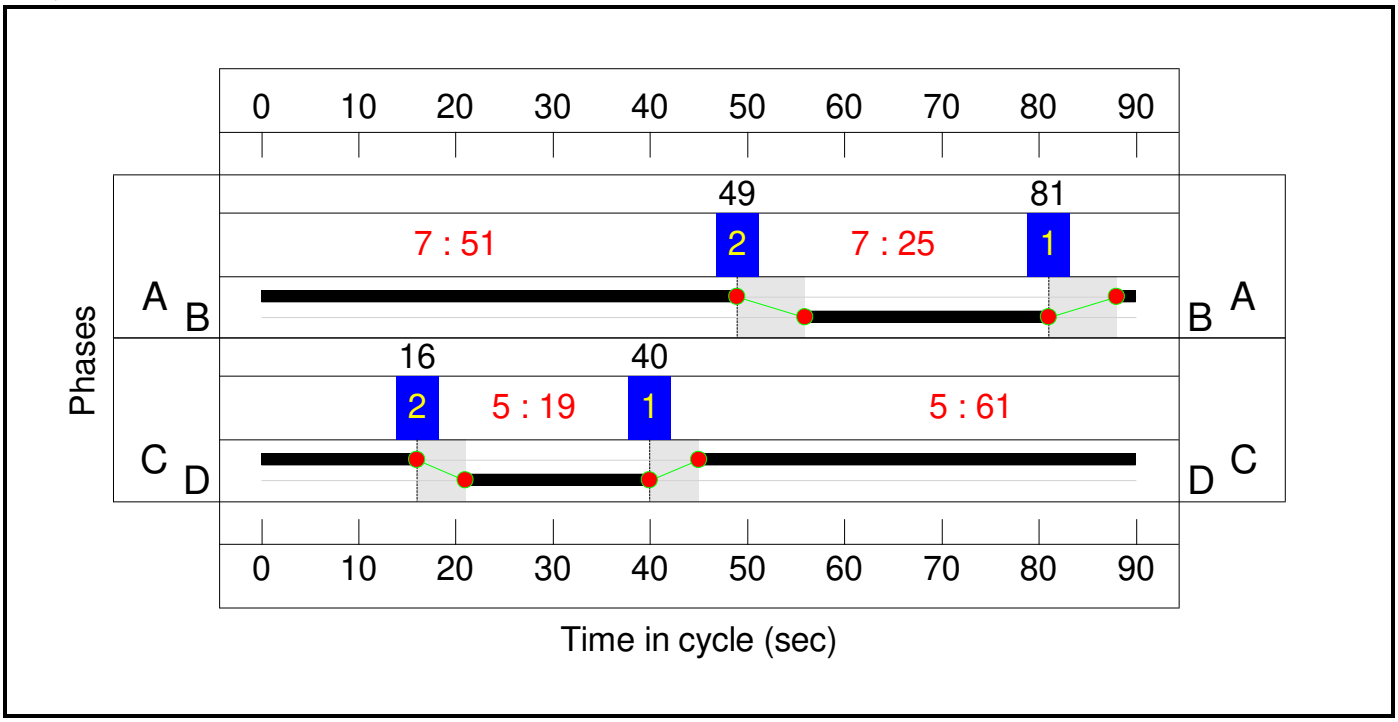
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
1/1	A5076 Mere Way	U	2:2	N/A	C2:D		1	31	-	1197	1965	699	171.3%
1/2+1/3	A5076 Mere Way	U	2:2	N/A	C2:D		1	31	-	1274	2105:1965	741+0	172.0 : 0.0%
2/1	Ahead	U	2:2	N/A	C2:C		1	47	-	944	1900	1013	68.2%
2/2	Ahead Right	U	2:2	N/A	C2:C		1	47	-	901	1900	1013	66.6%
2/3	Right	U	2:2	N/A	C2:C		1	47	-	368	1900	1013	29.5%
4/1	Ahead	U	3:1	N/A	C3:A		1	64	-	1288	1900	1372	55.4%
4/2	Ahead Right	U	3:1	N/A	C3:A		1	64	-	1642	1900	1372	75.7%
4/3	Right	U	3:1	N/A	C3:A		1	64	-	0	1900	1372	0.0%
5/2+5/1	A508 London Road Left Ahead	U	3:1	N/A	C3:B		1	14	-	634	2105:1965	351+327	87.2 : 100.2%
5/3	A508 London Road Ahead	U	1:1	N/A	C1:B		1	26	-	517	1965	590	87.7%
7/1	Ahead Right	U	1:1	N/A	C1:A		1	50	-	845	1900	1077	57.5%
7/2	Right	U	1:1	N/A	C1:A		1	50	-	517	1900	1077	48.0%
8/2+8/1	A45 Southbound	U	1:1	N/A	C1:B		1	26	-	1153	2120:1945	636+161	144.7 : 144.7%
8/3	A45 Southbound Ahead	U	1:1	N/A	C1:B		1	26	-	858	1980	594	144.4%
10/3	Right	U	N/A	N/A	-		-	-	-	386	3000	3000	9.0%
10/4	Right	U	N/A	N/A	-		-	-	-	480	3000	3000	11.1%
11/2+11/1	Hardingstone Lane Ahead Left	O	N/A	N/A	-		-	-	-	503	Inf : Inf	425+100	95.7 : 95.7%
12/1	Ahead	U	1:2	N/A	C1:C		1	61	-	560	1900	1309	36.9%
12/2	Right Ahead	U	1:2	N/A	C1:C		1	61	-	1174	1900	1309	68.0%
12/3	Right	U	1:2	N/A	C1:C		1	61	-	386	1900	1309	20.6%
12/4	Right	U	1:2	N/A	C1:C		1	61	-	887	1900	1309	56.5%
14/2+14/1	Newport Pagnell Road Ahead Left	U	1:2	N/A	C1:D		1	19	-	324	2005:1965	426+289	45.3 : 45.3%
14/3	Newport Pagnell Road Ahead	U	1:2	N/A	C1:D		1	19	-	753	1908	424	177.6%
15/1	Ahead	U	2:1	N/A	C2:A		1	70	-	1138	1900	1499	57.0%
15/2	Ahead	U	2:1	N/A	C2:A		1	70	-	579	1900	1499	30.9%
15/3	Ahead	U	2:1	N/A	C2:A		1	70	-	1640	1900	1499	77.6%
17/2+17/1	A45 Northbound	U	2:1	N/A	C2:B		1	10	-	321	2120:1980	259+21	114.6 : 114.6%
17/3	A45 Northbound	U	2:1	N/A	C2:B		1	10	-	276	1980	242	114.0%

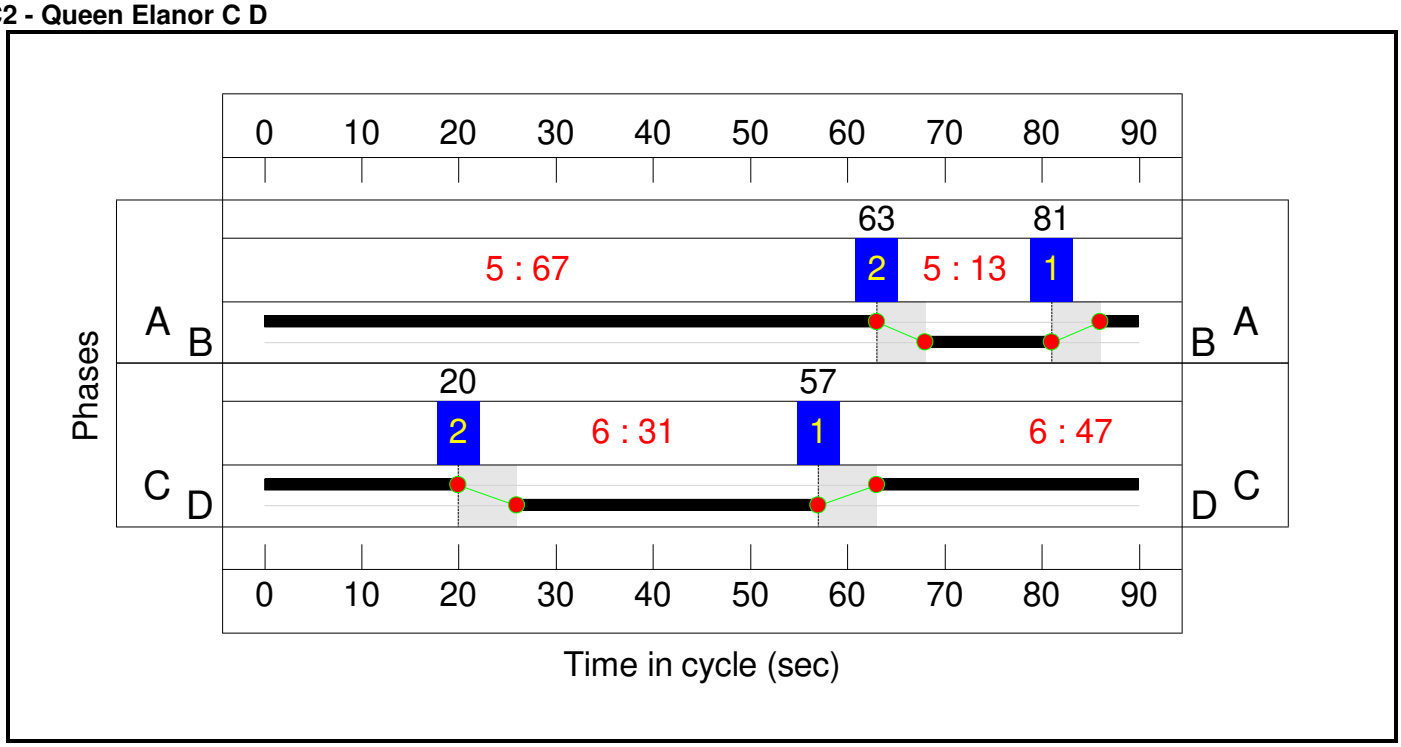
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
1/1	1197	699	-	-	-	31.0	250.4	-	281.4	846.3	44.9	250.4	295.2
1/2+1/3	1274	741	-	-	-	30.5	267.9	-	298.4	843.1	48.4	267.9	316.3
2/1	691	691	-	-	-	1.4	1.1	-	2.5	13.0	5.7	1.1	6.8
2/2	674	674	-	-	-	1.4	1.0	-	2.4	13.0	6.5	1.0	7.5
2/3	299	299	-	-	-	1.1	0.2	-	1.3	15.2	5.3	0.2	5.5
4/1	761	761	-	-	-	0.2	0.6	-	0.8	3.7	0.5	0.6	1.2
4/2	1039	1039	-	-	-	0.9	1.5	-	2.4	8.3	9.6	1.5	11.1
4/3	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2+5/1	634	633	-	-	-	6.5	5.9	-	12.5	70.9	8.2	5.9	14.2
5/3	517	517	-	-	-	4.3	3.3	-	7.6	52.7	12.2	3.3	15.5
7/1	619	619	-	-	-	2.1	0.7	-	2.8	16.1	5.8	0.7	6.5
7/2	517	517	-	-	-	3.3	0.5	-	3.8	26.5	12.9	0.5	13.4
8/2+8/1	1153	797	-	-	-	24.2	179.6	-	203.7	636.1	39.4	179.6	219.0
8/3	858	594	-	-	-	20.7	133.6	-	154.3	647.6	33.2	133.6	166.8
10/3	270	270	-	-	-	0.0	0.0	-	0.0	0.7	0.0	0.0	0.0
10/4	332	332	-	-	-	0.0	0.1	-	0.1	0.7	0.0	0.1	0.1
11/2+11/1	503	503	1006	0	0	2.1	6.9	-	9.0	64.4	9.8	6.9	16.8
12/1	483	483	-	-	-	1.9	0.3	-	2.2	16.5	7.2	0.3	7.5
12/2	890	890	-	-	-	1.2	1.1	-	2.3	9.3	10.9	1.1	11.9
12/3	270	270	-	-	-	0.0	0.1	-	0.2	2.1	0.1	0.1	0.3
12/4	739	739	-	-	-	0.6	0.6	-	1.2	6.0	6.0	0.6	6.7
14/2+14/1	324	324	-	-	-	2.7	0.4	-	3.1	34.3	4.1	0.4	4.5
14/3	753	424	-	-	-	20.8	165.6	-	186.4	891.3	27.1	165.6	192.7
15/1	854	854	-	-	-	1.4	0.7	-	2.1	8.9	17.1	0.7	17.8
15/2	463	463	-	-	-	0.1	0.2	-	0.4	2.8	2.7	0.2	2.9
15/3	1163	1163	-	-	-	1.7	1.7	-	3.4	10.5	12.7	1.7	14.4
17/2+17/1	321	280	-	-	-	4.7	23.8	-	28.6	320.4	8.8	23.8	32.7
17/3	276	242	-	-	-	4.1	20.4	-	24.5	319.5	7.8	20.4	28.2

C1 - Queen Elanor A B	Stream: 1 PRC for Signalled Lanes (%):	-60.7	Total Delay for Signalled Lanes (pcuHr):	372.23	Cycle Time (s): 90
C1 - Queen Elanor A B	Stream: 2 PRC for Signalled Lanes (%):	-97.3	Total Delay for Signalled Lanes (pcuHr):	195.43	Cycle Time (s): 90
C2 - Queen Elanor C D	Stream: 1 PRC for Signalled Lanes (%):	-27.4	Total Delay for Signalled Lanes (pcuHr):	58.92	Cycle Time (s): 90
C2 - Queen Elanor C D	Stream: 2 PRC for Signalled Lanes (%):	-91.1	Total Delay for Signalled Lanes (pcuHr):	585.94	Cycle Time (s): 90
C3 - London Road	Stream: 1 PRC for Signalled Lanes (%):	-11.3	Total Delay for Signalled Lanes (pcuHr):	15.66	Cycle Time (s): 90
	PRC Over All Lanes (%):	-97.3	Total Delay Over All Lanes(pcuHr):	1237.29	

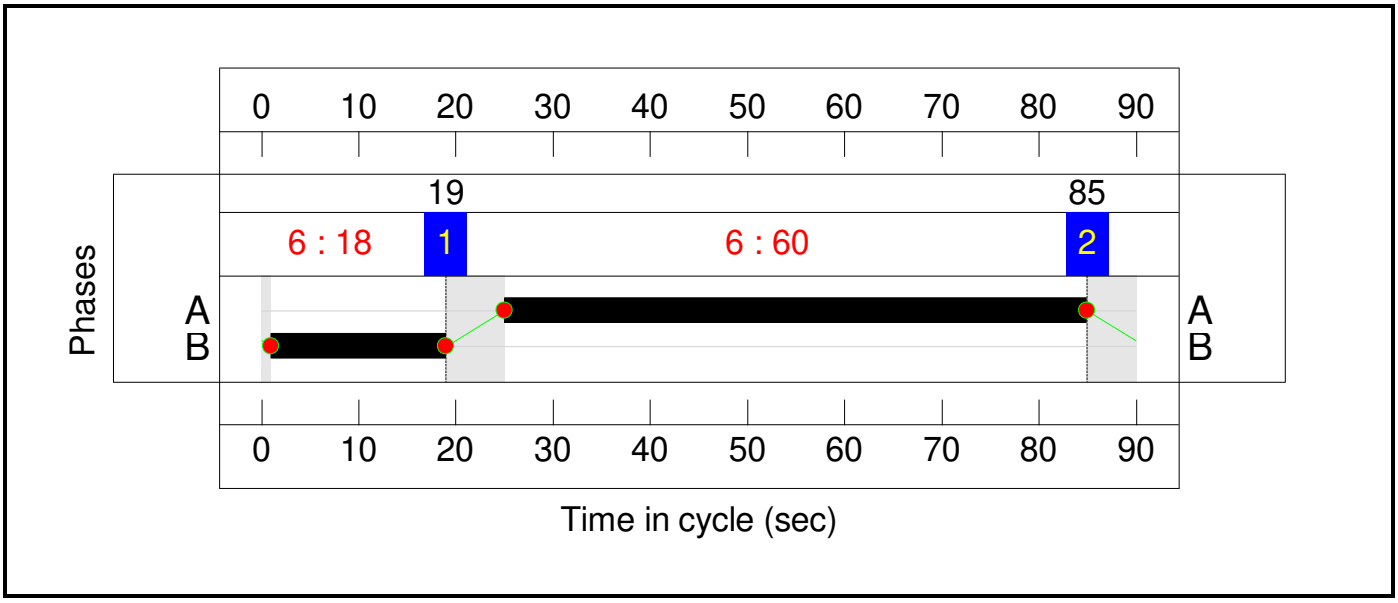
Signal Timings Diagram
Scenario 10: '2021 H1 Ref AM' (FG11: '2021 H1 Ref AM', Plan 1: 'Network Control Plan 1')
C1 - Queen Elanor A B



C2 - Queen Elanor C D



C3 - London Road



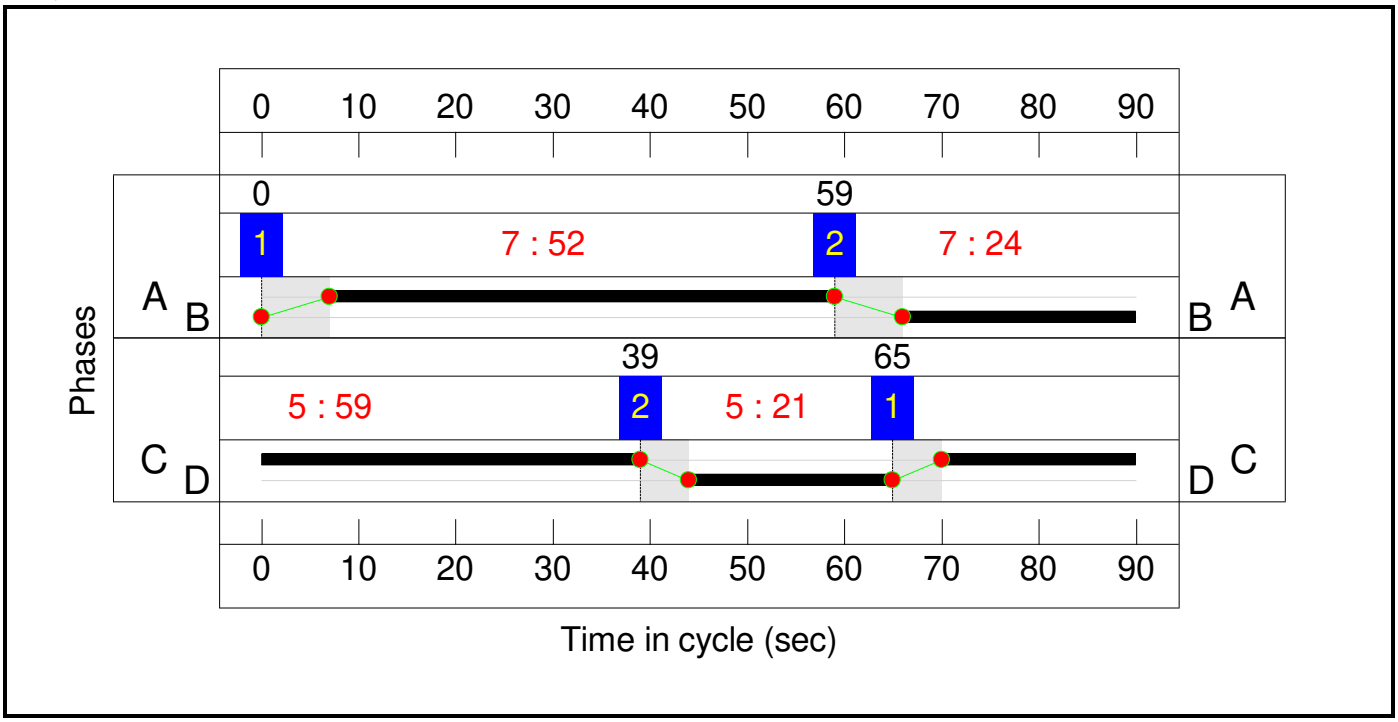
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
1/1	A5076 Mere Way	U	2:2	N/A	C2:D		1	31	-	1210	1965	699	173.2%
1/2+1/3	A5076 Mere Way	U	2:2	N/A	C2:D		1	31	-	1285	2105:1965	741+0	173.5 : 0.0%
2/1	Ahead	U	2:2	N/A	C2:C		1	47	-	983	1900	1013	72.9%
2/2	Ahead Right	U	2:2	N/A	C2:C		1	47	-	950	1900	1013	72.4%
2/3	Right	U	2:2	N/A	C2:C		1	47	-	369	1900	1013	27.6%
4/1	Ahead	U	3:1	N/A	C3:A		1	60	-	1371	1900	1288	63.5%
4/2	Ahead Right	U	3:1	N/A	C3:A		1	60	-	1654	1900	1288	79.2%
4/3	Right	U	3:1	N/A	C3:A		1	60	-	0	1900	1288	0.0%
5/2+5/1	A508 London Road Left Ahead	U	3:1	N/A	C3:B		1	18	-	650	2105:1965	253+415	97.4 : 97.4%
5/3	A508 London Road Ahead	U	1:1	N/A	C1:B		1	25	-	471	1965	568	83.0%
7/1	Ahead Right	U	1:1	N/A	C1:A		1	51	-	852	1900	1098	54.2%
7/2	Right	U	1:1	N/A	C1:A		1	51	-	471	1900	1098	42.9%
8/2+8/1	A45 Southbound Left Ahead	U	1:1	N/A	C1:B		1	25	-	1063	2120:1940	612+137	141.9 : 141.9%
8/3	A45 Southbound	U	1:1	N/A	C1:B		1	25	-	811	1980	572	141.8%
10/3	Right	U	N/A	N/A	-		-	-	-	394	3000	3000	9.4%
10/4	Right	U	N/A	N/A	-		-	-	-	429	3000	3000	10.1%
11/2+11/1	Hardingstone Lane Ahead Left	O	N/A	N/A	-		-	-	-	503	Inf : Inf	453+120	87.8 : 87.8%
12/1	Ahead	U	1:2	N/A	C1:C		1	61	-	540	1900	1309	33.7%
12/2	Right Ahead	U	1:2	N/A	C1:C		1	61	-	1126	1900	1309	66.4%
12/3	Right	U	1:2	N/A	C1:C		1	61	-	394	1900	1309	21.5%
12/4	Right	U	1:2	N/A	C1:C		1	61	-	827	1900	1309	53.5%
14/2+14/1	Newport Pagnell Road Ahead Left	U	1:2	N/A	C1:D		1	19	-	307	2005:1965	427+281	43.4 : 43.4%
14/3	Newport Pagnell Road Ahead	U	1:2	N/A	C1:D		1	19	-	759	1908	424	179.0%
15/1	Ahead	U	2:1	N/A	C2:A		1	67	-	1080	1900	1436	57.4%
15/2	Ahead	U	2:1	N/A	C2:A		1	67	-	579	1900	1436	32.5%
15/3	Ahead	U	2:1	N/A	C2:A		1	67	-	1586	1900	1436	78.3%
17/2+17/1	A45 Northbound Left U-Turn	U	2:1	N/A	C2:B		1	13	-	427	2120:1980	320+54	114.2 : 114.2%
17/3	A45 Northbound	U	2:1	N/A	C2:B		1	13	-	351	1980	308	114.0%

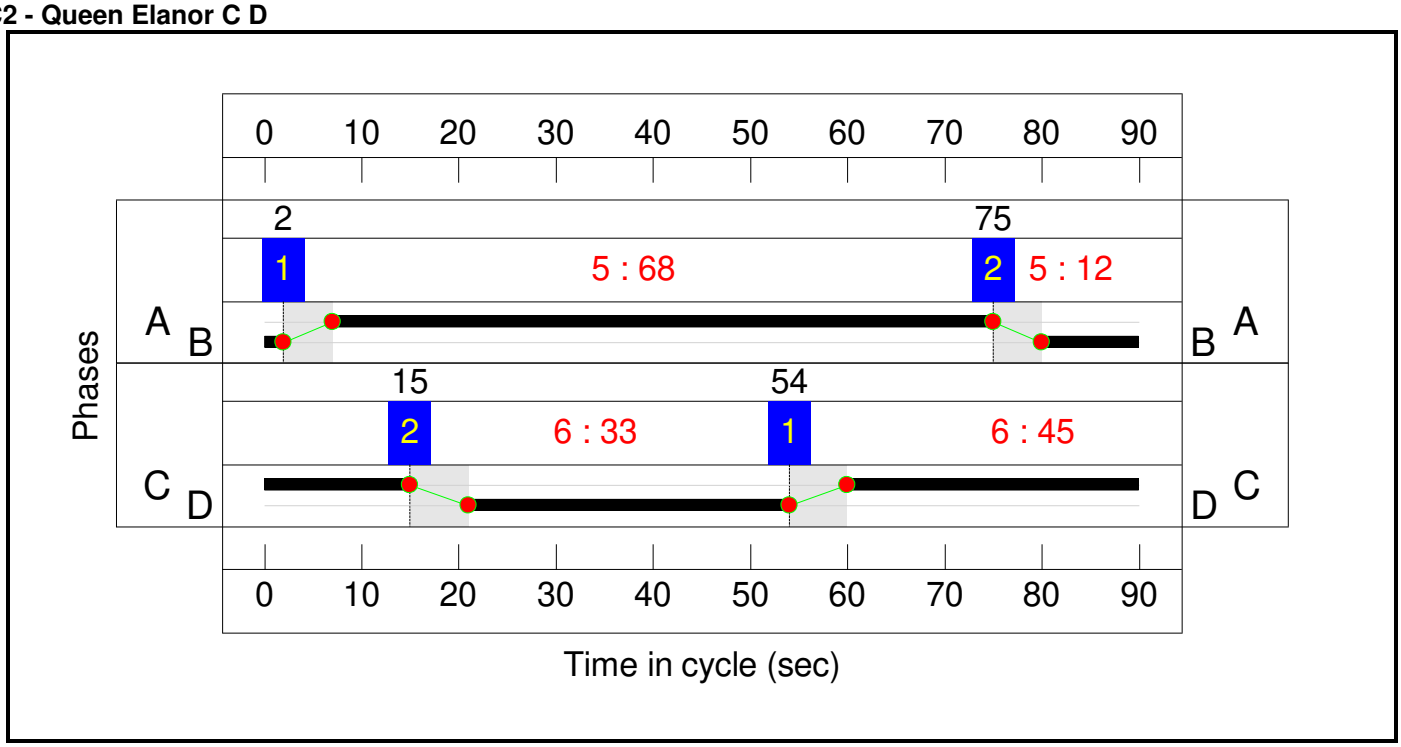
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
1/1	1210	699	-	-	-	31.8	256.8	-	288.7	858.9	45.7	256.8	302.6
1/2+1/3	1285	741	-	-	-	31.0	273.4	-	304.4	852.7	48.9	273.4	322.3
2/1	739	739	-	-	-	1.6	1.3	-	2.9	14.1	6.0	1.3	7.3
2/2	734	734	-	-	-	1.7	1.3	-	3.0	14.8	7.2	1.3	8.5
2/3	280	280	-	-	-	1.1	0.2	-	1.3	16.3	5.5	0.2	5.7
4/1	818	818	-	-	-	0.2	0.9	-	1.1	4.7	0.6	0.9	1.4
4/2	1020	1020	-	-	-	0.6	1.9	-	2.5	8.8	9.5	1.9	11.4
4/3	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2+5/1	650	650	-	-	-	6.1	9.1	-	15.2	84.4	10.0	9.1	19.1
5/3	471	471	-	-	-	3.9	2.3	-	6.2	47.7	11.0	2.3	13.3
7/1	595	595	-	-	-	2.2	0.6	-	2.8	16.9	6.2	0.6	6.8
7/2	471	471	-	-	-	2.9	0.4	-	3.3	25.1	11.8	0.4	12.2
8/2+8/1	1063	749	-	-	-	21.5	158.6	-	180.1	609.9	35.8	158.6	194.4
8/3	811	572	-	-	-	19.1	121.2	-	140.3	622.7	30.9	121.2	152.0
10/3	281	281	-	-	-	0.0	0.1	-	0.1	0.7	0.0	0.1	0.1
10/4	303	303	-	-	-	0.0	0.1	-	0.1	0.7	0.0	0.1	0.1
11/2+11/1	503	503	1006	0	0	1.8	3.3	-	5.1	36.5	8.8	3.3	12.1
12/1	441	441	-	-	-	1.5	0.3	-	1.8	14.6	5.6	0.3	5.9
12/2	869	869	-	-	-	1.2	1.0	-	2.2	9.0	10.3	1.0	11.2
12/3	281	281	-	-	-	0.0	0.1	-	0.2	2.3	0.2	0.1	0.3
12/4	701	701	-	-	-	0.6	0.6	-	1.2	6.1	7.0	0.6	7.5
14/2+14/1	307	307	-	-	-	2.5	0.4	-	2.9	34.1	4.0	0.4	4.3
14/3	759	424	-	-	-	21.1	168.6	-	189.7	899.9	27.3	168.6	196.0
15/1	823	823	-	-	-	2.0	0.7	-	2.6	11.5	16.6	0.7	17.3
15/2	466	466	-	-	-	0.3	0.2	-	0.5	4.1	4.4	0.2	4.6
15/3	1125	1125	-	-	-	1.7	1.8	-	3.5	11.2	11.8	1.8	13.6
17/2+17/1	427	374	-	-	-	6.2	30.0	-	36.2	305.2	11.6	30.0	41.6
17/3	351	308	-	-	-	5.4	25.0	-	30.4	312.2	10.3	25.0	35.3

C1 - Queen Elanor A B	Stream: 1 PRC for Signalled Lanes (%):	-57.7	Total Delay for Signalled Lanes (pcuHr):	332.68	Cycle Time (s): 90
C1 - Queen Elanor A B	Stream: 2 PRC for Signalled Lanes (%):	-98.9	Total Delay for Signalled Lanes (pcuHr):	197.98	Cycle Time (s): 90
C2 - Queen Elanor C D	Stream: 1 PRC for Signalled Lanes (%):	-26.8	Total Delay for Signalled Lanes (pcuHr):	73.29	Cycle Time (s): 90
C2 - Queen Elanor C D	Stream: 2 PRC for Signalled Lanes (%):	-92.8	Total Delay for Signalled Lanes (pcuHr):	600.21	Cycle Time (s): 90
C3 - London Road	Stream: 1 PRC for Signalled Lanes (%):	-8.2	Total Delay for Signalled Lanes (pcuHr):	18.79	Cycle Time (s): 90
	PRC Over All Lanes (%):	-98.9	Total Delay Over All Lanes(pcuHr):	1228.15	

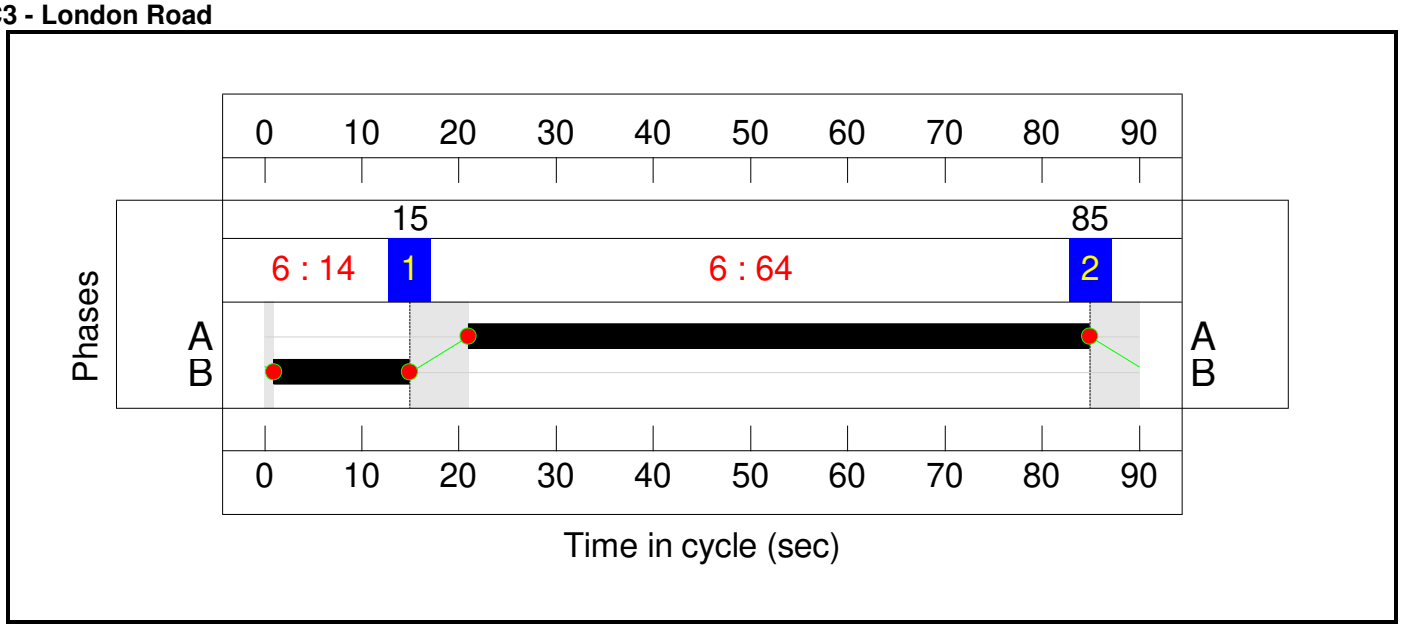
Signal Timings Diagram
Scenario 11: '2021 B1 Ref PM' (FG10: '2021 B1 Ref PM', Plan 1: 'Network Control Plan 1')
C1 - Queen Elanor A B



C2 - Queen Elanor C D



C3 - London Road



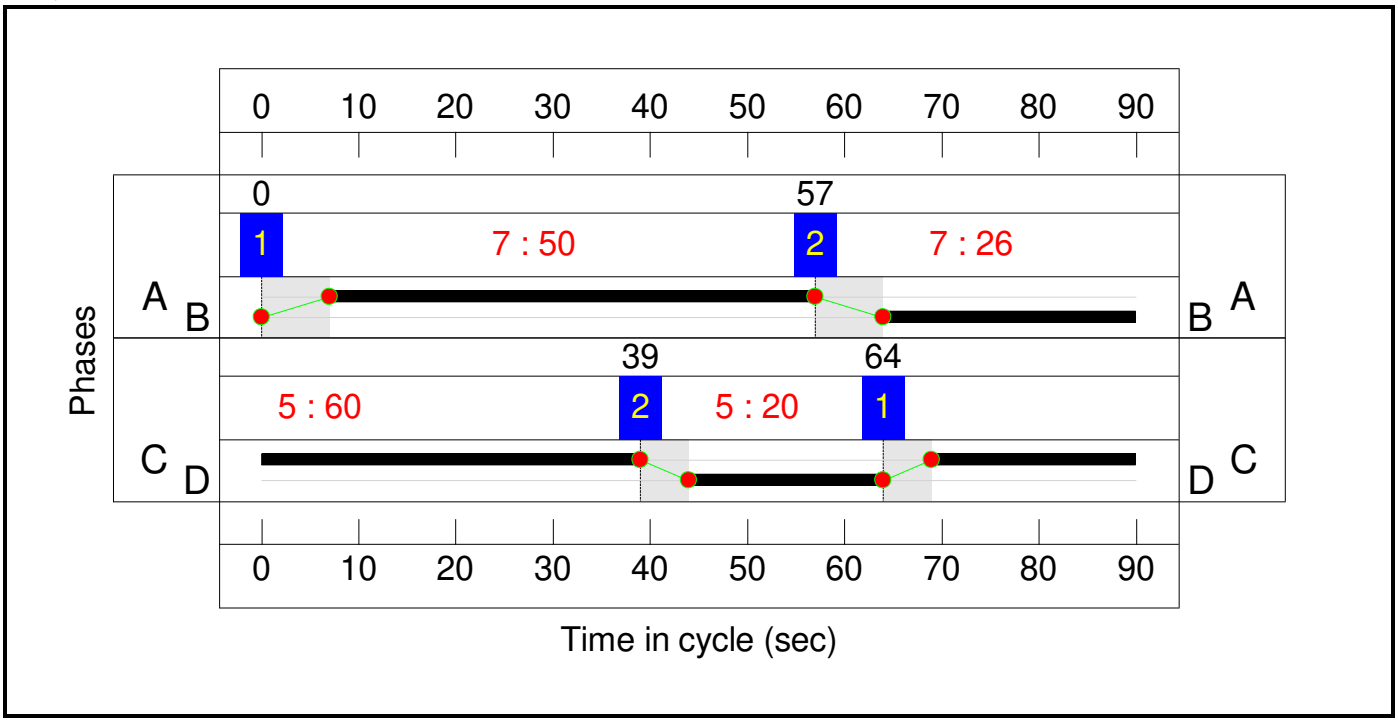
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
1/1	A5076 Mere Way	U	2:2	N/A	C2:D		1	33	-	1293	1964	742	174.3%
1/2+1/3	A5076 Mere Way	U	2:2	N/A	C2:D		1	33	-	1374	2105:1965	787+0	174.5 : 0.0%
2/1	Ahead	U	2:2	N/A	C2:C		1	45	-	872	1900	971	71.8%
2/2	Ahead Right	U	2:2	N/A	C2:C		1	45	-	811	1900	971	65.7%
2/3	Right	U	2:2	N/A	C2:C		1	45	-	440	1900	971	32.3%
4/1	Ahead	U	3:1	N/A	C3:A		1	64	-	1546	1900	1372	67.0%
4/2	Ahead Right	U	3:1	N/A	C3:A		1	64	-	1814	1900	1372	80.3%
4/3	Right	U	3:1	N/A	C3:A		1	64	-	0	1900	1372	0.0%
5/2+5/1	A508 London Road Left Ahead	U	3:1	N/A	C3:B		1	14	-	853	2105:1965	174+327	170.1 : 170.1%
5/3	A508 London Road Ahead	U	1:1	N/A	C1:B		1	24	-	519	1965	546	95.1%
7/1	Ahead Right	U	1:1	N/A	C1:A		1	52	-	1116	1900	1119	61.5%
7/2	Right	U	1:1	N/A	C1:A		1	52	-	519	1900	1119	46.4%
8/2+8/1	A45 Southbound Left Ahead	U	1:1	N/A	C1:B		1	24	-	1342	2120:1894	589+526	121.9 : 118.6%
8/3	A45 Southbound	U	1:1	N/A	C1:B		1	24	-	669	1980	550	121.6%
10/3	Right	U	N/A	N/A	-		-	-	-	523	3000	3000	14.5%
10/4	Right	U	N/A	N/A	-		-	-	-	179	3000	3000	4.9%
11/2+11/1	Hardingstone Lane Ahead Left	O	N/A	N/A	-		-	-	-	713	Inf : Inf	458+38	143.5 : 143.5%
12/1	Ahead	U	1:2	N/A	C1:C		1	59	-	780	1900	1267	48.4%
12/2	Right Ahead	U	1:2	N/A	C1:C		1	59	-	865	1900	1267	57.0%
12/3	Right	U	1:2	N/A	C1:C		1	59	-	523	1900	1267	34.4%
12/4	Right	U	1:2	N/A	C1:C		1	59	-	837	1900	1267	47.8%
14/2+14/1	Newport Pagnell Road Ahead Left	U	1:2	N/A	C1:D		1	21	-	789	2005:1964	446+402	93.0 : 93.0%
14/3	Newport Pagnell Road Ahead	U	1:2	N/A	C1:D		1	21	-	659	1908	466	141.3%
15/1	Ahead	U	2:1	N/A	C2:A		1	68	-	1134	1900	1457	68.1%
15/2	Ahead	U	2:1	N/A	C2:A		1	68	-	938	1900	1457	58.4%
15/3	Ahead	U	2:1	N/A	C2:A		1	68	-	1496	1900	1457	73.6%
17/2+17/1	A45 Northbound Left U-Turn	U	2:1	N/A	C2:B		1	12	-	432	2120:1980	291+106	109.0 : 109.0%
17/3	A45 Northbound	U	2:1	N/A	C2:B		1	12	-	310	1980	286	108.4%

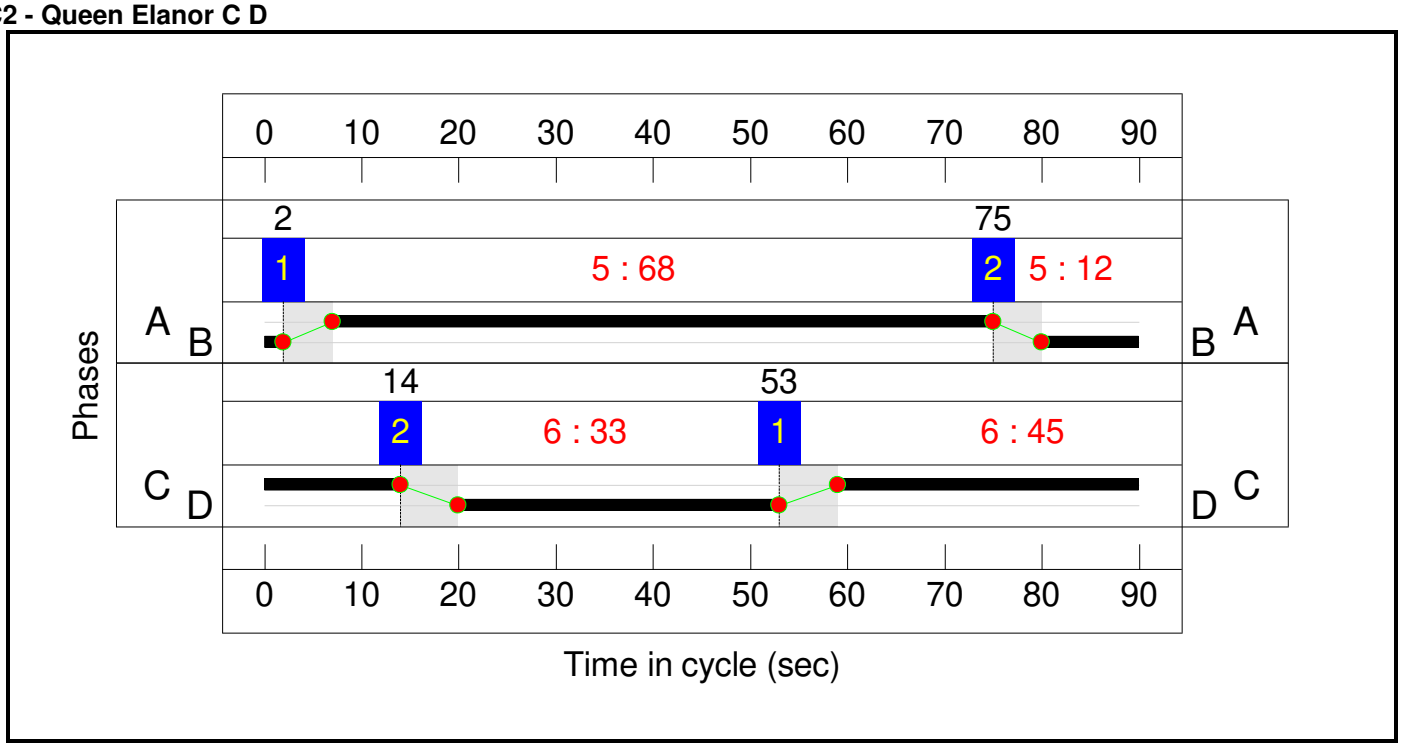
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
1/1	1293	742	-	-	-	33.5	276.7	-	310.2	863.6	48.0	276.7	324.7
1/2+1/3	1374	787	-	-	-	33.6	294.5	-	328.0	859.5	52.5	294.5	346.9
2/1	697	697	-	-	-	1.7	1.3	-	3.0	15.4	7.5	1.3	8.8
2/2	638	638	-	-	-	2.2	1.0	-	3.1	17.6	7.3	1.0	8.3
2/3	314	314	-	-	-	1.7	0.2	-	2.0	22.6	5.3	0.2	5.6
4/1	919	919	-	-	-	0.1	1.0	-	1.1	4.4	0.5	1.0	1.5
4/2	1101	1101	-	-	-	0.5	2.0	-	2.5	8.2	10.7	2.0	12.7
4/3	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2+5/1	853	536	-	-	-	21.5	176.9	-	198.4	837.4	26.5	176.9	203.5
5/3	519	519	-	-	-	4.6	6.5	-	11.1	77.1	12.7	6.5	19.2
7/1	688	688	-	-	-	1.6	0.8	-	2.4	12.7	9.0	0.8	9.8
7/2	519	519	-	-	-	3.1	0.4	-	3.5	24.4	13.0	0.4	13.4
8/2+8/1	1342	1115	-	-	-	20.8	116.4	-	137.2	368.0	28.2	116.4	144.6
8/3	669	550	-	-	-	12.3	62.2	-	74.5	400.9	22.1	62.2	84.3
10/3	436	436	-	-	-	0.0	0.1	-	0.1	0.7	0.0	0.1	0.1
10/4	147	147	-	-	-	0.0	0.0	-	0.0	0.6	0.0	0.0	0.0
11/2+11/1	713	497	994	0	0	13.4	109.7	-	123.1	621.6	41.4	109.7	151.1
12/1	612	612	-	-	-	1.0	0.5	-	1.5	8.6	4.4	0.5	4.9
12/2	722	722	-	-	-	0.4	0.7	-	1.0	5.2	6.8	0.7	7.5
12/3	436	436	-	-	-	0.0	0.3	-	0.3	2.3	0.1	0.3	0.3
12/4	606	606	-	-	-	1.8	0.5	-	2.2	13.4	10.3	0.5	10.7
14/2+14/1	789	789	-	-	-	7.0	5.6	-	12.6	57.5	9.8	5.6	15.4
14/3	659	466	-	-	-	13.6	98.0	-	111.6	609.7	22.1	98.0	120.1
15/1	992	992	-	-	-	2.1	1.1	-	3.1	11.4	15.4	1.1	16.5
15/2	851	851	-	-	-	1.0	0.7	-	1.7	7.1	10.1	0.7	10.8
15/3	1072	1072	-	-	-	2.3	1.4	-	3.7	12.5	13.9	1.4	15.3
17/2+17/1	432	396	-	-	-	6.4	22.6	-	29.0	241.6	9.9	22.6	32.4
17/3	310	286	-	-	-	4.5	16.7	-	21.2	246.0	8.5	16.7	25.2

C1 - Queen Elanor A B	Stream: 1 PRC for Signalled Lanes (%):	-35.5	Total Delay for Signalled Lanes (pcuHr):	228.75	Cycle Time (s): 90
C1 - Queen Elanor A B	Stream: 2 PRC for Signalled Lanes (%):	-57.0	Total Delay for Signalled Lanes (pcuHr):	129.24	Cycle Time (s): 90
C2 - Queen Elanor C D	Stream: 1 PRC for Signalled Lanes (%):	-21.1	Total Delay for Signalled Lanes (pcuHr):	58.72	Cycle Time (s): 90
C2 - Queen Elanor C D	Stream: 2 PRC for Signalled Lanes (%):	-93.9	Total Delay for Signalled Lanes (pcuHr):	646.31	Cycle Time (s): 90
C3 - London Road	Stream: 1 PRC for Signalled Lanes (%):	-89.0	Total Delay for Signalled Lanes (pcuHr):	202.07	Cycle Time (s): 90
	PRC Over All Lanes (%):	-93.9	Total Delay Over All Lanes(pcuHr):	1388.31	

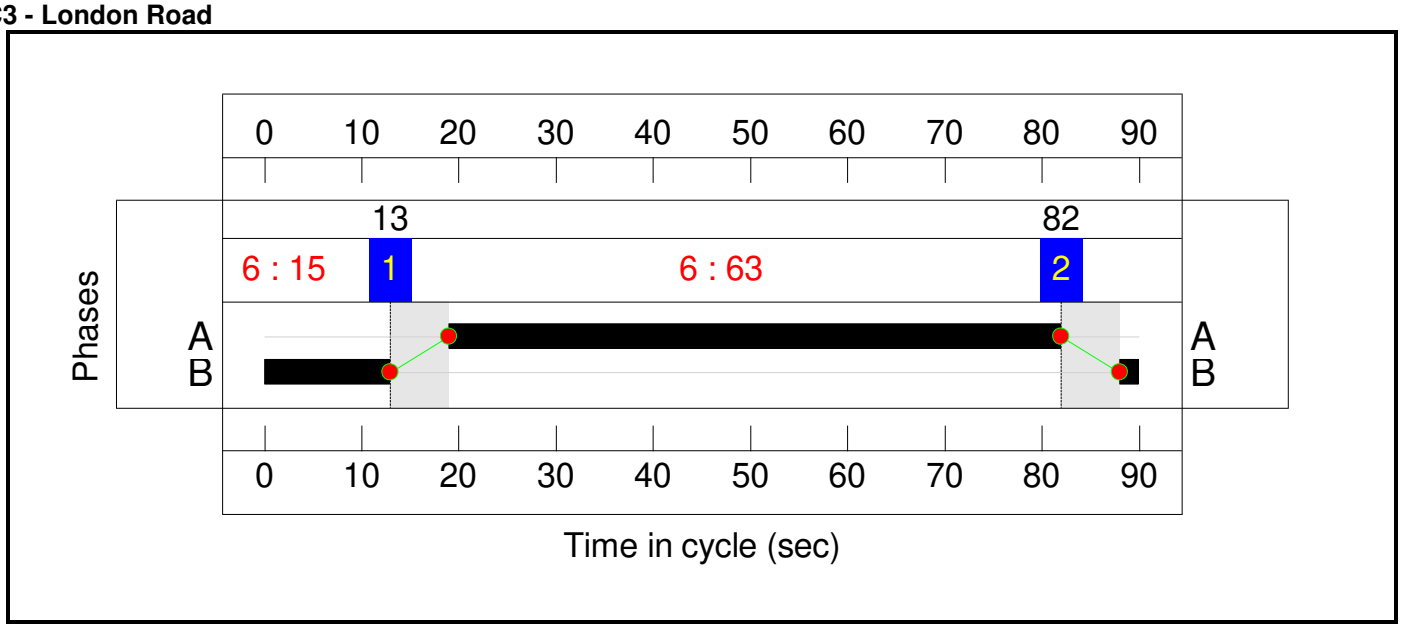
Signal Timings Diagram
Scenario 12: '2021 H1 Ref PM' (FG12: '2021 H1 Ref PM', Plan 1: 'Network Control Plan 1')
C1 - Queen Elanor A B



C2 - Queen Elanor C D



C3 - London Road



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
1/1	A5076 Mere Way	U	2:2	N/A	C2:D		1	33	-	1307	1964	742	176.2%
1/2+1/3	A5076 Mere Way	U	2:2	N/A	C2:D		1	33	-	1389	2105:1965	787+0	176.4 : 0.0%
2/1	Ahead	U	2:2	N/A	C2:C		1	45	-	888	1900	971	73.6%
2/2	Ahead Right	U	2:2	N/A	C2:C		1	45	-	837	1900	971	67.6%
2/3	Right	U	2:2	N/A	C2:C		1	45	-	430	1900	971	31.3%
4/1	Ahead	U	3:1	N/A	C3:A		1	63	-	1542	1900	1351	67.0%
4/2	Ahead Right	U	3:1	N/A	C3:A		1	63	-	1819	1900	1351	80.8%
4/3	Right	U	3:1	N/A	C3:A		1	63	-	0	1900	1351	0.0%
5/2+5/1	A508 London Road Left Ahead	U	3:1	N/A	C3:B		1	15	-	859	2105:1965	150+349	172.0 : 172.0%
5/3	A508 London Road Ahead	U	1:1	N/A	C1:B		1	26	-	507	1965	590	86.0%
7/1	Ahead Right	U	1:1	N/A	C1:A		1	50	-	1152	1900	1077	62.7%
7/2	Right	U	1:1	N/A	C1:A		1	50	-	507	1900	1077	47.1%
8/2+8/1	A45 Southbound Left Ahead	U	1:1	N/A	C1:B		1	26	-	1308	2120:1897	636+467	118.6 : 118.6%
8/3	A45 Southbound	U	1:1	N/A	C1:B		1	26	-	705	1980	594	118.7%
10/3	Right	U	N/A	N/A	-		-	-	-	495	3000	3000	14.1%
10/4	Right	U	N/A	N/A	-		-	-	-	256	3000	3000	7.2%
11/2+11/1	Hardingstone Lane Ahead Left	O	N/A	N/A	-		-	-	-	703	Inf : Inf	439+41	146.5 : 146.5%
12/1	Ahead	U	1:2	N/A	C1:C		1	60	-	796	1900	1288	47.8%
12/2	Right Ahead	U	1:2	N/A	C1:C		1	60	-	878	1900	1288	58.1%
12/3	Right	U	1:2	N/A	C1:C		1	60	-	495	1900	1288	32.9%
12/4	Right	U	1:2	N/A	C1:C		1	60	-	899	1900	1288	50.8%
14/2+14/1	Newport Pagnell Road Ahead Left	U	1:2	N/A	C1:D		1	20	-	810	2005:1964	435+379	99.5 : 99.5%
14/3	Newport Pagnell Road Ahead	U	1:2	N/A	C1:D		1	20	-	617	1908	445	138.6%
15/1	Ahead	U	2:1	N/A	C2:A		1	68	-	1161	1900	1457	70.9%
15/2	Ahead	U	2:1	N/A	C2:A		1	68	-	928	1900	1457	58.9%
15/3	Ahead	U	2:1	N/A	C2:A		1	68	-	1516	1900	1457	75.5%
17/2+17/1	A45 Northbound Left U-Turn	U	2:1	N/A	C2:B		1	12	-	455	2120:1980	289+119	111.4 : 111.4%
17/3	A45 Northbound	U	2:1	N/A	C2:B		1	12	-	317	1980	286	110.8%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
1/1	1307	742	-	-	-	34.2	283.7	-	317.8	875.4	48.6	283.7	332.3
1/2+1/3	1389	787	-	-	-	34.4	302.0	-	336.4	871.9	53.2	302.0	355.2
2/1	714	714	-	-	-	2.1	1.4	-	3.5	17.5	8.9	1.4	10.3
2/2	656	656	-	-	-	2.3	1.0	-	3.4	18.4	8.0	1.0	9.1
2/3	304	304	-	-	-	1.8	0.2	-	2.0	23.5	5.3	0.2	5.6
4/1	905	905	-	-	-	0.1	1.0	-	1.1	4.6	0.5	1.0	1.5
4/2	1091	1091	-	-	-	0.5	2.1	-	2.6	8.6	10.7	2.1	12.8
4/3	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2+5/1	859	508	-	-	-	23.0	181.0	-	204.0	854.9	29.1	181.0	210.2
5/3	507	507	-	-	-	4.2	2.9	-	7.1	50.1	11.8	2.9	14.7
7/1	675	675	-	-	-	2.1	0.8	-	2.9	15.7	8.3	0.8	9.2
7/2	507	507	-	-	-	3.3	0.4	-	3.7	26.4	12.7	0.4	13.1
8/2+8/1	1308	1103	-	-	-	19.1	105.5	-	124.6	342.9	27.8	105.5	133.2
8/3	705	594	-	-	-	12.1	58.5	-	70.6	360.4	22.6	58.5	81.1
10/3	424	424	-	-	-	0.0	0.1	-	0.1	0.7	0.0	0.1	0.1
10/4	216	216	-	-	-	0.0	0.0	-	0.0	0.6	0.0	0.0	0.0
11/2+11/1	703	480	960	0	0	13.6	113.2	-	126.8	649.1	39.9	113.2	153.1
12/1	616	616	-	-	-	1.0	0.5	-	1.4	8.3	4.3	0.5	4.8
12/2	748	748	-	-	-	0.4	0.7	-	1.1	5.1	8.0	0.7	8.7
12/3	424	424	-	-	-	0.0	0.2	-	0.3	2.2	0.0	0.2	0.3
12/4	655	655	-	-	-	1.7	0.5	-	2.2	12.2	10.8	0.5	11.4
14/2+14/1	810	810	-	-	-	7.5	13.2	-	20.7	91.8	11.6	13.2	24.7
14/3	617	445	-	-	-	12.2	87.7	-	99.8	582.6	20.1	87.7	107.7
15/1	1033	1033	-	-	-	2.5	1.2	-	3.7	13.0	16.4	1.2	17.6
15/2	857	857	-	-	-	1.0	0.7	-	1.7	7.1	9.5	0.7	10.2
15/3	1100	1100	-	-	-	2.7	1.5	-	4.2	13.9	15.1	1.5	16.6
17/2+17/1	455	408	-	-	-	7.2	27.5	-	34.7	274.5	10.6	27.5	38.1
17/3	317	286	-	-	-	5.0	19.6	-	24.5	278.4	9.0	19.6	28.6

C1 - Queen Elanor A B	Stream: 1 PRC for Signalled Lanes (%):	-31.9	Total Delay for Signalled Lanes (pcuHr):	208.89	Cycle Time (s):	90
C1 - Queen Elanor A B	Stream: 2 PRC for Signalled Lanes (%):	-54.0	Total Delay for Signalled Lanes (pcuHr):	125.46	Cycle Time (s):	90
C2 - Queen Elanor C D	Stream: 1 PRC for Signalled Lanes (%):	-23.8	Total Delay for Signalled Lanes (pcuHr):	68.86	Cycle Time (s):	90
C2 - Queen Elanor C D	Stream: 2 PRC for Signalled Lanes (%):	-96.0	Total Delay for Signalled Lanes (pcuHr):	663.05	Cycle Time (s):	90
C3 - London Road	Stream: 1 PRC for Signalled Lanes (%):	-91.2	Total Delay for Signalled Lanes (pcuHr):	207.75	Cycle Time (s):	90
	PRC Over All Lanes (%):	-96.0	Total Delay Over All Lanes(pcuHr):	1400.89		