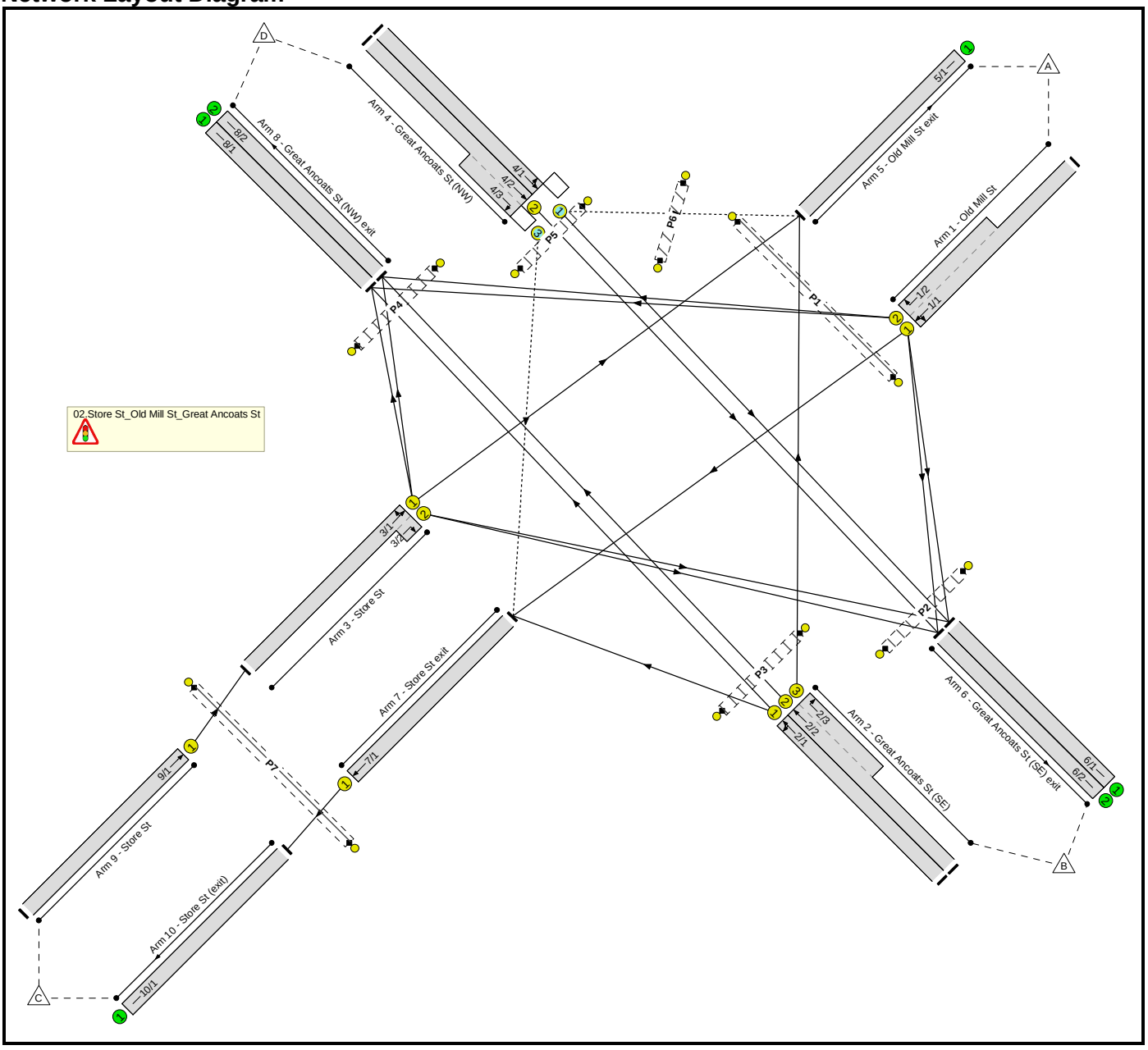
Full Input Data And Results

User and Project Details

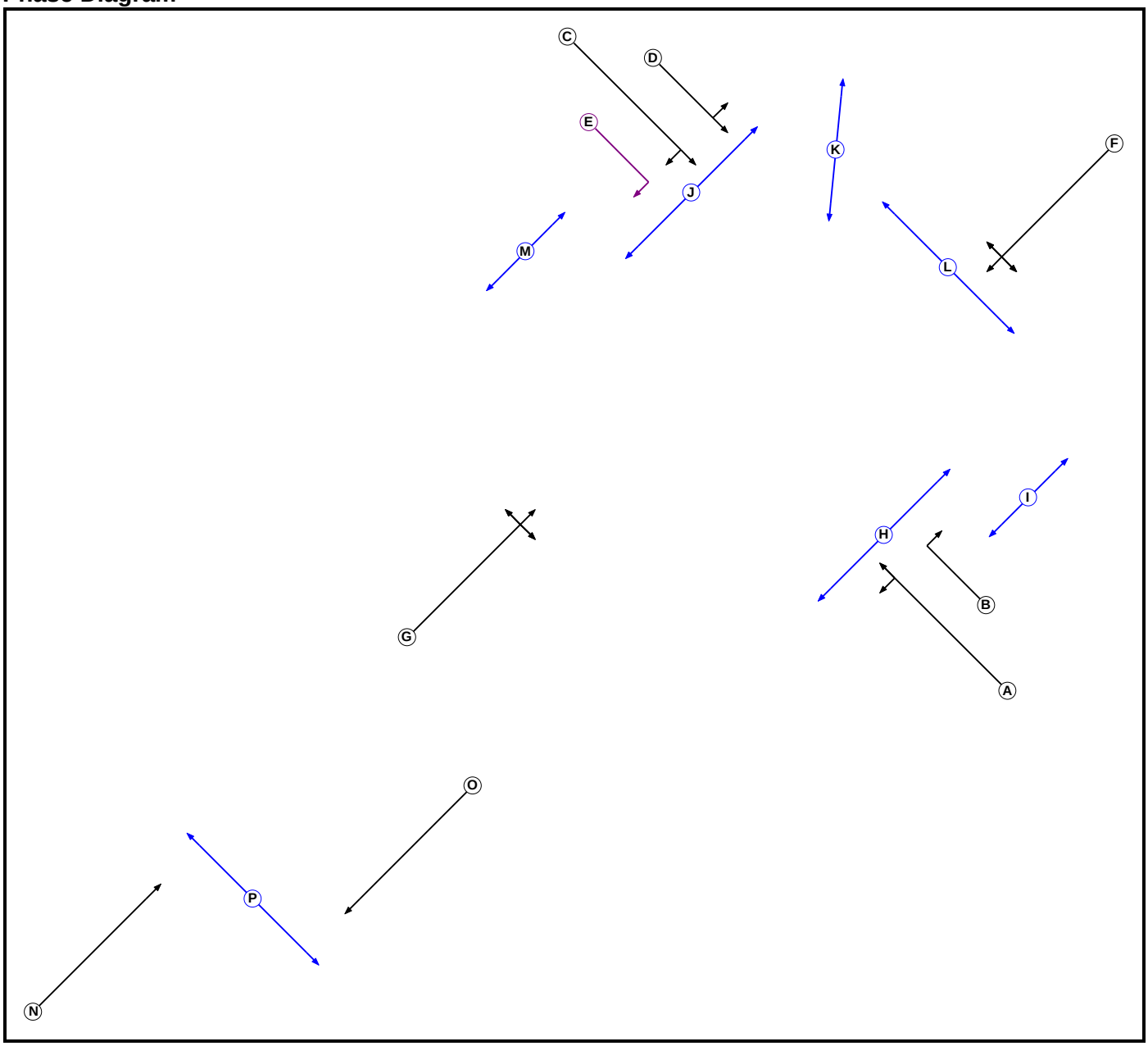
Project:	
Title:	
Location:	
Additional detail:	
File name:	02.Store St_Old Mill St_Great Ancoats St.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

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	1		7	7
D	Traffic	1		7	7
E	Ind. Arrow	1	C	3	3
F	Traffic	1		7	7
G	Traffic	1		7	7
H	Pedestrian	1		9	9
I	Pedestrian	1		2	2
J	Pedestrian	1		7	7
K	Pedestrian	1		5	5
L	Pedestrian	1		9	9
M	Pedestrian	1		2	2
N	Traffic	2		7	7
O	Traffic	2		7	7
P	Pedestrian	2		5	5

Full Input Data And Results

Phase Intergreens Matrix

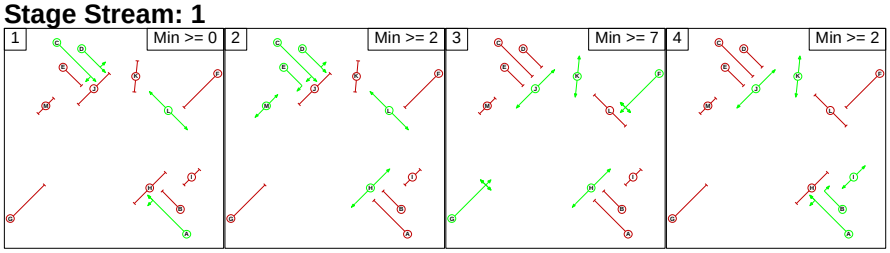
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A		-	-	-	5	7	7	5	-	-	-	-	9	-	-	-
B	-		7	8	-	8	8	5	-	-	-	9	-	-	-	-
C	-	5		-	-	8	8	-	9	5	-	-	-	-	-	-
D	-	3	-		-	-	3	-	-	-	5	-	-	-	-	-
E	5	-	-	-		8	8	-	-	5	-	-	-	-	-	-
F	7	6	7	-	7		-	-	9	-	-	6	12	-	-	-
G	7	8	7	9	7	-		-	13	-	-	10	10	-	-	-
H	6	6	-	-	-	-	-		-	-	-	-	-	-	-	-
I	-	-	6	-	-	5	5	-		-	-	-	-	-	-	-
J	-	-	10	-	10	-	-	-	-		-	-	-	-	-	-
K	-	-	-	5	-	-	-	-	-	-		-	-	-	-	-
L	-	12	-	-	-	13	13	-	-	-	-		-	-	-	-
M	6	-	-	-	-	6	6	-	-	-	-	-		-	-	-
N	-	-	-	-	-	-	-	-	-	-	-	-	-		-	5
O	-	-	-	-	-	-	-	-	-	-	-	-	-	-		5
P	-	-	-	-	-	-	-	-	-	-	-	-	-	7	7	

Phases in Stage

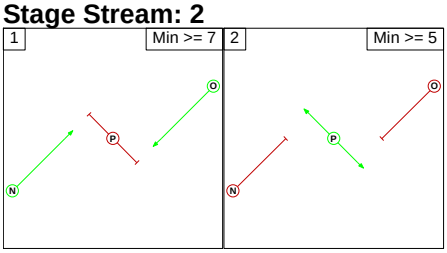
Stream	Stage No.	Phases in Stage
1	1	A C D L
1	2	C D E H L M
1	3	F G H J K
1	4	A B I J K
2	1	N O
2	2	P

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	A	Losing	5	5
1	3	C	Losing	5	5
1	3	D	Losing	5	5
2	3	C	Losing	5	5
2	3	D	Losing	5	5
2	3	E	Losing	5	5
2	3	M	Losing	7	7
2	4	C	Losing	3	3
2	4	D	Losing	3	3
2	4	E	Losing	3	3
2	4	H	Losing	3	3
2	4	M	Losing	3	3
3	1	H	Losing	1	1
3	1	K	Losing	4	4
3	4	H	Losing	1	1
4	1	B	Losing	1	1
4	1	I	Losing	4	4
4	1	K	Losing	4	4
4	3	I	Losing	3	3

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

		To Stage			
		1	2	3	4
From Stage	1		9	13	12
	2	6		13	12
	3	10	12		13
	4	10	10	8	

Stage Stream: 2

		To Stage	
		1	2
From Stage	1		5
	2	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: 02.Store St_Old Mill St_Great Ancoats St											
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)**
4/1 (Great Ancoats St (NW))	5/1 (Left)	715	0	2/3	0.22	All	2.00	2.00	0.50	2	2.00
				3/1	0.22	To 5/1 (Ahead)					
4/3 (Great Ancoats St (NW))	7/1 (Right)	1439	0	2/1	1.09	All	2.00	-	0.50	2	2.00
				2/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: 02.Store St_Old Mill St_Great Ancoats St

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 (Old Mill St)	U	F	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 6 Left	13.00
											Arm 7 Ahead	Inf
1/2 (Old Mill St)	U	F	2	3	12.0	Geom	-	3.30	0.00	N	Arm 8 Right	24.00
2/1 (Great Ancoats St (SE))	U	A	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 7 Left	10.00
											Arm 8 Ahead	Inf
2/2 (Great Ancoats St (SE))	U	A	2	3	60.0	Geom	-	3.30	0.00	N	Arm 8 Ahead	Inf
2/3 (Great Ancoats St (SE))	U	B	2	3	10.0	Geom	-	3.50	0.00	Y	Arm 5 Right	15.00
3/1 (Store St)	U	G	2	3	60.0	Geom	-	2.80	0.00	Y	Arm 5 Ahead	Inf
											Arm 8 Left	14.00
3/2 (Store St)	U	G	2	3	2.0	Geom	-	2.80	0.00	N	Arm 6 Right	18.00
4/1 (Great Ancoats St (NW))	O	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Left	23.00
											Arm 6 Ahead	Inf
4/2 (Great Ancoats St (NW))	U	C	2	3	60.0	Geom	-	3.40	0.00	N	Arm 6 Ahead	Inf
4/3 (Great Ancoats St (NW))	O	C E	2	3	7.0	Geom	-	3.60	0.00	Y	Arm 7 Right	14.00
5/1 (Old Mill St exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Great Ancoats St (SE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2 (Great Ancoats St (SE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Store St exit)	U	O	2	3	5.0	Geom	-	3.50	0.00	Y	Arm 10 Ahead	Inf

8/1 (Great Ancoats St (NW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/2 (Great Ancoats St (NW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (Store St)	U	N	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 3 Ahead	Inf
10/1 (Store St (exit))	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Base'	08:30	09:30	01:00	
2: 'PM Base'	17:00	18:00	01:00	
3: 'AM Proposed'	08:30	09:30	01:00	
4: 'PM Proposed'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	27	22	6	55
	B	122	0	0	898	1020
	C	71	37	0	99	207
	D	92	667	342	0	1101
	Tot.	285	731	364	1003	2383

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: 02.Store St_Old Mill St_Great Ancoats St	
1/1 (with short)	55(In) 49(Out)
1/2 (short)	6
2/1	432
2/2 (with short)	588(In) 466(Out)
2/3 (short)	122
3/1 (with short)	207(In) 170(Out)
3/2 (short)	37
4/1	412
4/2 (with short)	689(In) 347(Out)
4/3 (short)	342
5/1	285
6/1	353
6/2	378
7/1	364
8/1	485
8/2	518
9/1	207
10/1	364

Full Input Data And Results

Lane Saturation Flows

Junction: 02.Store St_Old Mill St_Great Ancoats St								
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 (Old Mill St)	3.30	0.00	Y	Arm 6 Left	13.00	55.1 %	1829	1829
				Arm 7 Ahead	Inf	44.9 %		
1/2 (Old Mill St)	3.30	0.00	N	Arm 8 Right	24.00	100.0 %	1962	1962
2/1 (Great Ancoats St (SE))	3.30	0.00	Y	Arm 7 Left	10.00	0.0 %	1945	1945
				Arm 8 Ahead	Inf	100.0 %		
2/2 (Great Ancoats St (SE))	3.30	0.00	N	Arm 8 Ahead	Inf	100.0 %	2085	2085
2/3 (Great Ancoats St (SE))	3.50	0.00	Y	Arm 5 Right	15.00	100.0 %	1786	1786
3/1 (Store St)	2.80	0.00	Y	Arm 5 Ahead	Inf	41.8 %	1784	1784
				Arm 8 Left	14.00	58.2 %		
3/2 (Store St)	2.80	0.00	N	Arm 6 Right	18.00	100.0 %	1878	1878
4/1 (Great Ancoats St (NW))	3.50	0.00	Y	Arm 5 Left	23.00	22.3 %	1937	1937
				Arm 6 Ahead	Inf	77.7 %		
4/2 (Great Ancoats St (NW))	3.40	0.00	N	Arm 6 Ahead	Inf	100.0 %	2095	2095
4/3 (Great Ancoats St (NW))	3.60	0.00	Y	Arm 7 Right	14.00	100.0 %	1784	1784
5/1 (Old Mill St exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats St (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Great Ancoats St (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Store St exit)	3.50	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1965	1965
8/1 (Great Ancoats St (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Great Ancoats St (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Store St)	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
10/1 (Store St (exit) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	13	19	8	40
	B	206	0	42	744	992
	C	140	43	0	91	274
	D	143	503	198	0	844
	Tot.	489	559	259	843	2150

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: 02.Store St_Old Mill St_Great Ancoats St	
1/1 (with short)	40(In) 32(Out)
1/2 (short)	8
2/1	420
2/2 (with short)	572(In) 366(Out)
2/3 (short)	206
3/1 (with short)	274(In) 231(Out)
3/2 (short)	43
4/1	333
4/2 (with short)	511(In) 313(Out)
4/3 (short)	198
5/1	489
6/1	219
6/2	340
7/1	259
8/1	428
8/2	415
9/1	274
10/1	259

Full Input Data And Results

Lane Saturation Flows

Junction: 02.Store St_Old Mill St_Great Ancoats St								
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 (Old Mill St)	3.30	0.00	Y	Arm 6 Left	13.00	40.6 %	1858	1858
				Arm 7 Ahead	Inf	59.4 %		
1/2 (Old Mill St)	3.30	0.00	N	Arm 8 Right	24.00	100.0 %	1962	1962
2/1 (Great Ancoats St (SE))	3.30	0.00	Y	Arm 7 Left	10.00	10.0 %	1916	1916
				Arm 8 Ahead	Inf	90.0 %		
2/2 (Great Ancoats St (SE))	3.30	0.00	N	Arm 8 Ahead	Inf	100.0 %	2085	2085
2/3 (Great Ancoats St (SE))	3.50	0.00	Y	Arm 5 Right	15.00	100.0 %	1786	1786
3/1 (Store St)	2.80	0.00	Y	Arm 5 Ahead	Inf	60.6 %	1818	1818
				Arm 8 Left	14.00	39.4 %		
3/2 (Store St)	2.80	0.00	N	Arm 6 Right	18.00	100.0 %	1878	1878
4/1 (Great Ancoats St (NW))	3.50	0.00	Y	Arm 5 Left	23.00	42.9 %	1911	1911
				Arm 6 Ahead	Inf	57.1 %		
4/2 (Great Ancoats St (NW))	3.40	0.00	N	Arm 6 Ahead	Inf	100.0 %	2095	2095
4/3 (Great Ancoats St (NW))	3.60	0.00	Y	Arm 7 Right	14.00	100.0 %	1784	1784
5/1 (Old Mill St exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats St (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Great Ancoats St (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Store St exit)	3.50	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1965	1965
8/1 (Great Ancoats St (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Great Ancoats St (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Store St)	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
10/1 (Store St (exit) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	27	25	6	58
	B	122	0	46	979	1147
	C	71	38	0	99	208
	D	92	674	353	0	1119
	Tot.	285	739	424	1084	2532

Traffic Lane Flows

Lane	Scenario 3: AM Proposed
Junction: 02.Store St_Old Mill St_Great Ancoats St	
1/1 (with short)	58(In) 52(Out)
1/2 (short)	6
2/1	492
2/2 (with short)	655(In) 533(Out)
2/3 (short)	122
3/1 (with short)	208(In) 170(Out)
3/2 (short)	38
4/1	422
4/2 (with short)	697(In) 344(Out)
4/3 (short)	353
5/1	285
6/1	363
6/2	376
7/1	424
8/1	499
8/2	585
9/1	208
10/1	424

Full Input Data And Results

Lane Saturation Flows

Junction: 02.Store St_Old Mill St_Great Ancoats St								
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 (Old Mill St)	3.30	0.00	Y	Arm 6 Left	13.00	51.9 %	1835	1835
				Arm 7 Ahead	Inf	48.1 %		
1/2 (Old Mill St)	3.30	0.00	N	Arm 8 Right	24.00	100.0 %	1962	1962
2/1 (Great Ancoats St (SE))	3.30	0.00	Y	Arm 7 Left	10.00	9.3 %	1918	1918
				Arm 8 Ahead	Inf	90.7 %		
2/2 (Great Ancoats St (SE))	3.30	0.00	N	Arm 8 Ahead	Inf	100.0 %	2085	2085
2/3 (Great Ancoats St (SE))	3.50	0.00	Y	Arm 5 Right	15.00	100.0 %	1786	1786
3/1 (Store St)	2.80	0.00	Y	Arm 5 Ahead	Inf	41.8 %	1784	1784
				Arm 8 Left	14.00	58.2 %		
3/2 (Store St)	2.80	0.00	N	Arm 6 Right	18.00	100.0 %	1878	1878
4/1 (Great Ancoats St (NW))	3.50	0.00	Y	Arm 5 Left	23.00	21.8 %	1937	1937
				Arm 6 Ahead	Inf	78.2 %		
4/2 (Great Ancoats St (NW))	3.40	0.00	N	Arm 6 Ahead	Inf	100.0 %	2095	2095
4/3 (Great Ancoats St (NW))	3.60	0.00	Y	Arm 7 Right	14.00	100.0 %	1784	1784
5/1 (Old Mill St exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats St (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Great Ancoats St (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Store St exit)	3.50	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1965	1965
8/1 (Great Ancoats St (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Great Ancoats St (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Store St)	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
10/1 (Store St (exit) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	13	19	8	40
	B	206	0	43	749	998
	C	142	82	0	100	324
	D	158	591	198	0	947
	Tot.	506	686	260	857	2309

Traffic Lane Flows

Lane	Scenario 4: PM Proposed
Junction: 02.Store St_Old Mill St_Great Ancoats St	
1/1 (with short)	40(In) 32(Out)
1/2 (short)	8
2/1	420
2/2 (with short)	578(In) 372(Out)
2/3 (short)	206
3/1 (with short)	324(In) 242(Out)
3/2 (short)	82
4/1	387
4/2 (with short)	560(In) 362(Out)
4/3 (short)	198
5/1	506
6/1	277
6/2	409
7/1	260
8/1	431
8/2	426
9/1	324
10/1	260

Full Input Data And Results

Lane Saturation Flows

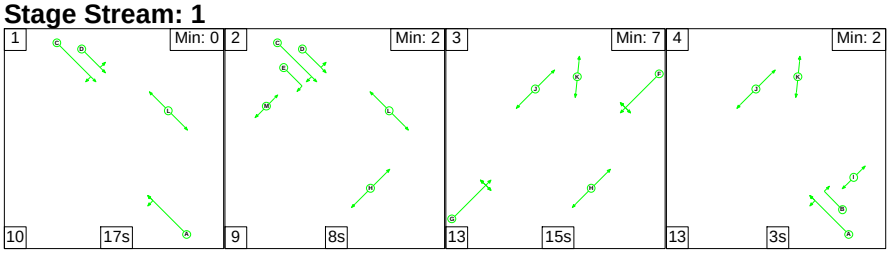
Junction: 02.Store St_Old Mill St_Great Ancoats St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Old Mill St)	3.30	0.00	Y	Arm 6 Left	13.00	40.6 %	1858	1858
				Arm 7 Ahead	Inf	59.4 %		
1/2 (Old Mill St)	3.30	0.00	N	Arm 8 Right	24.00	100.0 %	1962	1962
2/1 (Great Ancoats St (SE))	3.30	0.00	Y	Arm 7 Left	10.00	10.2 %	1916	1916
				Arm 8 Ahead	Inf	89.8 %		
2/2 (Great Ancoats St (SE))	3.30	0.00	N	Arm 8 Ahead	Inf	100.0 %	2085	2085
2/3 (Great Ancoats St (SE))	3.50	0.00	Y	Arm 5 Right	15.00	100.0 %	1786	1786
3/1 (Store St)	2.80	0.00	Y	Arm 5 Ahead	Inf	58.7 %	1815	1815
				Arm 8 Left	14.00	41.3 %		
3/2 (Store St)	2.80	0.00	N	Arm 6 Right	18.00	100.0 %	1878	1878
4/1 (Great Ancoats St (NW))	3.50	0.00	Y	Arm 5 Left	23.00	40.8 %	1914	1914
				Arm 6 Ahead	Inf	59.2 %		
4/2 (Great Ancoats St (NW))	3.40	0.00	N	Arm 6 Ahead	Inf	100.0 %	2095	2095
4/3 (Great Ancoats St (NW))	3.60	0.00	Y	Arm 7 Right	14.00	100.0 %	1784	1784
5/1 (Old Mill St exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats St (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Great Ancoats St (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Store St exit)	3.50	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1965	1965
8/1 (Great Ancoats St (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Great Ancoats St (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Store St)	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
10/1 (Store St (exit) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

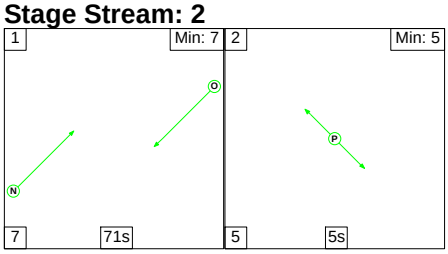
Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

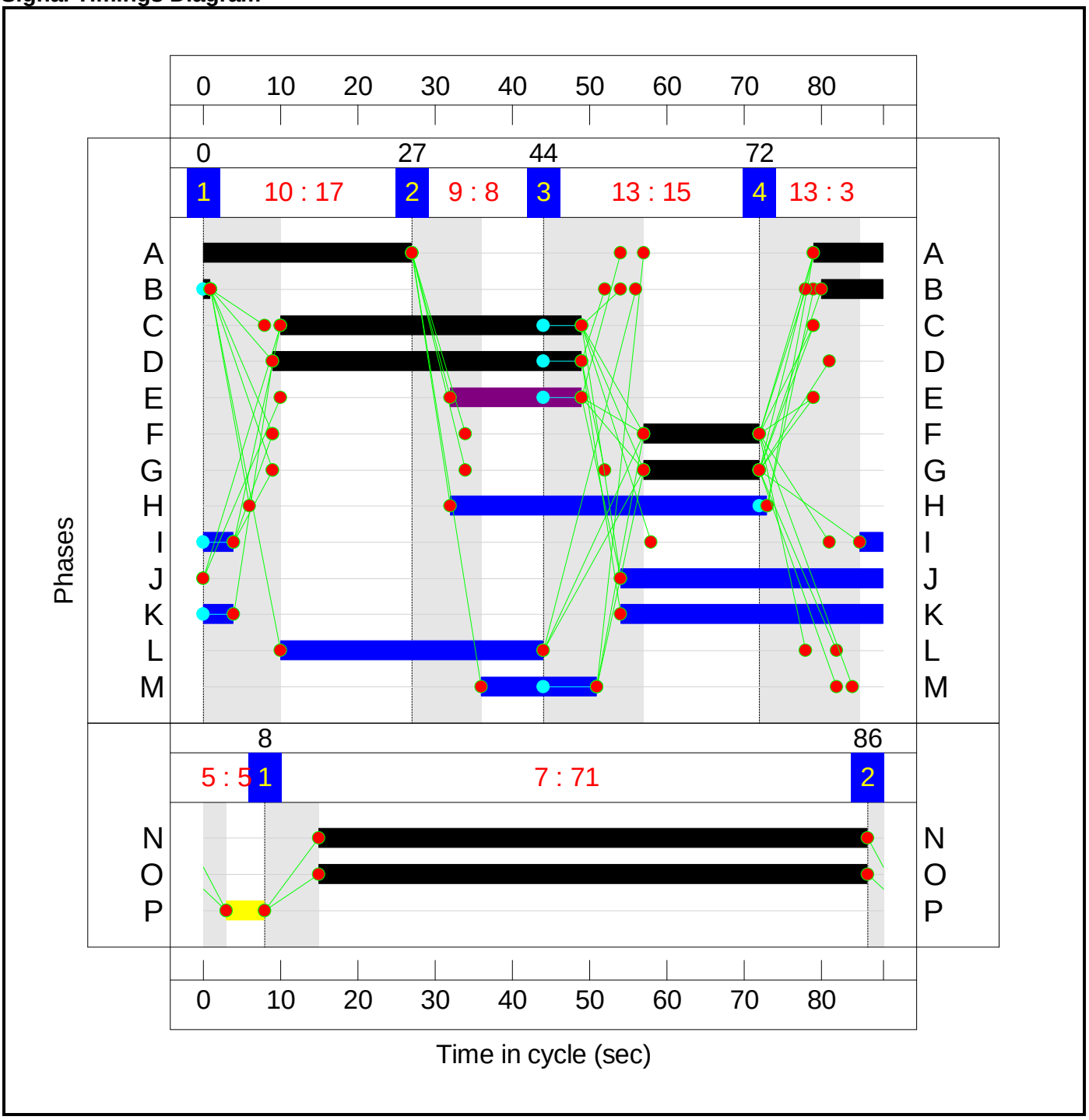
Stage	1	2	3	4
Duration	17	8	15	3
Change Point	0	27	44	72

Stage Stream: 2

Stage	1	2
Duration	71	5
Change Point	8	86

Full Input Data And Results

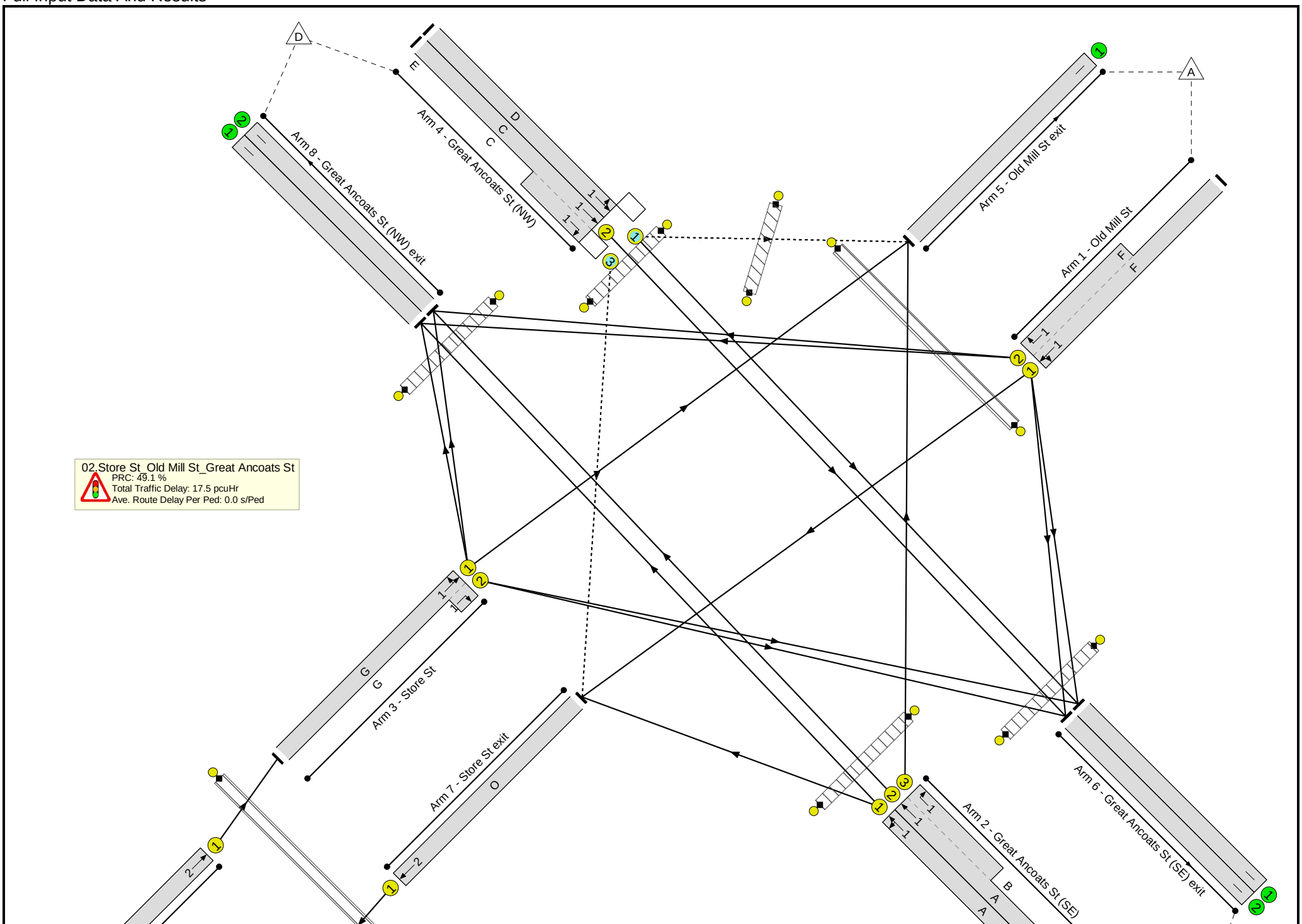
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.4%**
02.Store St_Old Mill St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.4%**
1/1+1/2	Old Mill St Left Ahead Right	U	1	N/A	F		1	15	-	55	1829:1962	333+41	14.7 : 14.7%
2/1	Great Ancoats St (SE) Left Ahead	U	1	N/A	A		1	36	-	432	1945	818	52.8%
2/2+2/3	Great Ancoats St (SE) Right Ahead	U	1	N/A	A B		1	36:9	-	588	2085:1786	772+203	60.4 : 60.1%
3/1+3/2	Store St Ahead Right Left	U	1	N/A	G		1	15	-	207	1784:1878	283+62	60.0 : 60.0%
4/1	Great Ancoats St (NW) Left Ahead	O	1	N/A	D		1	40	-	412	1937	902	45.7%
4/2+4/3	Great Ancoats St (NW) Ahead Right	U+O	1	N/A	C	E	1	39	17	689	2095:1784	577+569	60.1 : 60.1%
5/1	Old Mill St exit	U	N/A	N/A	-		-	-	-	285	Inf	Inf	0.0%
6/1	Great Ancoats St (SE) exit	U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%
6/2	Great Ancoats St (SE) exit	U	N/A	N/A	-		-	-	-	378	Inf	Inf	0.0%
7/1	Store St exit Ahead	U	2	N/A	O		1	71	-	364	1965	1608	22.6%
8/1	Great Ancoats St (NW) exit	U	N/A	N/A	-		-	-	-	485	Inf	Inf	0.0%
8/2	Great Ancoats St (NW) exit	U	N/A	N/A	-		-	-	-	518	Inf	Inf	0.0%
9/1	Store St Ahead	U	2	N/A	N		1	71	-	207	1965	1608	12.9%
10/1	Store St (exit)	U	N/A	N/A	-		-	-	-	364	Inf	Inf	0.0%

Full Input Data And Results

Ped Link: P1	Unnamed Ped Link	-	1	-	L		1	34	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	1	-	I		1	7	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	1	-	H		1	41	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	1	-	M		1	15	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	1	-	J		1	34	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	1	-	K		1	38	-	0	-	0	0.0%
Ped Link: P7	Unnamed Ped Link	-	2	-	P		1	5	-	0	-	0	0.0%

Full Input Data And Results

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)
Network	**-**	**-**	**94**	**330**	**10**	**13.6**	**3.5**	**0.4**	**17.5**	**-**	**-**	**-**	**-**
02.Store St_Old Mill St_Great Ancoats St	**-**	**-**	**94**	**330**	**10**	**13.6**	**3.5**	**0.4**	**17.5**	**-**	**-**	**-**	**-**
1/1+1/2	55	55	-	-	-	0.5	0.1	-	0.5	35.9	1.0	0.1	1.1
2/1	432	432	-	-	-	2.3	0.6	-	2.8	23.7	7.8	0.6	8.4
2/2+2/3	588	588	-	-	-	3.7	0.8	-	4.5	27.4	8.4	0.8	9.2
3/1+3/2	207	207	-	-	-	1.8	0.7	-	2.5	43.8	4.2	0.7	4.9
4/1	412	412	0	90	2	1.8	0.4	0.0	2.2	19.6	6.8	0.4	7.2
4/2+4/3	689	689	94	240	8	3.4	0.8	0.4	4.6	24.1	6.9	0.8	7.7
5/1	285	285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	364	364	-	-	-	0.0	0.1	-	0.1	1.4	0.0	0.1	0.1
8/1	485	485	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	518	518	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	207	207	-	-	-	0.1	0.1	-	0.2	2.9	1.0	0.1	1.1
10/1	364	364	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 49.1 Total Delay for Signalled Lanes (pcuHr): 17.23 Cycle Time (s): 88
C1 Stream: 2 PRC for Signalled Lanes (%): 297.5 Total Delay for Signalled Lanes (pcuHr): 0.31 Cycle Time (s): 88
PRC Over All Lanes (%): 49.1 Total Delay Over All Lanes(pcuHr): 17.55

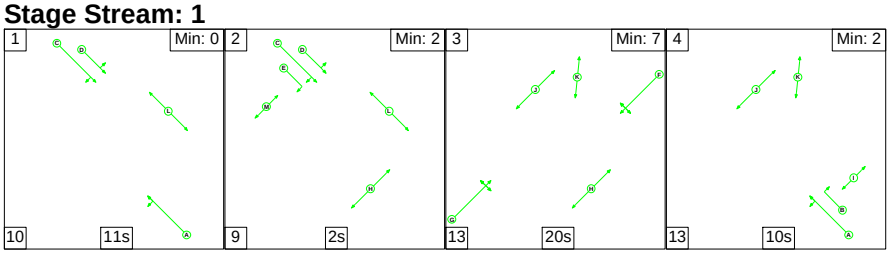
Full Input Data And Results

Full Input Data And Results

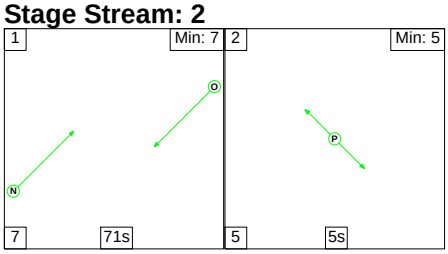
Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

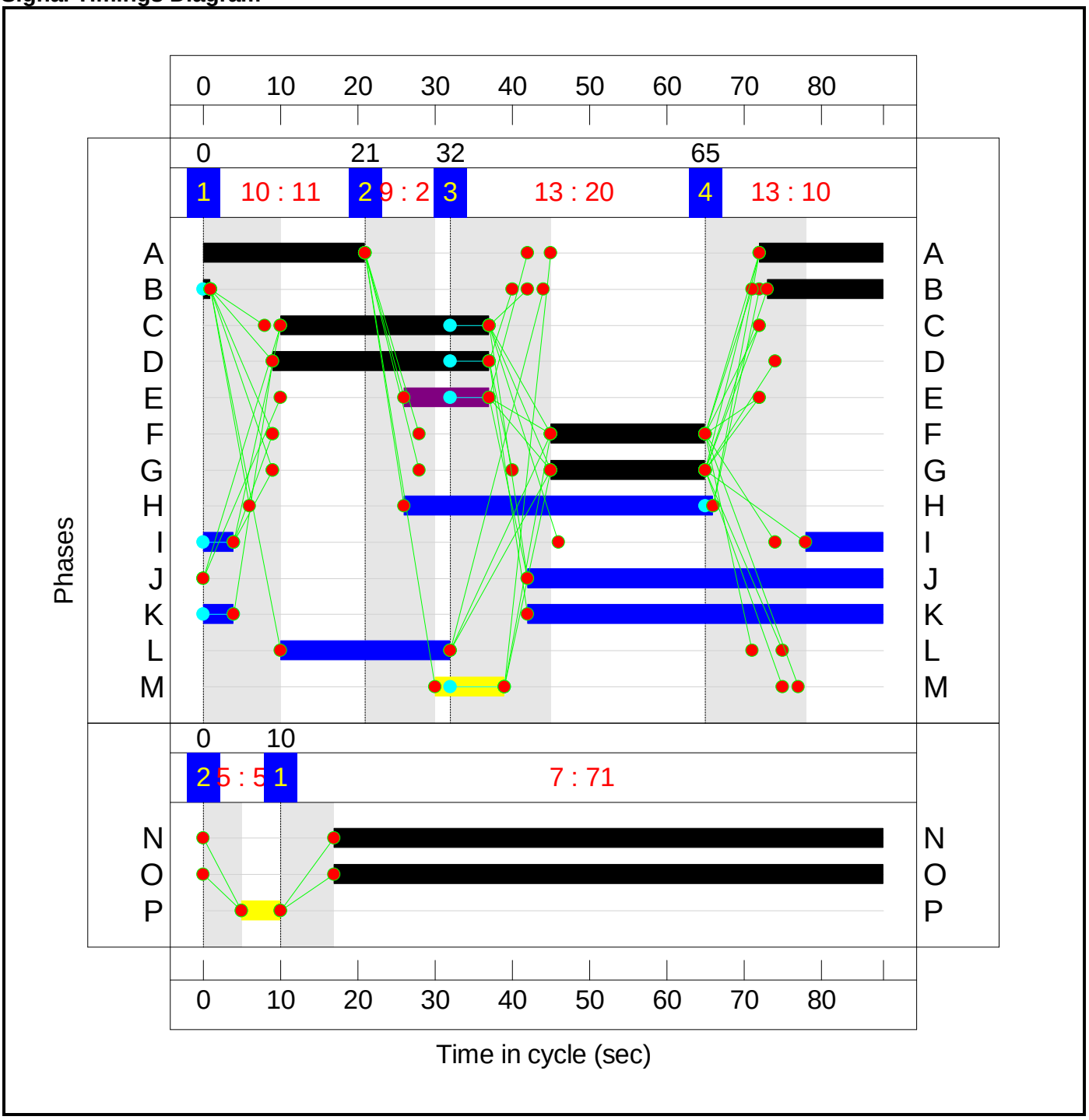
Stage	1	2	3	4
Duration	11	2	20	10
Change Point	0	21	32	65

Stage Stream: 2

Stage	1	2
Duration	71	5
Change Point	10	0

Full Input Data And Results

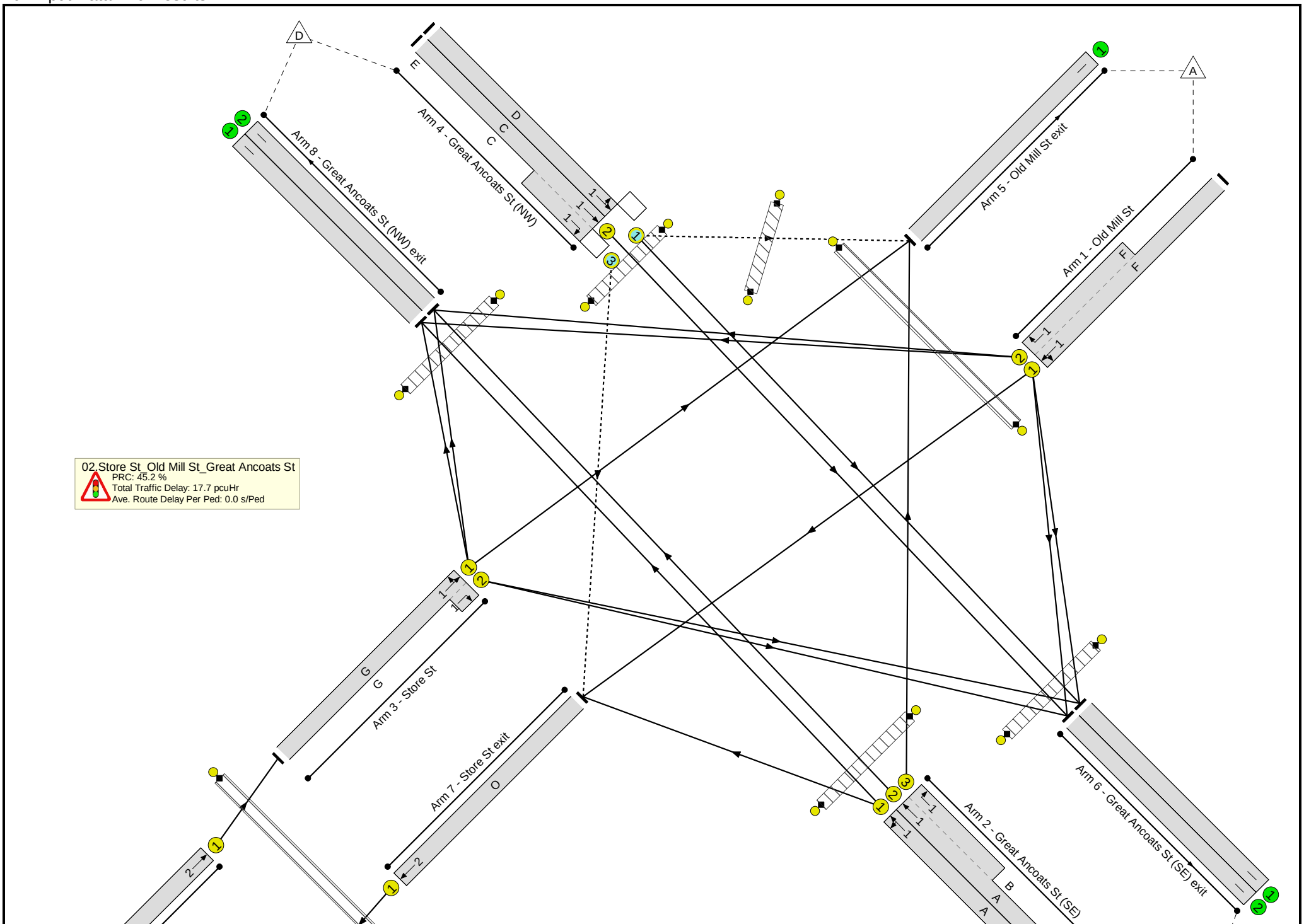
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**62.0%**
02.Store St_Old Mill St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**62.0%**
1/1+1/2	Old Mill St Left Ahead Right	U	1	N/A	F		1	20	-	40	1858:1962	443+111	7.2 : 7.2%
2/1	Great Ancoats St (SE) Left Ahead	U	1	N/A	A		1	37	-	420	1916	827	50.8%
2/2+2/3	Great Ancoats St (SE) Right Ahead	U	1	N/A	A B		1	37:16	-	572	2085:1786	669+345	54.7 : 59.7%
3/1+3/2	Store St Ahead Right Left	U	1	N/A	G		1	20	-	274	1818:1878	379+71	60.9 : 60.9%
4/1	Great Ancoats St (NW) Left Ahead	O	1	N/A	D		1	28	-	333	1911	630	52.9%
4/2+4/3	Great Ancoats St (NW) Ahead Right	U+O	1	N/A	C	E	1	27	11	511	2095:1784	505+319	62.0 : 62.0%
5/1	Old Mill St exit	U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
6/1	Great Ancoats St (SE) exit	U	N/A	N/A	-		-	-	-	219	Inf	Inf	0.0%
6/2	Great Ancoats St (SE) exit	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
7/1	Store St exit Ahead	U	2	N/A	O		1	71	-	259	1965	1608	16.1%
8/1	Great Ancoats St (NW) exit	U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
8/2	Great Ancoats St (NW) exit	U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
9/1	Store St Ahead	U	2	N/A	N		1	71	-	274	1965	1608	17.0%
10/1	Store St (exit)	U	N/A	N/A	-		-	-	-	259	Inf	Inf	0.0%

Full Input Data And Results

Ped Link: P1	Unnamed Ped Link	-	1	-	L		1	22	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	1	-	I		1	14	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	1	-	H		1	40	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	1	-	M		1	9	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	1	-	J		1	46	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	1	-	K		1	50	-	0	-	0	0.0%
Ped Link: P7	Unnamed Ped Link	-	2	-	P		1	5	-	0	-	0	0.0%

Full Input Data And Results

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)
Network	**-**	**-**	**79**	**254**	**8**	**13.9**	**3.5**	**0.3**	**17.7**	**-**	**-**	**-**	**-**
02.Store St_Old Mill St_Great Ancoats St	**-**	**-**	**79**	**254**	**8**	**13.9**	**3.5**	**0.3**	**17.7**	**-**	**-**	**-**	**-**
1/1+1/2	40	40	-	-	-	0.3	0.0	-	0.3	29.5	0.6	0.0	0.6
2/1	420	420	-	-	-	2.1	0.5	-	2.6	22.6	7.5	0.5	8.0
2/2+2/3	572	572	-	-	-	3.6	0.6	-	4.3	26.8	6.1	0.6	6.7
3/1+3/2	274	274	-	-	-	2.1	0.8	-	2.9	37.9	5.6	0.8	6.3
4/1	333	333	0	140	3	2.2	0.6	0.0	2.8	30.3	6.6	0.6	7.1
4/2+4/3	511	511	79	114	5	3.4	0.8	0.2	4.4	31.3	6.1	0.8	6.9
5/1	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	259	259	-	-	-	0.0	0.1	-	0.1	1.8	0.4	0.1	0.5
8/1	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	274	274	-	-	-	0.1	0.1	-	0.2	3.0	1.4	0.1	1.5
10/1	259	259	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 45.2 Total Delay for Signalled Lanes (pcuHr): 17.35 Cycle Time (s): 88
C1 Stream: 2 PRC for Signalled Lanes (%): 428.1 Total Delay for Signalled Lanes (pcuHr): 0.36 Cycle Time (s): 88
PRC Over All Lanes (%): 45.2 Total Delay Over All Lanes(pcuHr): 17.71

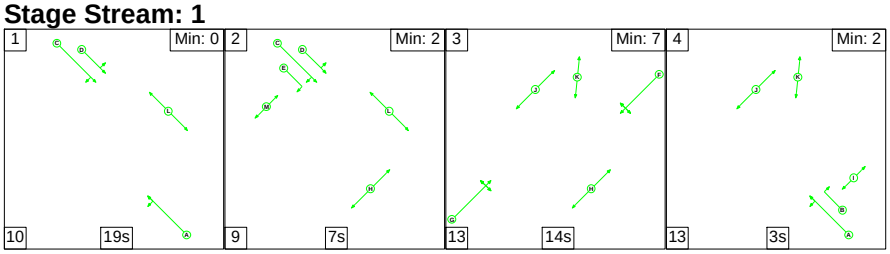
Full Input Data And Results

Full Input Data And Results

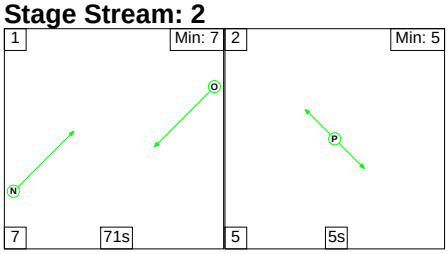
Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

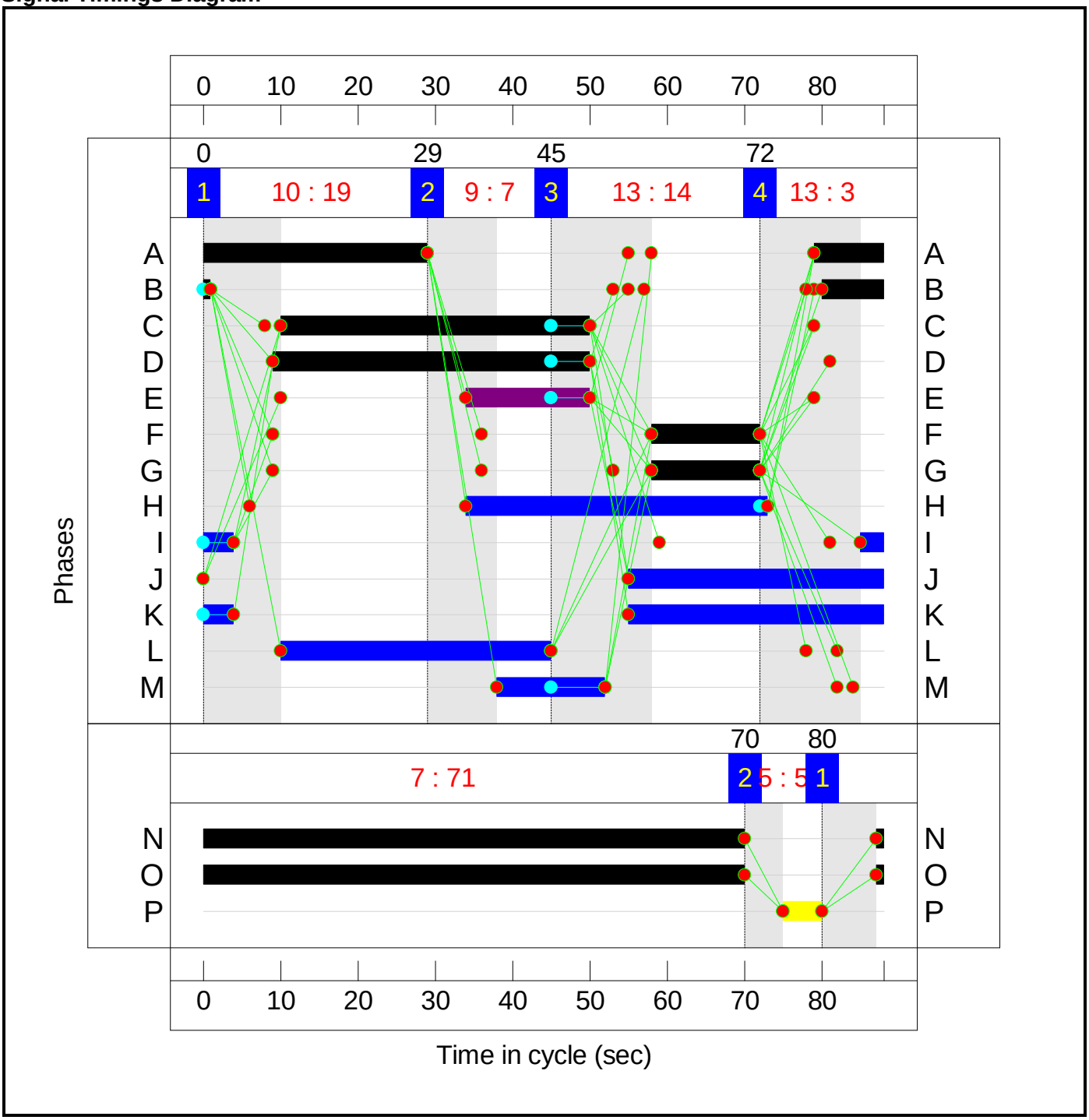
Stage	1	2	3	4
Duration	19	7	14	3
Change Point	0	29	45	72

Stage Stream: 2

Stage	1	2
Duration	71	5
Change Point	80	70

Full Input Data And Results

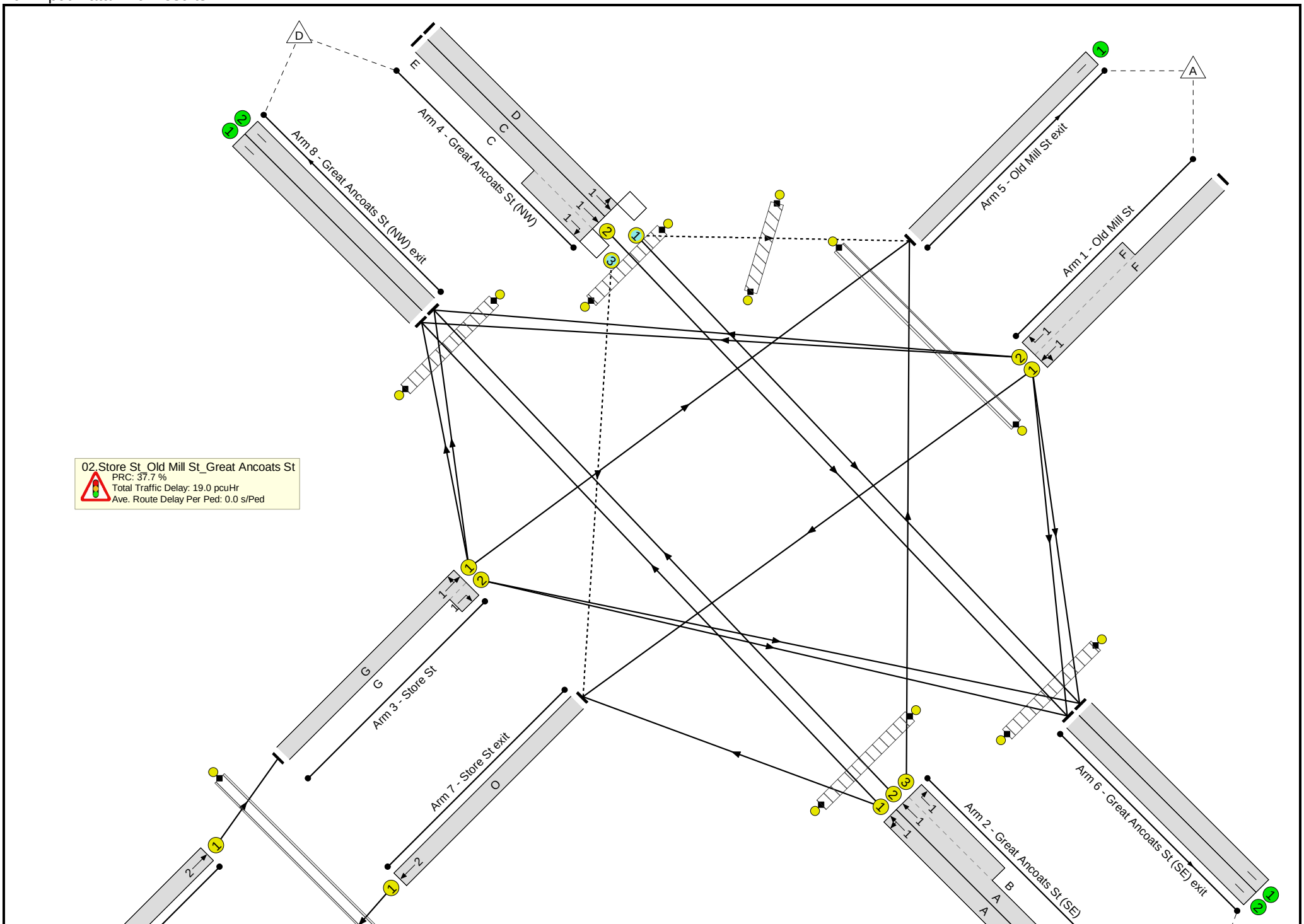
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**65.4%**
02.Store St_Old Mill St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**65.4%**
1/1+1/2	Old Mill St Left Ahead Right	U	1	N/A	F		1	14	-	58	1835:1962	313+36	16.6 : 16.6%
2/1	Great Ancoats St (SE) Left Ahead	U	1	N/A	A		1	38	-	492	1918	850	57.9%
2/2+2/3	Great Ancoats St (SE) Right Ahead	U	1	N/A	A B		1	38:9	-	655	2085:1786	820+188	65.0 : 65.0%
3/1+3/2	Store St Ahead Right Left	U	1	N/A	G		1	14	-	208	1784:1878	266+59	64.0 : 64.0%
4/1	Great Ancoats St (NW) Left Ahead	O	1	N/A	D		1	41	-	422	1937	924	45.6%
4/2+4/3	Great Ancoats St (NW) Ahead Right	U+O	1	N/A	C	E	1	40	16	697	2095:1784	526+540	65.4 : 65.4%
5/1	Old Mill St exit	U	N/A	N/A	-		-	-	-	285	Inf	Inf	0.0%
6/1	Great Ancoats St (SE) exit	U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
6/2	Great Ancoats St (SE) exit	U	N/A	N/A	-		-	-	-	376	Inf	Inf	0.0%
7/1	Store St exit Ahead	U	2	N/A	O		1	71	-	424	1965	1608	26.4%
8/1	Great Ancoats St (NW) exit	U	N/A	N/A	-		-	-	-	499	Inf	Inf	0.0%
8/2	Great Ancoats St (NW) exit	U	N/A	N/A	-		-	-	-	585	Inf	Inf	0.0%
9/1	Store St Ahead	U	2	N/A	N		1	71	-	208	1965	1608	12.9%
10/1	Store St (exit)	U	N/A	N/A	-		-	-	-	424	Inf	Inf	0.0%

Full Input Data And Results

Ped Link: P1	Unnamed Ped Link	-	1	-	L		1	35	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	1	-	I		1	7	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	1	-	H		1	39	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	1	-	M		1	14	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	1	-	J		1	33	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	1	-	K		1	37	-	0	-	0	0.0%
Ped Link: P7	Unnamed Ped Link	-	2	-	P		1	5	-	0	-	0	0.0%

Full Input Data And Results

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)
Network	**-**	**-**	**73**	**362**	**10**	**14.3**	**4.2**	**0.5**	**19.0**	**-**	**-**	**-**	**-**
02.Store St_Old Mill St_Great Ancoats St	**-**	**-**	**73**	**362**	**10**	**14.3**	**4.2**	**0.5**	**19.0**	**-**	**-**	**-**	**-**
1/1+1/2	58	58	-	-	-	0.5	0.1	-	0.6	37.3	1.1	0.1	1.2
2/1	492	492	-	-	-	2.5	0.7	-	3.2	23.4	8.9	0.7	9.6
2/2+2/3	655	655	-	-	-	4.0	0.9	-	4.9	26.9	9.6	0.9	10.5
3/1+3/2	208	208	-	-	-	1.8	0.9	-	2.7	47.0	4.2	0.9	5.1
4/1	422	422	0	90	2	1.8	0.4	0.0	2.2	19.0	6.8	0.4	7.2
4/2+4/3	697	697	73	272	8	3.6	0.9	0.5	5.0	25.8	7.5	0.9	8.4
5/1	285	285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	376	376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	424	424	-	-	-	0.0	0.2	-	0.2	1.6	0.2	0.2	0.4
8/1	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	585	585	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	208	208	-	-	-	0.1	0.1	-	0.2	2.9	1.0	0.1	1.1
10/1	424	424	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 37.7 Total Delay for Signalled Lanes (pcuHr): 18.62 Cycle Time (s): 88
C1 Stream: 2 PRC for Signalled Lanes (%): 241.3 Total Delay for Signalled Lanes (pcuHr): 0.36 Cycle Time (s): 88
PRC Over All Lanes (%): 37.7 Total Delay Over All Lanes(pcuHr): 18.98

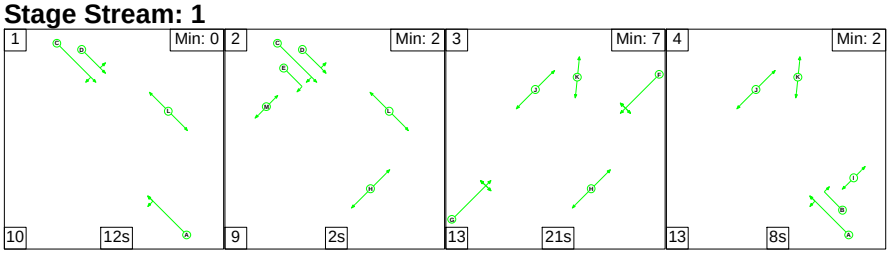
Full Input Data And Results

Full Input Data And Results

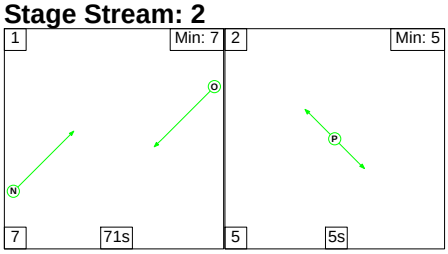
Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

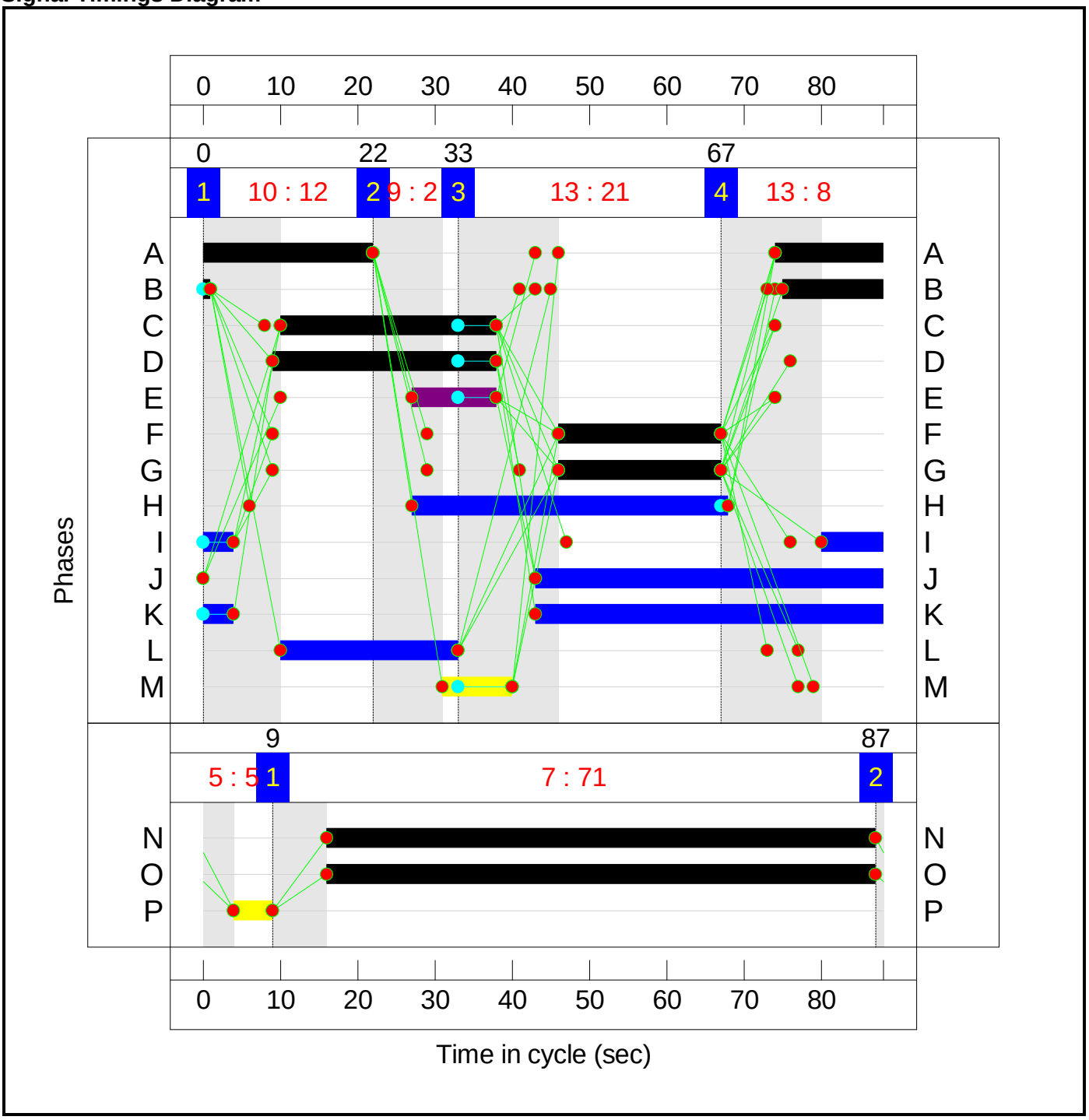
Stage	1	2	3	4
Duration	12	2	21	8
Change Point	0	22	33	67

Stage Stream: 2

Stage	1	2
Duration	71	5
Change Point	9	87

Full Input Data And Results

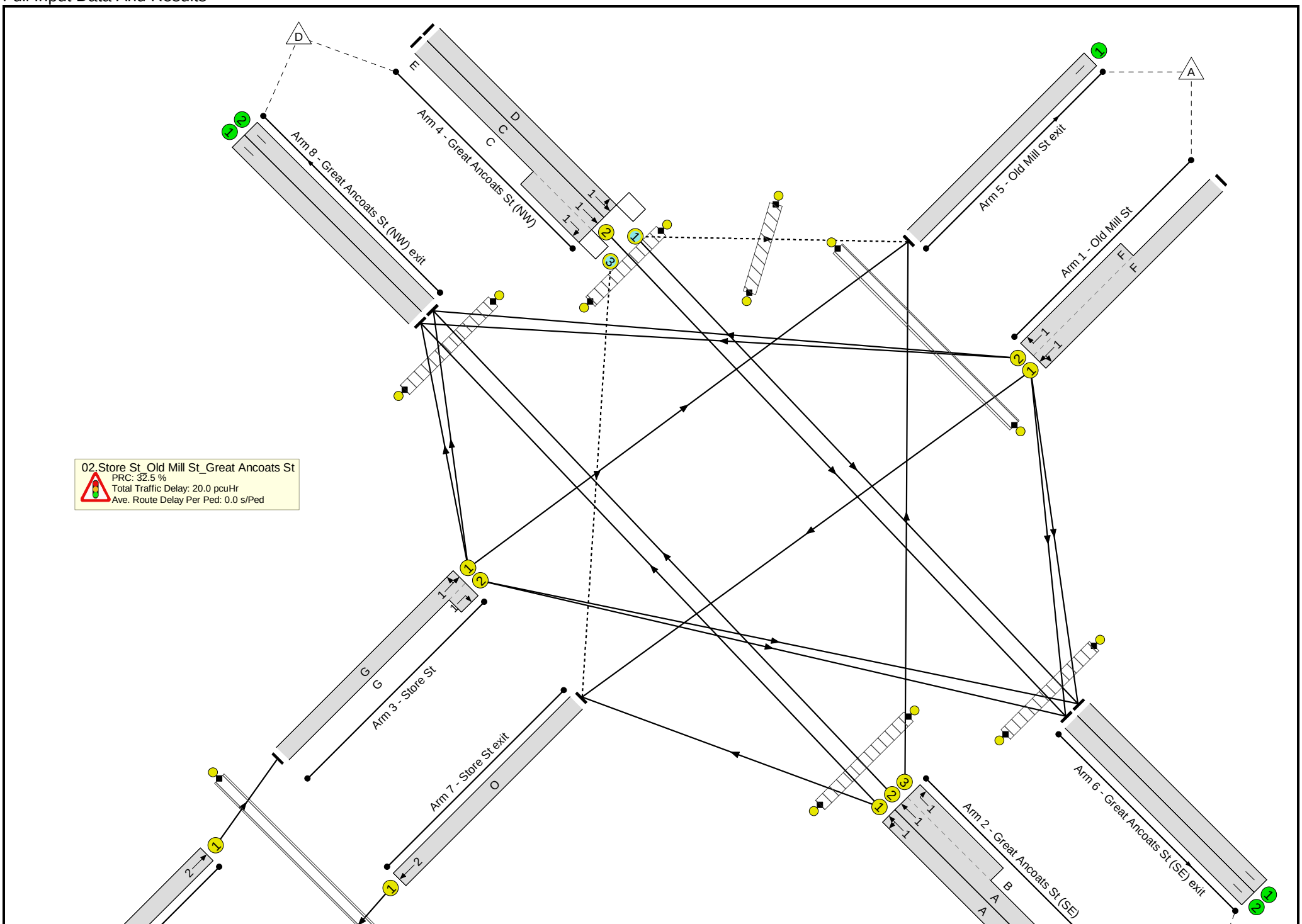
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.9%**
02.Store St_Old Mill St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.9%**
1/1+1/2	Old Mill St Left Ahead Right	U	1	N/A	F		1	21	-	40	1858:1962	465+116	6.9 : 6.9%
2/1	Great Ancoats St (SE) Left Ahead	U	1	N/A	A		1	36	-	420	1916	806	52.1%
2/2+2/3	Great Ancoats St (SE) Right Ahead	U	1	N/A	A B		1	36:14	-	578	2085:1786	598+304	62.2 : 67.7%
3/1+3/2	Store St Ahead Right Left	U	1	N/A	G		1	21	-	324	1815:1878	361+122	66.9 : 66.9%
4/1	Great Ancoats St (NW) Left Ahead	O	1	N/A	D		1	29	-	387	1914	653	59.3%
4/2+4/3	Great Ancoats St (NW) Ahead Right	U+O	1	N/A	C	E	1	28	11	560	2095:1784	533+291	67.9 : 67.9%
5/1	Old Mill St exit	U	N/A	N/A	-		-	-	-	506	Inf	Inf	0.0%
6/1	Great Ancoats St (SE) exit	U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
6/2	Great Ancoats St (SE) exit	U	N/A	N/A	-		-	-	-	409	Inf	Inf	0.0%
7/1	Store St exit Ahead	U	2	N/A	O		1	71	-	260	1965	1608	16.2%
8/1	Great Ancoats St (NW) exit	U	N/A	N/A	-		-	-	-	431	Inf	Inf	0.0%
8/2	Great Ancoats St (NW) exit	U	N/A	N/A	-		-	-	-	426	Inf	Inf	0.0%
9/1	Store St Ahead	U	2	N/A	N		1	71	-	324	1965	1608	20.2%
10/1	Store St (exit)	U	N/A	N/A	-		-	-	-	260	Inf	Inf	0.0%

Full Input Data And Results

Ped Link: P1	Unnamed Ped Link	-	1	-	L		1	23	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	1	-	I		1	12	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	1	-	H		1	41	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	1	-	M		1	9	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	1	-	J		1	45	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	1	-	K		1	49	-	0	-	0	0.0%
Ped Link: P7	Unnamed Ped Link	-	2	-	P		1	5	-	0	-	0	0.0%

Full Input Data And Results

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)
Network	**-**	**-**	**85**	**263**	**8**	**15.2**	**4.5**	**0.3**	**20.0**	**-**	**-**	**-**	**-**
02.Store St_Old Mill St_Great Ancoats St	**-**	**-**	**85**	**263**	**8**	**15.2**	**4.5**	**0.3**	**20.0**	**-**	**-**	**-**	**-**
1/1+1/2	40	40	-	-	-	0.3	0.0	-	0.3	28.5	0.6	0.0	0.6
2/1	420	420	-	-	-	2.2	0.5	-	2.8	23.6	7.6	0.5	8.1
2/2+2/3	578	578	-	-	-	3.8	0.9	-	4.7	29.3	6.4	0.9	7.3
3/1+3/2	324	324	-	-	-	2.5	1.0	-	3.5	38.4	6.3	1.0	7.3
4/1	387	387	0	154	4	2.6	0.7	0.0	3.3	30.9	7.7	0.7	8.5
4/2+4/3	560	560	85	108	5	3.7	1.1	0.2	5.0	31.9	7.3	1.1	8.4
5/1	506	506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	409	409	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	260	260	-	-	-	0.1	0.1	-	0.2	2.1	0.4	0.1	0.5
8/1	431	431	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	426	426	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	324	324	-	-	-	0.2	0.1	-	0.3	3.1	1.7	0.1	1.8
10/1	260	260	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 32.5 Total Delay for Signalled Lanes (pcuHr): 19.52 Cycle Time (s): 88
C1 Stream: 2 PRC for Signalled Lanes (%): 346.6 Total Delay for Signalled Lanes (pcuHr): 0.43 Cycle Time (s): 88
PRC Over All Lanes (%): 32.5 Total Delay Over All Lanes(pcuHr): 19.96

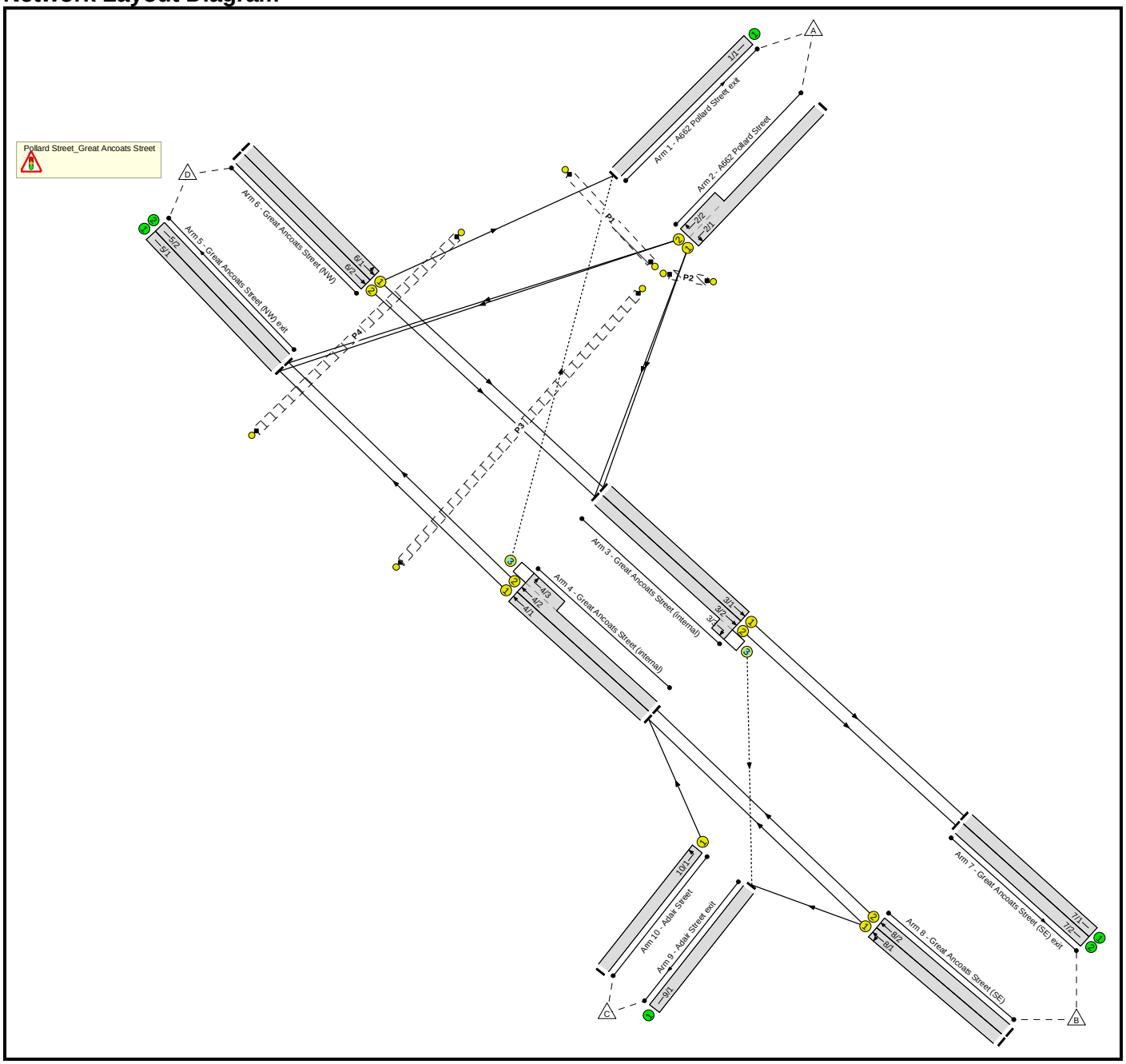
Full Input Data And Results

Full Input Data And Results

User and Project Details

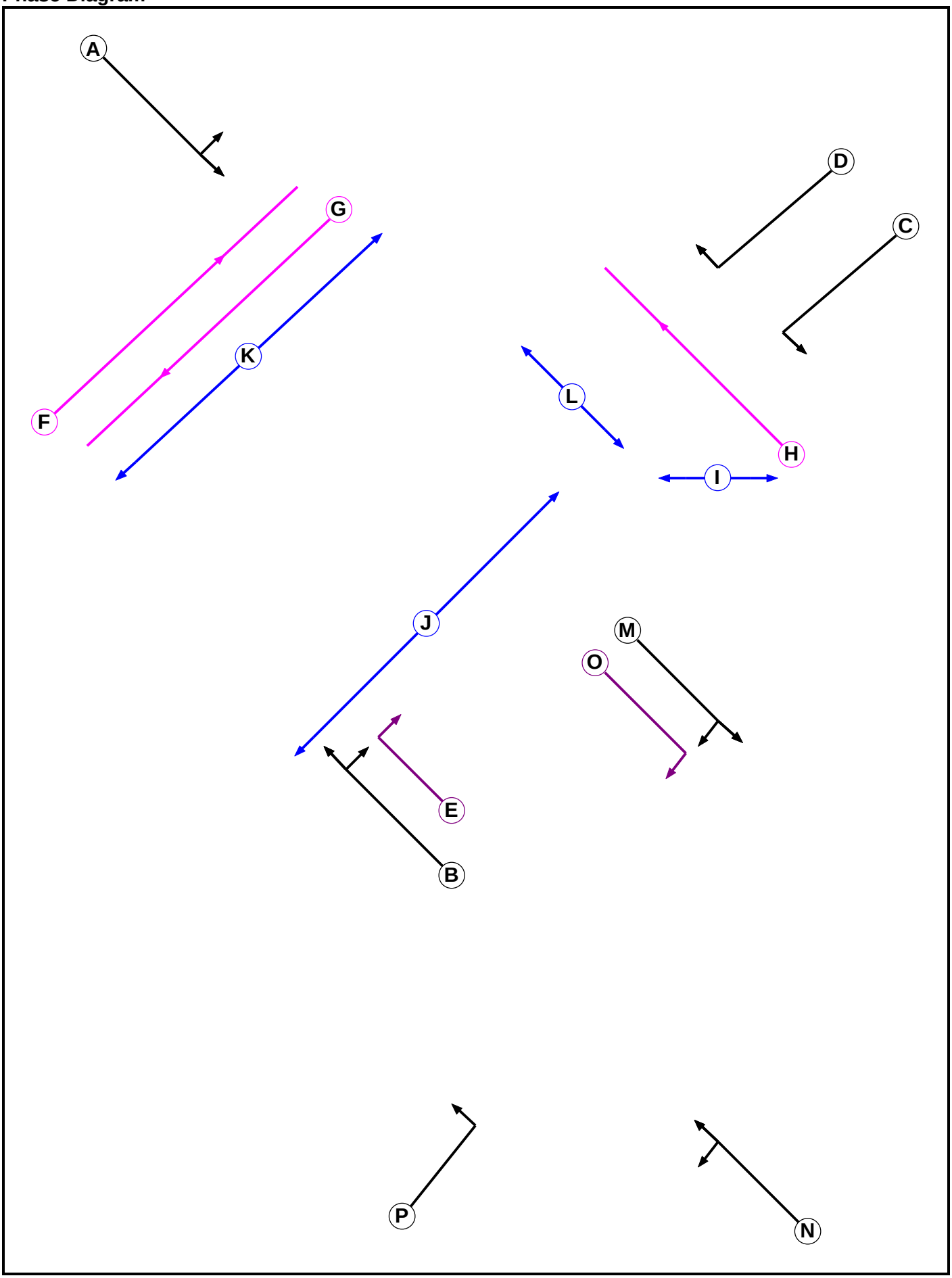
Project:	
Title:	
Location:	
Additional detail:	
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Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Ind. Arrow	B	3	3
F	Cycle		7	7
G	Cycle		7	7
H	Cycle		7	7
I	Pedestrian		5	5
J	Pedestrian		11	11
K	Pedestrian		9	9
L	Pedestrian		5	5
M	Traffic		7	7
N	Traffic		7	7
O	Ind. Arrow	M	3	3
P	Traffic		7	7

Full Input Data And Results

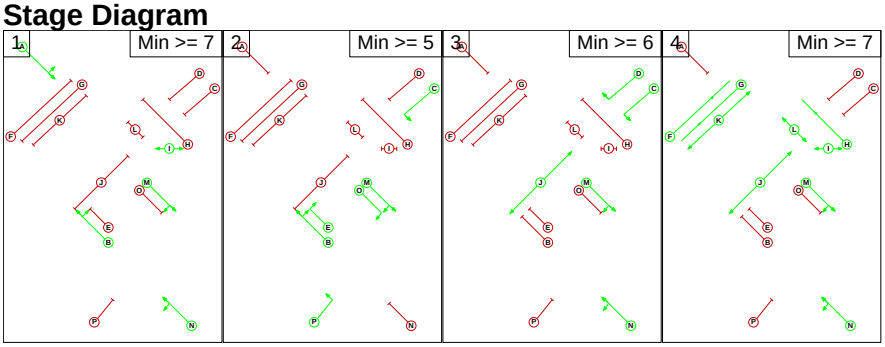
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A		-	7	6	5	5	6	6	-	8	6	9	-	-	-	-
B	-		-	7	-	8	7	8	-	5	8	10	-	-	-	-
C	4	-		-	-	-	-	5	5	-	-	-	-	-	-	-
D	6	6	-		6	11	8	5	-	-	10	6	-	-	-	-
E	5	-	-	7		-	-	8	-	5	-	10	-	-	-	-
F	9	6	-	4	-		-	-	-	-	-	-	-	-	-	-
G	6	7	-	7	-	-		-	-	-	-	-	-	-	-	-
H	6	6	5	6	6	-	-		-	-	-	-	-	-	-	-
I	-	-	5	-	-	-	-	-		-	-	-	-	-	-	-
J	8	8	-	-	8	-	-	-	-		-	-	-	-	-	-
K	7	7	-	6	-	-	-	-	-	-		-	-	-	-	-
L	7	7	-	7	7	-	-	-	-	-	-		-	-	-	-
M	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
N	-	-	-	-	-	-	-	-	-	-	-	-	-		5	6
O	-	-	-	-	-	-	-	-	-	-	-	-	-	5		-
P	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B I M N
2	B C E M O P
3	C D J M N
4	F G H I J K L M N

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	I	Losing	2	2
1	3	I	Losing	2	2
2	4	C	Losing	3	3
4	1	G	Losing	2	2
4	1	H	Losing	3	3
4	1	J	Losing	1	1
4	1	K	Losing	2	2
4	1	L	Losing	2	2

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		7	8	10
	2	5		7	10
	3	8	8		11
	4	9	8	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Pollard Street_Great Ancoats Street											
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)**
3/3 (Great Ancoats Street (internal))	9/1 (Right)	1439	0	8/1	1.09	All	2.00	-	0.50	2	2.00
				8/2	1.09	All					
4/3 (Great Ancoats Street (internal))	1/1 (Right)	1439	0	6/1	1.09	All	2.00	-	0.50	2	2.00
				6/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: Pollard Street_Great Ancoats Street

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 (A662 Pollard Street exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/1 (A662 Pollard Street)	U	C	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 3 Left	15.00
2/2 (A662 Pollard Street)	U	D	2	3	6.0	Geom	-	3.00	0.00	N	Arm 5 Right	30.00
3/1 (Great Ancoats Street (internal))	U	M	2	3	9.2	Geom	-	2.80	0.00	Y	Arm 7 Ahead	Inf
3/2 (Great Ancoats Street (internal))	U	M	2	3	9.2	Geom	-	2.90	0.00	N	Arm 7 Ahead	Inf
3/3 (Great Ancoats Street (internal))	O	M O	2	3	2.0	Geom	-	2.80	0.00	N	Arm 9 Right	Inf
4/1 (Great Ancoats Street (internal))	U	B	2	3	7.0	Geom	-	2.90	0.00	Y	Arm 5 Ahead	Inf
4/2 (Great Ancoats Street (internal))	U	B	2	3	7.0	Geom	-	3.00	0.00	N	Arm 5 Ahead	Inf
4/3 (Great Ancoats Street (internal))	O	B E	2	3	5.0	Geom	-	3.00	0.00	N	Arm 1 Right	17.00
5/1 (Great Ancoats Street (NW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (Great Ancoats Street (NW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Great Ancoats Street (NW))	U	A	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 1 Left	13.00
											Arm 3 Ahead	Inf

6/2 (Great Ancoats Street (NW))	U	A	2	3	60.0	Geom	-	3.10	0.00	N	Arm 3 Ahead	Inf
7/1 (Great Ancoats Street (SE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2 (Great Ancoats Street (SE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Great Ancoats Street (SE))	U	N	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 4 Ahead	Inf
											Arm 9 Left	20.00
8/2 (Great Ancoats Street (SE))	U	N	2	3	60.0	Geom	-	3.00	0.00	N	Arm 4 Ahead	Inf
9/1 (Adair Street exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1 (Adair Street)	U	P	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Left	12.00

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Base'	08:30	09:30	01:00	
2: 'PM Base'	17:00	18:00	01:00	
3: 'AM Proposed'	08:30	09:30	01:00	
4: 'PM Proposed'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	339	159	233	731
	B	7	0	48	767	822
	C	0	0	0	168	168
	D	57	473	222	0	752
	Tot.	64	812	429	1168	2473

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: Pollard Street_Great Ancoats Street	
1/1	64
2/1 (with short)	731(In) 498(Out)
2/2 (short)	233
3/1	473
3/2 (with short)	720(In) 339(Out)
3/3 (short)	381
4/1	482
4/2 (with short)	460(In) 453(Out)
4/3 (short)	7
5/1	599
5/2	569
6/1	359
6/2	393
7/1	473
7/2	339
8/1	362
8/2	460
9/1	429
10/1	168

Full Input Data And Results

Lane Saturation Flows

Junction: Pollard Street_Great Ancoats Street								
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 (A662 Pollard Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/1 (A662 Pollard Street)	4.00	0.00	Y	Arm 3 Left	15.00	100.0 %	1832	1832
2/2 (A662 Pollard Street)	3.00	0.00	N	Arm 5 Right	30.00	100.0 %	1957	1957
3/1 (Great Ancoats Street (internal))	2.80	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1895	1895
3/2 (Great Ancoats Street (internal))	2.90	0.00	N	Arm 7 Ahead	Inf	100.0 %	2045	2045
3/3 (Great Ancoats Street (internal))	2.80	0.00	N	Arm 9 Right	Inf	100.0 %	2035	2035
4/1 (Great Ancoats Street (internal))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
4/2 (Great Ancoats Street (internal))	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
4/3 (Great Ancoats Street (internal))	3.00	0.00	N	Arm 1 Right	17.00	100.0 %	1888	1888
5/1 (Great Ancoats Street (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Great Ancoats Street (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats Street (NW))	3.10	0.00	Y	Arm 1 Left	13.00	15.9 %	1890	1890
				Arm 3 Ahead	Inf	84.1 %		
6/2 (Great Ancoats Street (NW))	3.10	0.00	N	Arm 3 Ahead	Inf	100.0 %	2065	2065
7/1 (Great Ancoats Street (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Great Ancoats Street (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Great Ancoats Street (SE))	3.10	0.00	Y	Arm 4 Ahead	Inf	86.7 %	1906	1906
				Arm 9 Left	20.00	13.3 %		
8/2 (Great Ancoats Street (SE))	3.00	0.00	N	Arm 4 Ahead	Inf	100.0 %	2055	2055
9/1 (Adair Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Adair Street)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	226	43	124	393
	B	0	0	31	444	475
	C	0	0	0	312	312
	D	74	521	100	0	695
	Tot.	74	747	174	880	1875

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: Pollard Street_Great Ancoats Street	
1/1	74
2/1 (with short)	393(In) 269(Out)
2/2 (short)	124
3/1	347
3/2 (with short)	543(In) 400(Out)
3/3 (short)	143
4/1	460
4/2 (with short)	296(In) 296(Out)
4/3 (short)	0
5/1	522
5/2	358
6/1	326
6/2	369
7/1	347
7/2	400
8/1	179
8/2	296
9/1	174
10/1	312

Full Input Data And Results

Lane Saturation Flows

Junction: Pollard Street_Great Ancoats Street								
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 (A662 Pollard Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/1 (A662 Pollard Street)	4.00	0.00	Y	Arm 3 Left	15.00	100.0 %	1832	1832
2/2 (A662 Pollard Street)	3.00	0.00	N	Arm 5 Right	30.00	100.0 %	1957	1957
3/1 (Great Ancoats Street (internal))	2.80	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1895	1895
3/2 (Great Ancoats Street (internal))	2.90	0.00	N	Arm 7 Ahead	Inf	100.0 %	2045	2045
3/3 (Great Ancoats Street (internal))	2.80	0.00	N	Arm 9 Right	Inf	100.0 %	2035	2035
4/1 (Great Ancoats Street (internal))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
4/2 (Great Ancoats Street (internal))	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
4/3 (Great Ancoats Street (internal))	3.00	0.00	N	Arm 1 Right	17.00	0.0 %	2055	2055
5/1 (Great Ancoats Street (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Great Ancoats Street (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats Street (NW))	3.10	0.00	Y	Arm 1 Left	13.00	22.7 %	1876	1876
				Arm 3 Ahead	Inf	77.3 %		
6/2 (Great Ancoats Street (NW))	3.10	0.00	N	Arm 3 Ahead	Inf	100.0 %	2065	2065
7/1 (Great Ancoats Street (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Great Ancoats Street (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Great Ancoats Street (SE))	3.10	0.00	Y	Arm 4 Ahead	Inf	82.7 %	1900	1900
				Arm 9 Left	20.00	17.3 %		
8/2 (Great Ancoats Street (SE))	3.00	0.00	N	Arm 4 Ahead	Inf	100.0 %	2055	2055
9/1 (Adair Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Adair Street)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	340	158	236	734
	B	7	0	125	891	1023
	C	0	0	0	168	168
	D	57	480	223	0	760
	Tot.	64	820	506	1295	2685

Traffic Lane Flows

Lane	Scenario 3: AM Proposed
Junction: Pollard Street_Great Ancoats Street	
1/1	64
2/1 (with short)	734(In) 498(Out)
2/2 (short)	236
3/1	649
3/2 (with short)	552(In) 171(Out)
3/3 (short)	381
4/1	537
4/2 (with short)	529(In) 522(Out)
4/3 (short)	7
5/1	655
5/2	640
6/1	366
6/2	394
7/1	649
7/2	171
8/1	494
8/2	529
9/1	506
10/1	168

Full Input Data And Results

Lane Saturation Flows

Junction: Pollard Street_Great Ancoats Street								
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 (A662 Pollard Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/1 (A662 Pollard Street)	4.00	0.00	Y	Arm 3 Left	15.00	100.0 %	1832	1832
2/2 (A662 Pollard Street)	3.00	0.00	N	Arm 5 Right	30.00	100.0 %	1957	1957
3/1 (Great Ancoats Street (internal))	2.80	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1895	1895
3/2 (Great Ancoats Street (internal))	2.90	0.00	N	Arm 7 Ahead	Inf	100.0 %	2045	2045
3/3 (Great Ancoats Street (internal))	2.80	0.00	N	Arm 9 Right	Inf	100.0 %	2035	2035
4/1 (Great Ancoats Street (internal))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
4/2 (Great Ancoats Street (internal))	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
4/3 (Great Ancoats Street (internal))	3.00	0.00	N	Arm 1 Right	17.00	100.0 %	1888	1888
5/1 (Great Ancoats Street (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Great Ancoats Street (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats Street (NW))	3.10	0.00	Y	Arm 1 Left	13.00	15.6 %	1891	1891
				Arm 3 Ahead	Inf	84.4 %		
6/2 (Great Ancoats Street (NW))	3.10	0.00	N	Arm 3 Ahead	Inf	100.0 %	2065	2065
7/1 (Great Ancoats Street (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Great Ancoats Street (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Great Ancoats Street (SE))	3.10	0.00	Y	Arm 4 Ahead	Inf	74.7 %	1889	1889
				Arm 9 Left	20.00	25.3 %		
8/2 (Great Ancoats Street (SE))	3.00	0.00	N	Arm 4 Ahead	Inf	100.0 %	2055	2055
9/1 (Adair Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Adair Street)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	210	36	124	370
	B	1	0	36	449	486
	C	0	0	0	313	313
	D	78	634	109	0	821
	Tot.	79	844	181	886	1990

Traffic Lane Flows

Lane	Scenario 4: PM Proposed
Junction: Pollard Street_Great Ancoats Street	
1/1	79
2/1 (with short)	370(In) 246(Out)
2/2 (short)	124
3/1	391
3/2 (with short)	598(In) 453(Out)
3/3 (short)	145
4/1	456
4/2 (with short)	307(In) 306(Out)
4/3 (short)	1
5/1	518
5/2	368
6/1	388
6/2	433
7/1	391
7/2	453
8/1	179
8/2	307
9/1	181
10/1	313

Full Input Data And Results

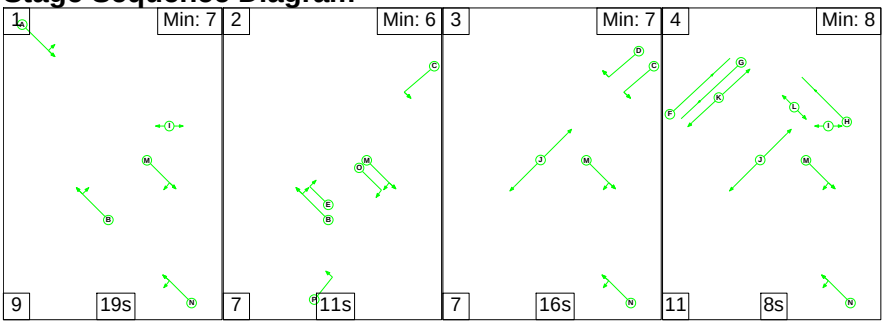
Lane Saturation Flows

Junction: Pollard Street_Great Ancoats Street								
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 (A662 Pollard Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/1 (A662 Pollard Street)	4.00	0.00	Y	Arm 3 Left	15.00	100.0 %	1832	1832
2/2 (A662 Pollard Street)	3.00	0.00	N	Arm 5 Right	30.00	100.0 %	1957	1957
3/1 (Great Ancoats Street (internal))	2.80	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1895	1895
3/2 (Great Ancoats Street (internal))	2.90	0.00	N	Arm 7 Ahead	Inf	100.0 %	2045	2045
3/3 (Great Ancoats Street (internal))	2.80	0.00	N	Arm 9 Right	Inf	100.0 %	2035	2035
4/1 (Great Ancoats Street (internal))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
4/2 (Great Ancoats Street (internal))	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
4/3 (Great Ancoats Street (internal))	3.00	0.00	N	Arm 1 Right	17.00	100.0 %	1888	1888
5/1 (Great Ancoats Street (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Great Ancoats Street (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats Street (NW))	3.10	0.00	Y	Arm 1 Left	13.00	20.1 %	1881	1881
				Arm 3 Ahead	Inf	79.9 %		
6/2 (Great Ancoats Street (NW))	3.10	0.00	N	Arm 3 Ahead	Inf	100.0 %	2065	2065
7/1 (Great Ancoats Street (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Great Ancoats Street (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Great Ancoats Street (SE))	3.10	0.00	Y	Arm 4 Ahead	Inf	79.9 %	1896	1896
				Arm 9 Left	20.00	20.1 %		
8/2 (Great Ancoats Street (SE))	3.00	0.00	N	Arm 4 Ahead	Inf	100.0 %	2055	2055
9/1 (Adair Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Adair Street)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724

Full Input Data And Results

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

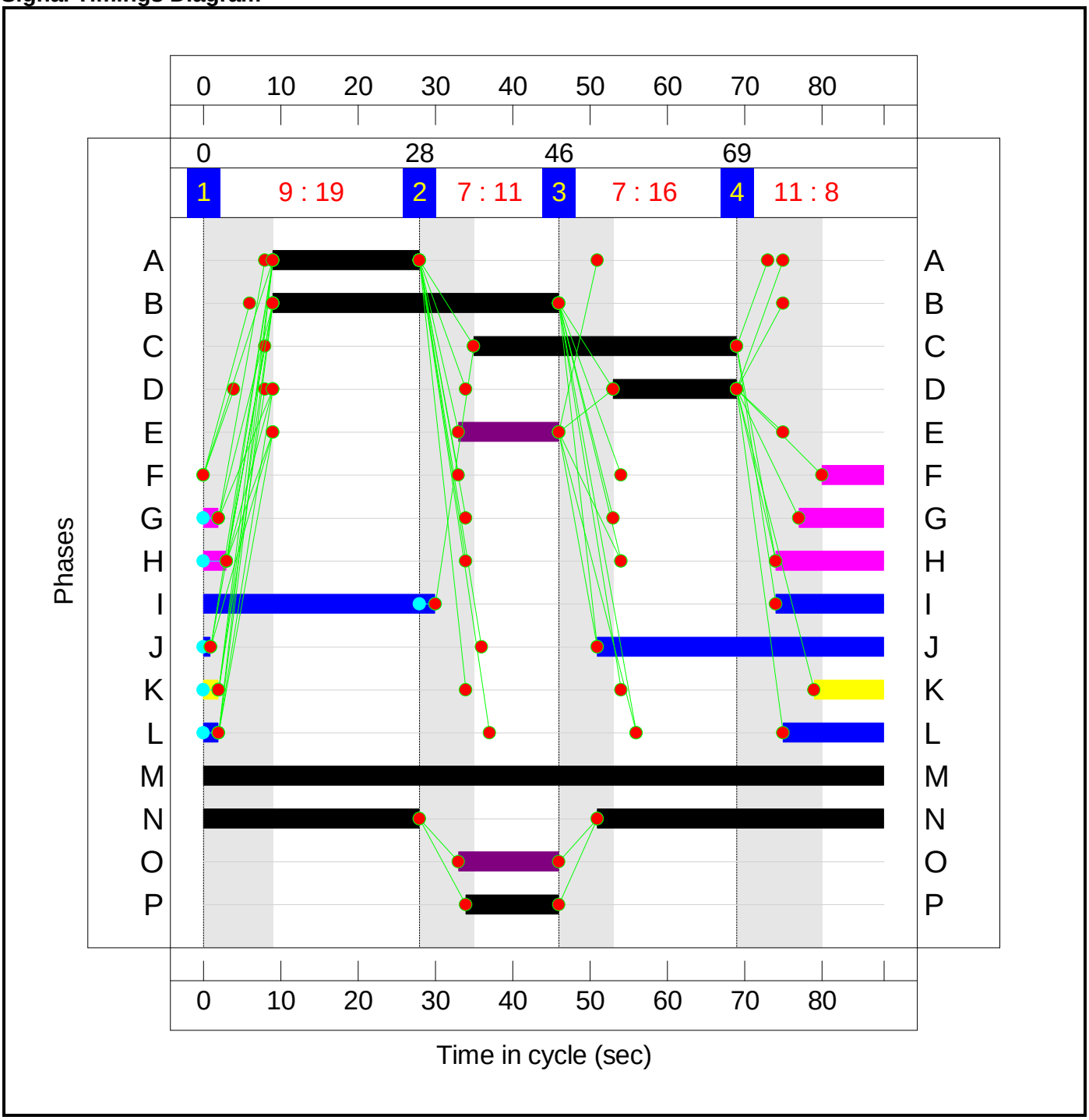


Stage Timings

Stage	1	2	3	4
Duration	19	11	16	8
Change Point	0	28	46	69

Full Input Data And Results

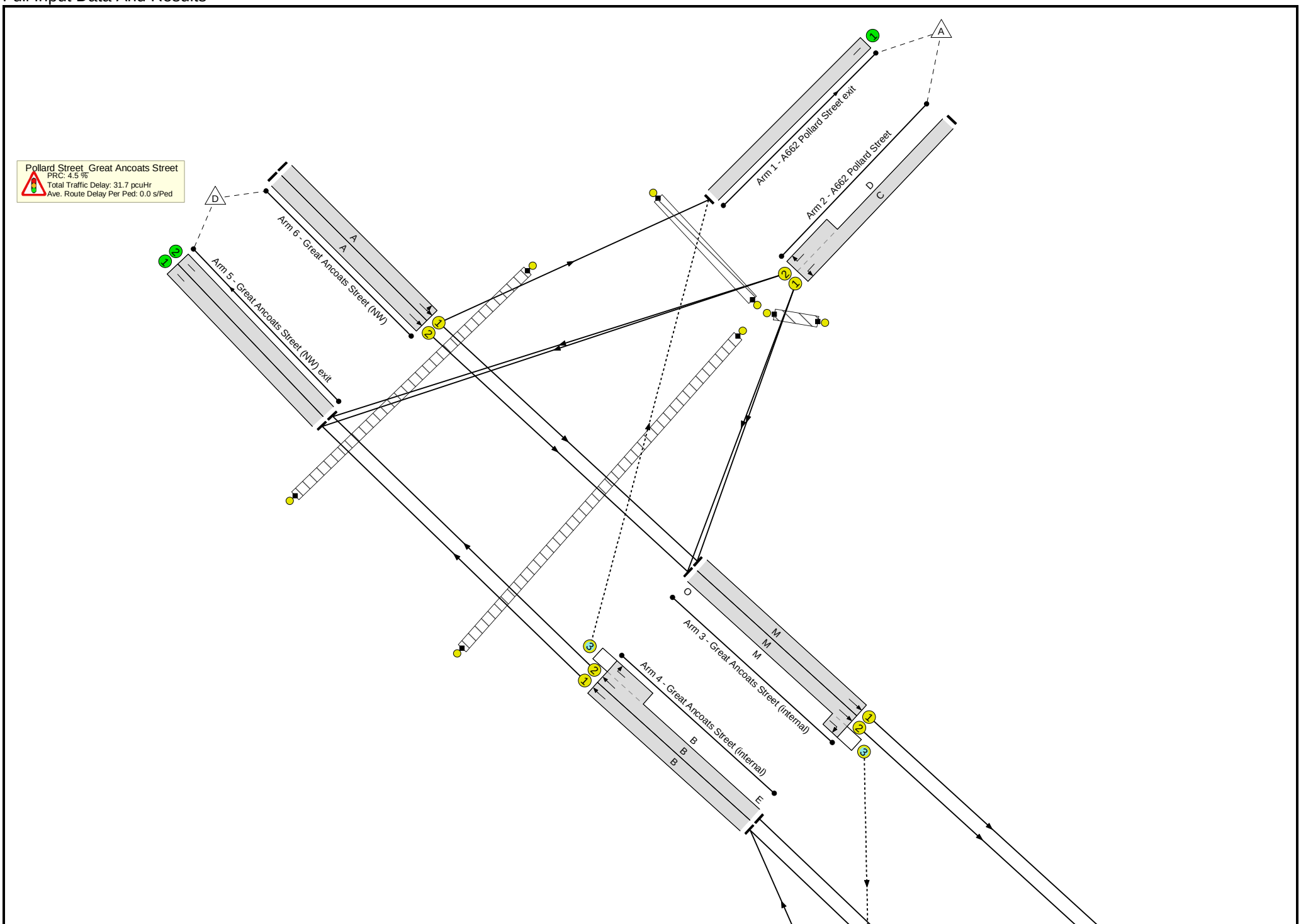
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.1%**
Pollard Street_Great Ancoats Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.1%**
1/1	A662 Pollard Street exit	U	N/A	N/A	-		-	-	-	64	Inf	Inf	0.0%
2/1+2/2	A662 Pollard Street Left Right	U	N/A	N/A	C D		1	34:16	-	731	1832:1957	578+271	86.1 : 86.1%
3/1	Great Ancoats Street (internal) Ahead	U	N/A	N/A	M		1	88	-	473	1895	1895	25.0%
3/2+3/3	Great Ancoats Street (internal) Ahead Right	U+O	N/A	N/A	M	O	1	88	13	720	2045:2035	642+722	52.8 : 52.8%
4/1	Great Ancoats Street (internal) Ahead	U	N/A	N/A	B		1	37	-	482	1905	823	58.6%
4/2+4/3	Great Ancoats Street (internal) Right Ahead	U+O	N/A	N/A	B	E	1	37	13	460	2055:1888	871+13	52.0 : 52.0%
5/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	599	Inf	Inf	0.0%
5/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	569	Inf	Inf	0.0%
6/1	Great Ancoats Street (NW) Left Ahead	U	N/A	N/A	A		1	19	-	359	1890	430	83.6%
6/2	Great Ancoats Street (NW) Ahead	U	N/A	N/A	A		1	19	-	393	2065	469	83.7%
7/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	473	Inf	Inf	0.0%
7/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	339	Inf	Inf	0.0%
8/1	Great Ancoats Street (SE) Ahead Left	U	N/A	N/A	N		1	65	-	362	1906	1429	25.3%

Full Input Data And Results

8/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	N		1	65	-	460	2055	1541	29.8%
9/1	Adair Street exit	U	N/A	N/A	-		-	-	-	429	Inf	Inf	0.0%
10/1	Adair Street Left	U	N/A	N/A	P		1	12	-	168	1724	255	66.0%
Ped Link: P1	Pollard Street Entry and RT	-	N/A	-	L		1	15	-	0	-	0	0.0%
Ped Link: P2	Pollard Street LT	-	N/A	-	I		1	44	-	0	-	0	0.0%
Ped Link: P3	Great Ancoats Street (SE) Entry	-	N/A	-	J		1	38	-	0	-	0	0.0%
Ped Link: P4	Great Ancoats Street (NW) Entry	-	N/A	-	K		1	11	-	0	-	0	0.0%

Full Input Data And Results

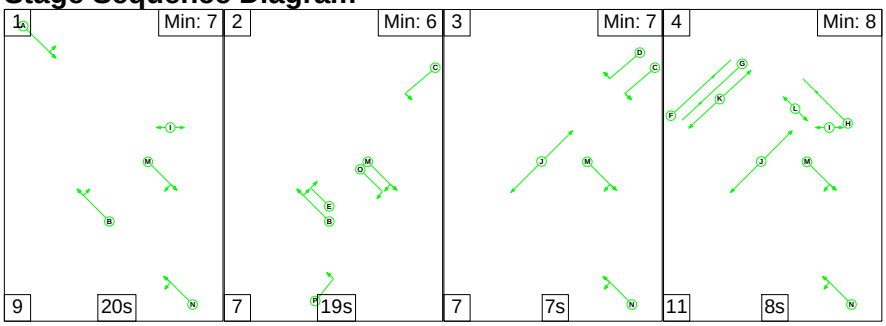
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**203**	**185**	**0**	**20.2**	**11.1**	**0.4**	**31.7**	**-**	**-**	**-**	**-**
Pollard Street_Great Ancoats Street	**-**	**-**	**203**	**185**	**0**	**20.2**	**11.1**	**0.4**	**31.7**	**-**	**-**	**-**	**-**
1/1	64	64	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1+2/2	731	731	-	-	-	5.2	2.9	-	8.2	40.4	13.0	2.9	16.0
3/1	473	473	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/2+3/3	720	720	196	185	0	0.1	0.6	0.4	1.0	5.2	8.9	0.6	9.4
4/1	482	482	-	-	-	2.5	0.7	-	3.2	23.7	7.2	0.7	7.9
4/2+4/3	460	460	7	0	0	3.2	0.5	0.0	3.8	29.6	10.2	0.5	10.8
5/1	599	599	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	569	569	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	359	359	-	-	-	3.2	2.4	-	5.6	56.3	8.3	2.4	10.7
6/2	393	393	-	-	-	3.5	2.4	-	6.0	54.6	9.1	2.4	11.5
7/1	473	473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	339	339	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	362	362	-	-	-	0.3	0.2	-	0.5	5.1	2.7	0.2	2.9
8/2	460	460	-	-	-	0.5	0.2	-	0.7	5.2	3.6	0.2	3.8
9/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	168	168	-	-	-	1.7	0.9	-	2.6	55.7	3.9	0.9	4.8
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 4.5 Total Delay for Signalled Lanes (pcuHr): 31.70 Cycle Time (s): 88
PRC Over All Lanes (%): 4.5 Total Delay Over All Lanes(pcuHr): 31.70

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

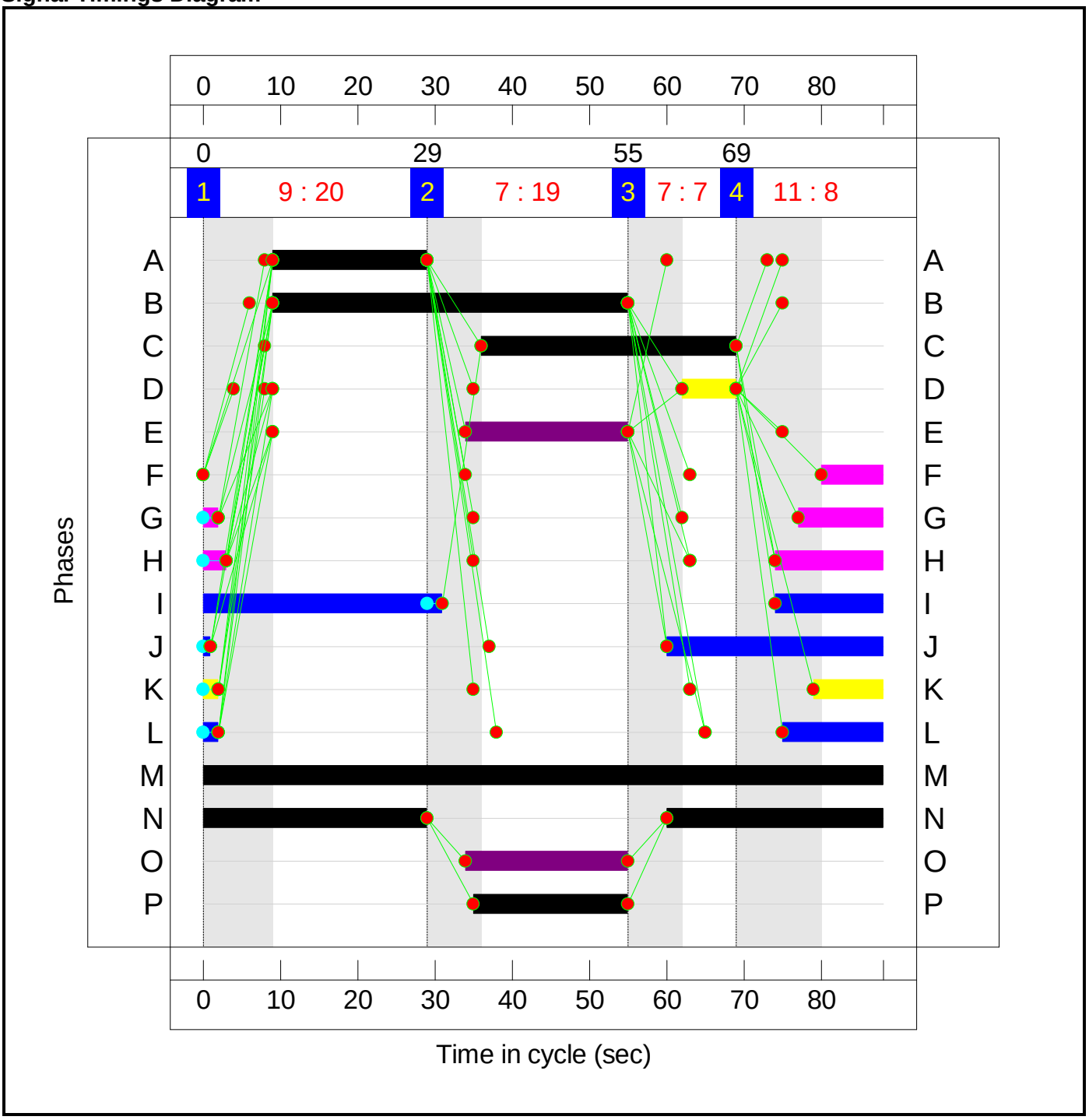


Stage Timings

Stage	1	2	3	4
Duration	20	19	7	8
Change Point	0	29	55	69

Full Input Data And Results

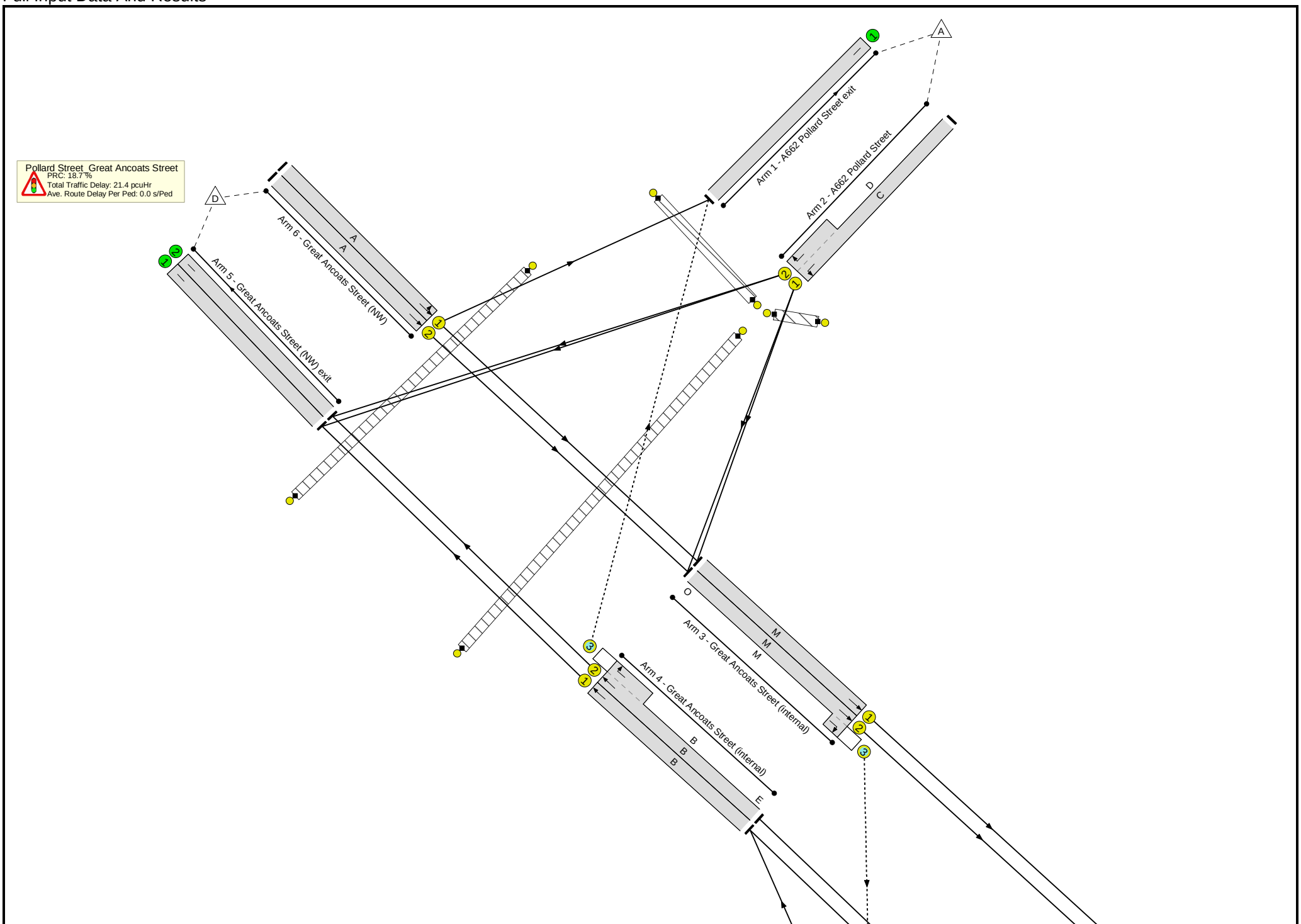
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.8%**
Pollard Street_Great Ancoats Street	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.8%**
1/1	A662 Pollard Street exit	U	N/A	N/A	-		-	-	-	74	Inf	Inf	0.0%
2/1+2/2	A662 Pollard Street Left Right	U	N/A	N/A	C D		1	33:7	-	393	1832:1957	386+178	69.7 : 69.7%
3/1	Great Ancoats Street (internal) Ahead	U	N/A	N/A	M		1	88	-	347	1895	1895	18.3%
3/2+3/3	Great Ancoats Street (internal) Ahead Right	U+O	N/A	N/A	M	O	1	88	21	543	2045:2035	1504+538	26.6 : 26.6%
4/1	Great Ancoats Street (internal) Ahead	U	N/A	N/A	B		1	46	-	460	1905	1017	45.2%
4/2+4/3	Great Ancoats Street (internal) Right Ahead	U+O	N/A	N/A	B	E	1	46	21	296	2055:2055	1092+0	27.1 : 0.0%
5/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	522	Inf	Inf	0.0%
5/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
6/1	Great Ancoats Street (NW) Left Ahead	U	N/A	N/A	A		1	20	-	326	1876	448	72.8%
6/2	Great Ancoats Street (NW) Ahead	U	N/A	N/A	A		1	20	-	369	2065	493	74.9%
7/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	347	Inf	Inf	0.0%
7/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	400	Inf	Inf	0.0%
8/1	Great Ancoats Street (SE) Ahead Left	U	N/A	N/A	N		1	57	-	179	1900	1252	14.3%

Full Input Data And Results

8/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	N		1	57	-	296	2055	1354	21.9%
9/1	Adair Street exit	U	N/A	N/A	-		-	-	-	174	Inf	Inf	0.0%
10/1	Adair Street Left	U	N/A	N/A	P		1	20	-	312	1724	411	75.8%
Ped Link: P1	Pollard Street Entry and RT	-	N/A	-	L		1	15	-	0	-	0	0.0%
Ped Link: P2	Pollard Street LT	-	N/A	-	I		1	45	-	0	-	0	0.0%
Ped Link: P3	Great Ancoats Street (SE) Entry	-	N/A	-	J		1	29	-	0	-	0	0.0%
Ped Link: P4	Great Ancoats Street (NW) Entry	-	N/A	-	K		1	11	-	0	-	0	0.0%

Full Input Data And Results

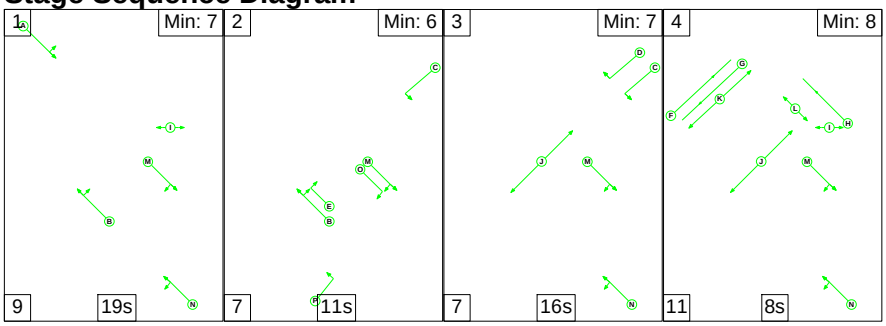
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**102**	**41**	**0**	**14.9**	**6.5**	**0.0**	**21.4**	**-**	**-**	**-**	**-**
Pollard Street_Great Ancoats Street	**-**	**-**	**102**	**41**	**0**	**14.9**	**6.5**	**0.0**	**21.4**	**-**	**-**	**-**	**-**
1/1	74	74	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1+2/2	393	393	-	-	-	2.8	1.1	-	3.9	36.0	4.7	1.1	5.8
3/1	347	347	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/2+3/3	543	543	102	41	0	0.0	0.2	0.0	0.2	1.2	7.2	0.2	7.3
4/1	460	460	-	-	-	1.1	0.4	-	1.5	11.4	3.4	0.4	3.8
4/2+4/3	296	296	0	0	0	1.6	0.2	0.0	1.8	21.6	5.9	0.2	6.1
5/1	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	326	326	-	-	-	2.8	1.3	-	4.1	45.4	7.3	1.3	8.6
6/2	369	369	-	-	-	3.2	1.5	-	4.6	45.3	8.3	1.5	9.8
7/1	347	347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	400	400	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	179	179	-	-	-	0.3	0.1	-	0.4	7.3	1.6	0.1	1.7
8/2	296	296	-	-	-	0.5	0.1	-	0.6	7.7	2.9	0.1	3.0
9/1	174	174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	312	312	-	-	-	2.7	1.5	-	4.2	48.7	7.0	1.5	8.5
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 18.7 Total Delay for Signalled Lanes (pcuHr): 21.42 Cycle Time (s): 88
PRC Over All Lanes (%): 18.7 Total Delay Over All Lanes(pcuHr): 21.42

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

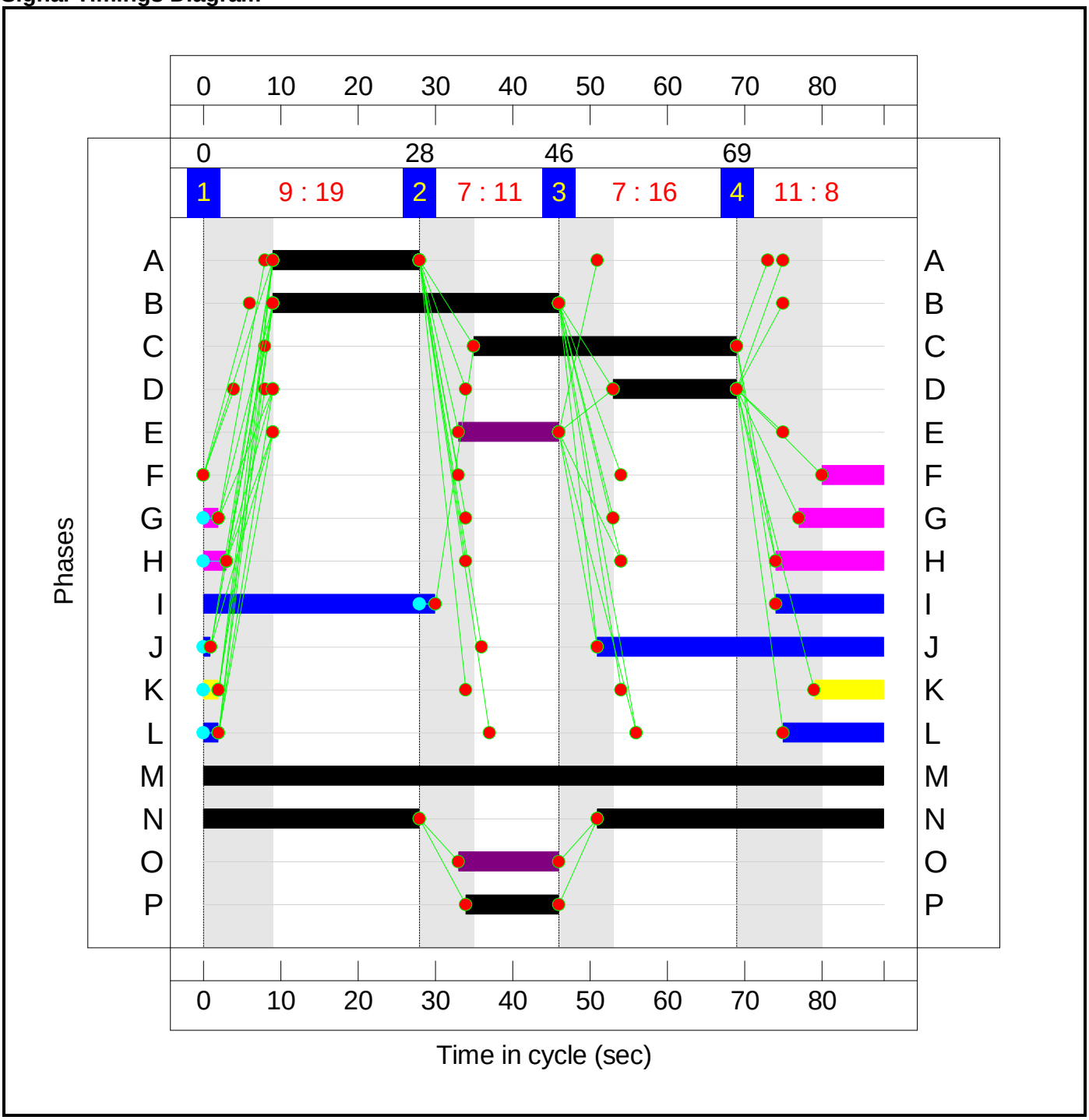


Stage Timings

Stage	1	2	3	4
Duration	19	11	16	8
Change Point	0	28	46	69

Full Input Data And Results

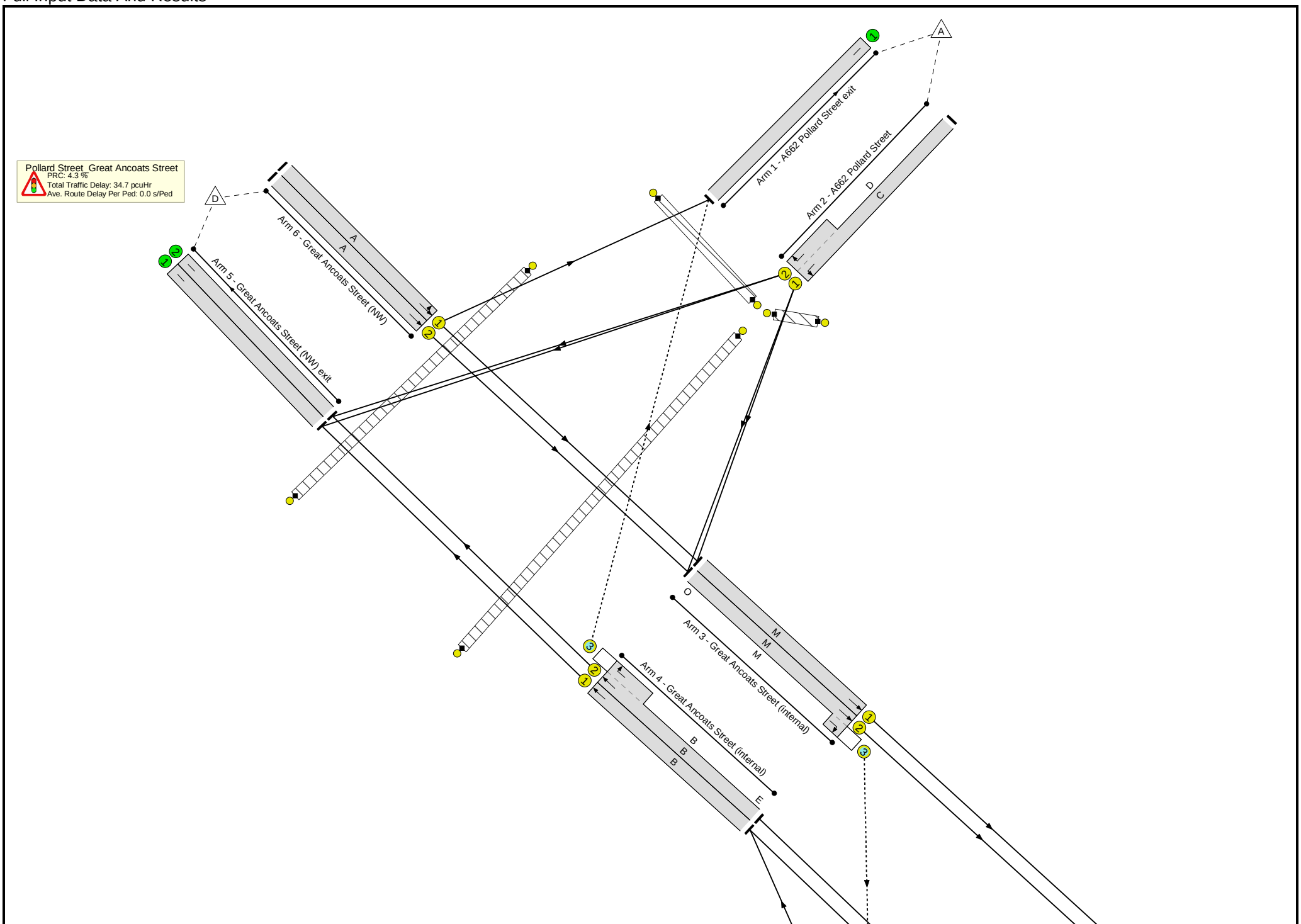
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.3%**
Pollard Street_Great Ancoats Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.3%**
1/1	A662 Pollard Street exit	U	N/A	N/A	-		-	-	-	64	Inf	Inf	0.0%
2/1+2/2	A662 Pollard Street Left Right	U	N/A	N/A	C D		1	34:16	-	734	1832:1957	577+274	86.3 : 86.3%
3/1	Great Ancoats Street (internal) Ahead	U	N/A	N/A	M		1	88	-	649	1895	1895	34.2%
3/2+3/3	Great Ancoats Street (internal) Ahead Right	U+O	N/A	N/A	M	O	1	88	13	552	2045:2035	284+633	60.2 : 60.2%
4/1	Great Ancoats Street (internal) Ahead	U	N/A	N/A	B		1	37	-	537	1905	823	65.3%
4/2+4/3	Great Ancoats Street (internal) Right Ahead	U+O	N/A	N/A	B	E	1	37	13	529	2055:1888	872+12	59.9 : 59.9%
5/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	655	Inf	Inf	0.0%
5/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	640	Inf	Inf	0.0%
6/1	Great Ancoats Street (NW) Left Ahead	U	N/A	N/A	A		1	19	-	366	1891	430	85.2%
6/2	Great Ancoats Street (NW) Ahead	U	N/A	N/A	A		1	19	-	394	2065	469	84.0%
7/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	649	Inf	Inf	0.0%
7/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	171	Inf	Inf	0.0%
8/1	Great Ancoats Street (SE) Ahead Left	U	N/A	N/A	N		1	65	-	494	1889	1417	34.9%

Full Input Data And Results

8/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	N		1	65	-	529	2055	1541	34.3%
9/1	Adair Street exit	U	N/A	N/A	-		-	-	-	506	Inf	Inf	0.0%
10/1	Adair Street Left	U	N/A	N/A	P		1	12	-	168	1724	255	66.0%
Ped Link: P1	Pollard Street Entry and RT	-	N/A	-	L		1	15	-	0	-	0	0.0%
Ped Link: P2	Pollard Street LT	-	N/A	-	I		1	44	-	0	-	0	0.0%
Ped Link: P3	Great Ancoats Street (SE) Entry	-	N/A	-	J		1	38	-	0	-	0	0.0%
Ped Link: P4	Great Ancoats Street (NW) Entry	-	N/A	-	K		1	11	-	0	-	0	0.0%

Full Input Data And Results

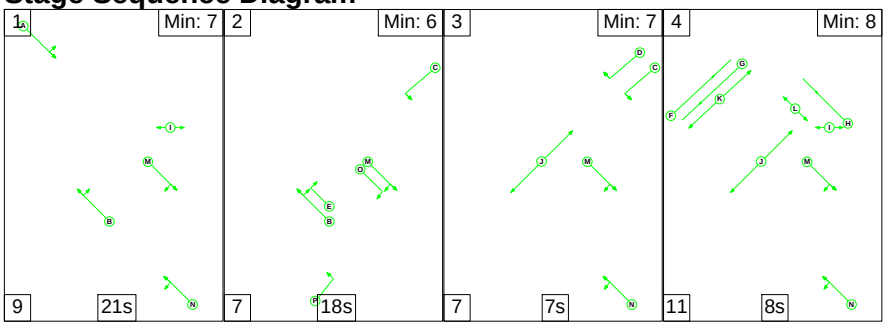
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**161**	**227**	**0**	**21.8**	**12.3**	**0.7**	**34.7**	**-**	**-**	**-**	**-**
Pollard Street_Great Ancoats Street	**-**	**-**	**161**	**227**	**0**	**21.8**	**12.3**	**0.7**	**34.7**	**-**	**-**	**-**	**-**
1/1	64	64	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1+2/2	734	734	-	-	-	5.3	3.0	-	8.3	40.6	13.1	3.0	16.1
3/1	649	649	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
3/2+3/3	552	552	155	226	0	0.2	0.8	0.7	1.6	10.2	9.4	0.8	10.1
4/1	537	537	-	-	-	2.9	0.9	-	3.8	25.7	8.7	0.9	9.6
4/2+4/3	529	529	6	1	0	3.9	0.7	0.0	4.6	31.5	12.2	0.7	13.0
5/1	655	655	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	640	640	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	366	366	-	-	-	3.3	2.6	-	6.0	58.6	8.5	2.6	11.2
6/2	394	394	-	-	-	3.6	2.5	-	6.0	54.9	9.2	2.5	11.6
7/1	649	649	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	171	171	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	494	494	-	-	-	0.5	0.3	-	0.8	5.7	4.0	0.3	4.2
8/2	529	529	-	-	-	0.5	0.3	-	0.8	5.5	4.3	0.3	4.5
9/1	506	506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	168	168	-	-	-	1.7	0.9	-	2.6	55.7	3.9	0.9	4.8
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 4.3 Total Delay for Signalled Lanes (pcuHr): 34.71 Cycle Time (s): 88
PRC Over All Lanes (%): 4.3 Total Delay Over All Lanes(pcuHr): 34.71

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

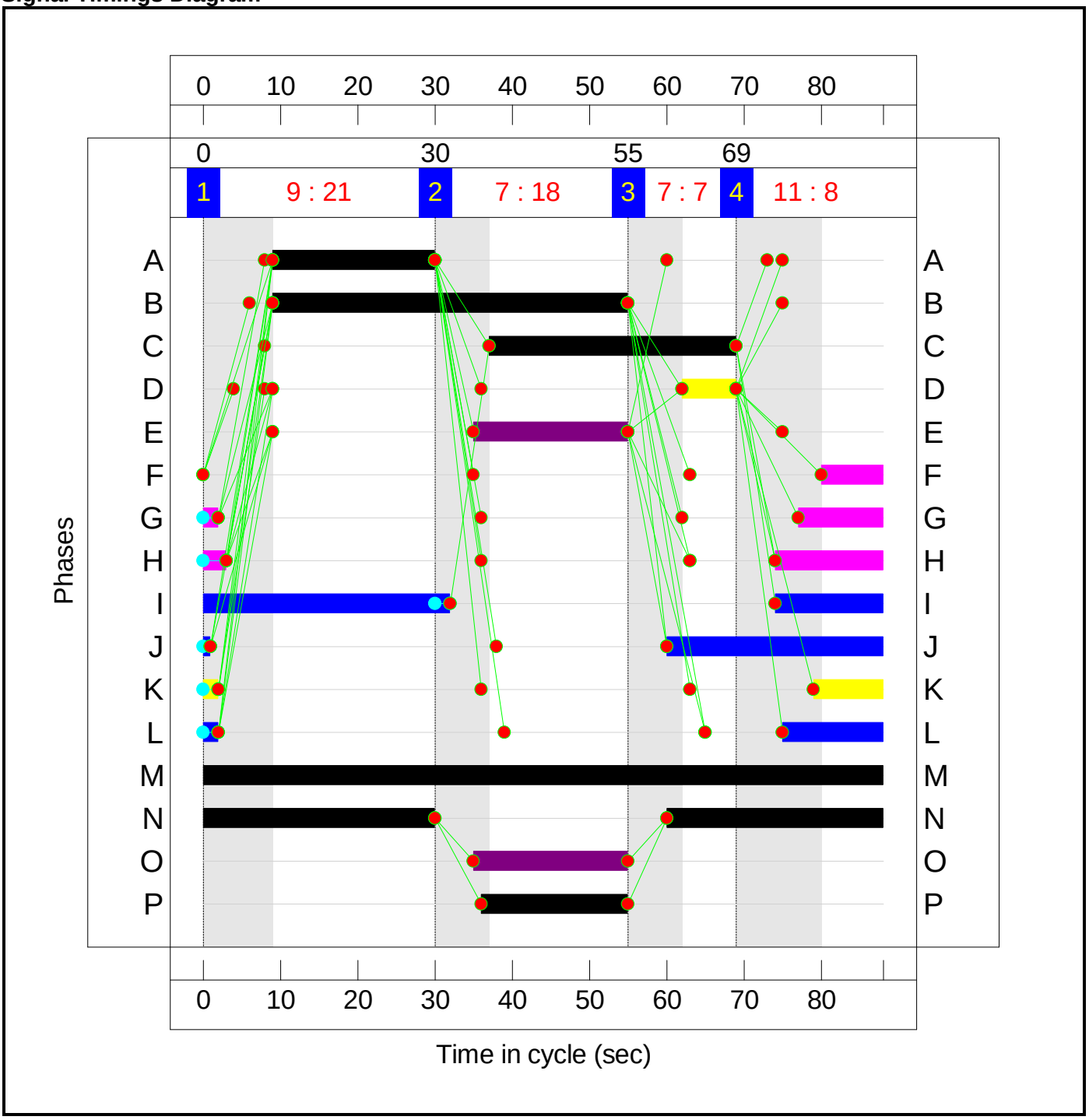


Stage Timings

Stage	1	2	3	4
Duration	21	18	7	8
Change Point	0	30	55	69

Full Input Data And Results

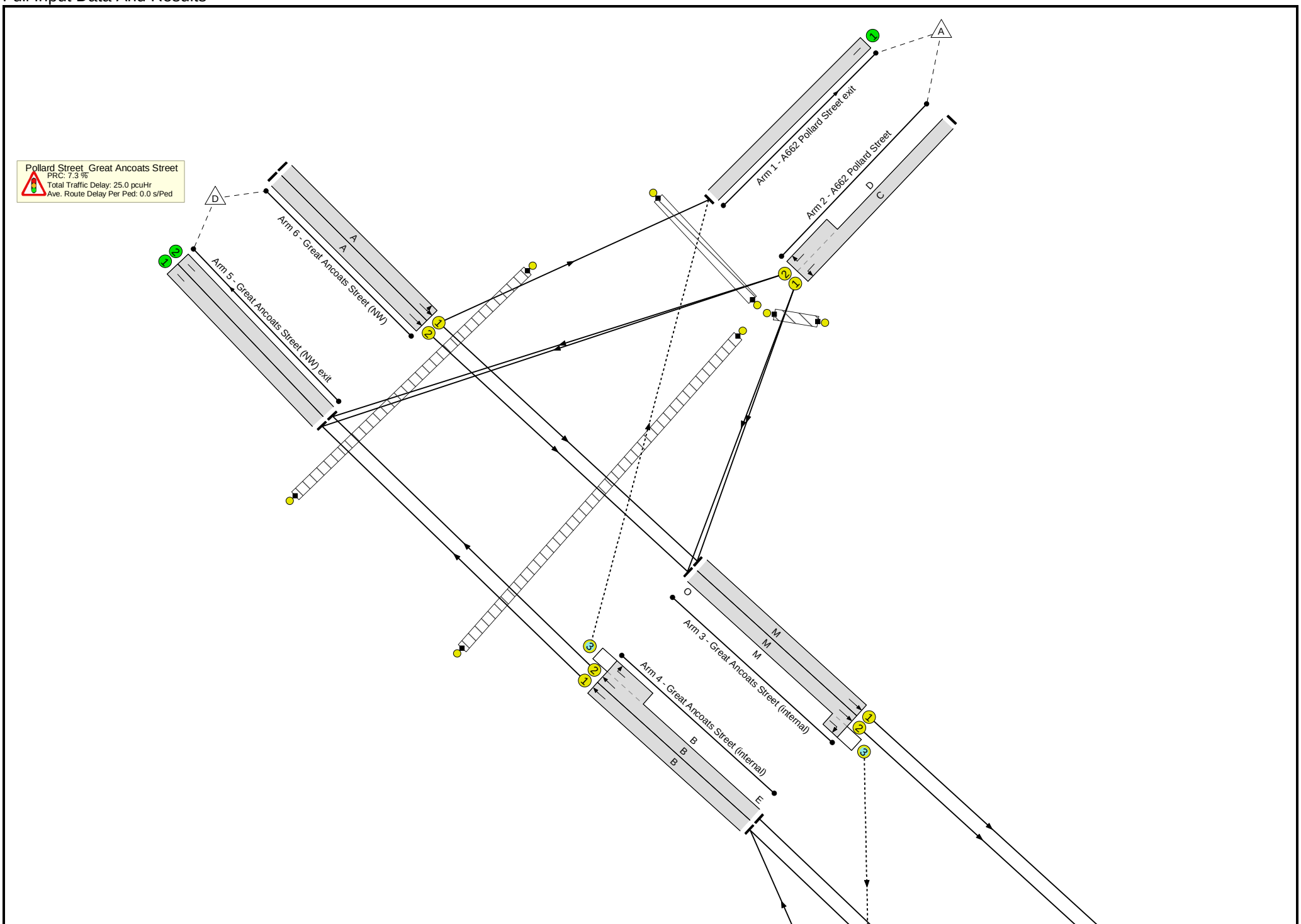
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.9%**
Pollard Street_Great Ancoats Street	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.9%**
1/1	A662 Pollard Street exit	U	N/A	N/A	-		-	-	-	79	Inf	Inf	0.0%
2/1+2/2	A662 Pollard Street Left Right	U	N/A	N/A	C D		1	32:7	-	370	1832:1957	353+178	69.7 : 69.7%
3/1	Great Ancoats Street (internal) Ahead	U	N/A	N/A	M		1	88	-	391	1895	1895	20.6%
3/2+3/3	Great Ancoats Street (internal) Ahead Right	U+O	N/A	N/A	M	O	1	88	20	598	2045:2035	1547+495	29.3 : 29.3%
4/1	Great Ancoats Street (internal) Ahead	U	N/A	N/A	B		1	46	-	456	1905	1017	44.8%
4/2+4/3	Great Ancoats Street (internal) Right Ahead	U+O	N/A	N/A	B	E	1	46	20	307	2055:1888	1089+4	28.1 : 28.1%
5/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	518	Inf	Inf	0.0%
5/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	368	Inf	Inf	0.0%
6/1	Great Ancoats Street (NW) Left Ahead	U	N/A	N/A	A		1	21	-	388	1881	470	82.5%
6/2	Great Ancoats Street (NW) Ahead	U	N/A	N/A	A		1	21	-	433	2065	516	83.9%
7/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	391	Inf	Inf	0.0%
7/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	453	Inf	Inf	0.0%
8/1	Great Ancoats Street (SE) Ahead Left	U	N/A	N/A	N		1	58	-	179	1896	1271	14.1%

Full Input Data And Results

8/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	N		1	58	-	307	2055	1378	22.3%
9/1	Adair Street exit	U	N/A	N/A	-		-	-	-	181	Inf	Inf	0.0%
10/1	Adair Street Left	U	N/A	N/A	P		1	19	-	313	1724	392	79.9%
Ped Link: P1	Pollard Street Entry and RT	-	N/A	-	L		1	15	-	0	-	0	0.0%
Ped Link: P2	Pollard Street LT	-	N/A	-	I		1	46	-	0	-	0	0.0%
Ped Link: P3	Great Ancoats Street (SE) Entry	-	N/A	-	J		1	29	-	0	-	0	0.0%
Ped Link: P4	Great Ancoats Street (NW) Entry	-	N/A	-	K		1	11	-	0	-	0	0.0%

Full Input Data And Results

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)
Network	**-**	**-**	**109**	**37**	**0**	**16.1**	**8.9**	**0.0**	**25.0**	**-**	**-**	**-**	**-**
Pollard Street_Great Ancoats Street	**-**	**-**	**109**	**37**	**0**	**16.1**	**8.9**	**0.0**	**25.0**	**-**	**-**	**-**	**-**
1/1	79	79	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1+2/2	370	370	-	-	-	2.7	1.1	-	3.8	37.3	4.3	1.1	5.4
3/1	391	391	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/2+3/3	598	598	108	37	0	0.0	0.2	0.0	0.2	1.3	8.9	0.2	9.1
4/1	456	456	-	-	-	1.1	0.4	-	1.5	11.8	3.5	0.4	3.9
4/2+4/3	307	307	1	0	0	1.6	0.2	0.0	1.8	21.3	6.0	0.2	6.2
5/1	518	518	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	388	388	-	-	-	3.4	2.2	-	5.6	51.9	8.9	2.2	11.2
6/2	433	433	-	-	-	3.8	2.5	-	6.2	51.7	10.0	2.5	12.4
7/1	391	391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	453	453	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	179	179	-	-	-	0.3	0.1	-	0.3	6.9	1.6	0.1	1.7
8/2	307	307	-	-	-	0.5	0.1	-	0.6	7.3	2.9	0.1	3.0
9/1	181	181	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	313	313	-	-	-	2.8	1.9	-	4.7	53.9	7.2	1.9	9.1
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

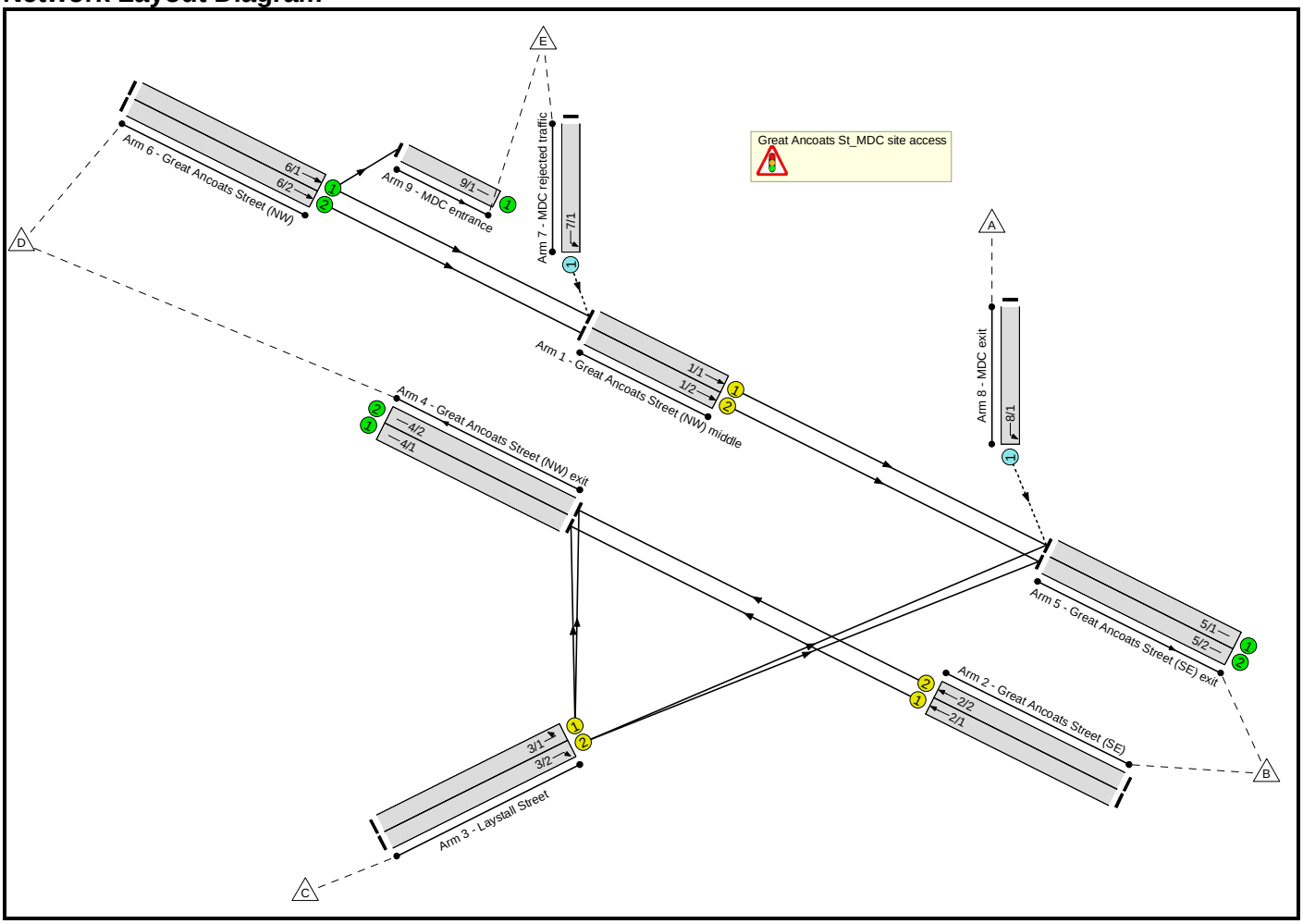
C1 PRC for Signalled Lanes (%): 7.3 Total Delay for Signalled Lanes (pcuHr): 24.97 Cycle Time (s): 88
PRC Over All Lanes (%): 7.3 Total Delay Over All Lanes(pcuHr): 24.97

Full Input Data And Results

User and Project Details

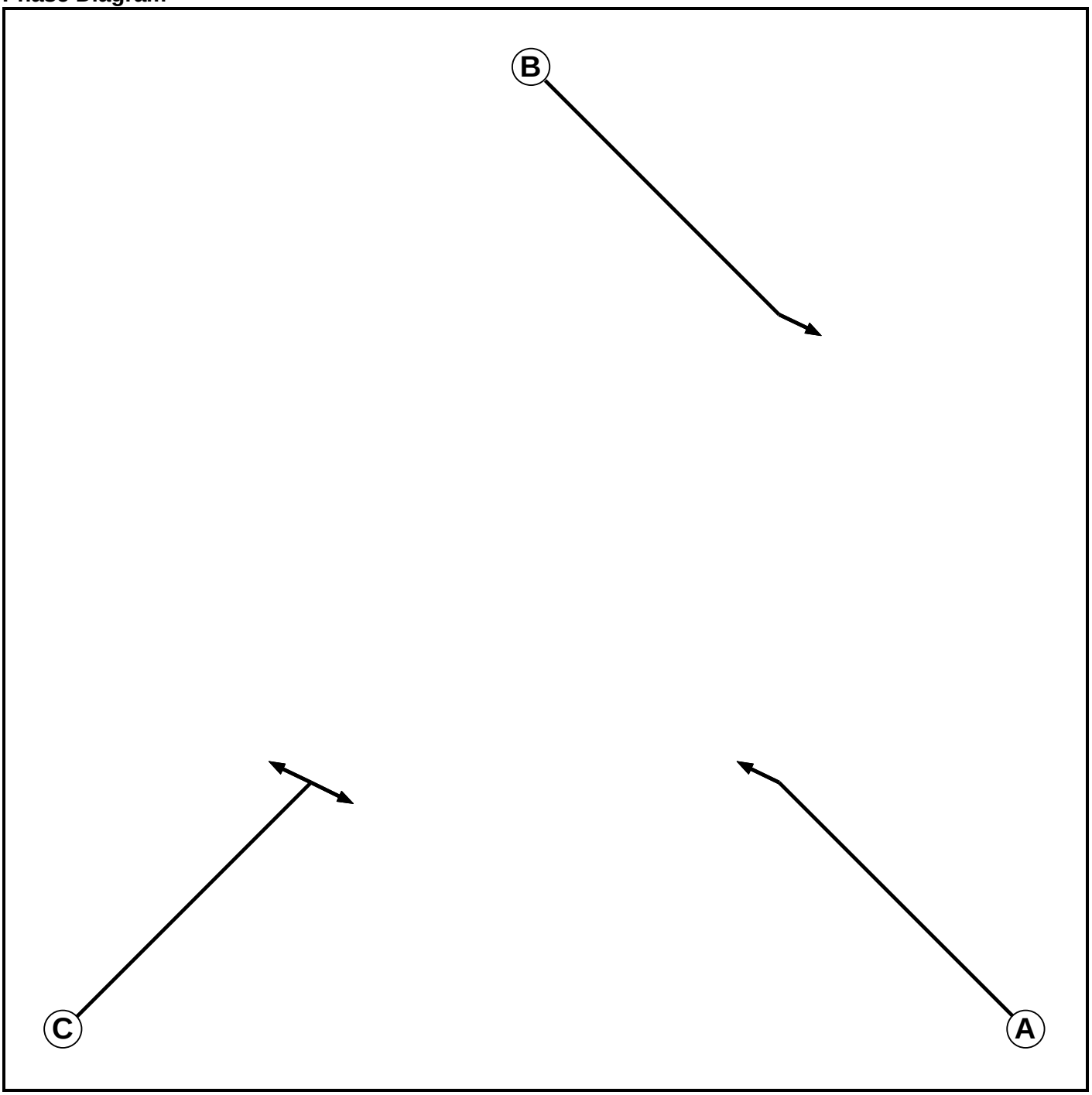
Project:	
Title:	
Location:	
Additional detail:	
File name:	04.Laystall St_Great Ancoats St.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7

Full Input Data And Results

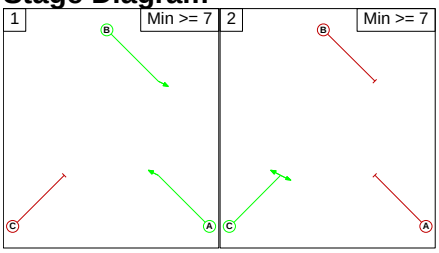
Phase Intergreens Matrix

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

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		7
	2	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Great Ancoats St_MDC site access											
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)**
7/1 (MDC rejected traffic)	1/1 (Left)	715	0	6/1	0.22	All	-	-	-	-	-
				6/2	0.22	All					
8/1 (MDC exit)	5/1 (Left)	715	0	1/1	0.22	All	-	-	-	-	-
				1/2	0.22	All					
				3/2	0.22	All					

Full Input Data And Results

Lane Input Data

Junction: Great Ancoats St_MDC site access

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 (Great Ancoats Street (NW) middle)	U	B	2	3	6.0	Geom	-	3.70	0.00	Y	Arm 5 Ahead	Inf
1/2 (Great Ancoats Street (NW) middle)	U	B	2	3	6.0	Geom	-	3.70	0.00	Y	Arm 5 Ahead	Inf
2/1 (Great Ancoats Street (SE))	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Ahead	Inf
2/2 (Great Ancoats Street (SE))	U	A	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 4 Ahead	Inf
3/1 (Laystall Street)	U	C	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 4 Left	12.00
3/2 (Laystall Street)	U	C	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 5 Right	55.00
4/1 (Great Ancoats Street (NW) exit)	U		2	3	60.0	Geom	-	3.00	0.00	Y		
4/2 (Great Ancoats Street (NW) exit)	U		2	3	60.0	Geom	-	3.40	0.00	Y		
5/1 (Great Ancoats Street (SE) exit)	U		2	3	60.0	Geom	-	3.70	0.00	Y		
5/2 (Great Ancoats Street (SE) exit)	U		2	3	60.0	Geom	-	3.70	0.00	Y		
6/1 (Great Ancoats Street (NW))	U		2	3	60.0	Geom	-	3.70	0.00	Y	Arm 1 Ahead Arm 9 Ahead	Inf 5.00
6/2 (Great Ancoats Street (NW))	U		2	3	60.0	Geom	-	3.70	0.00	Y	Arm 1 Ahead	Inf
7/1 (MDC rejected traffic)	O		2	3	60.0	Geom	-	3.25	0.00	Y	Arm 1 Left	5.00
8/1 (MDC exit)	O		2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Left	5.00

9/1 (MDC entrance)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Base'	08:30	09:30	01:00	
2: 'PM Base'	17:00	18:00	01:00	
3: 'AM Proposed'	08:30	09:30	01:00	
4: 'PM Proposed'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	1100	0	1100
	C	0	113	0	46	0	159
	D	0	1479	0	0	0	1479
	E	0	0	0	0	0	0
	Tot.	0	1592	0	1146	0	2738

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: Great Ancoats St_MDC site access	
1/1	742
1/2	737
2/1	541
2/2	559
3/1	46
3/2	113
4/1	546
4/2	600
5/1	780
5/2	812
6/1	742
6/2	737
7/1	0
8/1	0
9/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Great Ancoats St_MDC site access								
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 (Great Ancoats Street (NW) middle)	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/2 (Great Ancoats Street (NW) middle)	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
2/1 (Great Ancoats Street (SE))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
2/2 (Great Ancoats Street (SE))	3.40	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1955	1955
3/1 (Laystall Street)	3.40	0.00	Y	Arm 4 Left	12.00	100.0 %	1738	1738
3/2 (Laystall Street)	3.30	0.00	Y	Arm 5 Right	55.00	100.0 %	1893	1893
4/1 (Great Ancoats Street (NW) exit)	3.00	0.00	Y				1915	1915
4/2 (Great Ancoats Street (NW) exit)	3.40	0.00	Y				1955	1955
5/1 (Great Ancoats Street (SE) exit)	3.70	0.00	Y				1985	1985
5/2 (Great Ancoats Street (SE) exit)	3.70	0.00	Y				1985	1985
6/1 (Great Ancoats Street (NW))	3.70	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1985	1985
				Arm 9 Ahead	5.00	0.0 %		
6/2 (Great Ancoats Street (NW))	3.70	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1985	1985
7/1 (MDC rejected traffic)	3.25	0.00	Y	Arm 1 Left	5.00	0.0 %	1940	1940
8/1 (MDC exit)	3.25	0.00	Y	Arm 5 Left	5.00	0.0 %	1940	1940
9/1 (MDC entrance Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	1124	0	1124
	C	0	273	0	148	0	421
	D	0	1363	0	0	0	1363
	E	0	0	0	0	0	0
	Tot.	0	1636	0	1272	0	2908

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: Great Ancoats St_MDC site access	
1/1	682
1/2	681
2/1	555
2/2	569
3/1	148
3/2	273
4/1	606
4/2	666
5/1	809
5/2	827
6/1	682
6/2	681
7/1	0
8/1	0
9/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Great Ancoats St_MDC site access								
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 (Great Ancoats Street (NW) middle)	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/2 (Great Ancoats Street (NW) middle)	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
2/1 (Great Ancoats Street (SE))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
2/2 (Great Ancoats Street (SE))	3.40	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1955	1955
3/1 (Laystall Street)	3.40	0.00	Y	Arm 4 Left	12.00	100.0 %	1738	1738
3/2 (Laystall Street)	3.30	0.00	Y	Arm 5 Right	55.00	100.0 %	1893	1893
4/1 (Great Ancoats Street (NW) exit)	3.00	0.00	Y				1915	1915
4/2 (Great Ancoats Street (NW) exit)	3.40	0.00	Y				1955	1955
5/1 (Great Ancoats Street (SE) exit)	3.70	0.00	Y				1985	1985
5/2 (Great Ancoats Street (SE) exit)	3.70	0.00	Y				1985	1985
6/1 (Great Ancoats Street (NW))	3.70	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1985	1985
				Arm 9 Ahead	5.00	0.0 %		
6/2 (Great Ancoats Street (NW))	3.70	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1985	1985
7/1 (MDC rejected traffic)	3.25	0.00	Y	Arm 1 Left	5.00	0.0 %	1940	1940
8/1 (MDC exit)	3.25	0.00	Y	Arm 5 Left	5.00	0.0 %	1940	1940
9/1 (MDC entrance Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	10	0	0	0	10
	B	0	0	0	1137	0	1137
	C	0	116	0	48	0	164
	D	0	1508	0	0	50	1558
	E	0	10	0	0	0	10
	Tot.	0	1644	0	1185	50	2879

Traffic Lane Flows

Lane	Scenario 3: AM Proposed
Junction: Great Ancoats St_MDC site access	
1/1	756
1/2	762
2/1	560
2/2	577
3/1	48
3/2	116
4/1	566
4/2	619
5/1	806
5/2	838
6/1	796
6/2	762
7/1	10
8/1	10
9/1	50

Full Input Data And Results

Lane Saturation Flows

Junction: Great Ancoats St_MDC site access								
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 (Great Ancoats Street (NW) middle)	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/2 (Great Ancoats Street (NW) middle)	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
2/1 (Great Ancoats Street (SE))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
2/2 (Great Ancoats Street (SE))	3.40	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1955	1955
3/1 (Laystall Street)	3.40	0.00	Y	Arm 4 Left	12.00	100.0 %	1738	1738
3/2 (Laystall Street)	3.30	0.00	Y	Arm 5 Right	55.00	100.0 %	1893	1893
4/1 (Great Ancoats Street (NW) exit)	3.00	0.00	Y				1915	1915
4/2 (Great Ancoats Street (NW) exit)	3.40	0.00	Y				1955	1955
5/1 (Great Ancoats Street (SE) exit)	3.70	0.00	Y				1985	1985
5/2 (Great Ancoats Street (SE) exit)	3.70	0.00	Y				1985	1985
6/1 (Great Ancoats Street (NW))	3.70	0.00	Y	Arm 1 Ahead	Inf	93.7 %	1948	1948
				Arm 9 Ahead	5.00	6.3 %		
6/2 (Great Ancoats Street (NW))	3.70	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1985	1985
7/1 (MDC rejected traffic)	3.25	0.00	Y	Arm 1 Left	5.00	100.0 %	1492	1492
8/1 (MDC exit)	3.25	0.00	Y	Arm 5 Left	5.00	100.0 %	1492	1492
9/1 (MDC entrance Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	50	0	0	0	50
	B	0	0	0	1135	0	1135
	C	0	286	0	163	0	449
	D	0	1405	0	0	10	1415
	E	0	2	0	0	0	2
	Tot.	0	1743	0	1298	10	3051

Traffic Lane Flows

Lane	Scenario 4: PM Proposed
Junction: Great Ancoats St_MDC site access	
1/1	703
1/2	704
2/1	560
2/2	575
3/1	163
3/2	286
4/1	619
4/2	679
5/1	868
5/2	875
6/1	711
6/2	704
7/1	2
8/1	50
9/1	10

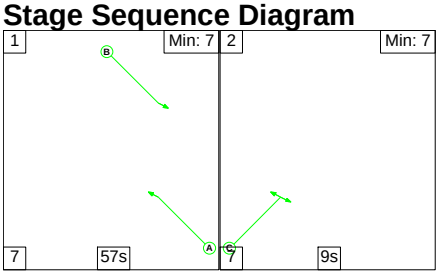
Full Input Data And Results

Lane Saturation Flows

Junction: Great Ancoats St_MDC site access								
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 (Great Ancoats Street (NW) middle)	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/2 (Great Ancoats Street (NW) middle)	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
2/1 (Great Ancoats Street (SE))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
2/2 (Great Ancoats Street (SE))	3.40	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1955	1955
3/1 (Laystall Street)	3.40	0.00	Y	Arm 4 Left	12.00	100.0 %	1738	1738
3/2 (Laystall Street)	3.30	0.00	Y	Arm 5 Right	55.00	100.0 %	1893	1893
4/1 (Great Ancoats Street (NW) exit)	3.00	0.00	Y				1915	1915
4/2 (Great Ancoats Street (NW) exit)	3.40	0.00	Y				1955	1955
5/1 (Great Ancoats Street (SE) exit)	3.70	0.00	Y				1985	1985
5/2 (Great Ancoats Street (SE) exit)	3.70	0.00	Y				1985	1985
6/1 (Great Ancoats Street (NW))	3.70	0.00	Y	Arm 1 Ahead	Inf	98.6 %	1977	1977
				Arm 9 Ahead	5.00	1.4 %		
6/2 (Great Ancoats Street (NW))	3.70	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1985	1985
7/1 (MDC rejected traffic)	3.25	0.00	Y	Arm 1 Left	5.00	100.0 %	1492	1492
8/1 (MDC exit)	3.25	0.00	Y	Arm 5 Left	5.00	100.0 %	1492	1492
9/1 (MDC entrance Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

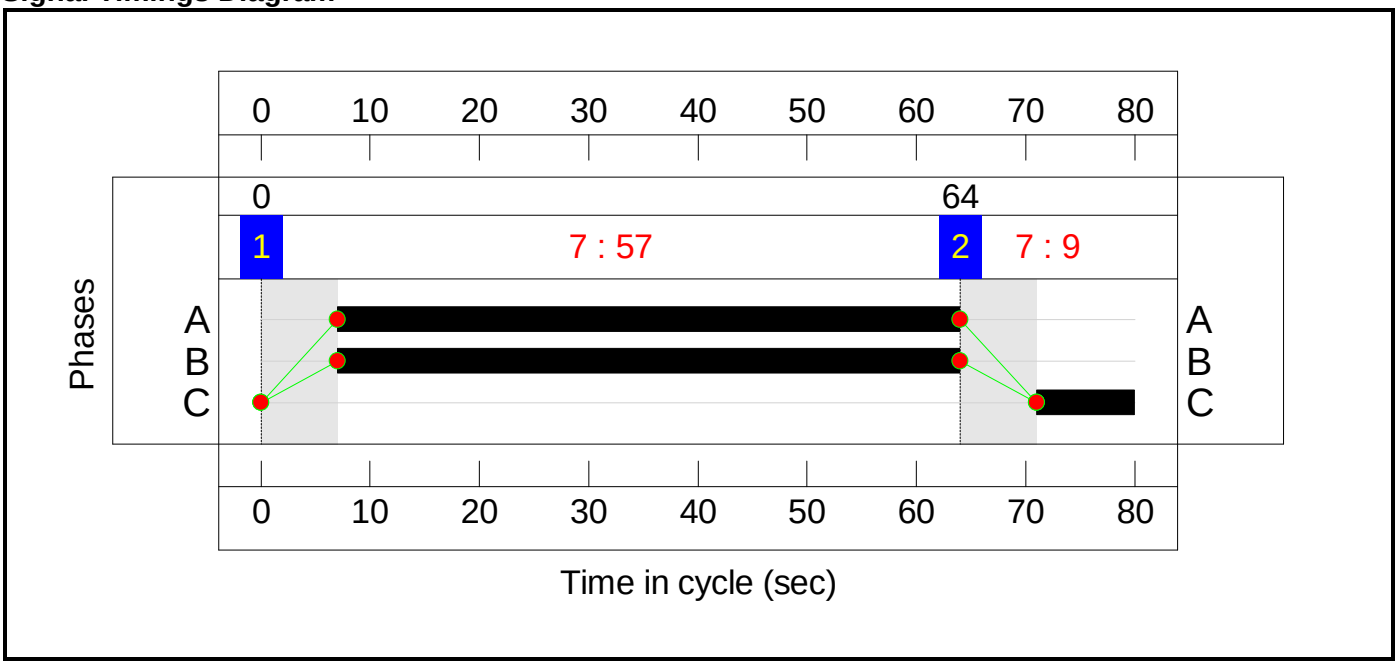


Full Input Data And Results

Stage Timings

Stage	1	2
Duration	57	9
Change Point	0	64

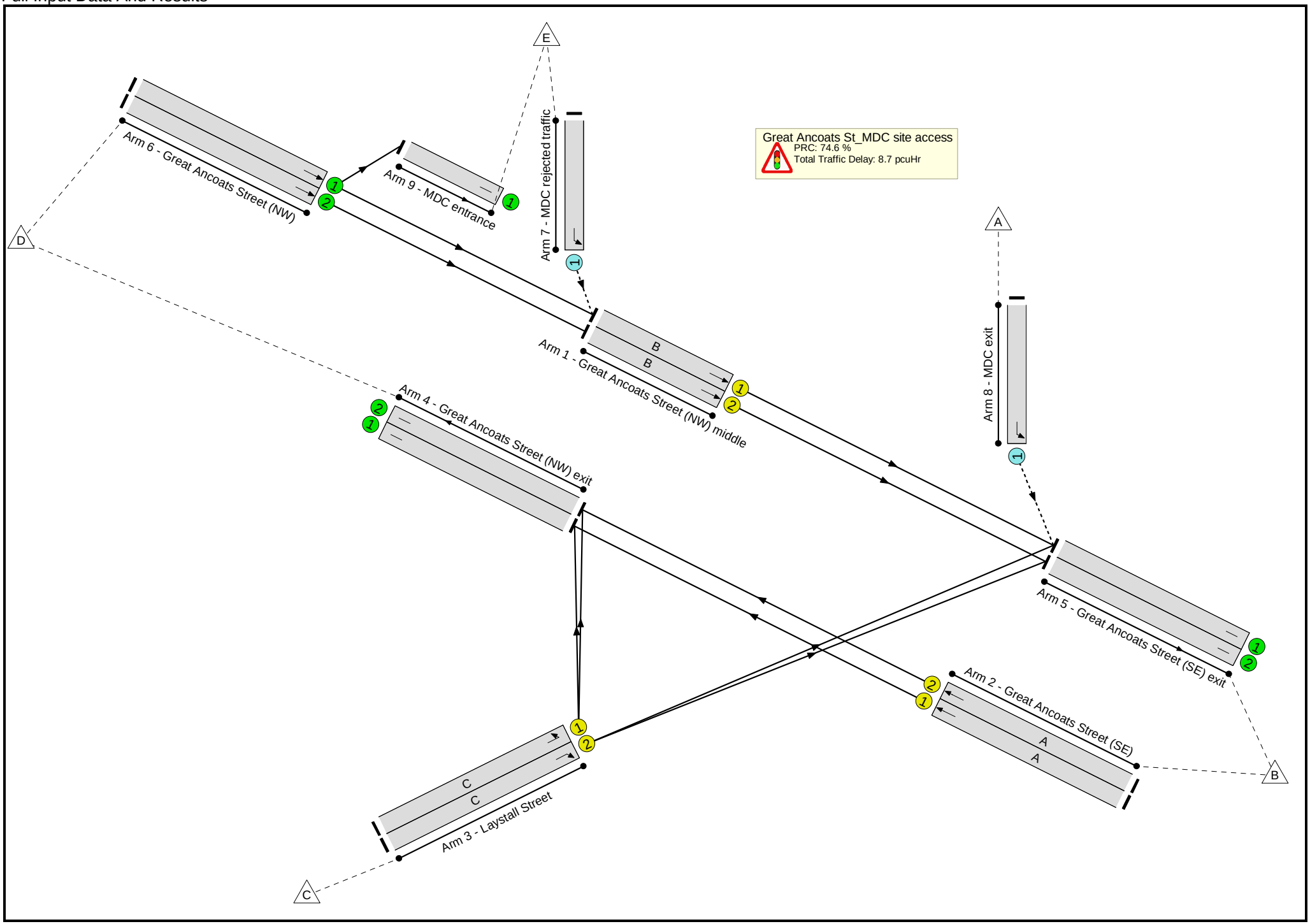
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**51.6%**
Great Ancoats St_MDC site access	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**51.6%**
1/1	Great Ancoats Street (NW) middle Ahead	U	N/A	N/A	B		1	57	-	742	1985	1439	51.6%
1/2	Great Ancoats Street (NW) middle Ahead	U	N/A	N/A	B		1	57	-	737	1985	1439	51.2%
2/1	Great Ancoats Street (SE) Ahead	U	N/A	N/A	A		1	57	-	541	1915	1388	39.0%
2/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	A		1	57	-	559	1955	1417	39.4%
3/1	Laystall Street Left	U	N/A	N/A	C		1	9	-	46	1738	217	21.2%
3/2	Laystall Street Right	U	N/A	N/A	C		1	9	-	113	1893	237	47.8%
4/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	546	1915	1915	28.5%
4/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	600	1955	1955	30.7%
5/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	780	1985	1985	39.3%
5/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	812	1985	1985	40.9%
6/1	Great Ancoats Street (NW) Ahead Ahead2	U	N/A	N/A	-		-	-	-	742	1985	1985	37.4%
6/2	Great Ancoats Street (NW) Ahead	U	N/A	N/A	-		-	-	-	737	1985	1985	37.1%
7/1	MDC rejected traffic Left	O	N/A	N/A	-		-	-	-	0	1940	649	0.0%
8/1	MDC exit Left	O	N/A	N/A	-		-	-	-	0	1940	621	0.0%

Full Input Data And Results

9/1	MDC entrance	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
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)**
Network	**-**	**-**	**0**	**0**	**0**	**4.7**	**4.0**	**0.0**	**8.7**	**-**	**-**	**-**	**-**
Great Ancoats St_MDC site access	**-**	**-**	**0**	**0**	**0**	**4.7**	**4.0**	**0.0**	**8.7**	**-**	**-**	**-**	**-**
1/1	742	742	-	-	-	1.0	0.5	-	1.5	7.4	7.2	0.5	7.7
1/2	737	737	-	-	-	1.0	0.5	-	1.5	7.4	7.0	0.5	7.5
2/1	541	541	-	-	-	0.6	0.3	-	1.0	6.3	4.5	0.3	4.8
2/2	559	559	-	-	-	0.7	0.3	-	1.0	6.3	4.7	0.3	5.0
3/1	46	46	-	-	-	0.4	0.1	-	0.5	42.0	0.9	0.1	1.0
3/2	113	113	-	-	-	1.0	0.5	-	1.5	47.0	2.3	0.5	2.8
4/1	546	546	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
4/2	600	600	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/1	780	780	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
5/2	812	812	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/1	742	742	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
6/2	737	737	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
7/1	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

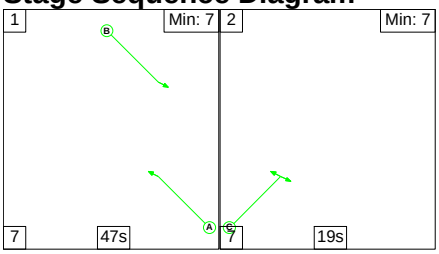
C1 PRC for Signalled Lanes (%): 74.6 Total Delay for Signalled Lanes (pcuHr): 6.99 Cycle Time (s): 80

PRC Over All Lanes (%): 74.6 Total Delay Over All Lanes(pcuHr): 8.67

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

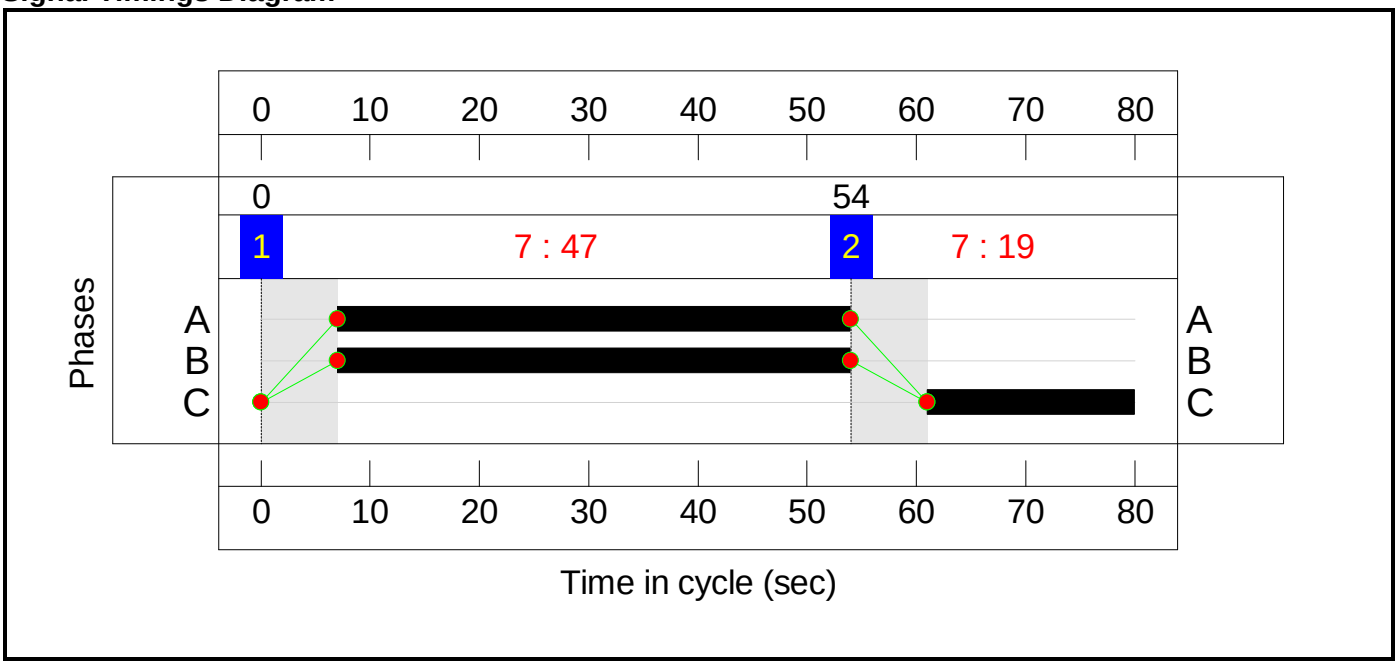
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	47	19
Change Point	0	54

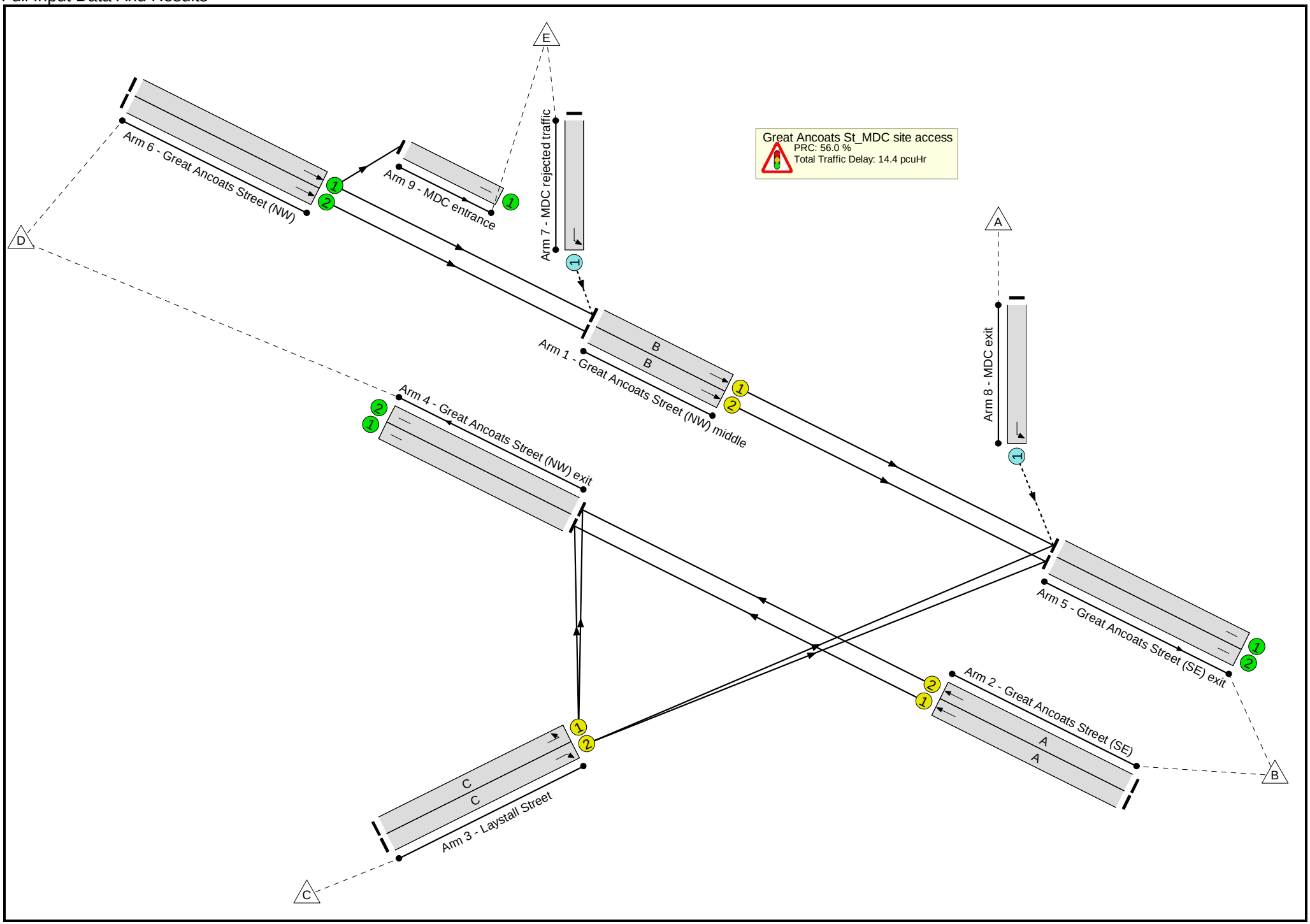
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**57.7%**
Great Ancoats St_MDC site access	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**57.7%**
1/1	Great Ancoats Street (NW) middle Ahead	U	N/A	N/A	B		1	47	-	682	1985	1191	57.3%
1/2	Great Ancoats Street (NW) middle Ahead	U	N/A	N/A	B		1	47	-	681	1985	1191	57.2%
2/1	Great Ancoats Street (SE) Ahead	U	N/A	N/A	A		1	47	-	555	1915	1149	48.3%
2/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	A		1	47	-	569	1955	1173	48.5%
3/1	Laystall Street Left	U	N/A	N/A	C		1	19	-	148	1738	435	34.1%
3/2	Laystall Street Right	U	N/A	N/A	C		1	19	-	273	1893	473	57.7%
4/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	606	1915	1915	31.6%
4/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	666	1955	1955	34.1%
5/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	809	1985	1985	40.8%
5/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	827	1985	1985	41.7%
6/1	Great Ancoats Street (NW) Ahead Ahead2	U	N/A	N/A	-		-	-	-	682	1985	1985	34.4%
6/2	Great Ancoats Street (NW) Ahead	U	N/A	N/A	-		-	-	-	681	1985	1985	34.3%
7/1	MDC rejected traffic Left	O	N/A	N/A	-		-	-	-	0	1940	684	0.0%
8/1	MDC exit Left	O	N/A	N/A	-		-	-	-	0	1940	608	0.0%

Full Input Data And Results

9/1	MDC entrance	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

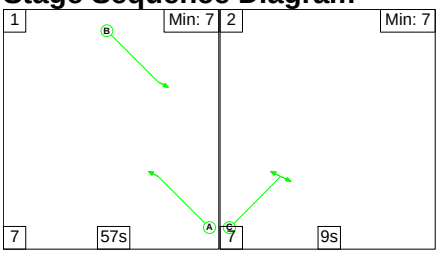
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**9.5**	**4.9**	**0.0**	**14.4**	**-**	**-**	**-**	**-**
Great Ancoats St_MDC site access	**-**	**-**	**0**	**0**	**0**	**9.5**	**4.9**	**0.0**	**14.4**	**-**	**-**	**-**	**-**
1/1	682	682	-	-	-	1.8	0.7	-	2.5	13.3	9.1	0.7	9.8
1/2	681	681	-	-	-	1.8	0.7	-	2.5	13.3	9.1	0.7	9.7
2/1	555	555	-	-	-	1.4	0.5	-	1.9	12.0	6.9	0.5	7.4
2/2	569	569	-	-	-	1.4	0.5	-	1.9	12.0	7.1	0.5	7.6
3/1	148	148	-	-	-	1.0	0.3	-	1.3	30.9	2.7	0.3	2.9
3/2	273	273	-	-	-	2.0	0.7	-	2.7	35.2	5.3	0.7	6.0
4/1	606	606	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
4/2	666	666	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
5/1	809	809	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
5/2	827	827	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
6/1	682	682	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
6/2	681	681	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
7/1	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 56.0 Total Delay for Signalled Lanes (pcuHr): 12.72 Cycle Time (s): 80
PRC Over All Lanes (%): 56.0 Total Delay Over All Lanes(pcuHr): 14.43

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

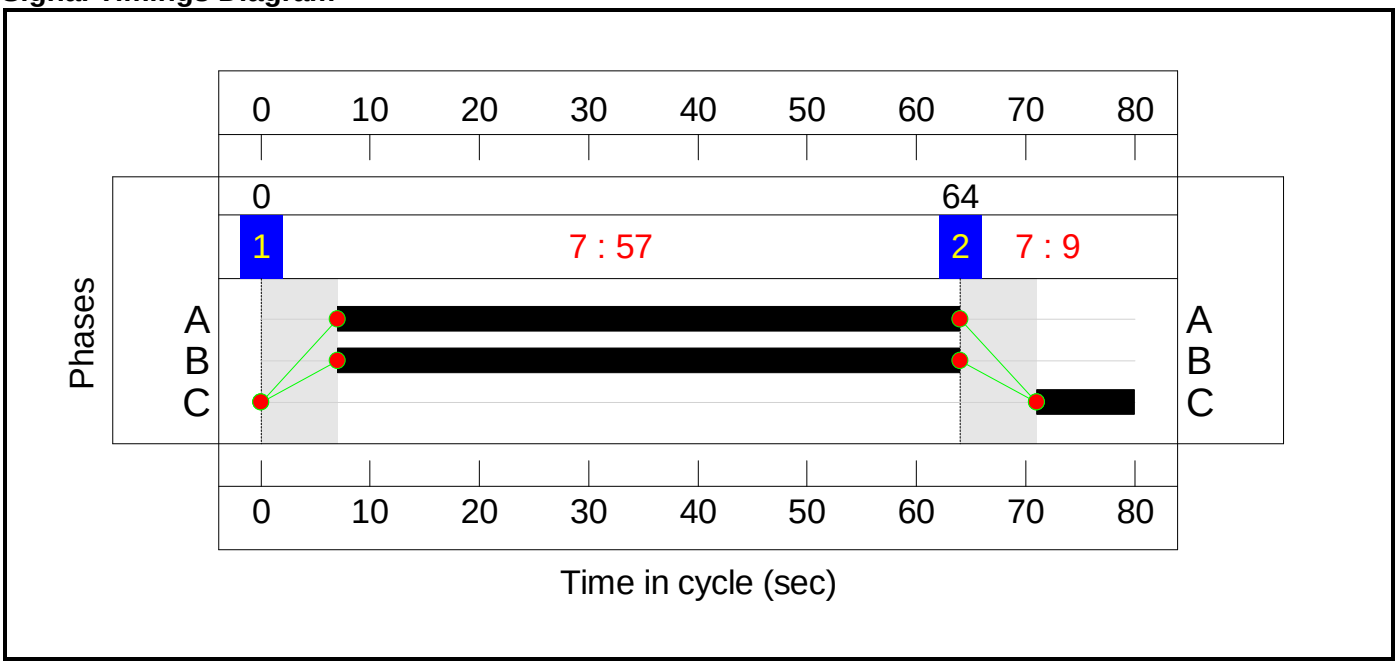
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	57	9
Change Point	0	64

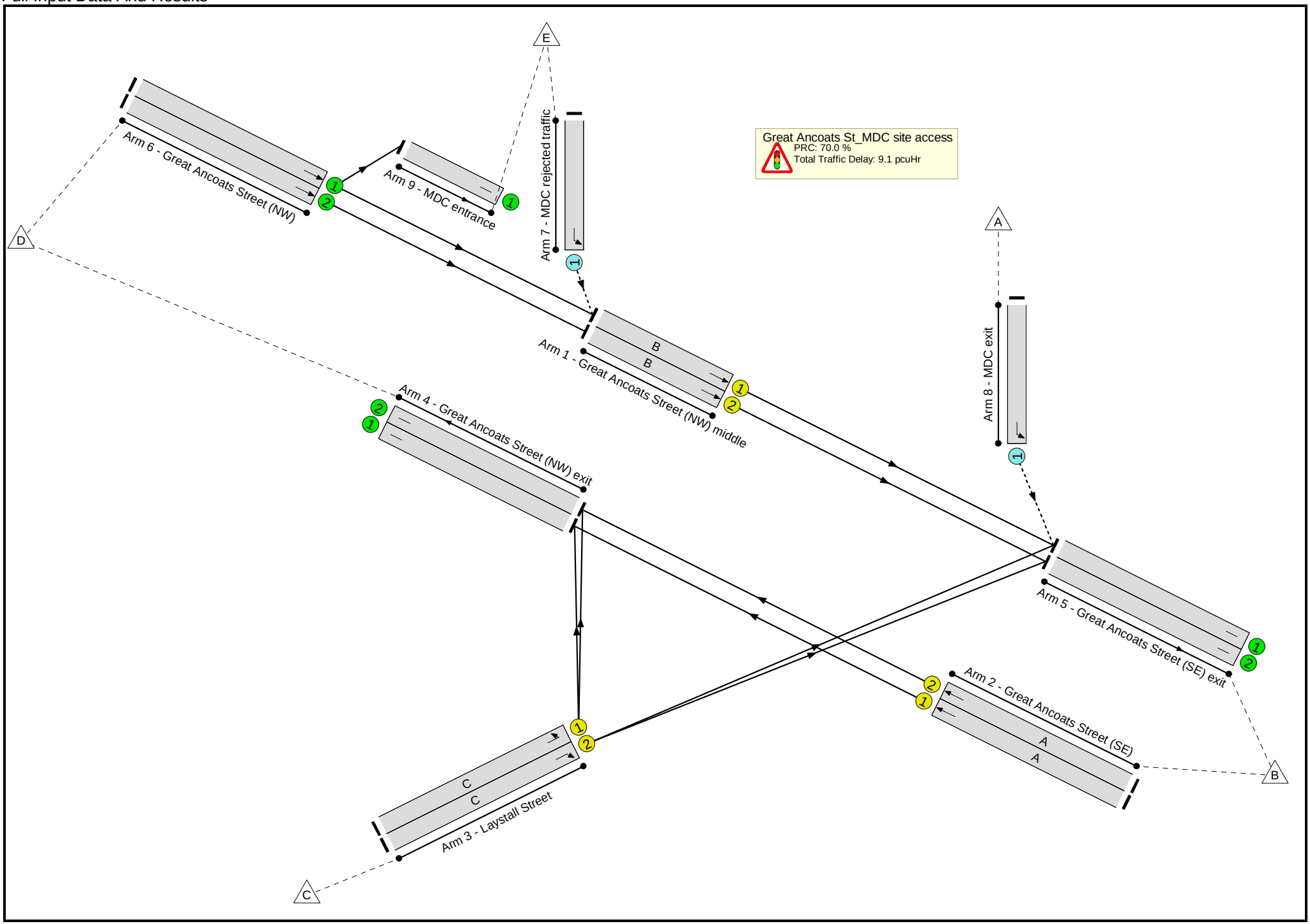
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**52.9%**
Great Ancoats St_MDC site access	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**52.9%**
1/1	Great Ancoats Street (NW) middle Ahead	U	N/A	N/A	B		1	57	-	756	1985	1439	52.5%
1/2	Great Ancoats Street (NW) middle Ahead	U	N/A	N/A	B		1	57	-	762	1985	1439	52.9%
2/1	Great Ancoats Street (SE) Ahead	U	N/A	N/A	A		1	57	-	560	1915	1388	40.3%
2/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	A		1	57	-	577	1955	1417	40.7%
3/1	Laystall Street Left	U	N/A	N/A	C		1	9	-	48	1738	217	22.1%
3/2	Laystall Street Right	U	N/A	N/A	C		1	9	-	116	1893	237	49.0%
4/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	566	1915	1915	29.6%
4/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	619	1955	1955	31.7%
5/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	806	1985	1985	40.6%
5/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	838	1985	1985	42.2%
6/1	Great Ancoats Street (NW) Ahead Ahead2	U	N/A	N/A	-		-	-	-	796	1948	1948	40.9%
6/2	Great Ancoats Street (NW) Ahead	U	N/A	N/A	-		-	-	-	762	1985	1985	38.4%
7/1	MDC rejected traffic Left	O	N/A	N/A	-		-	-	-	10	1492	372	2.7%
8/1	MDC exit Left	O	N/A	N/A	-		-	-	-	10	1492	381	2.6%

Full Input Data And Results

9/1	MDC entrance	U	N/A	N/A	-		-	-	-	50	Inf	Inf	0.0%
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)**
Network	**-**	**-**	**19**	**2**	**0**	**4.9**	**4.2**	**0.0**	**9.1**	**-**	**-**	**-**	**-**
Great Ancoats St_MDC site access	**-**	**-**	**19**	**2**	**0**	**4.9**	**4.2**	**0.0**	**9.1**	**-**	**-**	**-**	**-**
1/1	756	756	-	-	-	1.0	0.6	-	1.6	7.5	7.4	0.6	7.9
1/2	762	762	-	-	-	1.0	0.6	-	1.6	7.6	7.4	0.6	8.0
2/1	560	560	-	-	-	0.7	0.3	-	1.0	6.4	4.8	0.3	5.2
2/2	577	577	-	-	-	0.7	0.3	-	1.0	6.4	5.0	0.3	5.3
3/1	48	48	-	-	-	0.4	0.1	-	0.6	42.1	0.9	0.1	1.1
3/2	116	116	-	-	-	1.1	0.5	-	1.5	47.5	2.4	0.5	2.9
4/1	566	566	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
4/2	619	619	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/1	806	806	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
5/2	838	838	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
6/1	796	796	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3
6/2	762	762	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
7/1	10	10	10	0	0	0.0	0.0	-	0.0	5.0	0.0	0.0	0.0
8/1	10	10	9	2	0	0.0	0.0	-	0.0	6.1	0.0	0.0	0.1
9/1	50	50	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

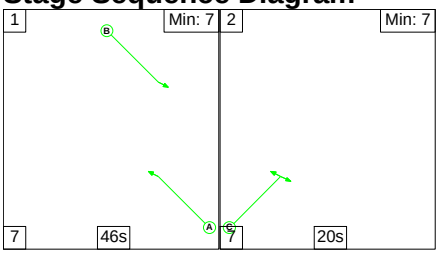
C1 PRC for Signalled Lanes (%): 70.0 Total Delay for Signalled Lanes (pcuHr): 7.31 Cycle Time (s): 80

PRC Over All Lanes (%): 70.0 Total Delay Over All Lanes(pcuHr): 9.14

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

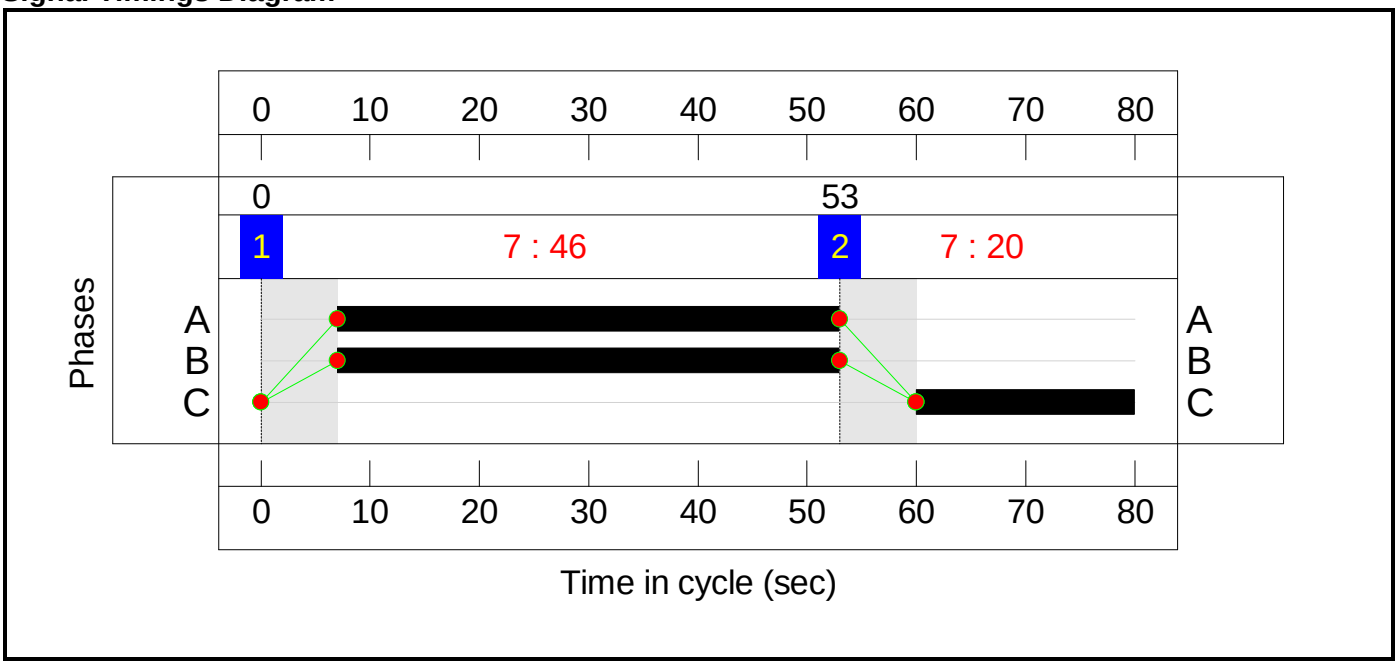
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	46	20
Change Point	0	53

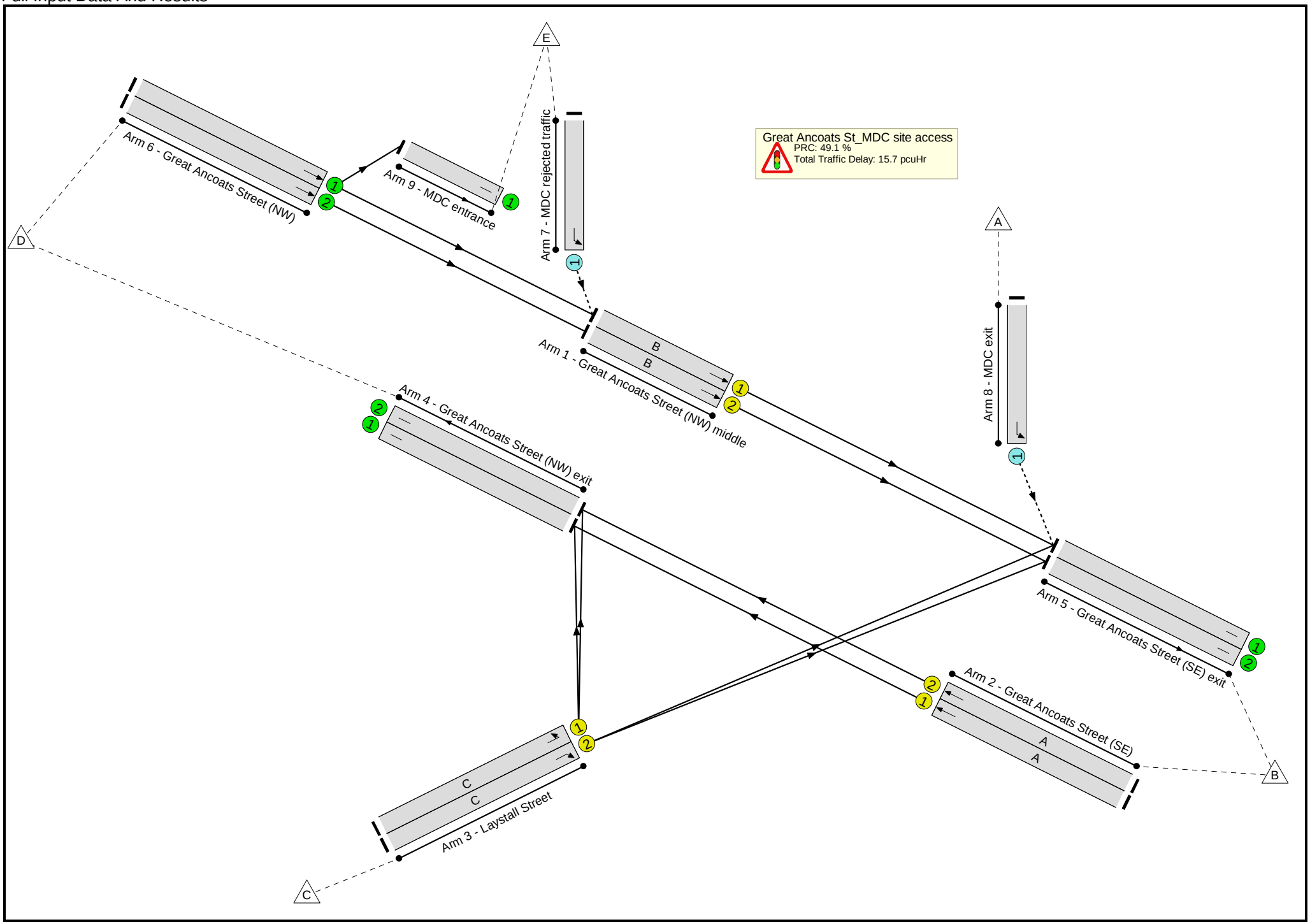
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.4%**
Great Ancoats St_MDC site access	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.4%**
1/1	Great Ancoats Street (NW) middle Ahead	U	N/A	N/A	B		1	46	-	703	1985	1166	60.3%
1/2	Great Ancoats Street (NW) middle Ahead	U	N/A	N/A	B		1	46	-	704	1985	1166	60.4%
2/1	Great Ancoats Street (SE) Ahead	U	N/A	N/A	A		1	46	-	560	1915	1125	49.8%
2/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	A		1	46	-	575	1955	1149	50.1%
3/1	Laystall Street Left	U	N/A	N/A	C		1	20	-	163	1738	456	35.7%
3/2	Laystall Street Right	U	N/A	N/A	C		1	20	-	286	1893	497	57.6%
4/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	619	1915	1915	32.3%
4/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	679	1955	1955	34.7%
5/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	868	1985	1985	43.7%
5/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	875	1985	1985	44.1%
6/1	Great Ancoats Street (NW) Ahead Ahead2	U	N/A	N/A	-		-	-	-	711	1977	1977	36.0%
6/2	Great Ancoats Street (NW) Ahead	U	N/A	N/A	-		-	-	-	704	1985	1985	35.5%
7/1	MDC rejected traffic Left	O	N/A	N/A	-		-	-	-	2	1492	404	0.5%
8/1	MDC exit Left	O	N/A	N/A	-		-	-	-	50	1492	378	13.2%

Full Input Data And Results

9/1	MDC entrance	U	N/A	N/A	-		-	-	-	10	Inf	Inf	0.0%
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)**
Network	**-**	**-**	**45**	**8**	**0**	**10.3**	**5.4**	**0.0**	**15.7**	**-**	**-**	**-**	**-**
Great Ancoats St_MDC site access	**-**	**-**	**45**	**8**	**0**	**10.3**	**5.4**	**0.0**	**15.7**	**-**	**-**	**-**	**-**
1/1	703	703	-	-	-	2.1	0.8	-	2.8	14.4	10.0	0.8	10.7
1/2	704	704	-	-	-	2.1	0.8	-	2.8	14.4	10.0	0.8	10.7
2/1	560	560	-	-	-	1.5	0.5	-	2.0	12.8	7.2	0.5	7.7
2/2	575	575	-	-	-	1.5	0.5	-	2.0	12.8	7.3	0.5	7.8
3/1	163	163	-	-	-	1.1	0.3	-	1.4	30.1	2.9	0.3	3.2
3/2	286	286	-	-	-	2.0	0.7	-	2.7	34.1	5.5	0.7	6.2
4/1	619	619	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
4/2	679	679	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
5/1	868	868	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
5/2	875	875	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
6/1	711	711	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
6/2	704	704	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
7/1	2	2	2	0	0	0.0	0.0	-	0.0	4.5	0.0	0.0	0.0
8/1	50	50	43	8	0	0.0	0.1	-	0.1	7.8	0.3	0.1	0.4
9/1	10	10	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 49.1 Total Delay for Signalled Lanes (pcuHr): 13.74 Cycle Time (s): 80

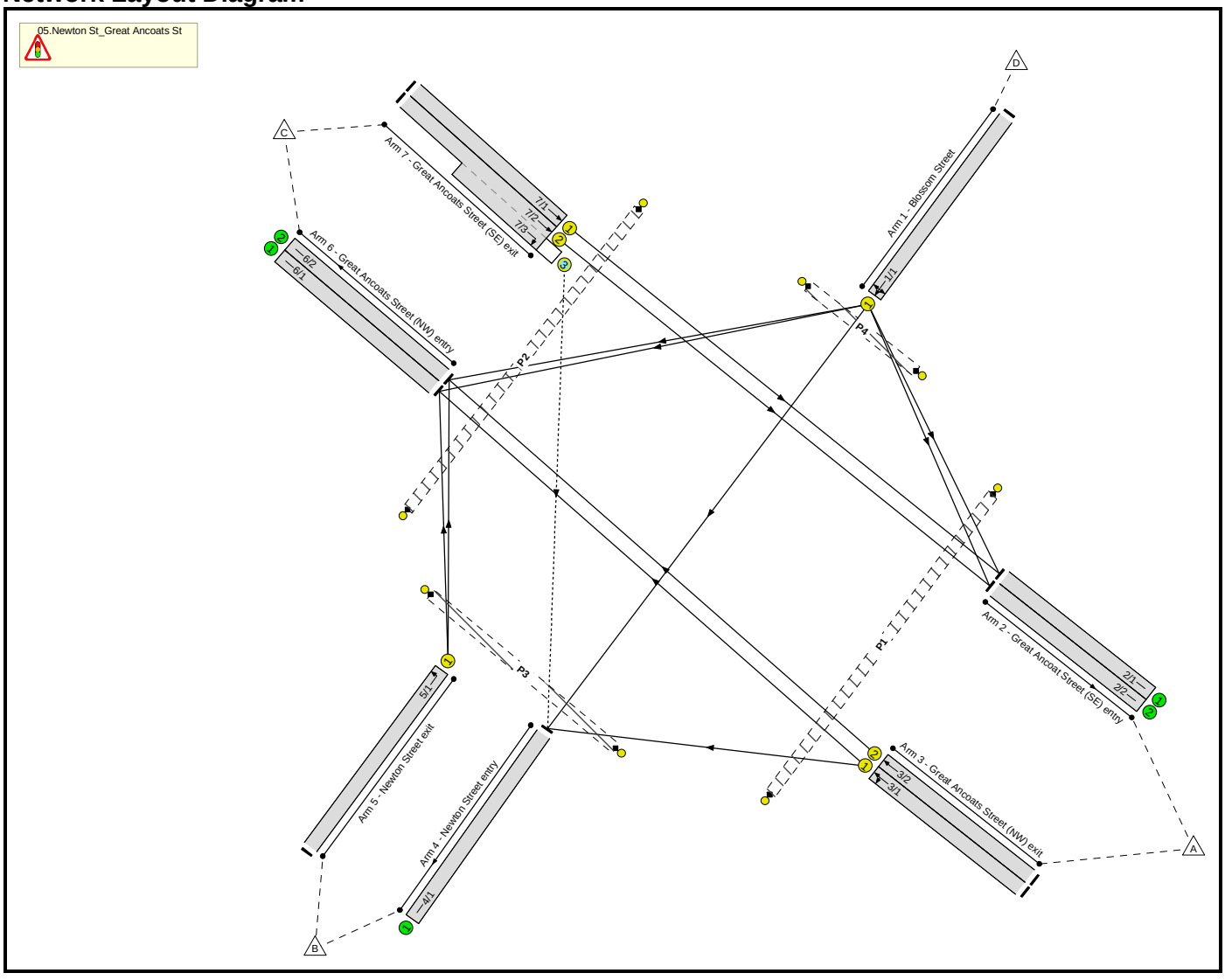
PRC Over All Lanes (%): 49.1 Total Delay Over All Lanes(pcuHr): 15.70

Full Input Data And Results

User and Project Details

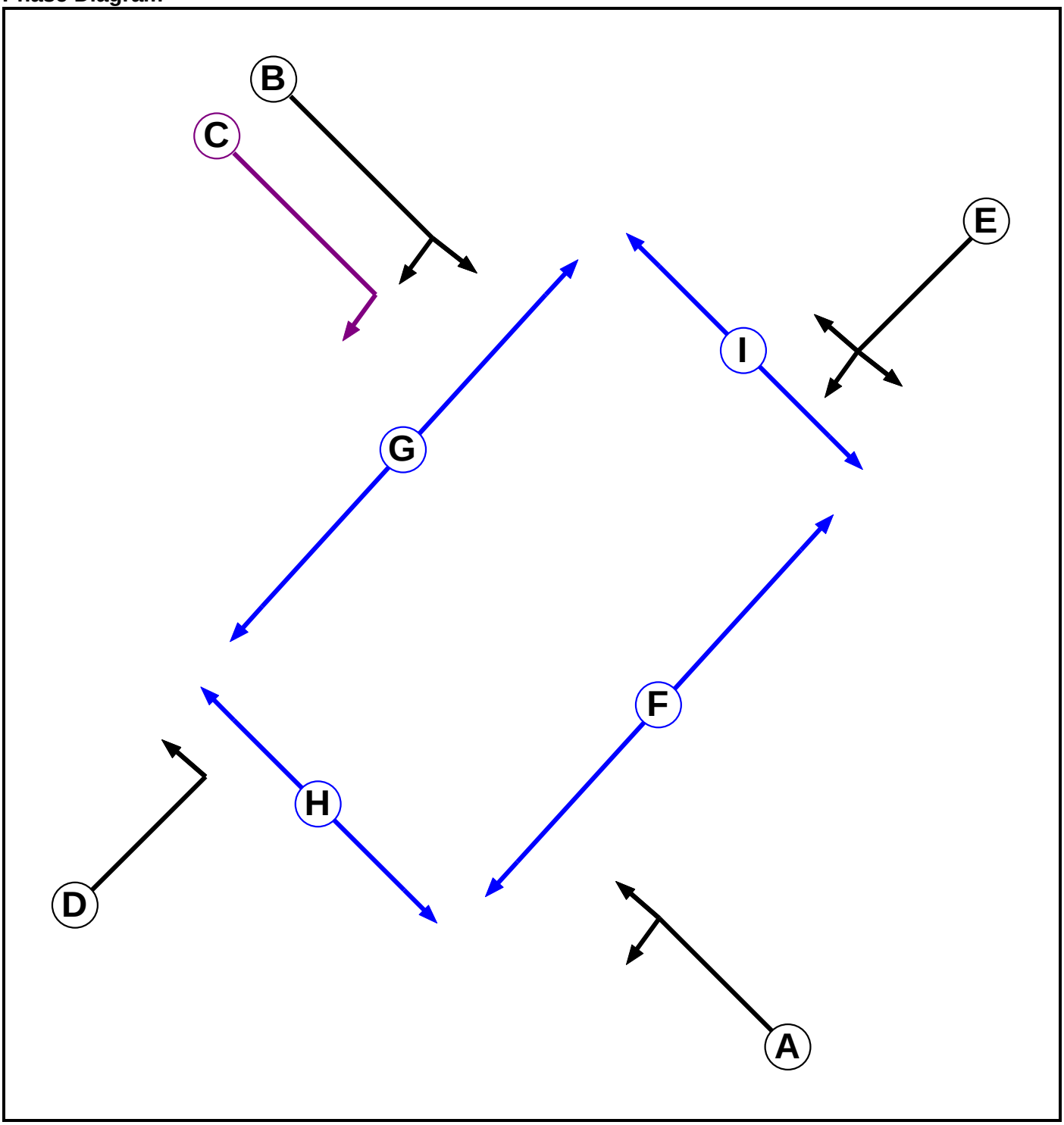
Project:	
Title:	
Location:	
Additional detail:	
File name:	05.Newton St_Great Ancoats St.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Ind. Arrow	B	3	3
D	Traffic		7	7
E	Traffic		7	7
F	Pedestrian		11	11
G	Pedestrian		12	12
H	Pedestrian		7	7
I	Pedestrian		5	5

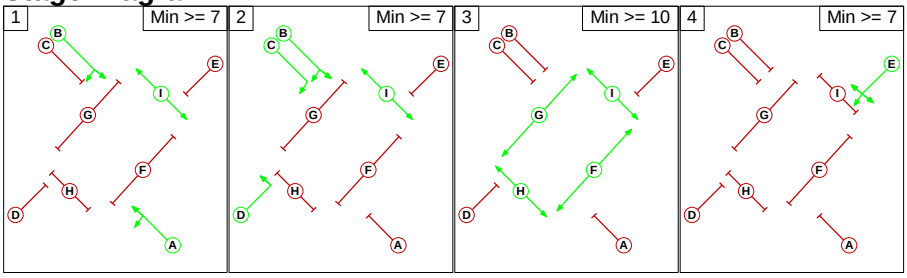
Phase Intergreens Matrix

		Starting Phase								
		A	B	C	D	E	F	G	H	I
Terminating Phase	A		-	5	6	6	5	8	7	-
	B	-		-	-	6	8	5	10	-
	C	7	-		-	6	-	5	10	-
	D	7	-	-		6	-	10	6	-
	E	8	6	6	6		9	10	9	6
	F	7	7	-	-	6		-	-	-
	G	9	9	9	8	8	-		-	-
	H	10	10	10	10	9	-	-		-
	I	-	-	-	-	6	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B I
2	B C D I
3	F G H I
4	E

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	F	Losing	3	3
3	1	G	Losing	1	1
3	4	F	Losing	3	3
3	4	G	Losing	1	1
3	4	I	Losing	3	3

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4
1		6	10	6
2	7		10	6
3	10	10		9
4	8	6	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: 05.Newton St_Great Ancoats St											
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)**
7/3 (Great Ancoats Street (SE) exit)	4/1 (Right)	1439	0	3/1	1.09	All	2.00	-	0.50	2	2.00
				3/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: 05.Newton St_Great Ancoats St

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 (Blossom Street)	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 2 Left Arm 4 Ahead Arm 6 Right	6.00 Inf 12.00
2/1 (Great Ancoat Street (SE) entry)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/2 (Great Ancoat Street (SE) entry)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Great Ancoats Street (NW) exit)	U	A	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 4 Left Arm 6 Ahead	8.00 Inf
3/2 (Great Ancoats Street (NW) exit)	U	A	2	3	60.0	Geom	-	3.20	0.00	N	Arm 6 Ahead	Inf
4/1 (Newton Street entry)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Newton Street exit)	U	D	2	3	60.0	Geom	-	4.30	0.00	Y	Arm 6 Left	8.00
6/1 (Great Ancoats Street (NW) entry)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2 (Great Ancoats Street (NW) entry)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Great Ancoats Street (SE) exit)	U	B	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 2 Ahead	Inf
7/2 (Great Ancoats Street (SE) exit)	U	B	2	3	60.0	Geom	-	3.30	0.00	N	Arm 2 Ahead	Inf
7/3 (Great Ancoats Street (SE) exit)	O	B C	2	3	11.0	Geom	-	3.20	0.00	Y	Arm 4 Right	16.00

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Base'	08:30	09:30	01:00	
2: 'PM Base'	17:00	18:00	01:00	
3: 'AM Proposed'	08:30	09:30	01:00	
4: 'PM Proposed'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	83	761	0	844
	B	0	0	74	0	74
	C	775	281	0	0	1056
	D	36	56	15	0	107
	Tot.	811	420	850	0	2081

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: 05.Newton St_Great Ancoats St	
1/1	107
2/1	657
2/2	154
3/1	393
3/2	451
4/1	420
5/1	74
6/1	355
6/2	495
7/1	639
7/2 (with short)	417(In) 136(Out)
7/3 (short)	281

Full Input Data And Results

Lane Saturation Flows

Junction: 05.Newton St_Great Ancoats St								
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 (Blossom Street)	3.00	0.00	Y	Arm 2 Left	6.00	33.6 %	1738	1738
				Arm 4 Ahead	Inf	52.3 %		
				Arm 6 Right	12.00	14.0 %		
2/1 (Great Ancoat Street (SE) entry Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Great Ancoat Street (SE) entry Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Great Ancoats Street (NW) exit)	3.30	0.00	Y	Arm 4 Left	8.00	21.1 %	1871	1871
				Arm 6 Ahead	Inf	78.9 %		
3/2 (Great Ancoats Street (NW) exit)	3.20	0.00	N	Arm 6 Ahead	Inf	100.0 %	2075	2075
4/1 (Newton Street entry Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Newton Street exit)	4.30	0.00	Y	Arm 6 Left	8.00	100.0 %	1722	1722
6/1 (Great Ancoats Street (NW) entry Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Great Ancoats Street (NW) entry Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Great Ancoats Street (SE) exit)	3.30	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1945	1945
7/2 (Great Ancoats Street (SE) exit)	3.30	0.00	N	Arm 2 Ahead	Inf	100.0 %	2085	2085
7/3 (Great Ancoats Street (SE) exit)	3.20	0.00	Y	Arm 4 Right	16.00	100.0 %	1769	1769

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	56	886	0	942
	B	0	0	186	0	186
	C	668	248	0	0	916
	D	27	30	33	0	90
	Tot.	695	334	1105	0	2134

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: 05.Newton St_Great Ancoats St	
1/1	90
2/1	542
2/2	153
3/1	446
3/2	496
4/1	334
5/1	186
6/1	500
6/2	605
7/1	528
7/2 (with short)	388(In) 140(Out)
7/3 (short)	248

Full Input Data And Results

Lane Saturation Flows

Junction: 05.Newton St_Great Ancoats St								
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 (Blossom Street)	3.00	0.00	Y	Arm 2 Left	6.00	30.0 %	1709	1709
				Arm 4 Ahead	Inf	33.3 %		
				Arm 6 Right	12.00	36.7 %		
2/1 (Great Ancoat Street (SE) entry Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Great Ancoat Street (SE) entry Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Great Ancoats Street (NW) exit)	3.30	0.00	Y	Arm 4 Left	8.00	12.6 %	1900	1900
				Arm 6 Ahead	Inf	87.4 %		
3/2 (Great Ancoats Street (NW) exit)	3.20	0.00	N	Arm 6 Ahead	Inf	100.0 %	2075	2075
4/1 (Newton Street entry Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Newton Street exit)	4.30	0.00	Y	Arm 6 Left	8.00	100.0 %	1722	1722
6/1 (Great Ancoats Street (NW) entry Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Great Ancoats Street (NW) entry Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Great Ancoats Street (SE) exit)	3.30	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1945	1945
7/2 (Great Ancoats Street (SE) exit)	3.30	0.00	N	Arm 2 Ahead	Inf	100.0 %	2085	2085
7/3 (Great Ancoats Street (SE) exit)	3.20	0.00	Y	Arm 4 Right	16.00	100.0 %	1769	1769

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	102	781	0	883
	B	0	0	75	0	75
	C	820	293	0	0	1113
	D	37	56	16	0	109
	Tot.	857	451	872	0	2180

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: AM Proposed
Junction: 05.Newton St_Great Ancoats St	
1/1	109
2/1	839
2/2	18
3/1	409
3/2	474
4/1	451
5/1	75
6/1	352
6/2	520
7/1	820
7/2 (with short)	293(In) 0(Out)
7/3 (short)	293

Full Input Data And Results

Lane Saturation Flows

Junction: 05.Newton St_Great Ancoats St								
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 (Blossom Street)	3.00	0.00	Y	Arm 2 Left	6.00	33.9 %	1736	1736
				Arm 4 Ahead	Inf	51.4 %		
				Arm 6 Right	12.00	14.7 %		
2/1 (Great Ancoat Street (SE) entry Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Great Ancoat Street (SE) entry Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Great Ancoats Street (NW) exit)	3.30	0.00	Y	Arm 4 Left	8.00	24.9 %	1858	1858
				Arm 6 Ahead	Inf	75.1 %		
3/2 (Great Ancoats Street (NW) exit)	3.20	0.00	N	Arm 6 Ahead	Inf	100.0 %	2075	2075
4/1 (Newton Street entry Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Newton Street exit)	4.30	0.00	Y	Arm 6 Left	8.00	100.0 %	1722	1722
6/1 (Great Ancoats Street (NW) entry Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Great Ancoats Street (NW) entry Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Great Ancoats Street (SE) exit)	3.30	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1945	1945
7/2 (Great Ancoats Street (SE) exit)	3.30	0.00	N	Arm 2 Ahead	Inf	0.0 %	2085	2085
7/3 (Great Ancoats Street (SE) exit)	3.20	0.00	Y	Arm 4 Right	16.00	100.0 %	1769	1769

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	57	910	0	967
	B	0	0	194	0	194
	C	669	249	0	0	918
	D	44	30	41	0	115
	Tot.	713	336	1145	0	2194

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: PM Proposed
Junction: 05.Newton St_Great Ancoats St	
1/1	115
2/1	608
2/2	105
3/1	458
3/2	509
4/1	336
5/1	194
6/1	519
6/2	626
7/1	586
7/2 (with short)	332(In) 83(Out)
7/3 (short)	249

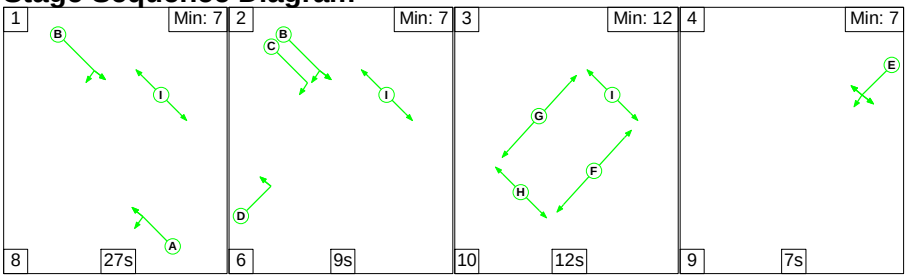
Full Input Data And Results

Lane Saturation Flows

Junction: 05.Newton St_Great Ancoats St								
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 (Blossom Street)	3.00	0.00	Y	Arm 2 Left	6.00	38.3 %	1680	1680
				Arm 4 Ahead	Inf	26.1 %		
				Arm 6 Right	12.00	35.7 %		
2/1 (Great Ancoat Street (SE) entry Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Great Ancoat Street (SE) entry Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Great Ancoats Street (NW) exit)	3.30	0.00	Y	Arm 4 Left	8.00	12.4 %	1901	1901
				Arm 6 Ahead	Inf	87.6 %		
3/2 (Great Ancoats Street (NW) exit)	3.20	0.00	N	Arm 6 Ahead	Inf	100.0 %	2075	2075
4/1 (Newton Street entry Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Newton Street exit)	4.30	0.00	Y	Arm 6 Left	8.00	100.0 %	1722	1722
6/1 (Great Ancoats Street (NW) entry Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Great Ancoats Street (NW) entry Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Great Ancoats Street (SE) exit)	3.30	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1945	1945
7/2 (Great Ancoats Street (SE) exit)	3.30	0.00	N	Arm 2 Ahead	Inf	100.0 %	2085	2085
7/3 (Great Ancoats Street (SE) exit)	3.20	0.00	Y	Arm 4 Right	16.00	100.0 %	1769	1769

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

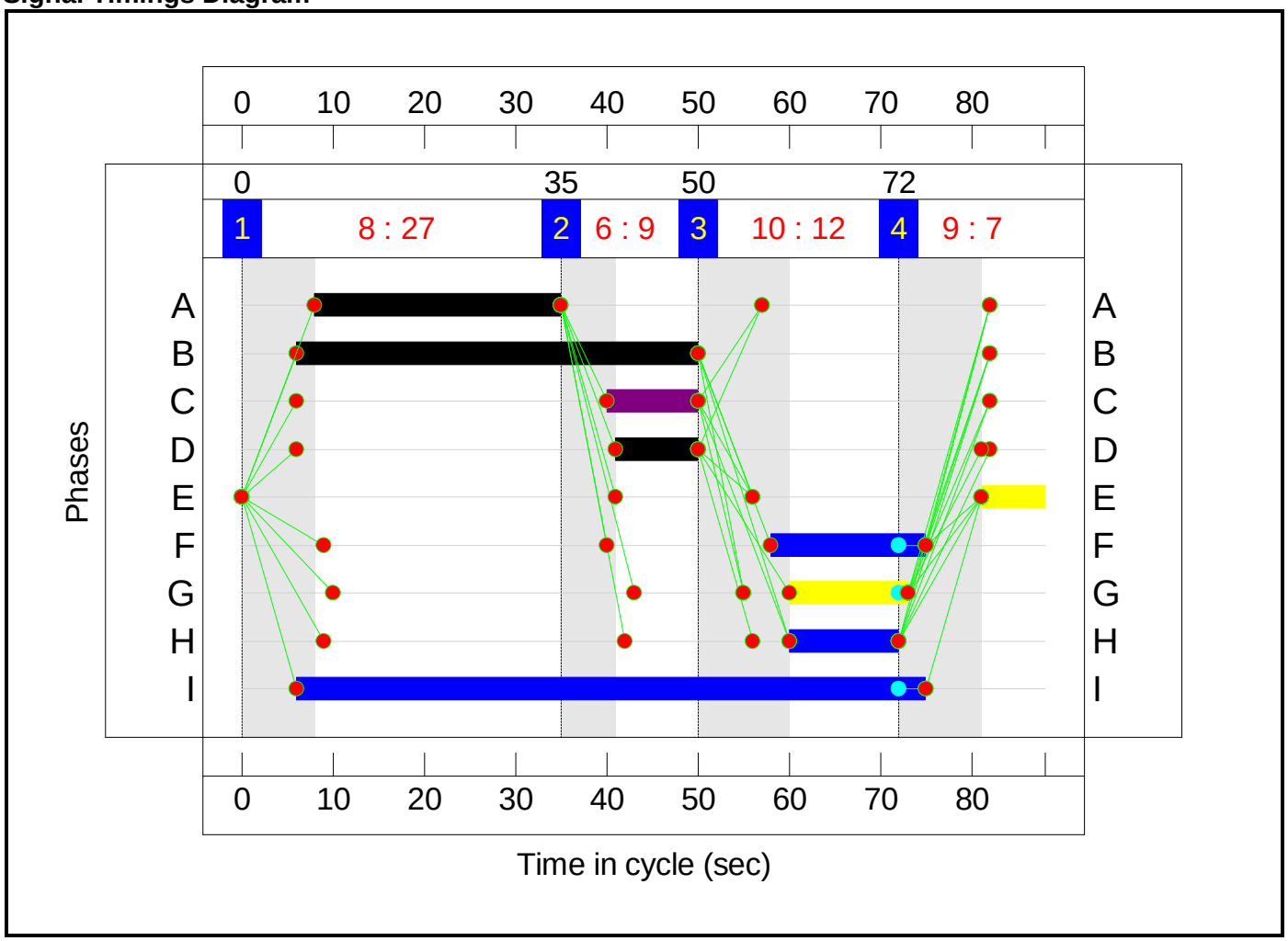


Full Input Data And Results

Stage Timings

Stage	1	2	3	4
Duration	27	9	12	7
Change Point	0	35	50	72

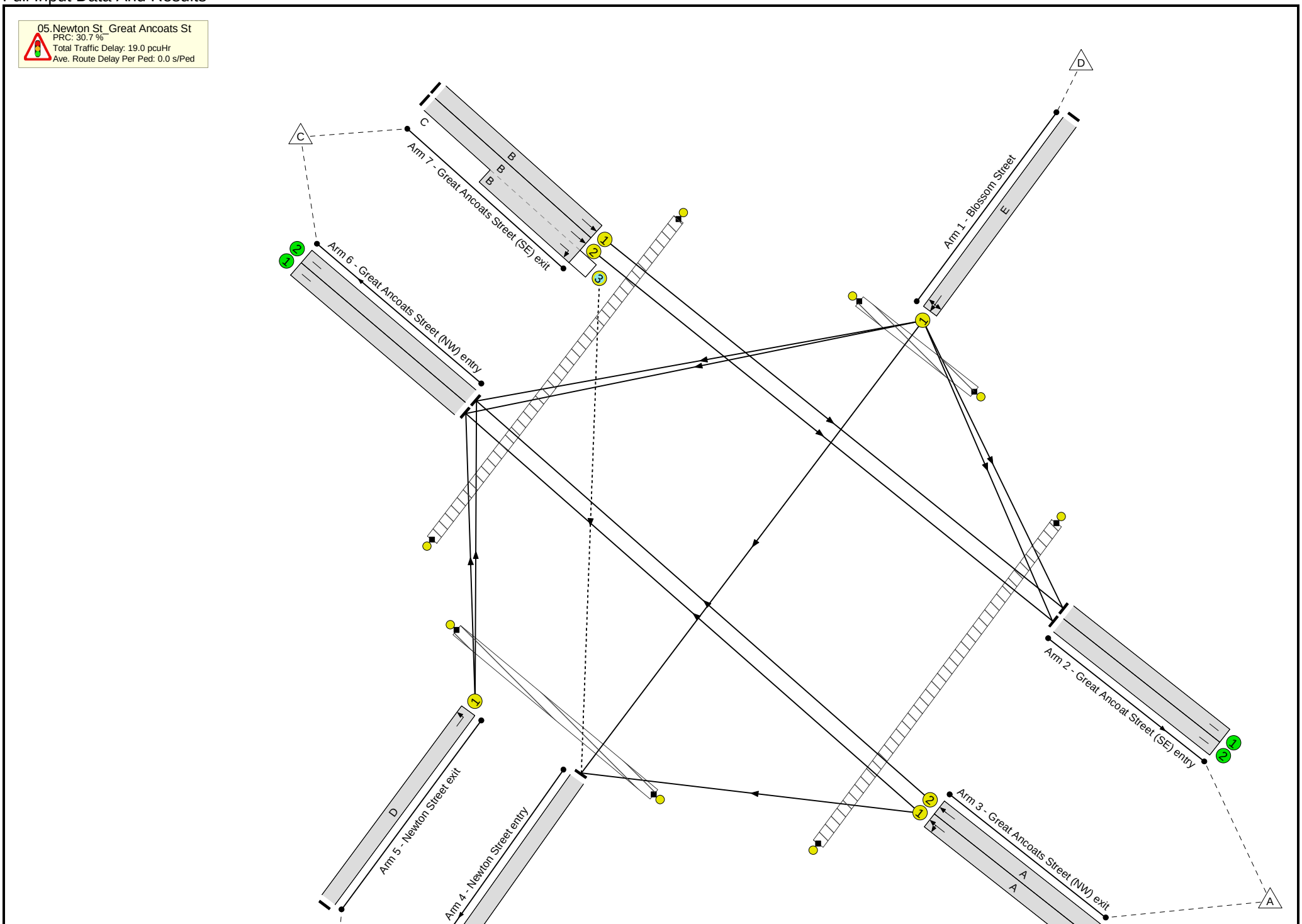
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**68.9%**
05.Newton St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**68.9%**
1/1	Blossom Street Left Ahead Right	U	N/A	N/A	E		1	7	-	107	1738	158	67.7%
2/1	Great Ancoat Street (SE) entry	U	N/A	N/A	-		-	-	-	657	Inf	Inf	0.0%
2/2	Great Ancoat Street (SE) entry	U	N/A	N/A	-		-	-	-	154	Inf	Inf	0.0%
3/1	Great Ancoats Street (NW) exit Left Ahead	U	N/A	N/A	A		1	27	-	393	1871	595	66.0%
3/2	Great Ancoats Street (NW) exit Ahead	U	N/A	N/A	A		1	27	-	451	2075	660	68.3%
4/1	Newton Street entry	U	N/A	N/A	-		-	-	-	420	Inf	Inf	0.0%
5/1	Newton Street exit Left	U	N/A	N/A	D		1	9	-	74	1722	196	37.8%
6/1	Great Ancoats Street (NW) entry	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
6/2	Great Ancoats Street (NW) entry	U	N/A	N/A	-		-	-	-	495	Inf	Inf	0.0%
7/1	Great Ancoats Street (SE) exit Ahead	U	N/A	N/A	B		1	44	-	639	1945	995	64.2%
7/2+7/3	Great Ancoats Street (SE) exit Ahead Right	U+O	N/A	N/A	B	C	1	44	10	417	2085:1769	197+408	68.9 : 68.9%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	17	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	13	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	12	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	69	-	0	-	0	0.0%

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)
Network	**-**	**-**	**65**	**210**	**6**	**13.0**	**5.3**	**0.7**	**19.0**	**-**	**-**	**-**	**-**
05.Newton St_Great Ancoats St	**-**	**-**	**65**	**210**	**6**	**13.0**	**5.3**	**0.7**	**19.0**	**-**	**-**	**-**	**-**
1/1	107	107	-	-	-	1.2	1.0	-	2.2	72.7	2.5	1.0	3.5
2/1	657	657	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	154	154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	393	393	-	-	-	2.8	1.0	-	3.8	34.7	8.2	1.0	9.1
3/2	451	451	-	-	-	3.3	1.1	-	4.3	34.7	9.5	1.1	10.6
4/1	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	74	74	-	-	-	0.7	0.3	-	1.0	50.9	1.7	0.3	2.0
6/1	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	495	495	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	639	639	-	-	-	2.8	0.9	-	3.7	20.7	11.4	0.9	12.3
7/2+7/3	417	417	65	210	6	2.2	1.1	0.7	4.0	34.7	6.2	1.1	7.3
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

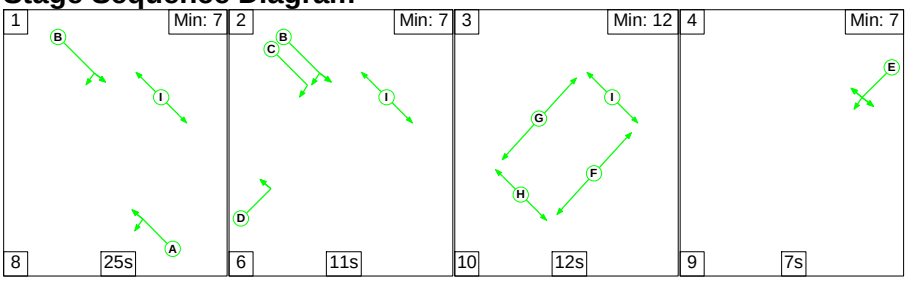
C1 PRC for Signalled Lanes (%): 30.7 Total Delay for Signalled Lanes (pcuHr): 19.02 Cycle Time (s): 88

PRC Over All Lanes (%): 30.7 Total Delay Over All Lanes(pcuHr): 19.02

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

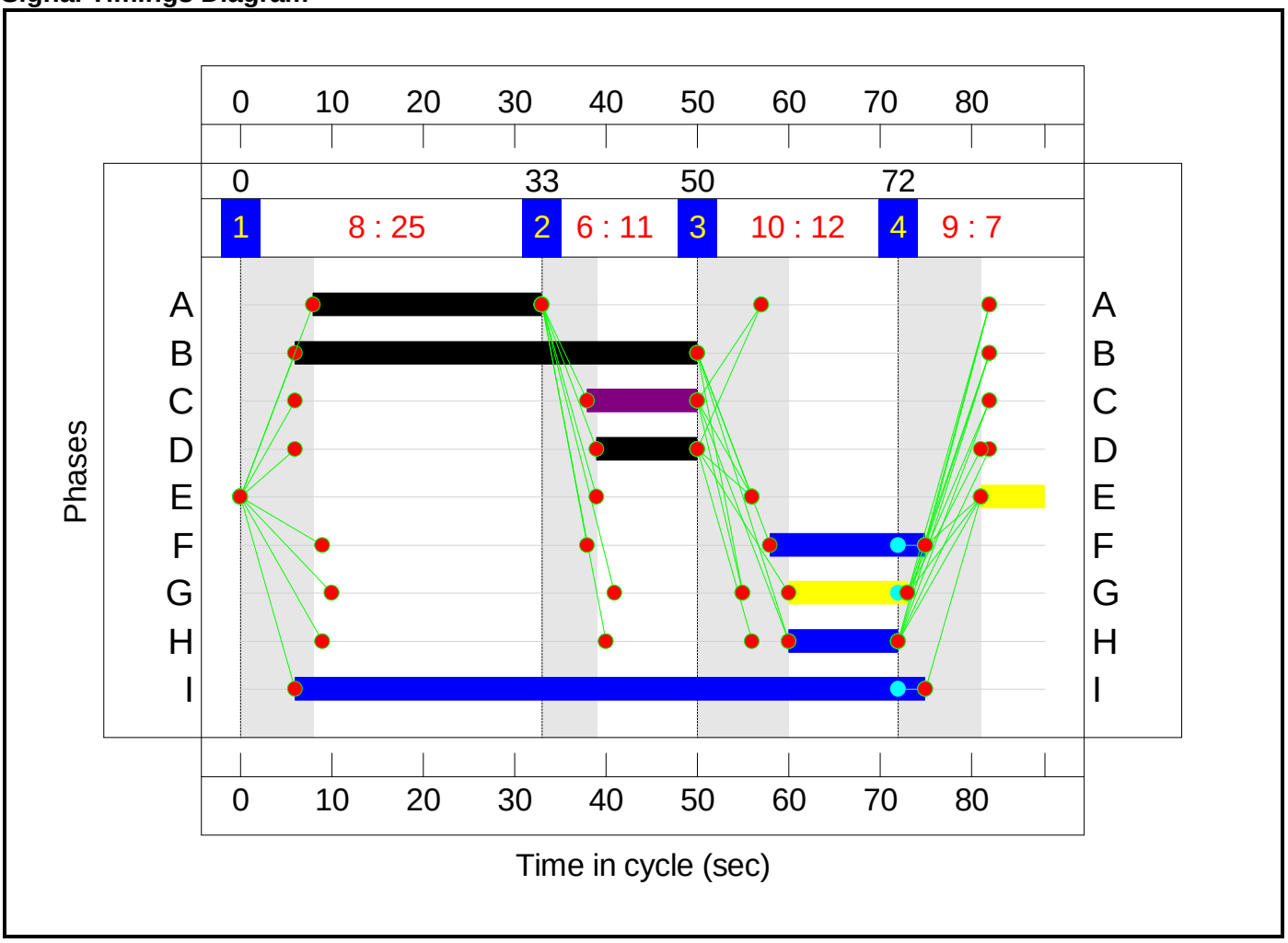
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	25	11	12	7
Change Point	0	33	50	72

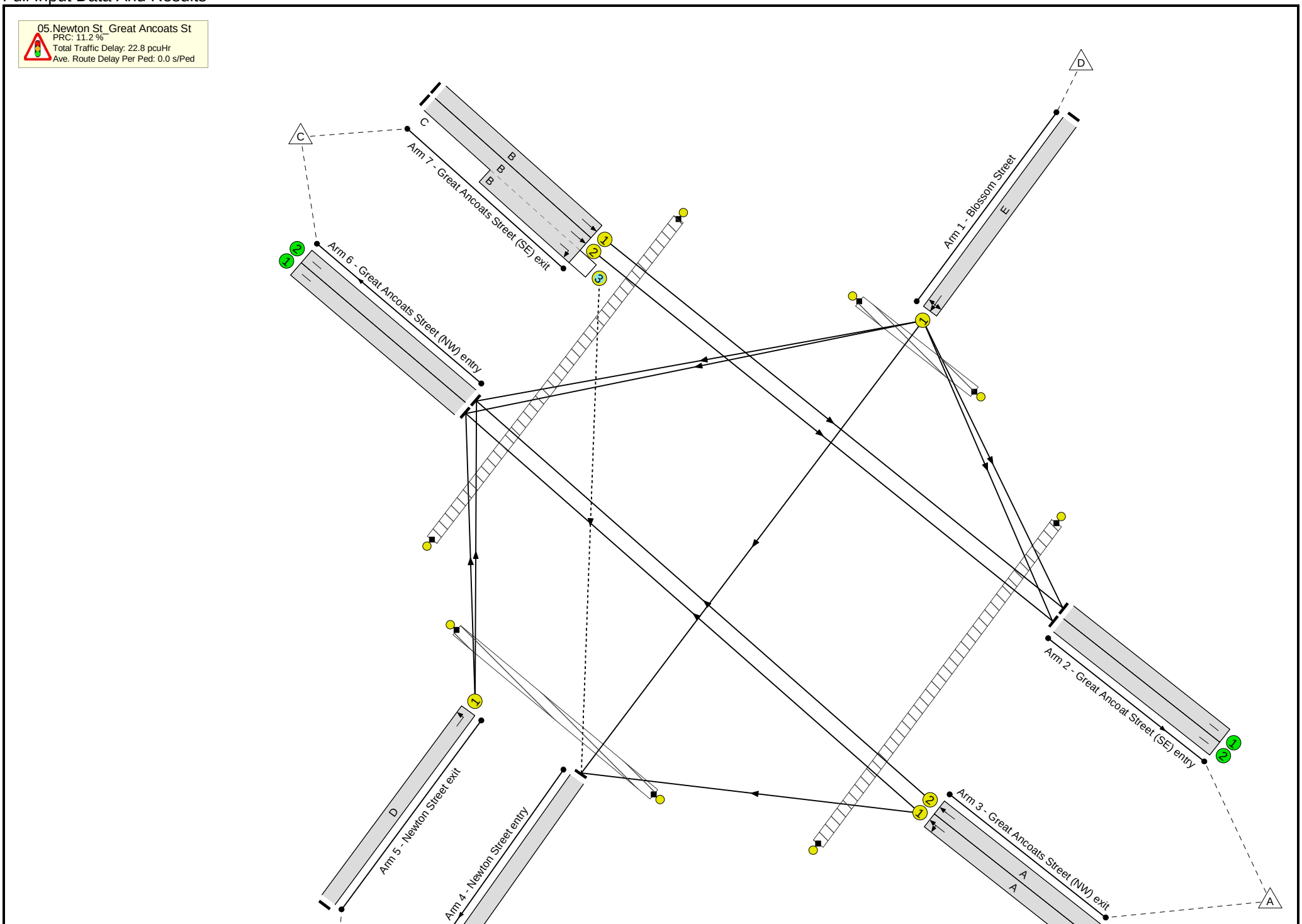
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**80.9%**
05.Newton St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**80.9%**
1/1	Blossom Street Left Ahead Right	U	N/A	N/A	E		1	7	-	90	1709	155	57.9%
2/1	Great Ancoat Street (SE) entry	U	N/A	N/A	-		-	-	-	542	Inf	Inf	0.0%
2/2	Great Ancoat Street (SE) entry	U	N/A	N/A	-		-	-	-	153	Inf	Inf	0.0%
3/1	Great Ancoats Street (NW) exit Left Ahead	U	N/A	N/A	A		1	25	-	446	1900	561	79.4%
3/2	Great Ancoats Street (NW) exit Ahead	U	N/A	N/A	A		1	25	-	496	2075	613	80.9%
4/1	Newton Street entry	U	N/A	N/A	-		-	-	-	334	Inf	Inf	0.0%
5/1	Newton Street exit Left	U	N/A	N/A	D		1	11	-	186	1722	235	79.2%
6/1	Great Ancoats Street (NW) entry	U	N/A	N/A	-		-	-	-	500	Inf	Inf	0.0%
6/2	Great Ancoats Street (NW) entry	U	N/A	N/A	-		-	-	-	605	Inf	Inf	0.0%
7/1	Great Ancoats Street (SE) exit Ahead	U	N/A	N/A	B		1	44	-	528	1945	995	53.1%
7/2+7/3	Great Ancoats Street (SE) exit Ahead Right	U+O	N/A	N/A	B	C	1	44	12	388	2085:1769	232+411	60.3 : 60.3%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	17	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	13	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	12	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	69	-	0	-	0	0.0%

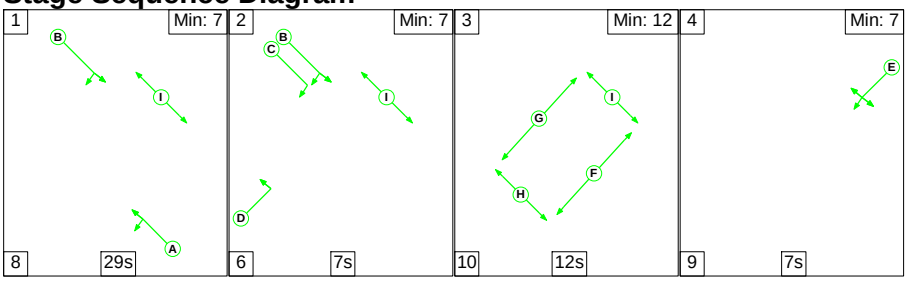
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**28**	**214**	**6**	**14.4**	**7.7**	**0.7**	**22.8**	**-**	**-**	**-**	**-**
05.Newton St_Great Ancoats St	**-**	**-**	**28**	**214**	**6**	**14.4**	**7.7**	**0.7**	**22.8**	**-**	**-**	**-**	**-**
1/1	90	90	-	-	-	1.0	0.7	-	1.6	65.4	2.1	0.7	2.8
2/1	542	542	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	153	153	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	446	446	-	-	-	3.5	1.9	-	5.4	43.7	10.0	1.9	11.9
3/2	496	496	-	-	-	4.0	2.0	-	6.0	43.6	11.2	2.0	13.2
4/1	334	334	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	186	186	-	-	-	1.9	1.8	-	3.7	71.2	4.4	1.8	6.2
6/1	500	500	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	605	605	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	528	528	-	-	-	2.1	0.6	-	2.7	18.3	8.7	0.6	9.2
7/2+7/3	388	388	28	214	6	1.9	0.8	0.7	3.4	31.4	5.4	0.8	6.1
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 11.2 Total Delay for Signalled Lanes (pcuHr): 22.78 Cycle Time (s): 88
PRC Over All Lanes (%): 11.2 Total Delay Over All Lanes(pcuHr): 22.78

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

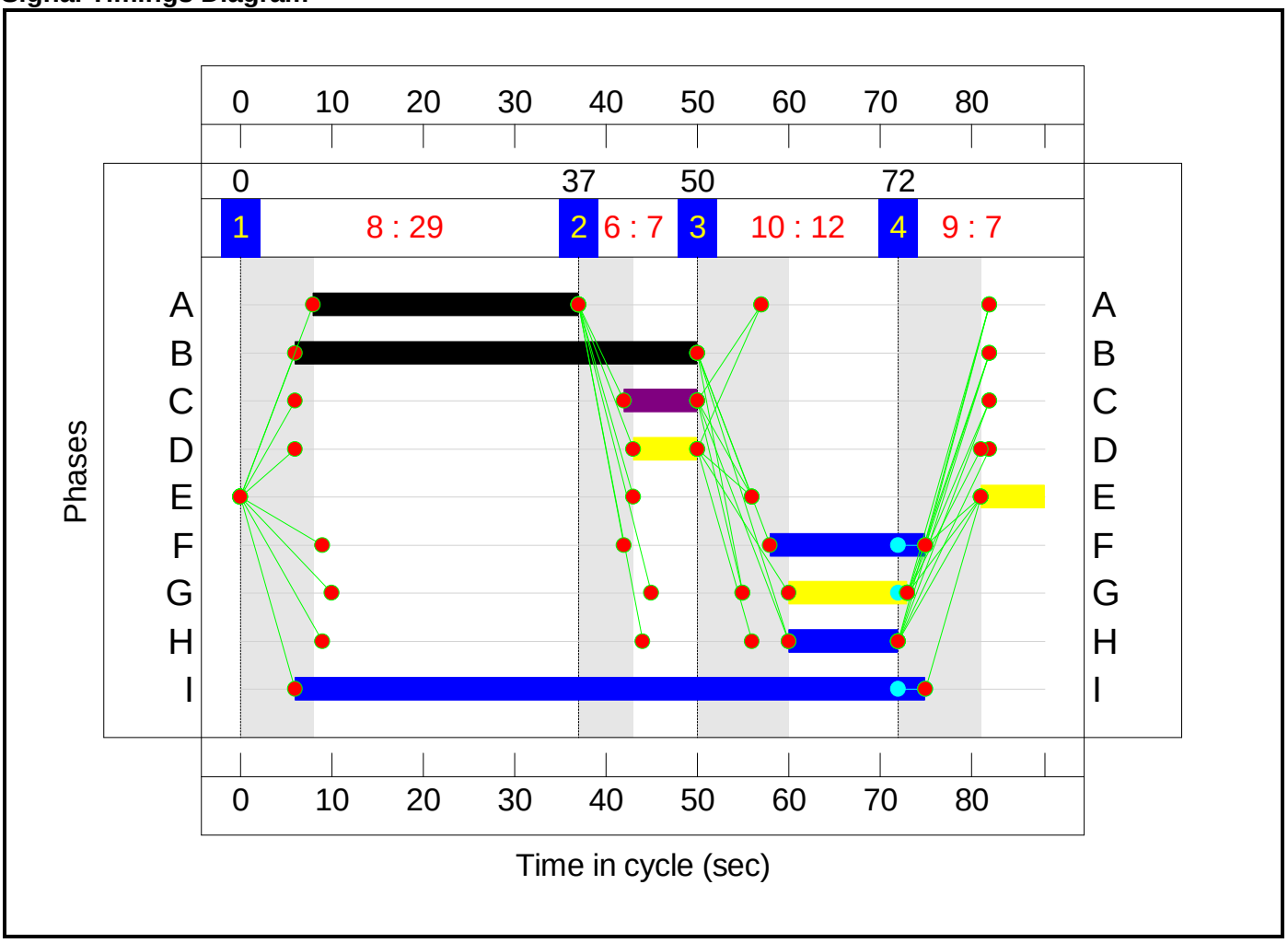
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	29	7	12	7
Change Point	0	37	50	72

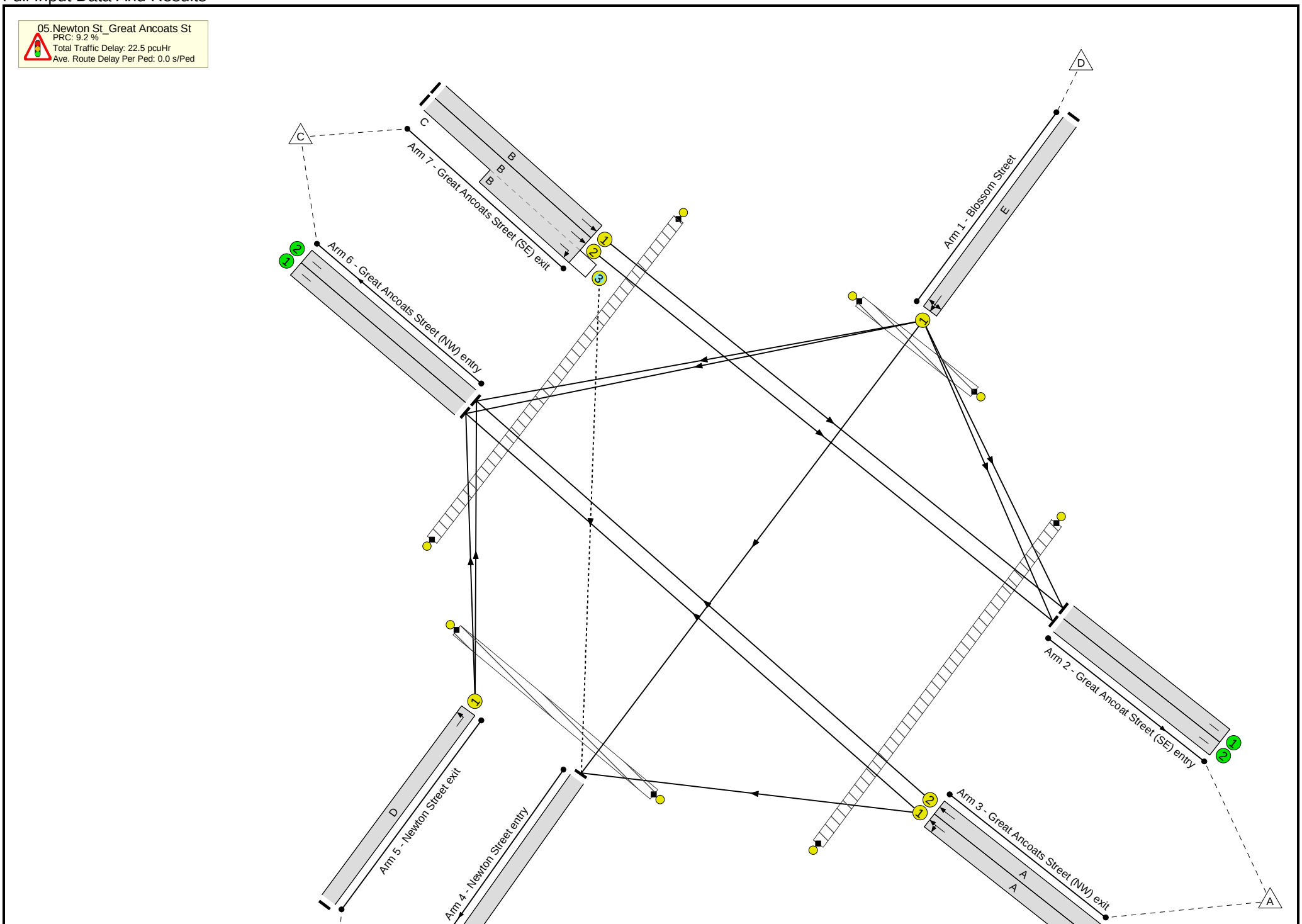
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.4%**
05.Newton St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.4%**
1/1	Blossom Street Left Ahead Right	U	N/A	N/A	E		1	7	-	109	1736	158	69.1%
2/1	Great Ancoat Street (SE) entry	U	N/A	N/A	-		-	-	-	839	Inf	Inf	0.0%
2/2	Great Ancoat Street (SE) entry	U	N/A	N/A	-		-	-	-	18	Inf	Inf	0.0%
3/1	Great Ancoats Street (NW) exit Left Ahead	U	N/A	N/A	A		1	29	-	409	1858	633	64.6%
3/2	Great Ancoats Street (NW) exit Ahead	U	N/A	N/A	A		1	29	-	474	2075	707	67.0%
4/1	Newton Street entry	U	N/A	N/A	-		-	-	-	451	Inf	Inf	0.0%
5/1	Newton Street exit Left	U	N/A	N/A	D		1	7	-	75	1722	157	47.9%
6/1	Great Ancoats Street (NW) entry	U	N/A	N/A	-		-	-	-	352	Inf	Inf	0.0%
6/2	Great Ancoats Street (NW) entry	U	N/A	N/A	-		-	-	-	520	Inf	Inf	0.0%
7/1	Great Ancoats Street (SE) exit Ahead	U	N/A	N/A	B		1	44	-	820	1945	995	82.4%
7/2+7/3	Great Ancoats Street (SE) exit Ahead Right	U+O	N/A	N/A	B	C	1	44	8	293	2085:1769	0+370	0.0 : 79.2%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	17	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	13	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	12	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	69	-	0	-	0	0.0%

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)
Network	**-**	**-**	**67**	**219**	**7**	**14.2**	**7.5**	**0.8**	**22.5**	**-**	**-**	**-**	**-**
05.Newton St_Great Ancoats St	**-**	**-**	**67**	**219**	**7**	**14.2**	**7.5**	**0.8**	**22.5**	**-**	**-**	**-**	**-**
1/1	109	109	-	-	-	1.2	1.1	-	2.2	74.1	2.6	1.1	3.6
2/1	839	839	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	18	18	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	409	409	-	-	-	2.8	0.9	-	3.7	32.5	8.4	0.9	9.3
3/2	474	474	-	-	-	3.3	1.0	-	4.3	32.4	9.9	1.0	10.9
4/1	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	75	75	-	-	-	0.8	0.5	-	1.2	59.9	1.7	0.5	2.2
6/1	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	820	820	-	-	-	4.1	2.3	-	6.4	28.2	16.9	2.3	19.1
7/2+7/3	293	293	67	219	7	2.0	1.8	0.8	4.6	56.3	6.8	1.8	8.6
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

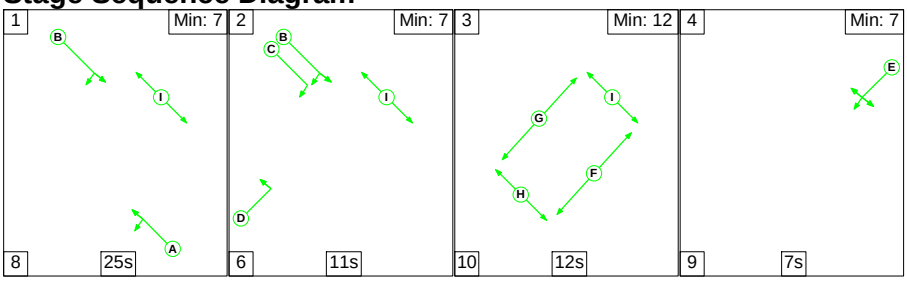
C1 PRC for Signalled Lanes (%): 9.2 Total Delay for Signalled Lanes (pcuHr): 22.46 Cycle Time (s): 88

PRC Over All Lanes (%): 9.2 Total Delay Over All Lanes(pcuHr): 22.46

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

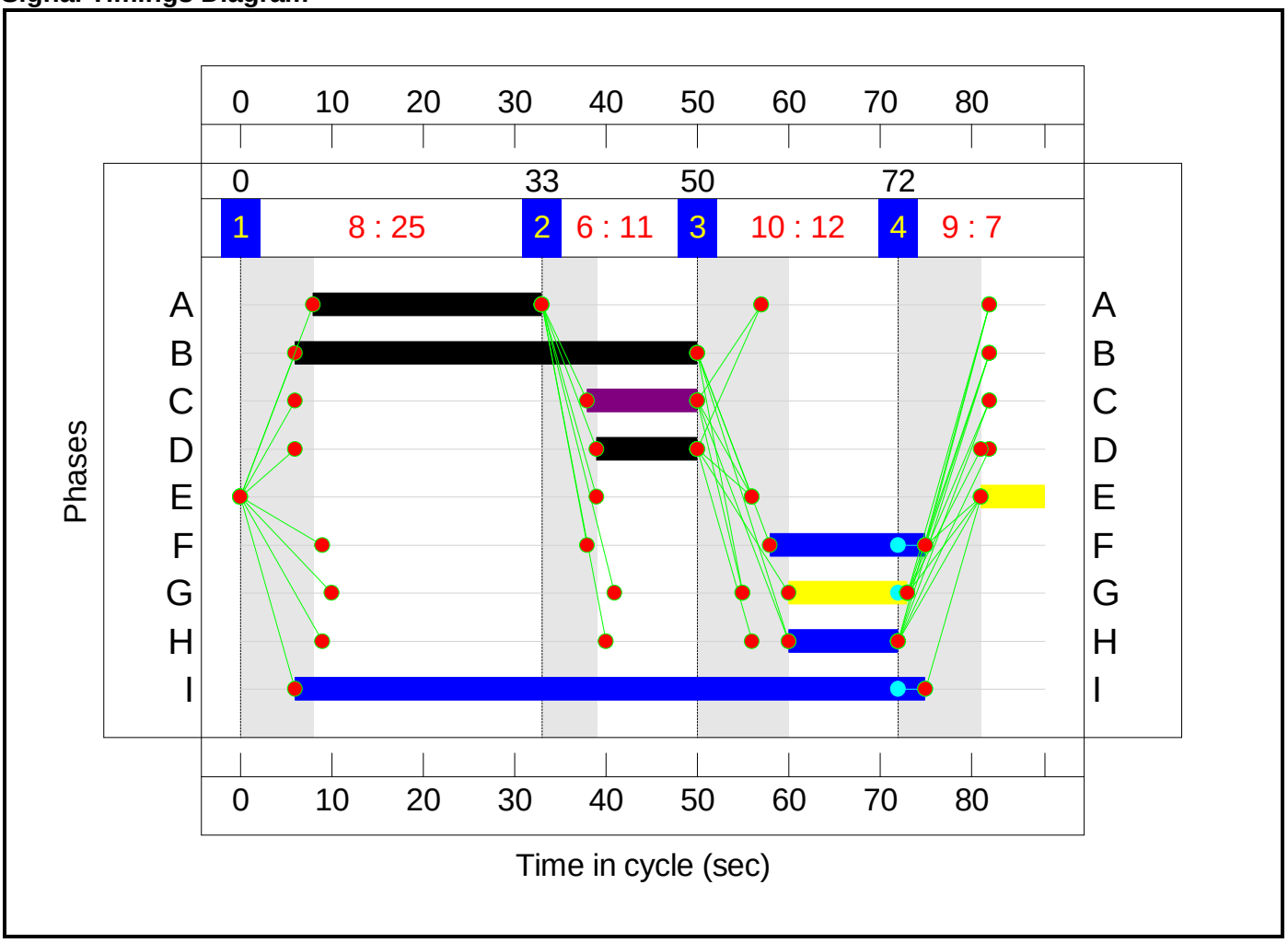
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	25	11	12	7
Change Point	0	33	50	72

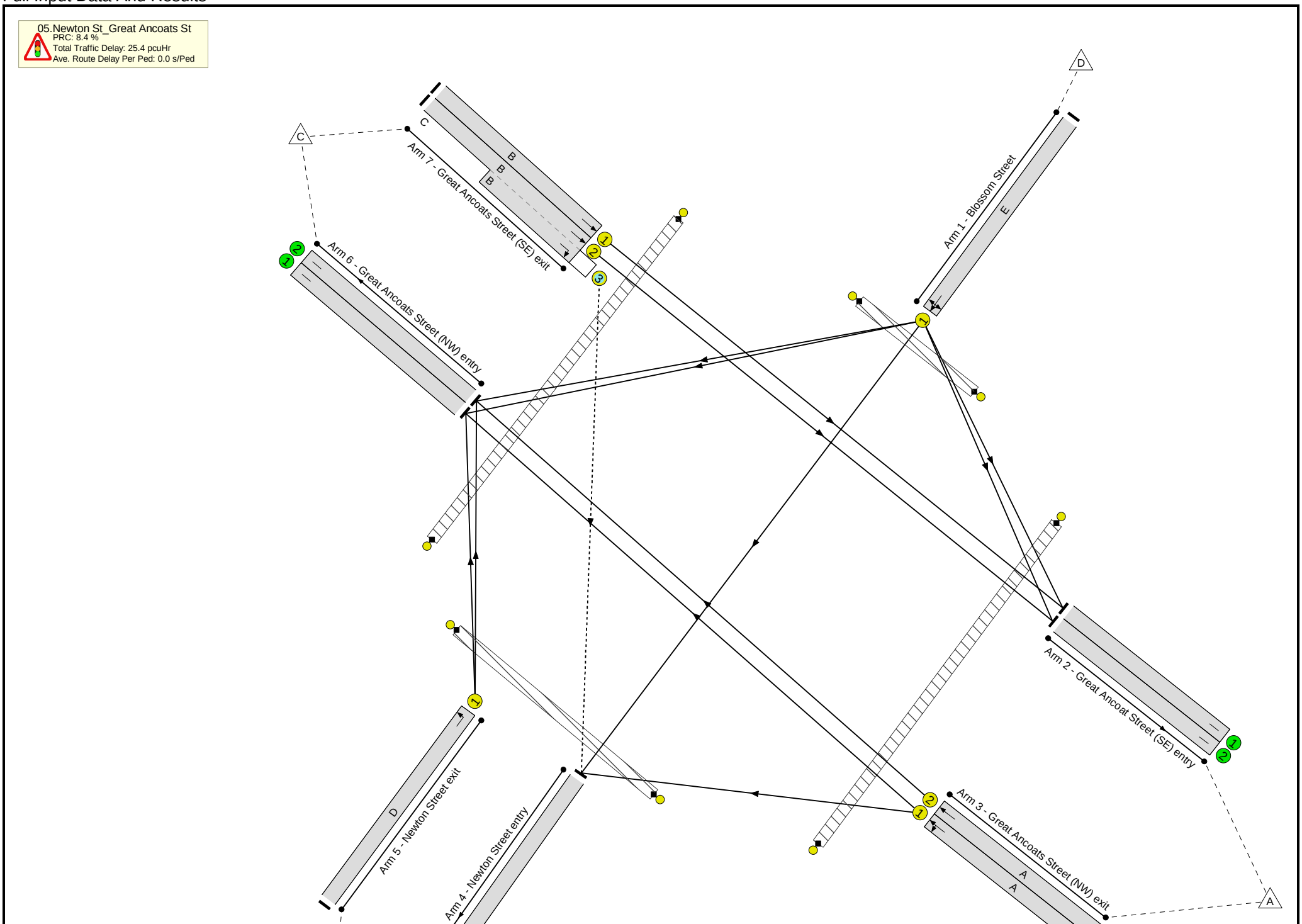
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.0%**
05.Newton St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.0%**
1/1	Blossom Street Left Ahead Right	U	N/A	N/A	E		1	7	-	115	1680	153	75.3%
2/1	Great Ancoat Street (SE) entry	U	N/A	N/A	-		-	-	-	608	Inf	Inf	0.0%
2/2	Great Ancoat Street (SE) entry	U	N/A	N/A	-		-	-	-	105	Inf	Inf	0.0%
3/1	Great Ancoats Street (NW) exit Left Ahead	U	N/A	N/A	A		1	25	-	458	1901	562	81.5%
3/2	Great Ancoats Street (NW) exit Ahead	U	N/A	N/A	A		1	25	-	509	2075	613	83.0%
4/1	Newton Street entry	U	N/A	N/A	-		-	-	-	336	Inf	Inf	0.0%
5/1	Newton Street exit Left	U	N/A	N/A	D		1	11	-	194	1722	235	82.6%
6/1	Great Ancoats Street (NW) entry	U	N/A	N/A	-		-	-	-	519	Inf	Inf	0.0%
6/2	Great Ancoats Street (NW) entry	U	N/A	N/A	-		-	-	-	626	Inf	Inf	0.0%
7/1	Great Ancoats Street (SE) exit Ahead	U	N/A	N/A	B		1	44	-	586	1945	995	58.9%
7/2+7/3	Great Ancoats Street (SE) exit Ahead Right	U+O	N/A	N/A	B	C	1	44	12	332	2085:1769	136+407	61.2 : 61.2%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	17	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	13	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	12	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	69	-	0	-	0	0.0%

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)
Network	**-**	**-**	**23**	**220**	**6**	**15.2**	**9.5**	**0.7**	**25.4**	**-**	**-**	**-**	**-**
05.Newton St_Great Ancoats St	**-**	**-**	**23**	**220**	**6**	**15.2**	**9.5**	**0.7**	**25.4**	**-**	**-**	**-**	**-**
1/1	115	115	-	-	-	1.2	1.4	-	2.7	83.4	2.7	1.4	4.1
2/1	608	608	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	105	105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	458	458	-	-	-	3.7	2.1	-	5.8	45.5	10.3	2.1	12.4
3/2	509	509	-	-	-	4.1	2.3	-	6.4	45.5	11.6	2.3	13.9
4/1	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	194	194	-	-	-	2.0	2.1	-	4.1	76.9	4.6	2.1	6.7
6/1	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	626	626	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	586	586	-	-	-	2.4	0.7	-	3.2	19.4	9.9	0.7	10.6
7/2+7/3	332	332	23	220	6	1.8	0.8	0.7	3.3	35.3	5.4	0.8	6.2
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

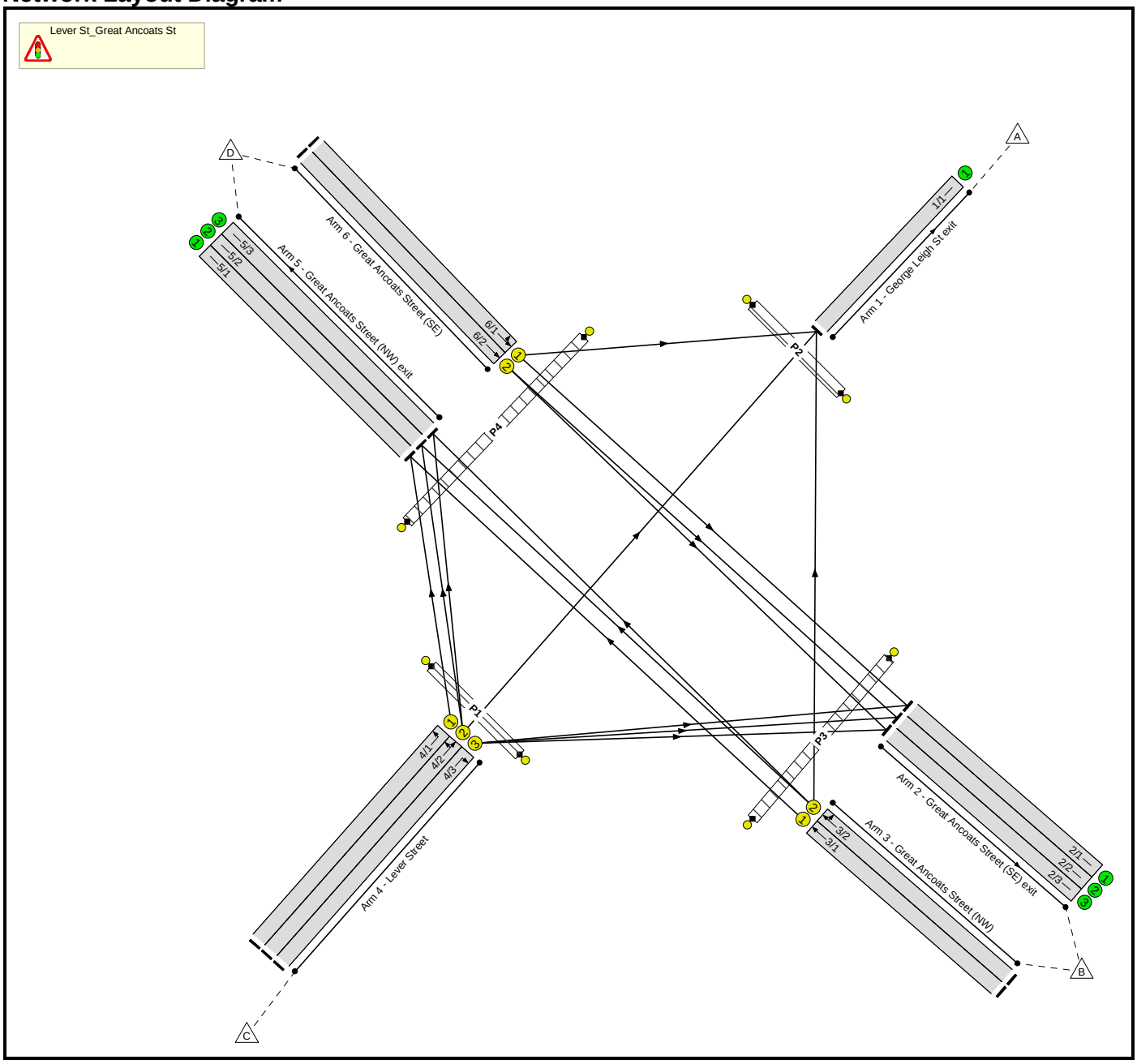
C1 PRC for Signalled Lanes (%): 8.4 Total Delay for Signalled Lanes (pcuHr): 25.44 Cycle Time (s): 88
PRC Over All Lanes (%): 8.4 Total Delay Over All Lanes(pcuHr): 25.44

Full Input Data And Results

User and Project Details

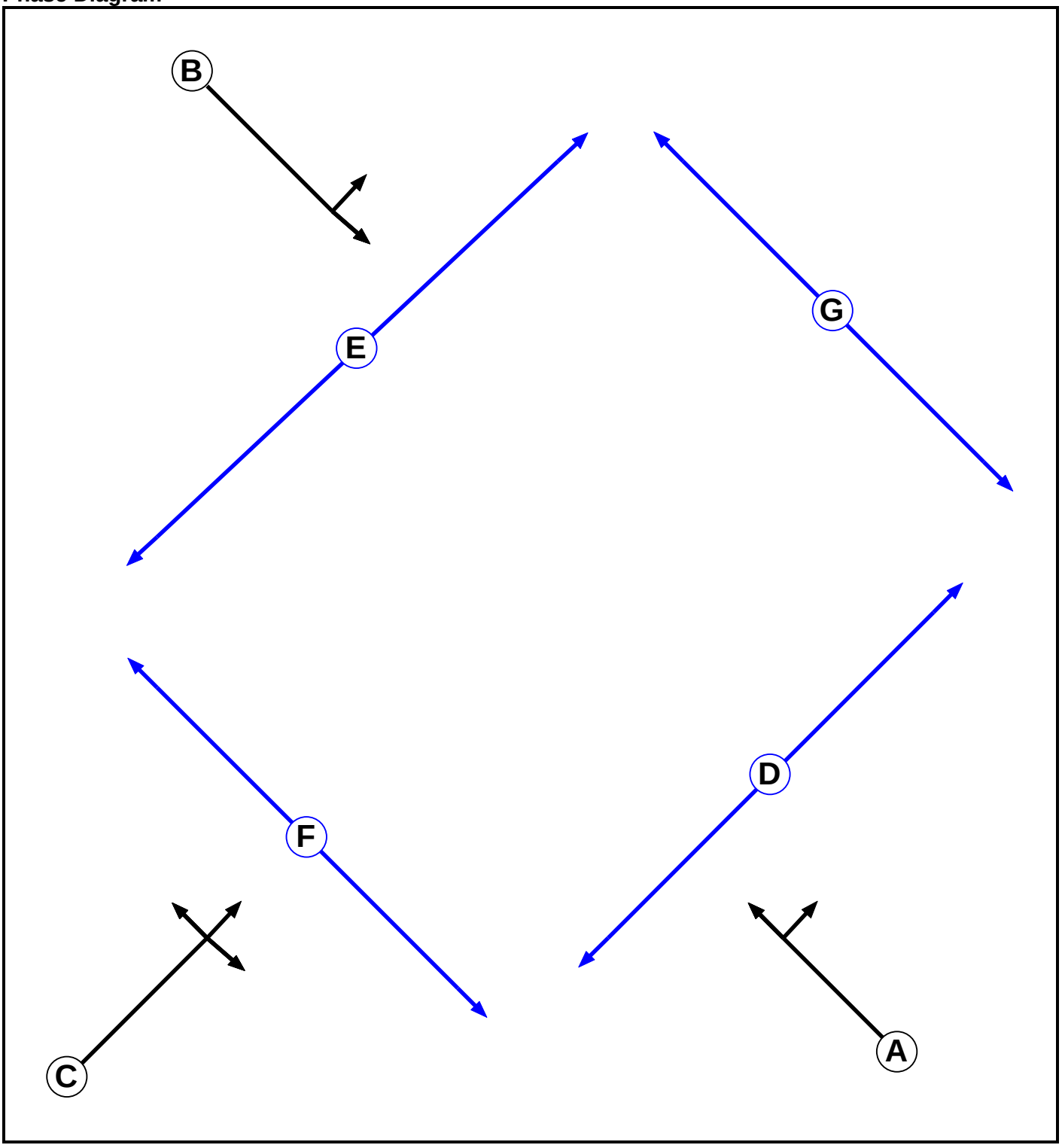
Project:	
Title:	
Location:	
Additional detail:	
File name:	06.Lever St_ Great Ancoats St v2.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Pedestrian		12	12
E	Pedestrian		11	11
F	Pedestrian		6	6
G	Pedestrian		5	2

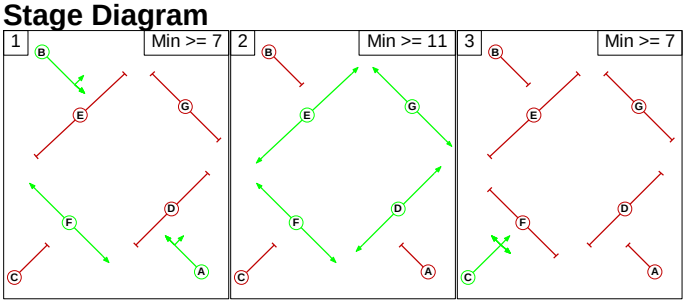
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G
A		-	6	5	9	-	10
B	-		5	9	5	-	7
C	7	7		10	9	6	9
D	8	8	7		-	-	-
E	8	8	7	-		-	-
F	-	-	9	-	-		-
G	5	5	4	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B F
2	D E F G
3	C

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	A	Losing	3	3
1	3	B	Losing	4	4
2	1	G	Losing	3	3
2	3	D	Losing	2	2
2	3	E	Losing	2	2
2	3	G	Losing	5	5

Full Input Data And Results

Prohibited Stage Change

	To Stage			
From Stage		1	2	3
	1		10	9
	2	8		9
	3	7	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Lever St_Great Ancoats St
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Lever St_Great Ancoats St

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 (George Leigh St exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/1 (Great Ancoats Street (SE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/2 (Great Ancoats Street (SE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/3 (Great Ancoats Street (SE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Great Ancoats Street (NW))	U	A	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 5 Ahead	Inf
3/2 (Great Ancoats Street (NW))	U	A	2	3	60.0	Geom	-	3.30	0.00	N	Arm 1 Right	Inf
											Arm 5 Ahead	Inf
4/1 (Lever Street)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	7.00
4/2 (Lever Street)	U	C	2	3	60.0	Geom	-	3.00	0.00	N	Arm 1 Ahead	Inf
											Arm 5 Left	8.00
4/3 (Lever Street)	U	C	2	3	60.0	Geom	-	2.90	0.00	Y	Arm 2 Right	12.00
5/1 (Great Ancoats Street (NW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (Great Ancoats Street (NW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/3 (Great Ancoats Street (NW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Great Ancoats Street (SE))	U	B	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 1 Left	8.00
											Arm 2 Ahead	Inf

6/2 (Great Ancoats Street (SE))	U	B	2	3	60.0	Geom	-	3.40	0.00	N	Arm 2 Ahead	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Base'	08:30	09:30	01:00	
2: 'PM Base'	17:00	18:00	01:00	
3: 'AM Proposed'	08:30	09:30	01:00	
4: 'PM Proposed'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	20	0	0	827	847
	C	15	48	0	147	210
	D	16	972	0	0	988
	Tot.	51	1020	0	974	2045

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: Lever St_Great Ancoats St	
1/1	51
2/1	466
2/2	277
2/3	277
3/1	403
3/2	444
4/1	71
4/2	91
4/3	48
5/1	474
5/2	250
5/3	250
6/1	466
6/2	522

Full Input Data And Results

Lane Saturation Flows

Junction: Lever St_Great Ancoats St								
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 (George Leigh St exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/1 (Great Ancoats Street (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Great Ancoats Street (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/3 (Great Ancoats Street (SE) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
3/1 (Great Ancoats Street (NW))	3.40	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1955	1955
3/2 (Great Ancoats Street (NW))	3.30	0.00	N	Arm 1 Right	Inf	4.5 %	2085	2085
				Arm 5 Ahead	Inf	95.5 %		
4/1 (Lever Street)	3.00	0.00	Y	Arm 5 Left	7.00	100.0 %	1577	1577
4/2 (Lever Street)	3.00	0.00	N	Arm 1 Ahead	Inf	16.5 %	1777	1777
				Arm 5 Left	8.00	83.5 %		
4/3 (Lever Street)	2.90	0.00	Y	Arm 2 Right	12.00	100.0 %	1693	1693
5/1 (Great Ancoats Street (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Great Ancoats Street (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/3 (Great Ancoats Street (NW) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats Street (SE))	3.30	0.00	Y	Arm 1 Left	8.00	3.4 %	1933	1933
				Arm 2 Ahead	Inf	96.6 %		
6/2 (Great Ancoats Street (SE))	3.40	0.00	N	Arm 2 Ahead	Inf	100.0 %	2095	2095

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	8	0	0	1122	1130
	C	22	83	0	264	369
	D	18	859	0	0	877
	Tot.	48	942	0	1386	2376

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: Lever St_Great Ancoats St	
1/1	48
2/1	423
2/2	260
2/3	259
3/1	540
3/2	590
4/1	130
4/2	156
4/3	83
5/1	670
5/2	358
5/3	358
6/1	413
6/2	464

Full Input Data And Results

Lane Saturation Flows

Junction: Lever St_Great Ancoats St								
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 (George Leigh St exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/1 (Great Ancoats Street (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Great Ancoats Street (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/3 (Great Ancoats Street (SE) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
3/1 (Great Ancoats Street (NW))	3.40	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1955	1955
3/2 (Great Ancoats Street (NW))	3.30	0.00	N	Arm 1 Right	Inf	1.4 %	2085	2085
				Arm 5 Ahead	Inf	98.6 %		
4/1 (Lever Street)	3.00	0.00	Y	Arm 5 Left	7.00	100.0 %	1577	1577
4/2 (Lever Street)	3.00	0.00	N	Arm 1 Ahead	Inf	14.1 %	1770	1770
				Arm 5 Left	8.00	85.9 %		
4/3 (Lever Street)	2.90	0.00	Y	Arm 2 Right	12.00	100.0 %	1693	1693
5/1 (Great Ancoats Street (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Great Ancoats Street (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/3 (Great Ancoats Street (NW) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats Street (SE))	3.30	0.00	Y	Arm 1 Left	8.00	4.4 %	1929	1929
				Arm 2 Ahead	Inf	95.6 %		
6/2 (Great Ancoats Street (SE))	3.40	0.00	N	Arm 2 Ahead	Inf	100.0 %	2095	2095

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	38	0	0	831	869
	C	15	48	0	147	210
	D	21	1029	0	0	1050
	Tot.	74	1077	0	978	2129

Traffic Lane Flows

Lane	Scenario 3: AM Proposed
Junction: Lever St_Great Ancoats St	
1/1	74
2/1	489
2/2	294
2/3	294
3/1	413
3/2	456
4/1	71
4/2	91
4/3	48
5/1	484
5/2	247
5/3	247
6/1	494
6/2	556

Full Input Data And Results

Lane Saturation Flows

Junction: Lever St_Great Ancoats St								
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 (George Leigh St exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/1 (Great Ancoats Street (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Great Ancoats Street (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/3 (Great Ancoats Street (SE) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
3/1 (Great Ancoats Street (NW))	3.40	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1955	1955
3/2 (Great Ancoats Street (NW))	3.30	0.00	N	Arm 1 Right	Inf	8.3 %	2085	2085
				Arm 5 Ahead	Inf	91.7 %		
4/1 (Lever Street)	3.00	0.00	Y	Arm 5 Left	7.00	100.0 %	1577	1577
4/2 (Lever Street)	3.00	0.00	N	Arm 1 Ahead	Inf	16.5 %	1777	1777
				Arm 5 Left	8.00	83.5 %		
4/3 (Lever Street)	2.90	0.00	Y	Arm 2 Right	12.00	100.0 %	1693	1693
5/1 (Great Ancoats Street (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Great Ancoats Street (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/3 (Great Ancoats Street (NW) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats Street (SE))	3.30	0.00	Y	Arm 1 Left	8.00	4.3 %	1930	1930
				Arm 2 Ahead	Inf	95.7 %		
6/2 (Great Ancoats Street (SE))	3.40	0.00	N	Arm 2 Ahead	Inf	100.0 %	2095	2095

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	9	0	0	1162	1171
	C	22	83	0	264	369
	D	18	861	0	0	879
	Tot.	49	944	0	1426	2419

Traffic Lane Flows

Lane	Scenario 4: PM Proposed
Junction: Lever St_Great Ancoats St	
1/1	49
2/1	423
2/2	261
2/3	260
3/1	560
3/2	611
4/1	130
4/2	156
4/3	83
5/1	690
5/2	368
5/3	368
6/1	413
6/2	466

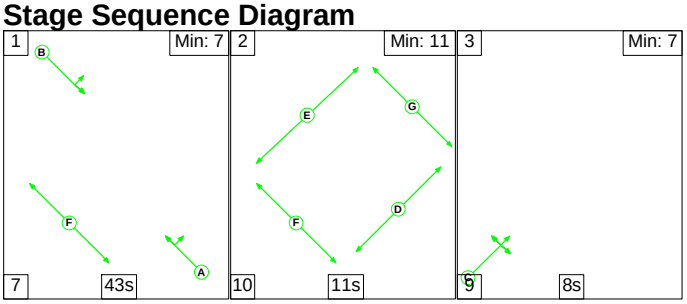
Full Input Data And Results

Lane Saturation Flows

Junction: Lever St_Great Ancoats St								
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 (George Leigh St exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/1 (Great Ancoats Street (SE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Great Ancoats Street (SE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/3 (Great Ancoats Street (SE) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
3/1 (Great Ancoats Street (NW))	3.40	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1955	1955
3/2 (Great Ancoats Street (NW))	3.30	0.00	N	Arm 1 Right	Inf	1.5 %	2085	2085
				Arm 5 Ahead	Inf	98.5 %		
4/1 (Lever Street)	3.00	0.00	Y	Arm 5 Left	7.00	100.0 %	1577	1577
4/2 (Lever Street)	3.00	0.00	N	Arm 1 Ahead	Inf	14.1 %	1770	1770
				Arm 5 Left	8.00	85.9 %		
4/3 (Lever Street)	2.90	0.00	Y	Arm 2 Right	12.00	100.0 %	1693	1693
5/1 (Great Ancoats Street (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Great Ancoats Street (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/3 (Great Ancoats Street (NW) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
6/1 (Great Ancoats Street (SE))	3.30	0.00	Y	Arm 1 Left	8.00	4.4 %	1929	1929
				Arm 2 Ahead	Inf	95.6 %		
6/2 (Great Ancoats Street (SE))	3.40	0.00	N	Arm 2 Ahead	Inf	100.0 %	2095	2095

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

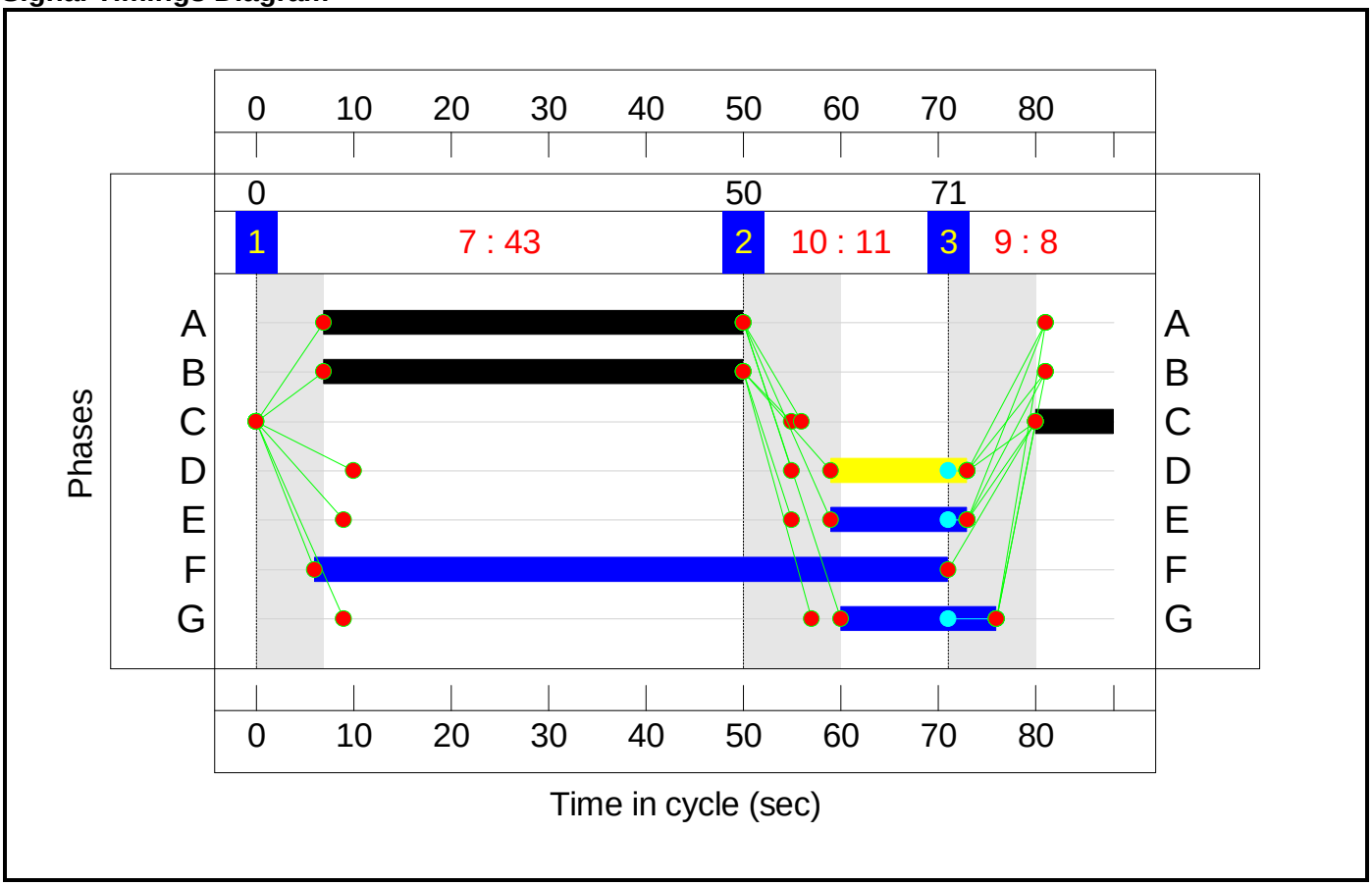


Full Input Data And Results

Stage Timings

Stage	1	2	3
Duration	43	11	8
Change Point	0	50	71

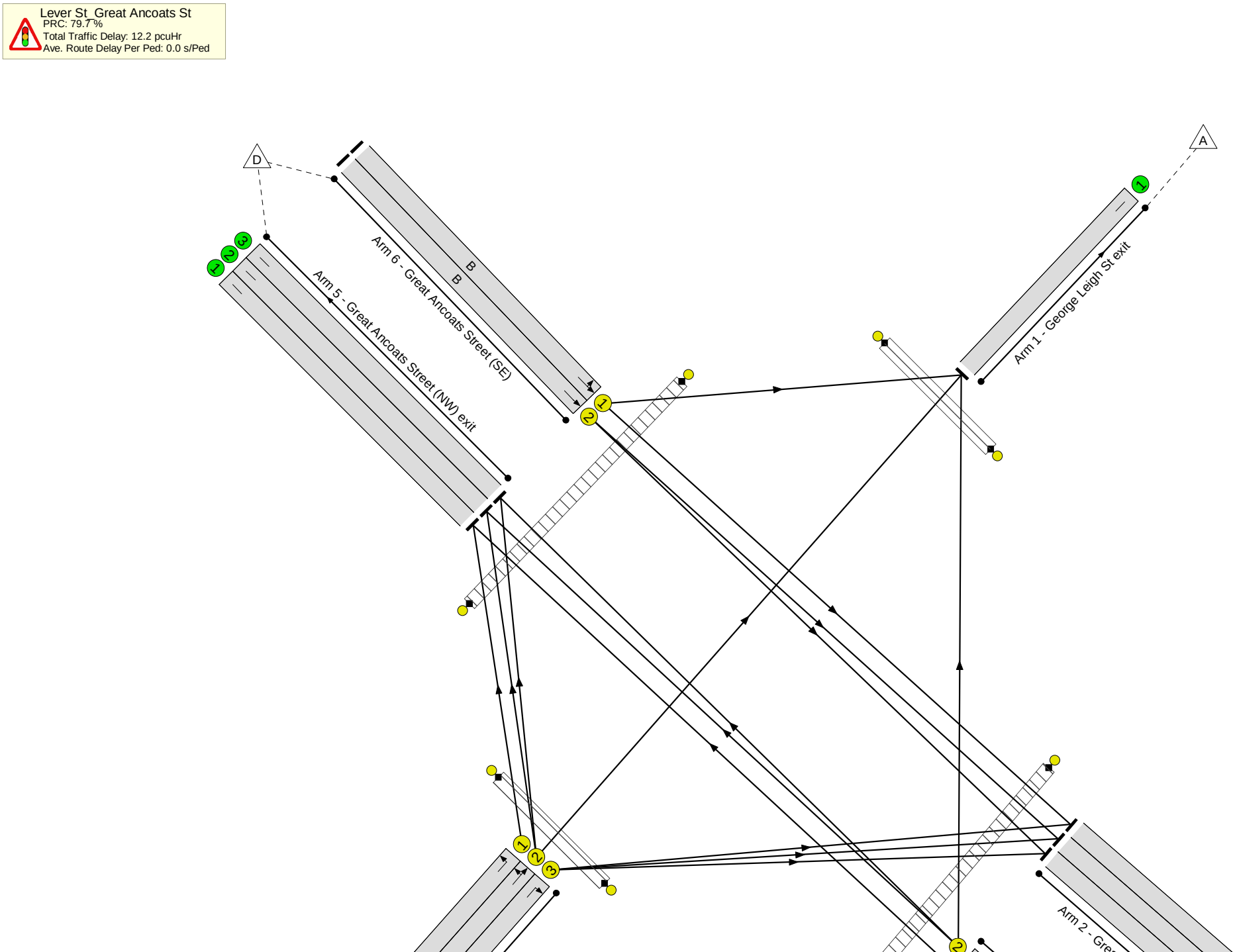
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**50.1%**
Lever St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**50.1%**
1/1	George Leigh St exit	U	N/A	N/A	-		-	-	-	51	Inf	Inf	0.0%
2/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%
2/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
2/3	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
3/1	Great Ancoats Street (NW) Ahead	U	N/A	N/A	A		1	43	-	403	1955	978	41.2%
3/2	Great Ancoats Street (NW) Right Ahead	U	N/A	N/A	A		1	43	-	444	2085	1043	42.6%
4/1	Lever Street Left	U	N/A	N/A	C		1	8	-	71	1577	161	44.0%
4/2	Lever Street Ahead Left	U	N/A	N/A	C		1	8	-	91	1777	182	50.1%
4/3	Lever Street Right	U	N/A	N/A	C		1	8	-	48	1693	173	27.7%
5/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	474	Inf	Inf	0.0%
5/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	250	Inf	Inf	0.0%
5/3	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	250	Inf	Inf	0.0%
6/1	Great Ancoats Street (SE) Left Ahead	U	N/A	N/A	B		1	43	-	466	1933	966	48.2%
6/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	B		1	43	-	522	2095	1047	49.8%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	65	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	16	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	D		1	14	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		1	65	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**9.4**	**2.8**	**0.0**	**12.2**	**-**	**-**	**-**	**-**
Lever St_Great Ancoats St	**-**	**-**	**0**	**0**	**0**	**9.4**	**2.8**	**0.0**	**12.2**	**-**	**-**	**-**	**-**
1/1	51	51	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/3	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	403	403	-	-	-	1.6	0.4	-	1.9	17.0	6.2	0.4	6.5
3/2	444	444	-	-	-	1.7	0.4	-	2.1	17.0	6.8	0.4	7.2
4/1	71	71	-	-	-	0.7	0.4	-	1.1	56.9	1.6	0.4	2.0
4/2	91	91	-	-	-	0.9	0.5	-	1.4	57.0	2.1	0.5	2.6
4/3	48	48	-	-	-	0.5	0.2	-	0.7	50.9	1.1	0.2	1.3
5/1	474	474	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	250	250	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/3	250	250	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	466	466	-	-	-	1.9	0.5	-	2.3	18.1	7.4	0.5	7.8
6/2	522	522	-	-	-	2.1	0.5	-	2.6	18.1	8.4	0.5	8.9
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

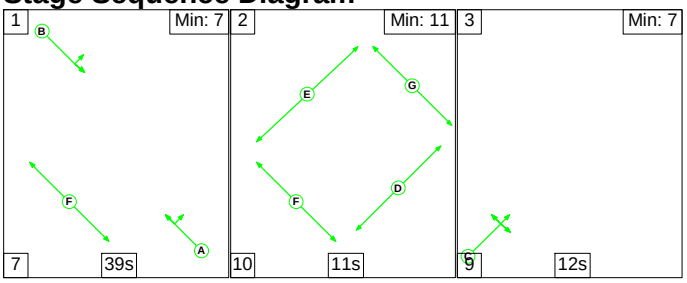
C1 PRC for Signalled Lanes (%): 79.7 Total Delay for Signalled Lanes (pcuHr): 12.20 Cycle Time (s): 88
PRC Over All Lanes (%): 79.7 Total Delay Over All Lanes(pcuHr): 12.20

Full Input Data And Results

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

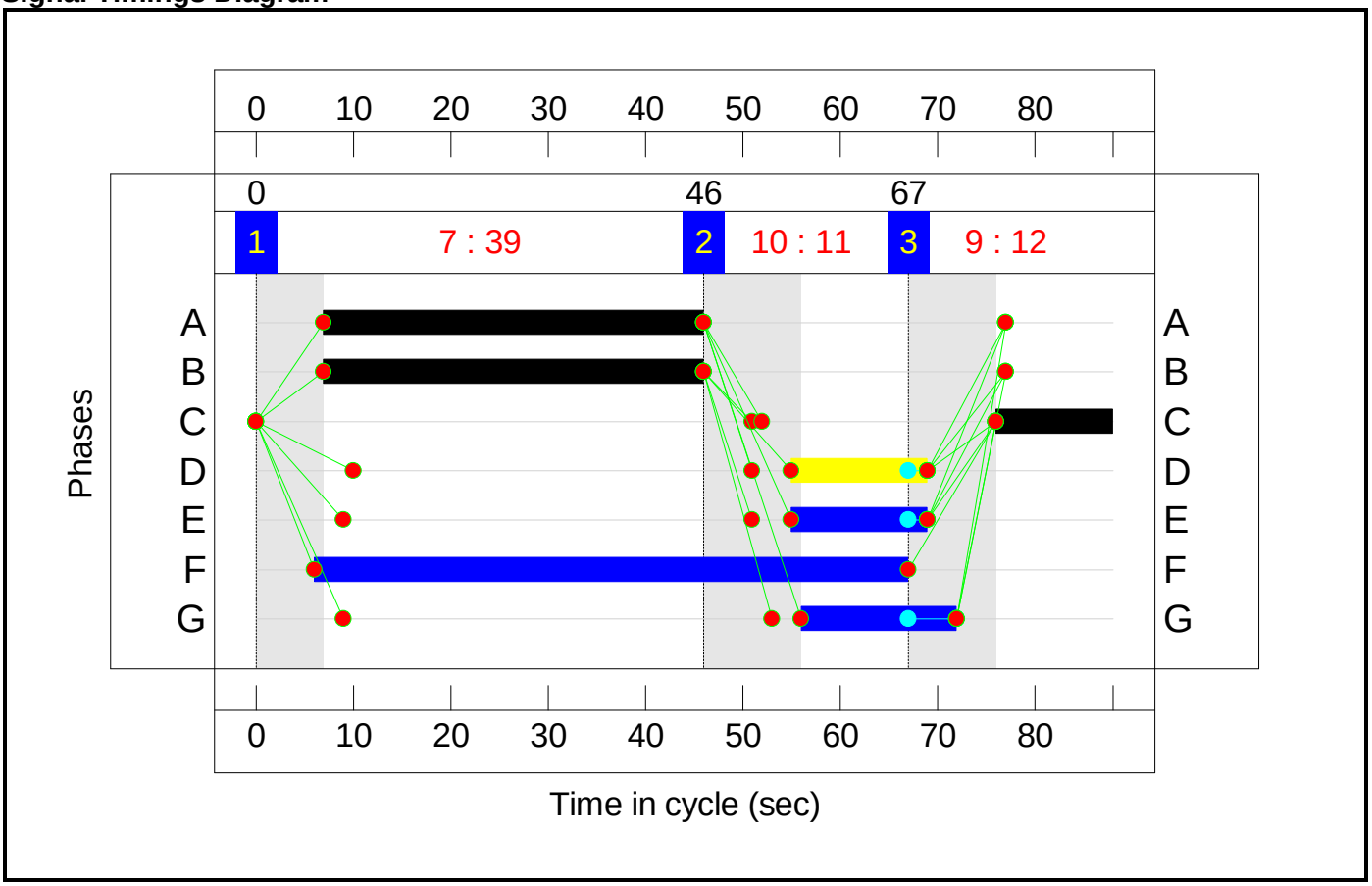
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	39	11	12
Change Point	0	46	67

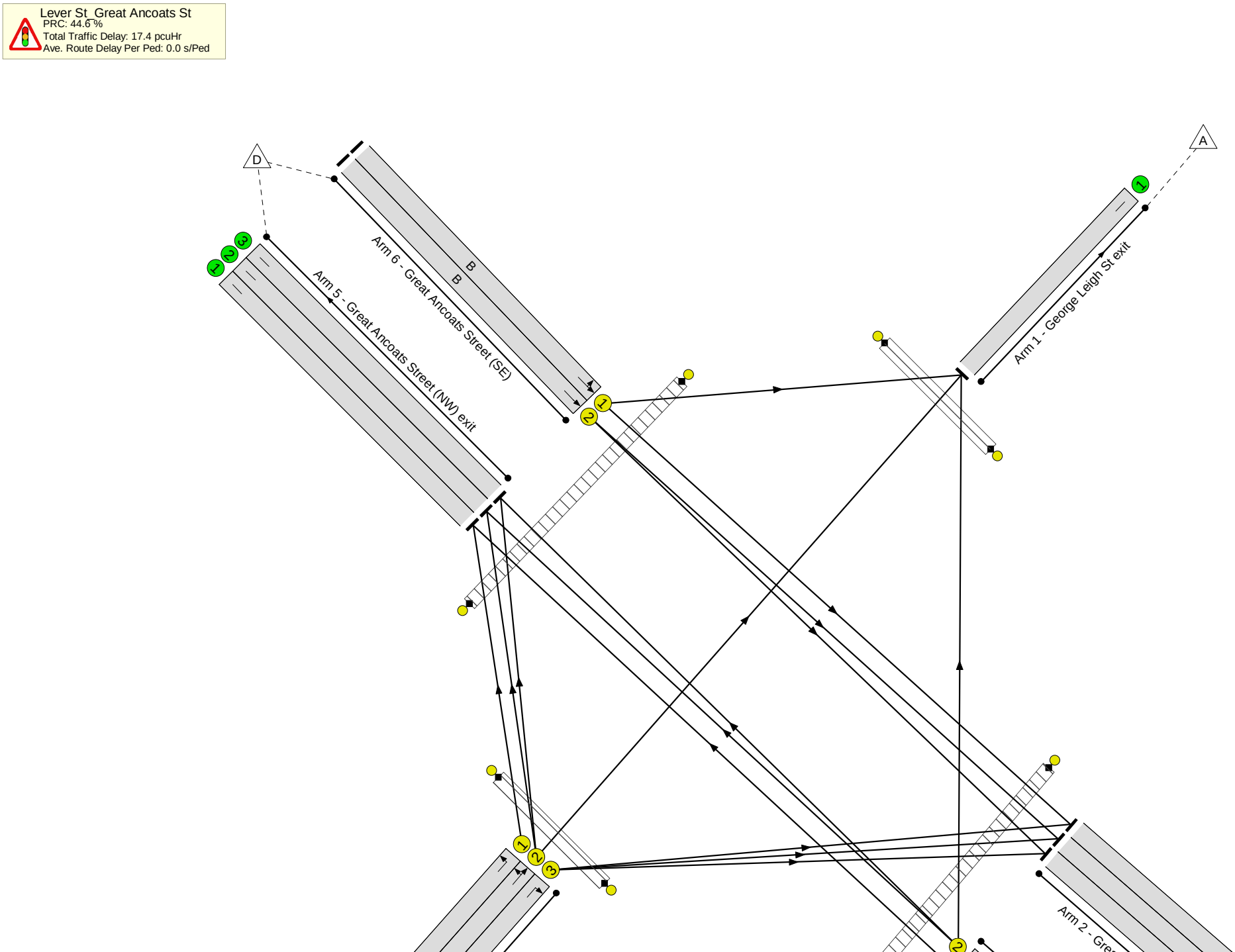
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**62.3%**
Lever St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**62.3%**
1/1	George Leigh St exit	U	N/A	N/A	-		-	-	-	48	Inf	Inf	0.0%
2/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%
2/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	260	Inf	Inf	0.0%
2/3	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	259	Inf	Inf	0.0%
3/1	Great Ancoats Street (NW) Ahead	U	N/A	N/A	A		1	39	-	540	1955	889	60.8%
3/2	Great Ancoats Street (NW) Right Ahead	U	N/A	N/A	A		1	39	-	590	2085	948	62.3%
4/1	Lever Street Left	U	N/A	N/A	C		1	12	-	130	1577	233	55.8%
4/2	Lever Street Ahead Left	U	N/A	N/A	C		1	12	-	156	1770	261	59.7%
4/3	Lever Street Right	U	N/A	N/A	C		1	12	-	83	1693	250	33.2%
5/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%
5/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
5/3	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
6/1	Great Ancoats Street (SE) Left Ahead	U	N/A	N/A	B		1	39	-	413	1929	877	47.1%
6/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	B		1	39	-	464	2095	952	48.7%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	61	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	16	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	D		1	14	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		1	61	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**13.3**	**4.1**	**0.0**	**17.4**	**-**	**-**	**-**	**-**
Lever St_Great Ancoats St	**-**	**-**	**0**	**0**	**0**	**13.3**	**4.1**	**0.0**	**17.4**	**-**	**-**	**-**	**-**
1/1	48	48	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	423	423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	260	260	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/3	259	259	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	540	540	-	-	-	2.7	0.8	-	3.5	23.2	9.9	0.8	10.7
3/2	590	590	-	-	-	3.0	0.8	-	3.8	23.3	10.8	0.8	11.6
4/1	130	130	-	-	-	1.3	0.6	-	1.9	52.1	2.9	0.6	3.5
4/2	156	156	-	-	-	1.5	0.7	-	2.2	51.9	3.6	0.7	4.3
4/3	83	83	-	-	-	0.8	0.2	-	1.0	44.4	1.8	0.2	2.0
5/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/3	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	413	413	-	-	-	1.9	0.4	-	2.4	20.5	7.0	0.4	7.4
6/2	464	464	-	-	-	2.2	0.5	-	2.6	20.5	7.9	0.5	8.3
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

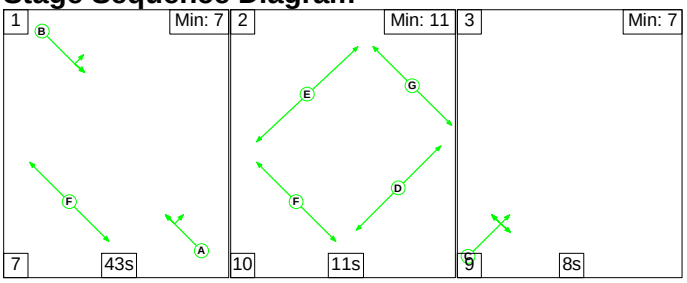
C1 PRC for Signalled Lanes (%): 44.6 Total Delay for Signalled Lanes (pcuHr): 17.45 Cycle Time (s): 88
PRC Over All Lanes (%): 44.6 Total Delay Over All Lanes(pcuHr): 17.45

Full Input Data And Results

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

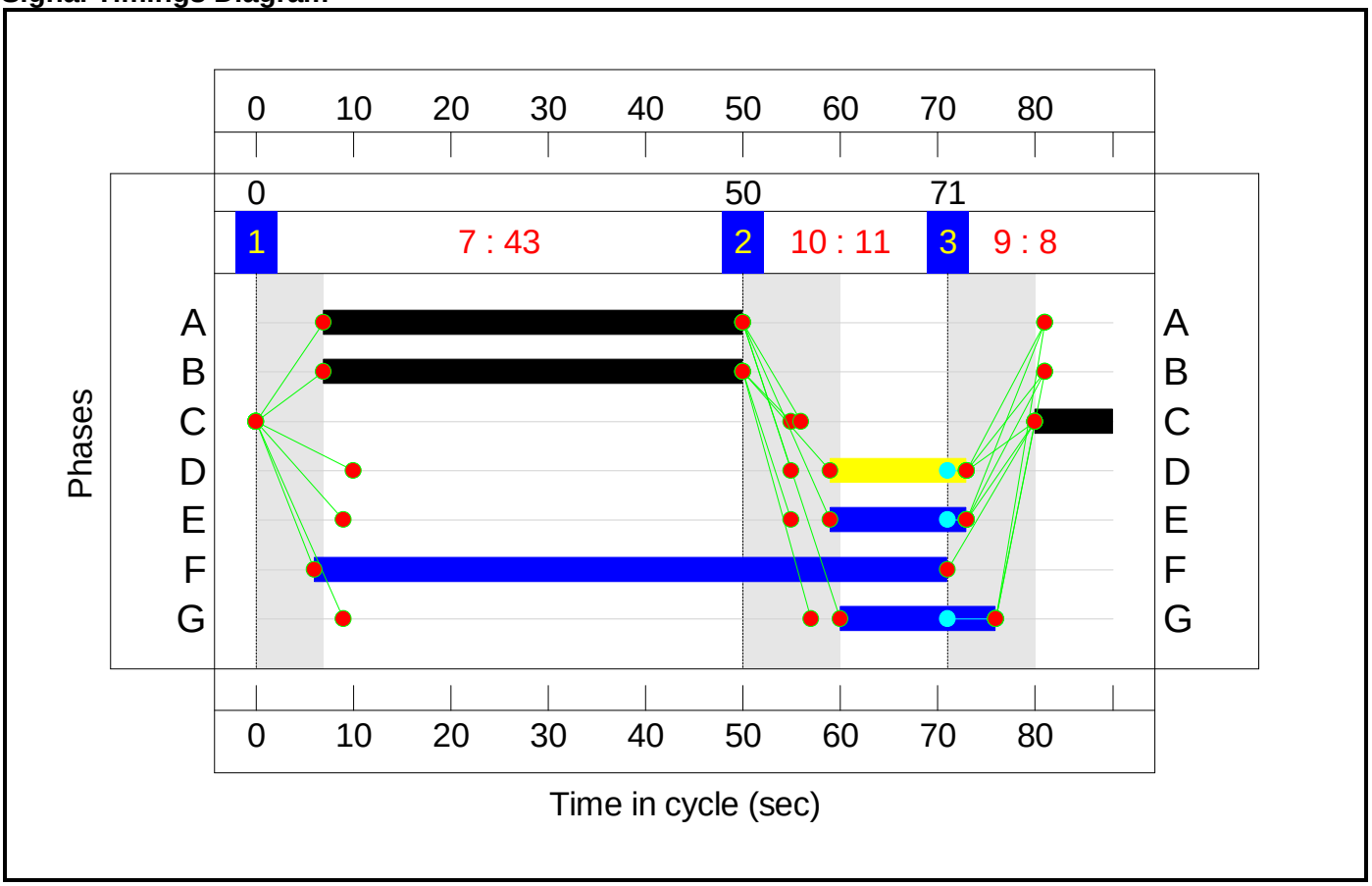
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	43	11	8
Change Point	0	50	71

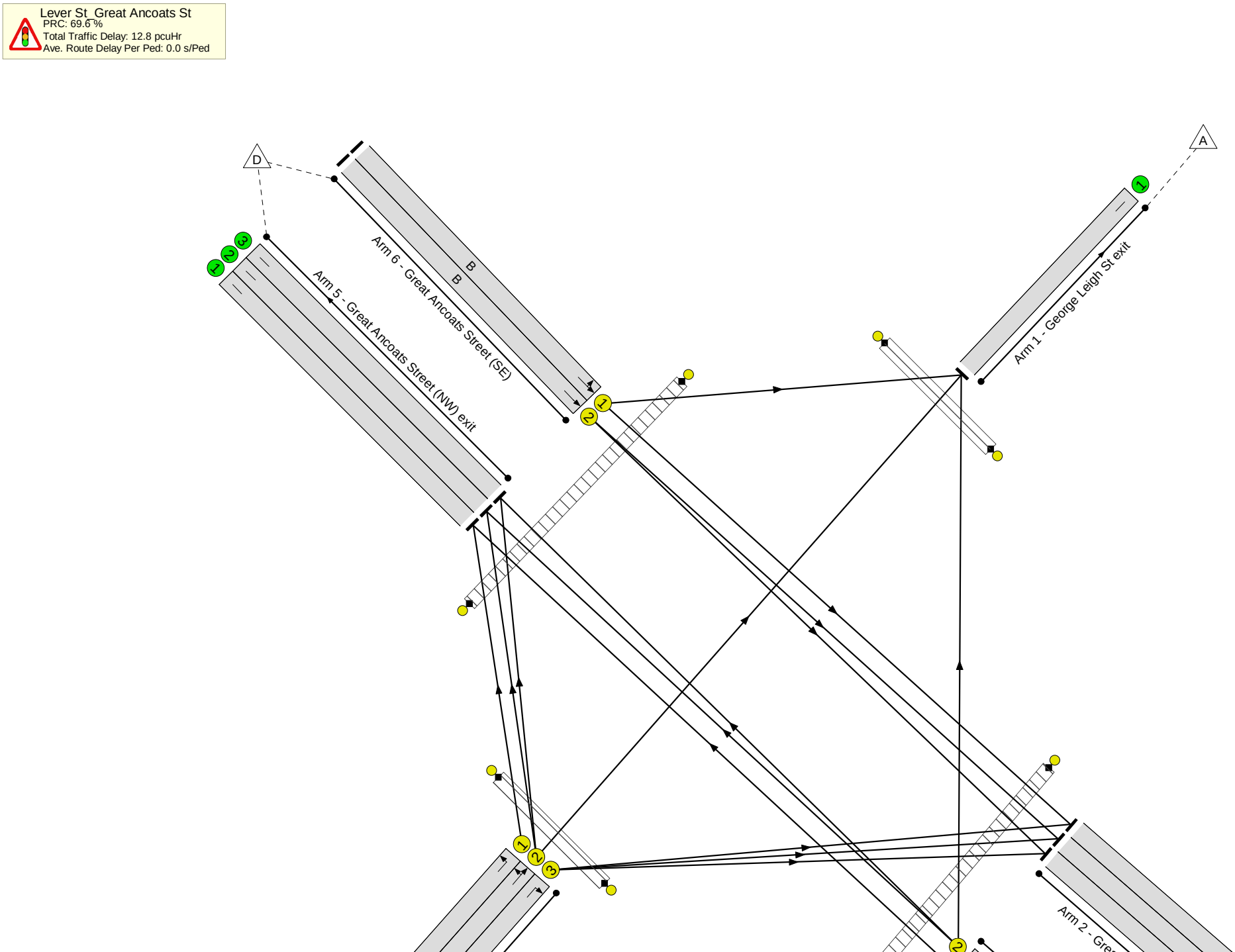
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.1%**
Lever St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.1%**
1/1	George Leigh St exit	U	N/A	N/A	-		-	-	-	74	Inf	Inf	0.0%
2/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
2/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	294	Inf	Inf	0.0%
2/3	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	294	Inf	Inf	0.0%
3/1	Great Ancoats Street (NW) Ahead	U	N/A	N/A	A		1	43	-	413	1955	978	42.3%
3/2	Great Ancoats Street (NW) Right Ahead	U	N/A	N/A	A		1	43	-	456	2085	1043	43.7%
4/1	Lever Street Left	U	N/A	N/A	C		1	8	-	71	1577	161	44.0%
4/2	Lever Street Ahead Left	U	N/A	N/A	C		1	8	-	91	1777	182	50.1%
4/3	Lever Street Right	U	N/A	N/A	C		1	8	-	48	1693	173	27.7%
5/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	484	Inf	Inf	0.0%
5/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	247	Inf	Inf	0.0%
5/3	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	247	Inf	Inf	0.0%
6/1	Great Ancoats Street (SE) Left Ahead	U	N/A	N/A	B		1	43	-	494	1930	965	51.2%
6/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	B		1	43	-	556	2095	1047	53.1%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	65	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	16	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	D		1	14	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		1	65	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**9.9**	**2.9**	**0.0**	**12.8**	**-**	**-**	**-**	**-**
Lever St_Great Ancoats St	**-**	**-**	**0**	**0**	**0**	**9.9**	**2.9**	**0.0**	**12.8**	**-**	**-**	**-**	**-**
1/1	74	74	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	294	294	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/3	294	294	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	413	413	-	-	-	1.6	0.4	-	2.0	17.1	6.3	0.4	6.7
3/2	456	456	-	-	-	1.8	0.4	-	2.2	17.1	7.1	0.4	7.5
4/1	71	71	-	-	-	0.7	0.4	-	1.1	56.9	1.6	0.4	2.0
4/2	91	91	-	-	-	0.9	0.5	-	1.4	57.0	2.1	0.5	2.6
4/3	48	48	-	-	-	0.5	0.2	-	0.7	50.9	1.1	0.2	1.3
5/1	484	484	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	247	247	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/3	247	247	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	494	494	-	-	-	2.0	0.5	-	2.6	18.6	8.1	0.5	8.6
6/2	556	556	-	-	-	2.3	0.6	-	2.9	18.6	9.1	0.6	9.7
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

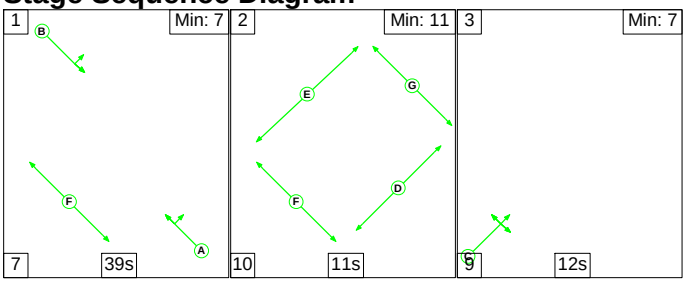
C1 PRC for Signalled Lanes (%): 69.6 Total Delay for Signalled Lanes (pcuHr): 12.81 Cycle Time (s): 88
PRC Over All Lanes (%): 69.6 Total Delay Over All Lanes(pcuHr): 12.81

Full Input Data And Results

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

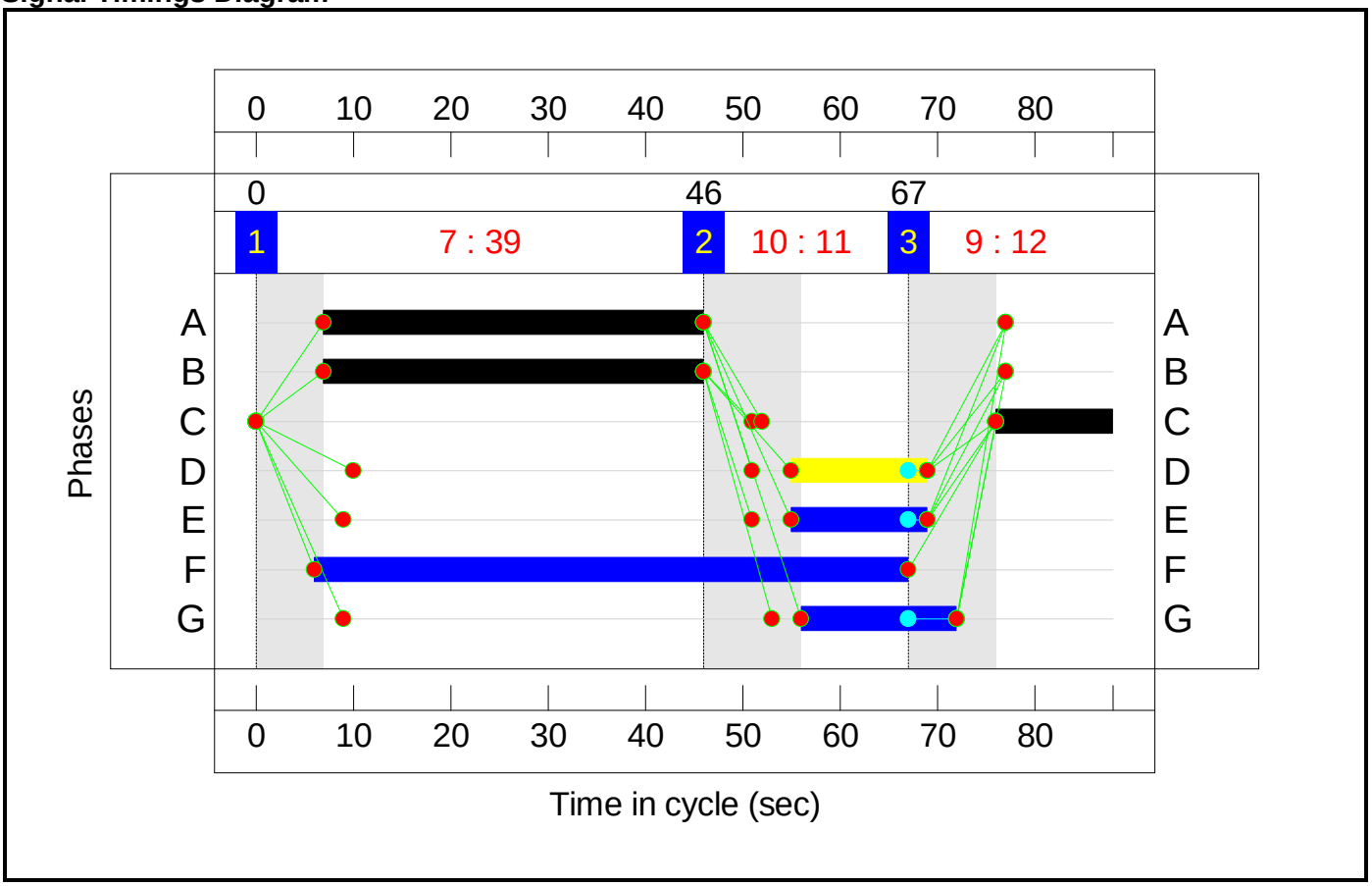
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	39	11	12
Change Point	0	46	67

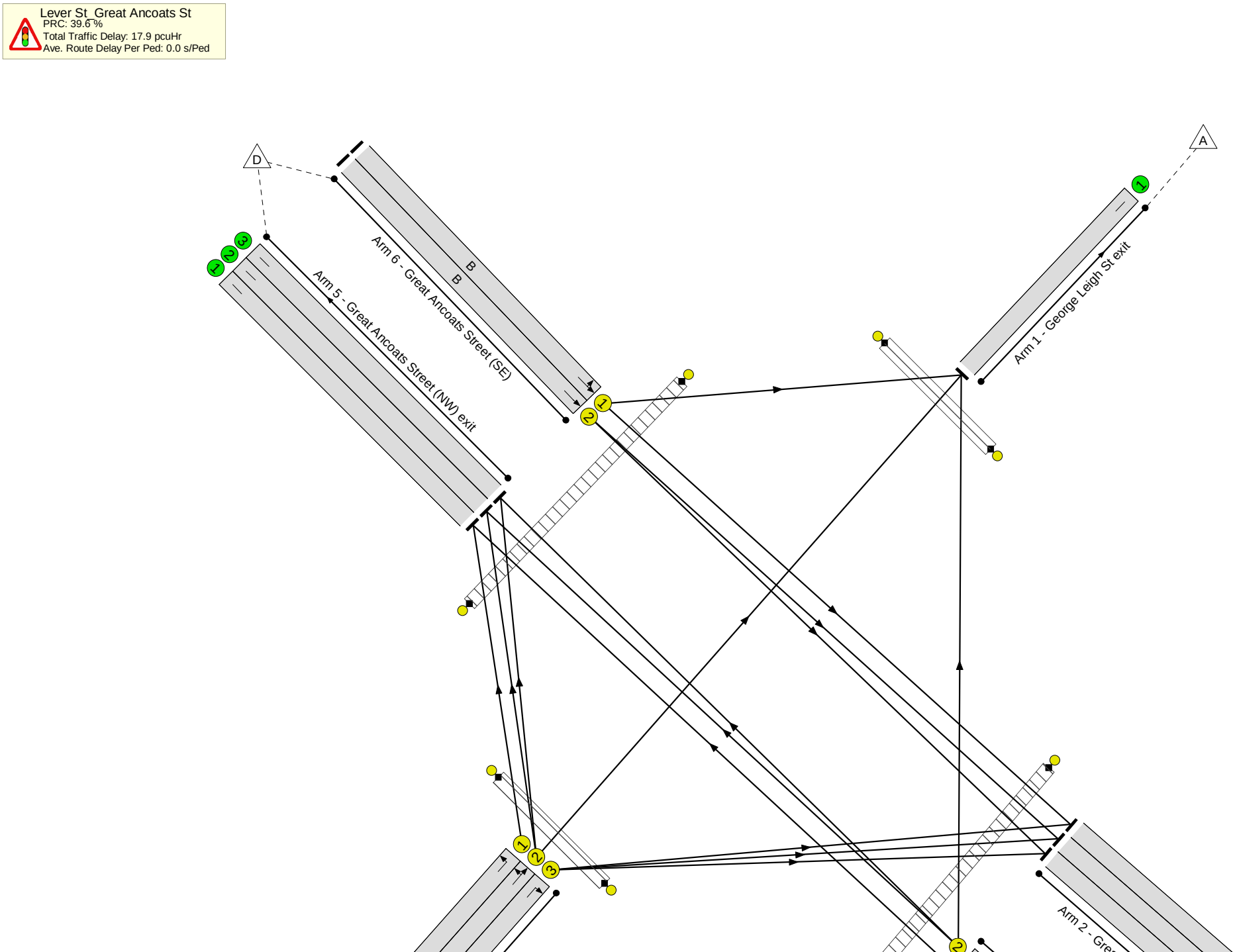
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**64.5%**
Lever St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**64.5%**
1/1	George Leigh St exit	U	N/A	N/A	-		-	-	-	49	Inf	Inf	0.0%
2/1	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%
2/2	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	261	Inf	Inf	0.0%
2/3	Great Ancoats Street (SE) exit	U	N/A	N/A	-		-	-	-	260	Inf	Inf	0.0%
3/1	Great Ancoats Street (NW) Ahead	U	N/A	N/A	A		1	39	-	560	1955	889	63.0%
3/2	Great Ancoats Street (NW) Right Ahead	U	N/A	N/A	A		1	39	-	611	2085	948	64.5%
4/1	Lever Street Left	U	N/A	N/A	C		1	12	-	130	1577	233	55.8%
4/2	Lever Street Ahead Left	U	N/A	N/A	C		1	12	-	156	1770	261	59.7%
4/3	Lever Street Right	U	N/A	N/A	C		1	12	-	83	1693	250	33.2%
5/1	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	690	Inf	Inf	0.0%
5/2	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	368	Inf	Inf	0.0%
5/3	Great Ancoats Street (NW) exit	U	N/A	N/A	-		-	-	-	368	Inf	Inf	0.0%
6/1	Great Ancoats Street (SE) Left Ahead	U	N/A	N/A	B		1	39	-	413	1929	877	47.1%
6/2	Great Ancoats Street (SE) Ahead	U	N/A	N/A	B		1	39	-	466	2095	952	48.9%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	61	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	16	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	D		1	14	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		1	61	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**13.6**	**4.3**	**0.0**	**17.9**	**-**	**-**	**-**	**-**
Lever St_Great Ancoats St	**-**	**-**	**0**	**0**	**0**	**13.6**	**4.3**	**0.0**	**17.9**	**-**	**-**	**-**	**-**
1/1	49	49	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	423	423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/3	260	260	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	560	560	-	-	-	2.9	0.8	-	3.7	23.8	10.4	0.8	11.3
3/2	611	611	-	-	-	3.1	0.9	-	4.0	23.8	11.4	0.9	12.3
4/1	130	130	-	-	-	1.3	0.6	-	1.9	52.1	2.9	0.6	3.5
4/2	156	156	-	-	-	1.5	0.7	-	2.2	51.9	3.6	0.7	4.3
4/3	83	83	-	-	-	0.8	0.2	-	1.0	44.4	1.8	0.2	2.0
5/1	690	690	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/3	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	413	413	-	-	-	1.9	0.4	-	2.4	20.5	7.0	0.4	7.4
6/2	466	466	-	-	-	2.2	0.5	-	2.7	20.5	7.9	0.5	8.4
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 39.6 Total Delay for Signalled Lanes (pcuHr): 17.91 Cycle Time (s): 88
PRC Over All Lanes (%): 39.6 Total Delay Over All Lanes(pcuHr): 17.91

Full Input Data And Results

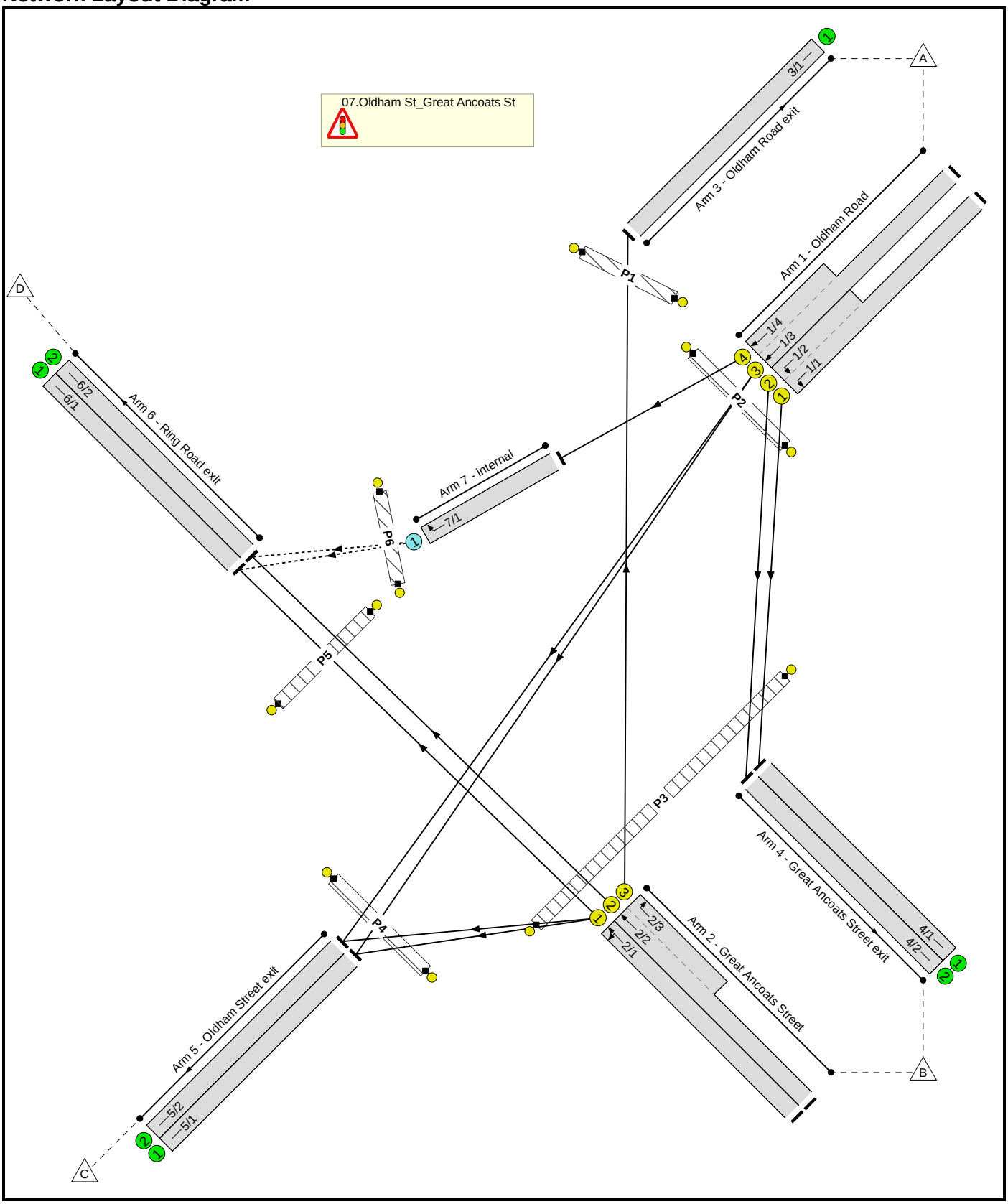
Full Input Data And Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	07.Oldham St_Great Ancoats St.lsg3x
Author:	
Company:	
Address:	

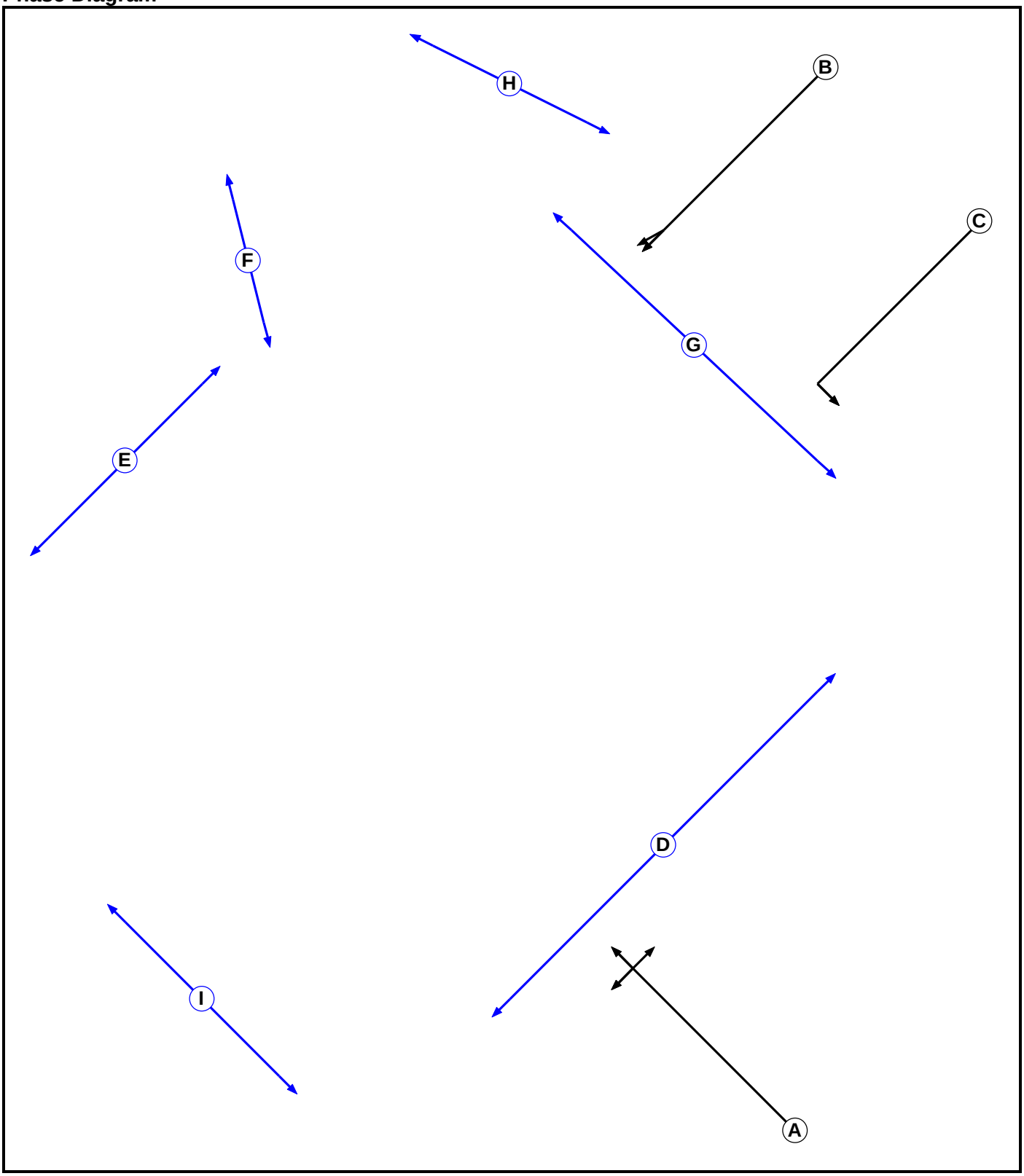
Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Pedestrian		12	12
E	Pedestrian		5	2
F	Pedestrian		5	4
G	Pedestrian		10	10
H	Pedestrian		5	5
I	Pedestrian		5	3

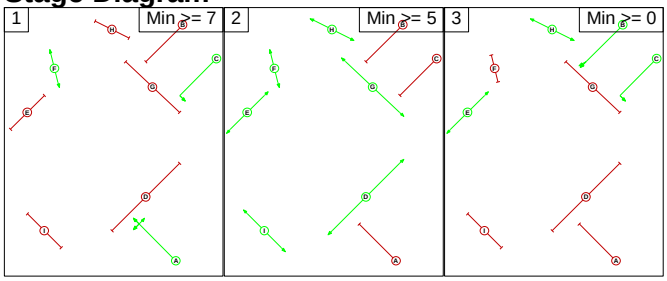
Phase Intergreens Matrix

		Starting Phase								
		A	B	C	D	E	F	G	H	I
Terminating Phase	A		8	-	5	10	-	-	18	8
	B	8		-	-	-	8	5	-	14
	C	-	-		11	-	-	5	-	-
	D	8	-	6		-	-	-	-	-
	E	5	-	-	-		-	-	-	-
	F	-	5	-	-	-		-	-	-
	G	-	6	6	-	-	-		-	-
	H	4	-	-	-	-	-	-		-
	I	6	4	-	-	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A C F
2	D E F G H I
3	B C E H

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	F	Losing	3	3
2	1	E	Losing	3	3
2	1	I	Losing	2	2
2	3	F	Losing	1	1
2	3	I	Losing	2	2
3	1	E	Losing	3	3
3	1	H	Losing	4	4
3	2	C	Losing	3	3

Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1		18	18
	2	8		6
	3	8	14	

Full Input Data And Results

Give-Way Lane Input Data

Junction: 07.Oldham St_Great Ancoats St											
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)**
7/1 (internal)	6/1 (Right)	600	0	2/1	0.19	To 6/1 (Ahead)	-	-	-	-	-
				2/2	0.19	All					
	6/2 (Right)	600	0	2/2	0.19	All					

Full Input Data And Results

Lane Input Data

Junction: 07.Oldham St_Great Ancoats St

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 (Oldham Road)	U	C	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 4 Left	14.00
1/2 (Oldham Road)	U	C	2	3	9.0	Geom	-	3.00	0.00	N	Arm 4 Left	15.00
1/3 (Oldham Road)	U	B	2	3	60.0	Geom	-	3.20	0.00	N	Arm 5 Ahead	29.00
1/4 (Oldham Road)	U	B	2	3	9.0	Geom	-	3.00	0.00	Y	Arm 7 Ahead	38.00
2/1 (Great Ancoats Street)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	9.00
											Arm 6 Ahead	Inf
2/2 (Great Ancoats Street)	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm 6 Ahead	Inf
2/3 (Great Ancoats Street)	U	A	2	3	10.0	Geom	-	3.00	0.00	Y	Arm 3 Right	30.00
3/1 (Oldham Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1 (Great Ancoats Street exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2 (Great Ancoats Street exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Oldham Street exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (Oldham Street exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Ring Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2 (Ring Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (internal)	O		2	3	1.5	Geom	-	3.25	0.00	Y	Arm 6 Right	12.00

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Base'	08:30	09:30	01:00	
2: 'PM Base'	17:00	18:00	01:00	
3: 'AM Proposed'	08:30	09:30	01:00	
4: 'PM Proposed'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	974	99	282	1355
	B	208	0	58	710	976
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	208	974	157	992	2331

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: 07.Oldham St_Great Ancoats St	
1/1 (with short)	974(In) 471(Out)
1/2 (short)	503
1/3 (with short)	381(In) 99(Out)
1/4 (short)	282
2/1	362
2/2 (with short)	614(In) 406(Out)
2/3 (short)	208
3/1	208
4/1	471
4/2	503
5/1	78
5/2	79
6/1	445
6/2	547
7/1	282

Full Input Data And Results

Lane Saturation Flows

Junction: 07.Oldham St_Great Ancoats St								
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 (Oldham Road)	3.20	0.00	Y	Arm 4 Left	14.00	100.0 %	1748	1748
1/2 (Oldham Road)	3.00	0.00	N	Arm 4 Left	15.00	100.0 %	1868	1868
1/3 (Oldham Road)	3.20	0.00	N	Arm 5 Ahead	29.00	100.0 %	1973	1973
1/4 (Oldham Road)	3.00	0.00	Y	Arm 7 Ahead	38.00	100.0 %	1842	1842
2/1 (Great Ancoats Street)	3.00	0.00	Y	Arm 5 Left	9.00	16.0 %	1865	1865
				Arm 6 Ahead	Inf	84.0 %		
2/2 (Great Ancoats Street)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/3 (Great Ancoats Street)	3.00	0.00	Y	Arm 3 Right	30.00	100.0 %	1824	1824
3/1 (Oldham Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Great Ancoats Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Great Ancoats Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Oldham Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Oldham Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (internal)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	892	84	336	1312
	B	474	0	50	916	1440
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	474	892	134	1252	2752

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: 07.Oldham St_Great Ancoats St	
1/1 (with short)	892(In) 431(Out)
1/2 (short)	461
1/3 (with short)	420(In) 84(Out)
1/4 (short)	336
2/1	500
2/2 (with short)	940(In) 466(Out)
2/3 (short)	474
3/1	474
4/1	431
4/2	461
5/1	67
5/2	67
6/1	618
6/2	634
7/1	336

Full Input Data And Results

Lane Saturation Flows

Junction: 07.Oldham St_Great Ancoats St								
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 (Oldham Road)	3.20	0.00	Y	Arm 4 Left	14.00	100.0 %	1748	1748
1/2 (Oldham Road)	3.00	0.00	N	Arm 4 Left	15.00	100.0 %	1868	1868
1/3 (Oldham Road)	3.20	0.00	N	Arm 5 Ahead	29.00	100.0 %	1973	1973
1/4 (Oldham Road)	3.00	0.00	Y	Arm 7 Ahead	38.00	100.0 %	1842	1842
2/1 (Great Ancoats Street)	3.00	0.00	Y	Arm 5 Left	9.00	10.0 %	1884	1884
				Arm 6 Ahead	Inf	90.0 %		
2/2 (Great Ancoats Street)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/3 (Great Ancoats Street)	3.00	0.00	Y	Arm 3 Right	30.00	100.0 %	1824	1824
3/1 (Oldham Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Great Ancoats Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Great Ancoats Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Oldham Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Oldham Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (internal)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1036	99	282	1417
	B	209	0	58	713	980
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	209	1036	157	995	2397

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: AM Proposed
Junction: 07.Oldham St_Great Ancoats St	
1/1 (with short)	1036(In) 501(Out)
1/2 (short)	535
1/3 (with short)	381(In) 99(Out)
1/4 (short)	282
2/1	363
2/2 (with short)	617(In) 408(Out)
2/3 (short)	209
3/1	209
4/1	501
4/2	535
5/1	78
5/2	79
6/1	446
6/2	549
7/1	282

Full Input Data And Results

Lane Saturation Flows

Junction: 07.Oldham St_Great Ancoats St								
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 (Oldham Road)	3.20	0.00	Y	Arm 4 Left	14.00	100.0 %	1748	1748
1/2 (Oldham Road)	3.00	0.00	N	Arm 4 Left	15.00	100.0 %	1868	1868
1/3 (Oldham Road)	3.20	0.00	N	Arm 5 Ahead	29.00	100.0 %	1973	1973
1/4 (Oldham Road)	3.00	0.00	Y	Arm 7 Ahead	38.00	100.0 %	1842	1842
2/1 (Great Ancoats Street)	3.00	0.00	Y	Arm 5 Left	9.00	16.0 %	1865	1865
				Arm 6 Ahead	Inf	84.0 %		
2/2 (Great Ancoats Street)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/3 (Great Ancoats Street)	3.00	0.00	Y	Arm 3 Right	30.00	100.0 %	1824	1824
3/1 (Oldham Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Great Ancoats Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Great Ancoats Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Oldham Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Oldham Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (internal)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	894	84	336	1314
	B	487	0	50	943	1480
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	487	894	134	1279	2794

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: PM Proposed
Junction: 07.Oldham St_Great Ancoats St	
1/1 (with short)	894(In) 432(Out)
1/2 (short)	462
1/3 (with short)	420(In) 84(Out)
1/4 (short)	336
2/1	522
2/2 (with short)	958(In) 471(Out)
2/3 (short)	487
3/1	487
4/1	432
4/2	462
5/1	67
5/2	67
6/1	640
6/2	639
7/1	336

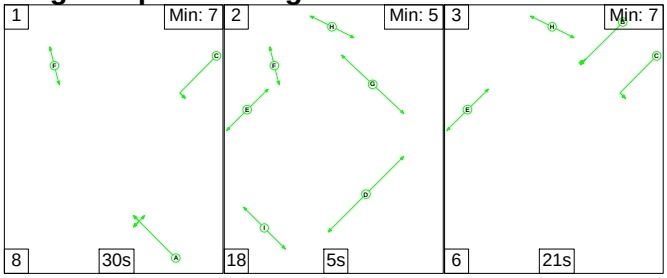
Full Input Data And Results

Lane Saturation Flows

Junction: 07.Oldham St_Great Ancoats St								
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 (Oldham Road)	3.20	0.00	Y	Arm 4 Left	14.00	100.0 %	1748	1748
1/2 (Oldham Road)	3.00	0.00	N	Arm 4 Left	15.00	100.0 %	1868	1868
1/3 (Oldham Road)	3.20	0.00	N	Arm 5 Ahead	29.00	100.0 %	1973	1973
1/4 (Oldham Road)	3.00	0.00	Y	Arm 7 Ahead	38.00	100.0 %	1842	1842
2/1 (Great Ancoats Street)	3.00	0.00	Y	Arm 5 Left	9.00	9.6 %	1885	1885
				Arm 6 Ahead	Inf	90.4 %		
2/2 (Great Ancoats Street)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/3 (Great Ancoats Street)	3.00	0.00	Y	Arm 3 Right	30.00	100.0 %	1824	1824
3/1 (Oldham Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Great Ancoats Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Great Ancoats Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Oldham Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Oldham Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (internal)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

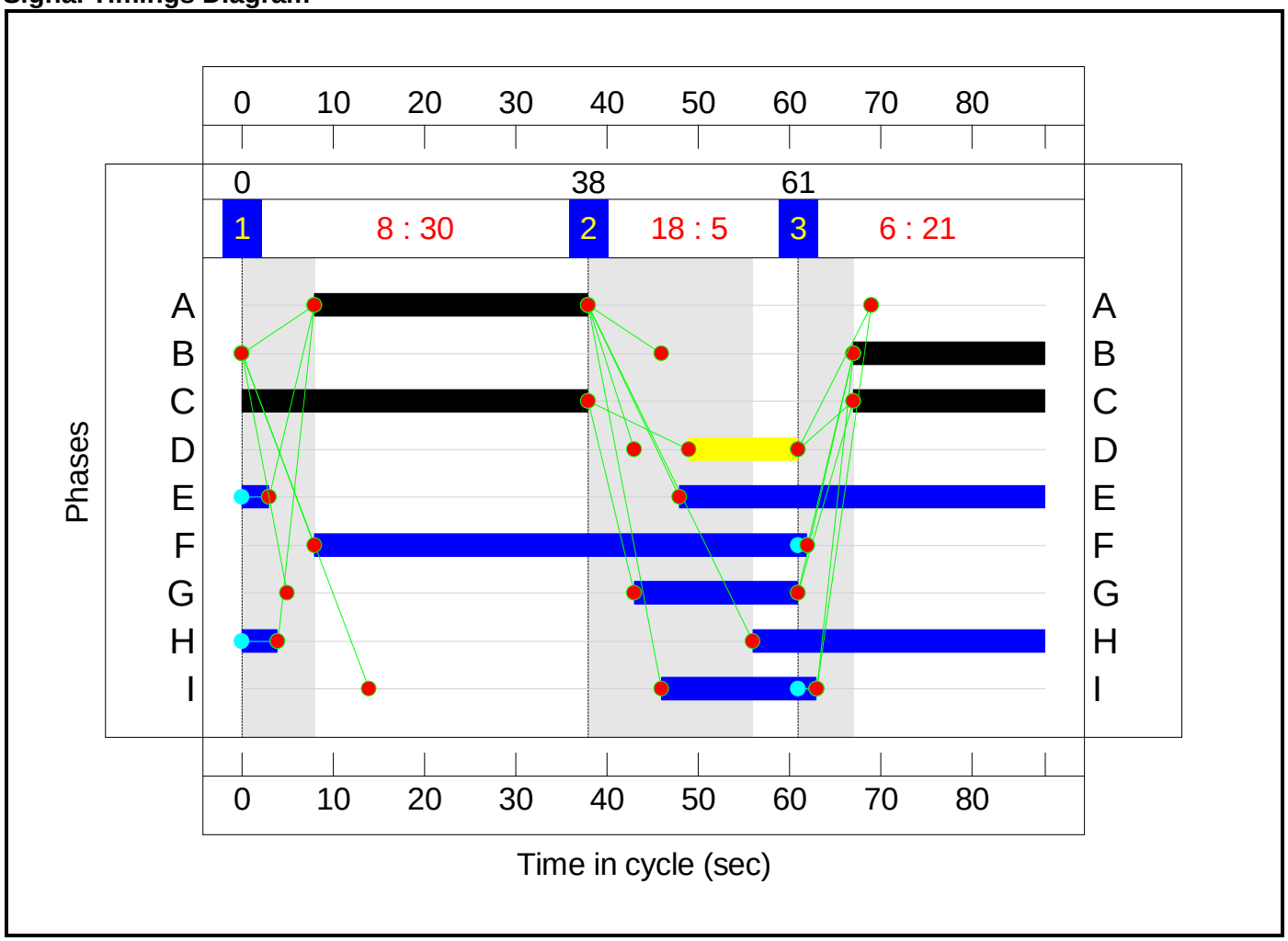


Full Input Data And Results

Stage Timings

Stage	1	2	3
Duration	30	5	21
Change Point	0	38	61

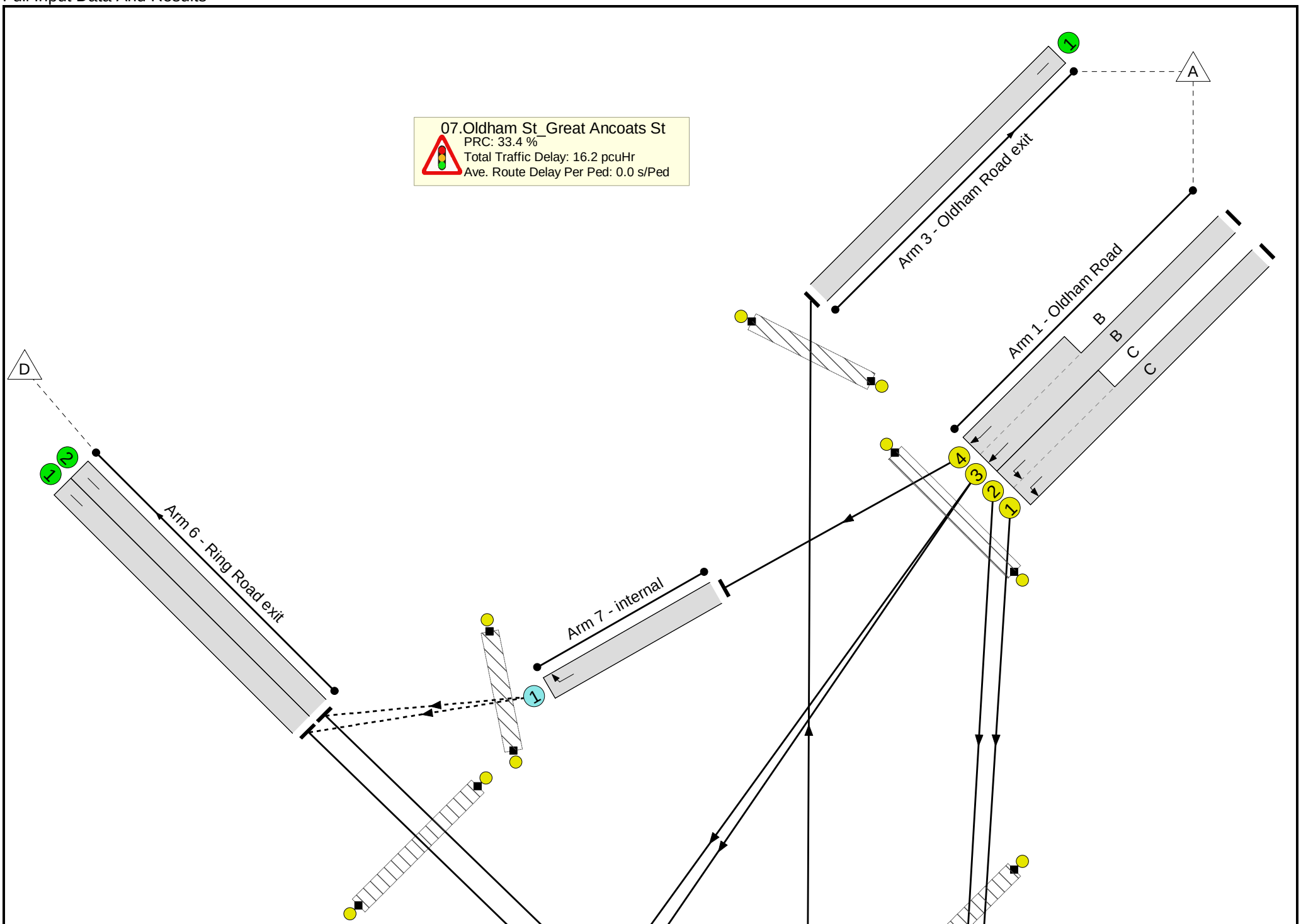
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.5%**
07.Oldham St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.5%**
1/1+1/2	Oldham Road Left	U	N/A	N/A	C		1	59	-	974	1748:1868	772+824	61.0 : 61.0%
1/3+1/4	Oldham Road Ahead Ahead2	U	N/A	N/A	B		1	21	-	381	1973:1842	151+431	65.4 : 65.4%
2/1	Great Ancoats Street Left Ahead	U	N/A	N/A	A		1	30	-	362	1865	657	55.1%
2/2+2/3	Great Ancoats Street Right Ahead	U	N/A	N/A	A		1	30	-	614	2055:1824	602+308	67.5 : 67.5%
3/1	Oldham Road exit	U	N/A	N/A	-		-	-	-	208	Inf	Inf	0.0%
4/1	Great Ancoats Street exit	U	N/A	N/A	-		-	-	-	471	Inf	Inf	0.0%
4/2	Great Ancoats Street exit	U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%
5/1	Oldham Street exit	U	N/A	N/A	-		-	-	-	78	Inf	Inf	0.0%
5/2	Oldham Street exit	U	N/A	N/A	-		-	-	-	79	Inf	Inf	0.0%
6/1	Ring Road exit	U	N/A	N/A	-		-	-	-	445	Inf	Inf	0.0%
6/2	Ring Road exit	U	N/A	N/A	-		-	-	-	547	Inf	Inf	0.0%
7/1	internal Right	O	N/A	N/A	-		-	-	-	282	1724	484	58.3%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	H		1	36	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	18	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	D		1	12	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	17	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	E		1	43	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	F		1	54	-	0	-	0	0.0%

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)
Network	**-**	**-**	**91**	**191**	**0**	**12.1**	**4.1**	**0.0**	**16.2**	**-**	**-**	**-**	**-**
07.Oldham St_Great Ancoats St	**-**	**-**	**91**	**191**	**0**	**12.1**	**4.1**	**0.0**	**16.2**	**-**	**-**	**-**	**-**
1/1+1/2	974	974	-	-	-	1.7	0.8	-	2.4	9.0	5.3	0.8	6.1
1/3+1/4	381	381	-	-	-	3.0	0.9	-	3.9	37.3	6.0	0.9	7.0
2/1	362	362	-	-	-	2.3	0.6	-	2.9	29.0	7.0	0.6	7.6
2/2+2/3	614	614	-	-	-	3.8	1.0	-	4.8	28.3	8.0	1.0	9.0
3/1	208	208	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	471	471	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	78	78	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	79	79	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	445	445	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	547	547	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	282	282	91	191	0	1.4	0.7	-	2.1	26.3	6.9	0.7	7.6
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

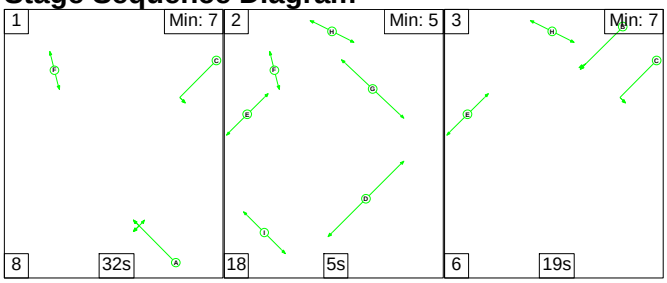
C1 PRC for Signalled Lanes (%): 33.4 Total Delay for Signalled Lanes (pcuHr): 14.12 Cycle Time (s): 88
PRC Over All Lanes (%): 33.4 Total Delay Over All Lanes(pcuHr): 16.18

Full Input Data And Results

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

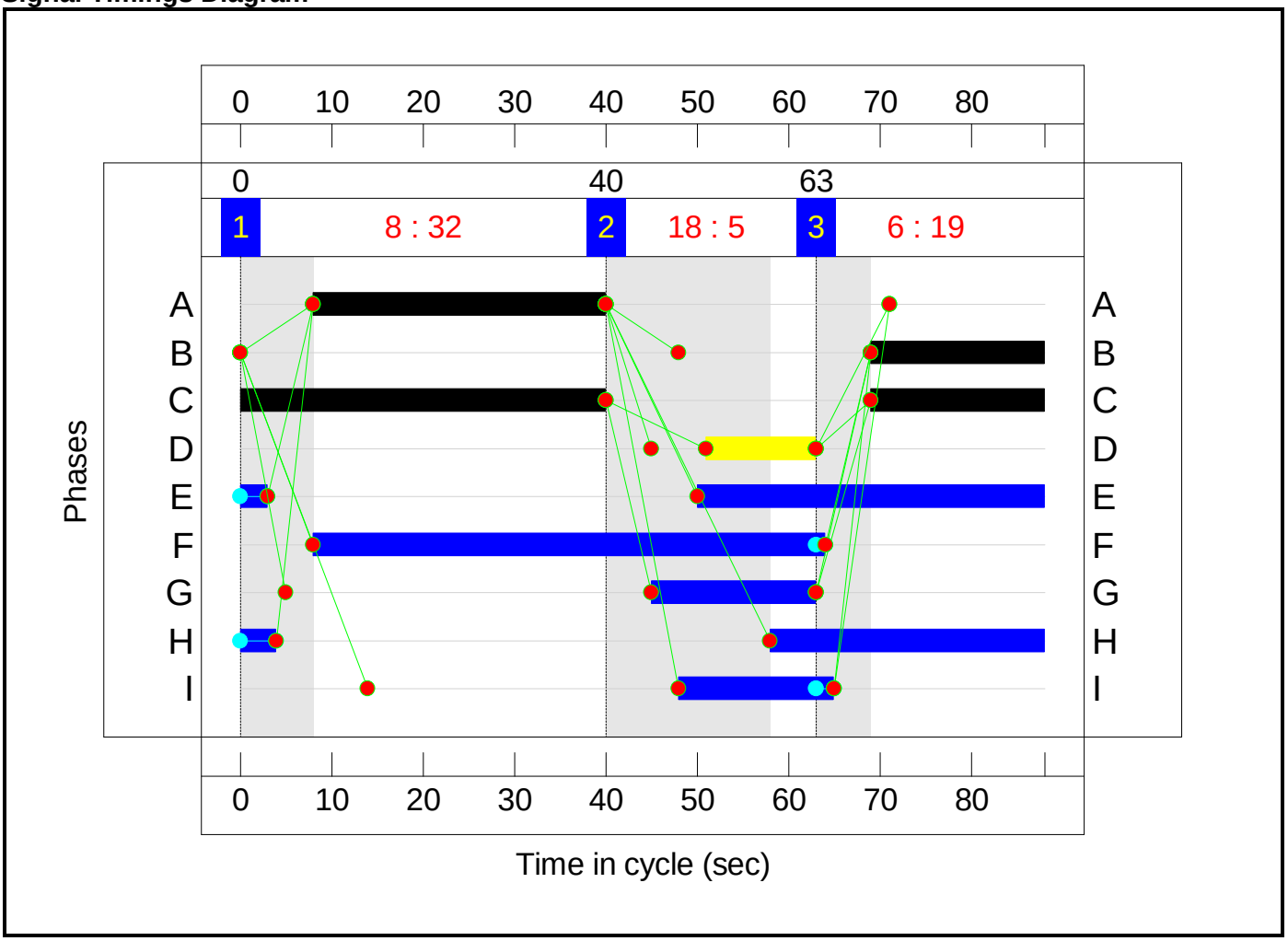
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	32	5	19
Change Point	0	40	63

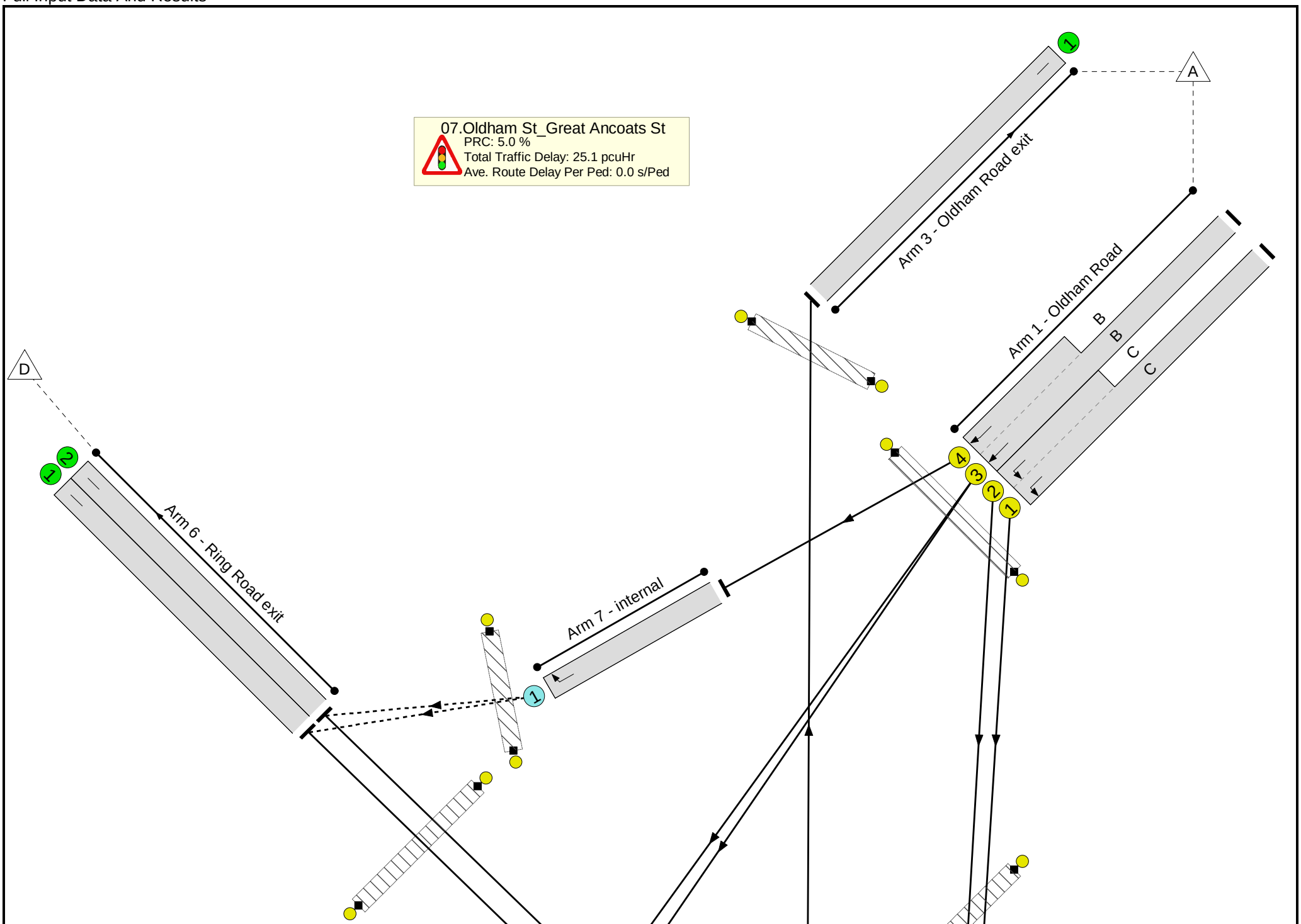
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.7%**
07.Oldham St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.7%**
1/1+1/2	Oldham Road Left	U	N/A	N/A	C		1	59	-	892	1748:1868	771+825	55.9 : 55.9%
1/3+1/4	Oldham Road Ahead Ahead2	U	N/A	N/A	B		1	19	-	420	1973:1842	101+402	83.6 : 83.6%
2/1	Great Ancoats Street Left Ahead	U	N/A	N/A	A		1	32	-	500	1884	707	70.8%
2/2+2/3	Great Ancoats Street Right Ahead	U	N/A	N/A	A		1	32	-	940	2055:1824	544+553	85.7 : 85.7%
3/1	Oldham Road exit	U	N/A	N/A	-		-	-	-	474	Inf	Inf	0.0%
4/1	Great Ancoats Street exit	U	N/A	N/A	-		-	-	-	431	Inf	Inf	0.0%
4/2	Great Ancoats Street exit	U	N/A	N/A	-		-	-	-	461	Inf	Inf	0.0%
5/1	Oldham Street exit	U	N/A	N/A	-		-	-	-	67	Inf	Inf	0.0%
5/2	Oldham Street exit	U	N/A	N/A	-		-	-	-	67	Inf	Inf	0.0%
6/1	Ring Road exit	U	N/A	N/A	-		-	-	-	618	Inf	Inf	0.0%
6/2	Ring Road exit	U	N/A	N/A	-		-	-	-	634	Inf	Inf	0.0%
7/1	internal Right	O	N/A	N/A	-		-	-	-	336	1724	456	73.7%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	H		1	34	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	18	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	D		1	12	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	17	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	E		1	41	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	F		1	56	-	0	-	0	0.0%

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)
Network	**-**	**-**	**81**	**255**	**0**	**16.6**	**8.5**	**0.0**	**25.1**	**-**	**-**	**-**	**-**
07.Oldham St_Great Ancoats St	**-**	**-**	**81**	**255**	**0**	**16.6**	**8.5**	**0.0**	**25.1**	**-**	**-**	**-**	**-**
1/1+1/2	892	892	-	-	-	1.5	0.6	-	2.1	8.5	4.7	0.6	5.4
1/3+1/4	420	420	-	-	-	3.6	2.4	-	6.0	51.8	7.7	2.4	10.1
2/1	500	500	-	-	-	3.2	1.2	-	4.4	32.0	10.3	1.2	11.5
2/2+2/3	940	940	-	-	-	5.9	2.9	-	8.8	33.8	9.7	2.9	12.6
3/1	474	474	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	431	431	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	618	618	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	336	336	81	255	0	2.3	1.4	-	3.7	39.7	8.2	1.4	9.6
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

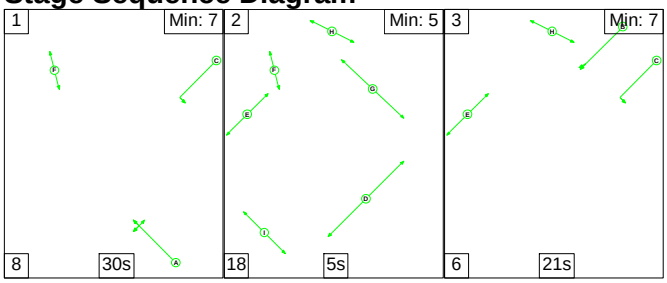
C1 PRC for Signalled Lanes (%): 5.0 Total Delay for Signalled Lanes (pcuHr): 21.42 Cycle Time (s): 88
PRC Over All Lanes (%): 5.0 Total Delay Over All Lanes(pcuHr): 25.12

Full Input Data And Results

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

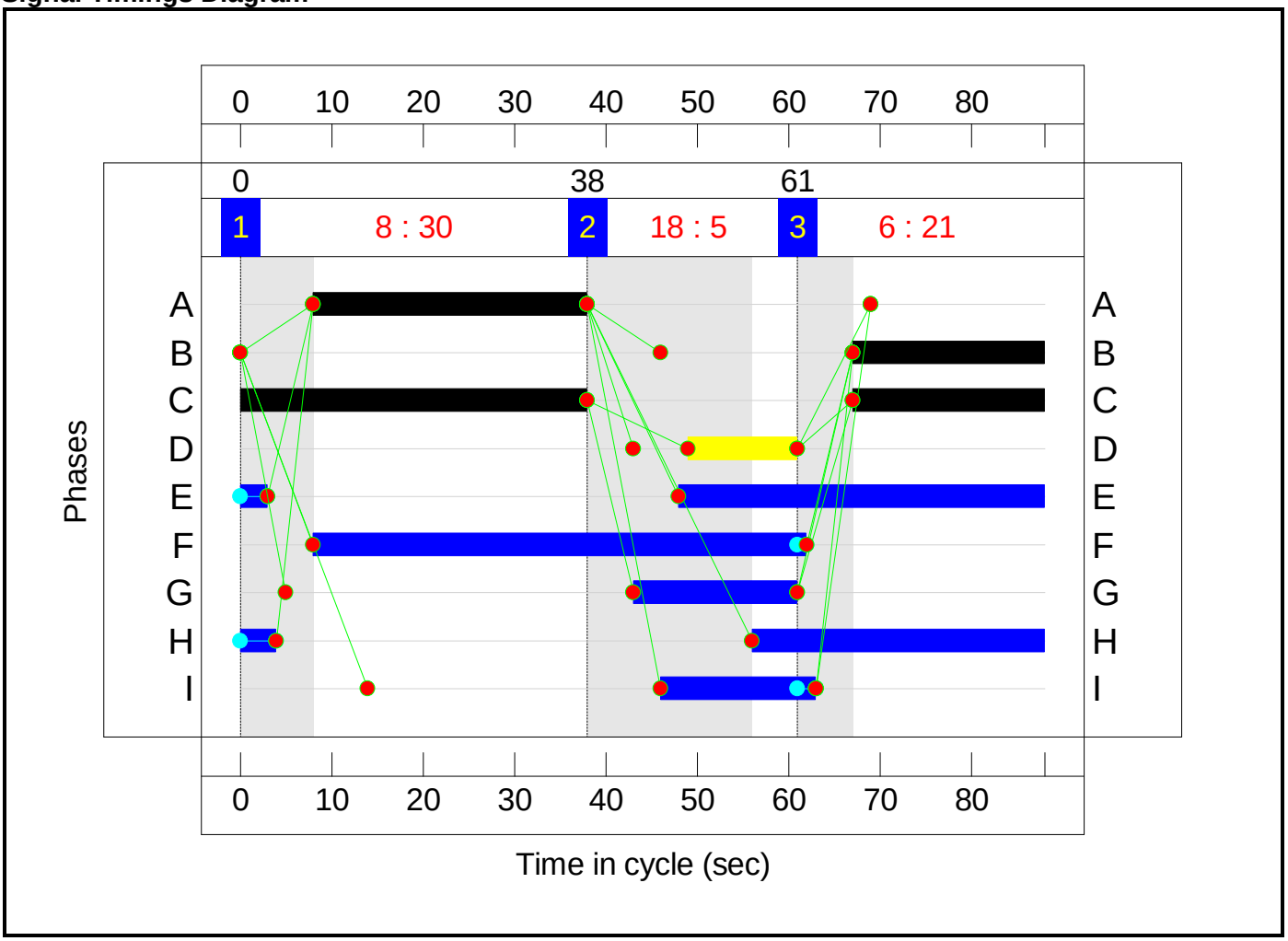
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	30	5	21
Change Point	0	38	61

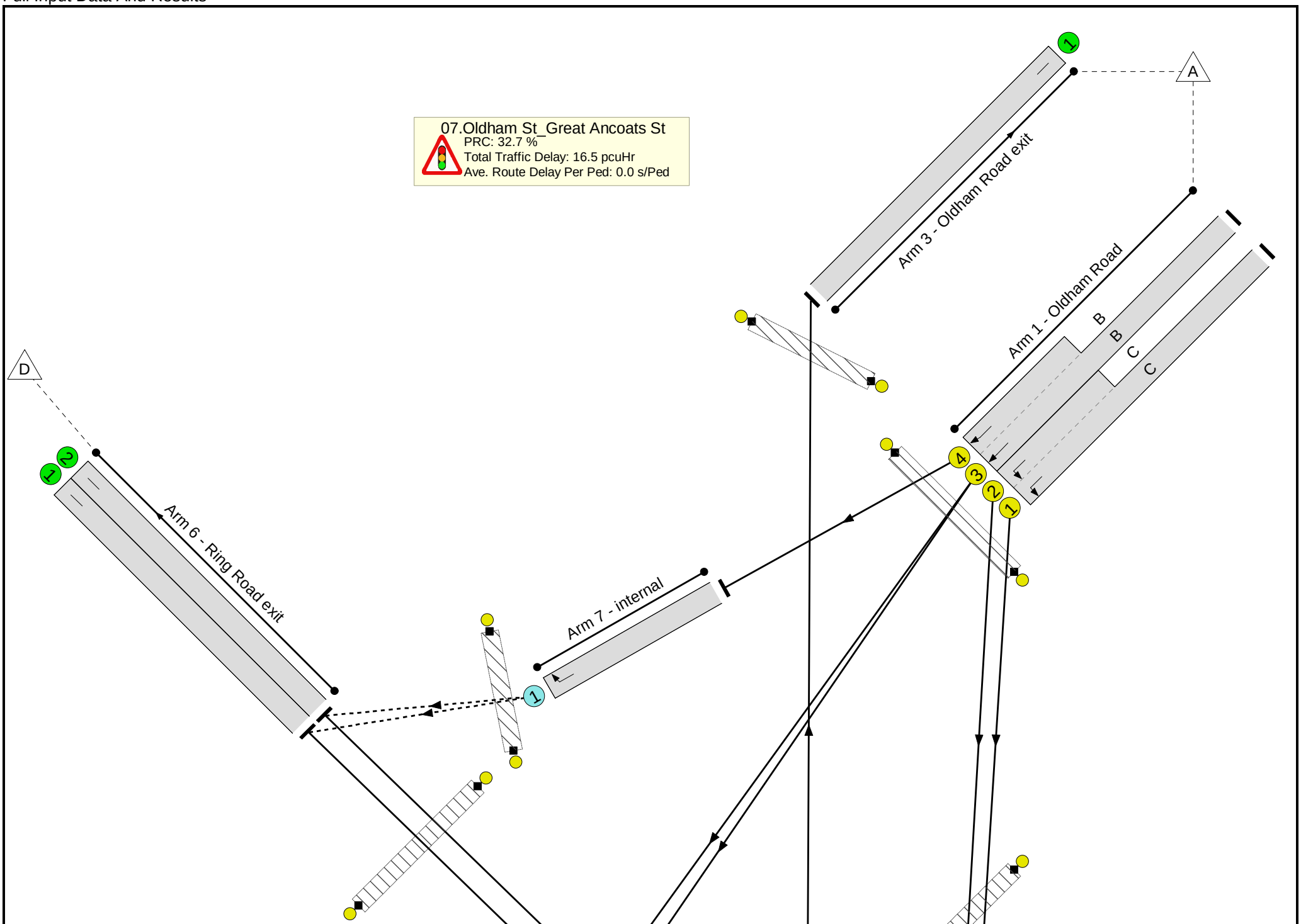
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.8%**
07.Oldham St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.8%**
1/1+1/2	Oldham Road Left	U	N/A	N/A	C		1	59	-	1036	1748:1868	772+824	64.9 : 64.9%
1/3+1/4	Oldham Road Ahead Ahead2	U	N/A	N/A	B		1	21	-	381	1973:1842	151+431	65.4 : 65.4%
2/1	Great Ancoats Street Left Ahead	U	N/A	N/A	A		1	30	-	363	1865	657	55.3%
2/2+2/3	Great Ancoats Street Right Ahead	U	N/A	N/A	A		1	30	-	617	2055:1824	602+308	67.8 : 67.8%
3/1	Oldham Road exit	U	N/A	N/A	-		-	-	-	209	Inf	Inf	0.0%
4/1	Great Ancoats Street exit	U	N/A	N/A	-		-	-	-	501	Inf	Inf	0.0%
4/2	Great Ancoats Street exit	U	N/A	N/A	-		-	-	-	535	Inf	Inf	0.0%
5/1	Oldham Street exit	U	N/A	N/A	-		-	-	-	78	Inf	Inf	0.0%
5/2	Oldham Street exit	U	N/A	N/A	-		-	-	-	79	Inf	Inf	0.0%
6/1	Ring Road exit	U	N/A	N/A	-		-	-	-	446	Inf	Inf	0.0%
6/2	Ring Road exit	U	N/A	N/A	-		-	-	-	549	Inf	Inf	0.0%
7/1	internal Right	O	N/A	N/A	-		-	-	-	282	1724	483	58.4%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	H		1	36	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	18	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	D		1	12	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	17	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	E		1	43	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	F		1	54	-	0	-	0	0.0%

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)
Network	**-**	**-**	**91**	**191**	**0**	**12.3**	**4.2**	**0.0**	**16.5**	**-**	**-**	**-**	**-**
07.Oldham St_Great Ancoats St	**-**	**-**	**91**	**191**	**0**	**12.3**	**4.2**	**0.0**	**16.5**	**-**	**-**	**-**	**-**
1/1+1/2	1036	1036	-	-	-	1.8	0.9	-	2.7	9.4	5.8	0.9	6.7
1/3+1/4	381	381	-	-	-	3.0	0.9	-	3.9	37.3	6.0	0.9	7.0
2/1	363	363	-	-	-	2.3	0.6	-	2.9	29.0	7.1	0.6	7.7
2/2+2/3	617	617	-	-	-	3.8	1.0	-	4.9	28.4	8.0	1.0	9.1
3/1	209	209	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	501	501	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	535	535	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	78	78	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	79	79	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	549	549	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	282	282	91	191	0	1.4	0.7	-	2.1	26.3	6.9	0.7	7.6
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 32.7
PRC Over All Lanes (%): 32.7

Total Delay for Signalled Lanes (pcuHr): 14.46
Total Delay Over All Lanes(pcuHr): 16.52

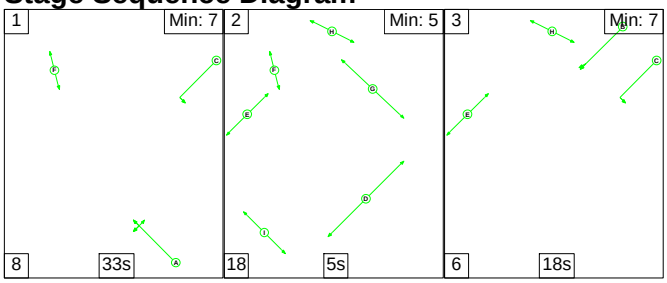
Cycle Time (s): 88

Full Input Data And Results

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

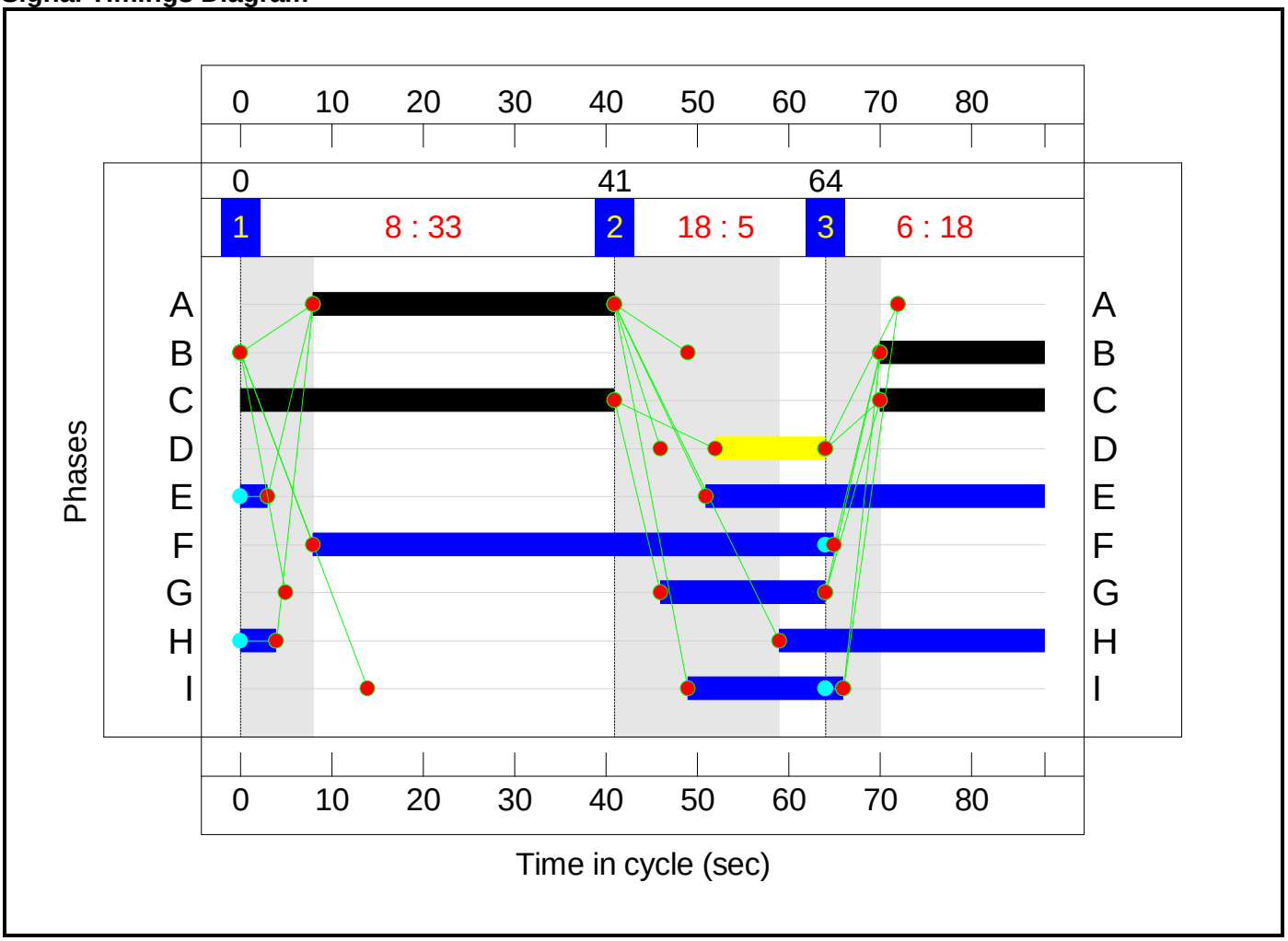
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	33	5	18
Change Point	0	41	64

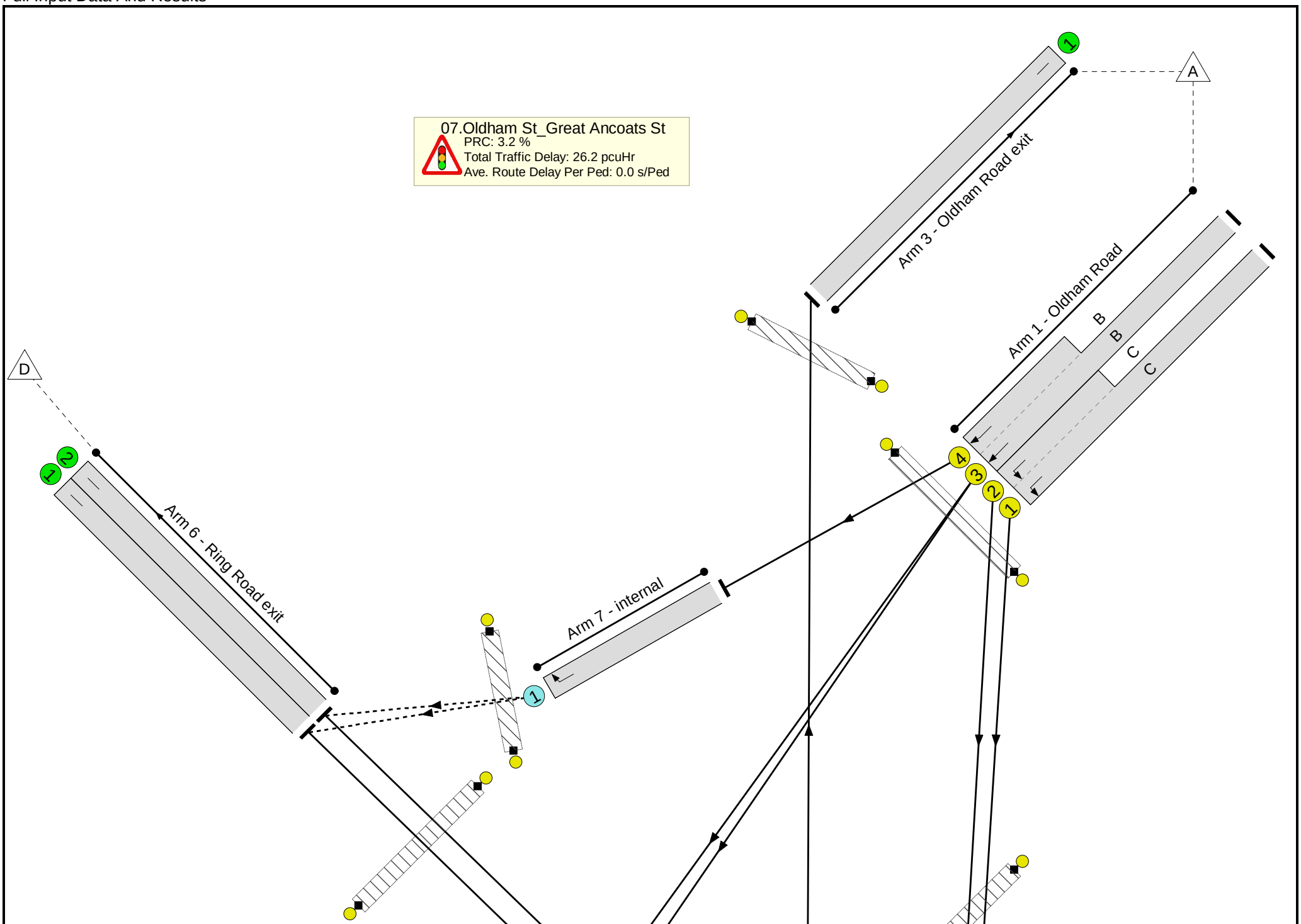
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.2%**
07.Oldham St_Great Ancoats St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.2%**
1/1+1/2	Oldham Road Left	U	N/A	N/A	C		1	59	-	894	1748:1868	771+825	56.0 : 56.0%
1/3+1/4	Oldham Road Ahead Ahead2	U	N/A	N/A	B		1	18	-	420	1973:1842	96+385	87.2 : 87.2%
2/1	Great Ancoats Street Left Ahead	U	N/A	N/A	A		1	33	-	522	1885	728	71.7%
2/2+2/3	Great Ancoats Street Right Ahead	U	N/A	N/A	A		1	33	-	958	2055:1824	547+565	86.2 : 86.2%
3/1	Oldham Road exit	U	N/A	N/A	-		-	-	-	487	Inf	Inf	0.0%
4/1	Great Ancoats Street exit	U	N/A	N/A	-		-	-	-	432	Inf	Inf	0.0%
4/2	Great Ancoats Street exit	U	N/A	N/A	-		-	-	-	462	Inf	Inf	0.0%
5/1	Oldham Street exit	U	N/A	N/A	-		-	-	-	67	Inf	Inf	0.0%
5/2	Oldham Street exit	U	N/A	N/A	-		-	-	-	67	Inf	Inf	0.0%
6/1	Ring Road exit	U	N/A	N/A	-		-	-	-	640	Inf	Inf	0.0%
6/2	Ring Road exit	U	N/A	N/A	-		-	-	-	639	Inf	Inf	0.0%
7/1	internal Right	O	N/A	N/A	-		-	-	-	336	1724	452	74.3%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	H		1	33	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	18	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	D		1	12	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	17	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	E		1	40	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	F		1	57	-	0	-	0	0.0%

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)
Network	**-**	**-**	**84**	**252**	**0**	**16.8**	**9.4**	**0.0**	**26.2**	**-**	**-**	**-**	**-**
07.Oldham St_Great Ancoats St	**-**	**-**	**84**	**252**	**0**	**16.8**	**9.4**	**0.0**	**26.2**	**-**	**-**	**-**	**-**
1/1+1/2	894	894	-	-	-	1.5	0.6	-	2.1	8.5	4.7	0.6	5.4
1/3+1/4	420	420	-	-	-	3.7	3.1	-	6.9	58.7	7.8	3.1	10.9
2/1	522	522	-	-	-	3.3	1.3	-	4.6	31.5	10.7	1.3	12.0
2/2+2/3	958	958	-	-	-	5.9	3.0	-	8.9	33.3	9.9	3.0	12.9
3/1	487	487	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	432	432	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	462	462	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	640	640	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	639	639	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	336	336	84	252	0	2.4	1.4	-	3.8	40.8	8.2	1.4	9.6
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 3.2 Total Delay for Signalled Lanes (pcuHr): 22.40 Cycle Time (s): 88
PRC Over All Lanes (%): 3.2 Total Delay Over All Lanes(pcuHr): 26.20

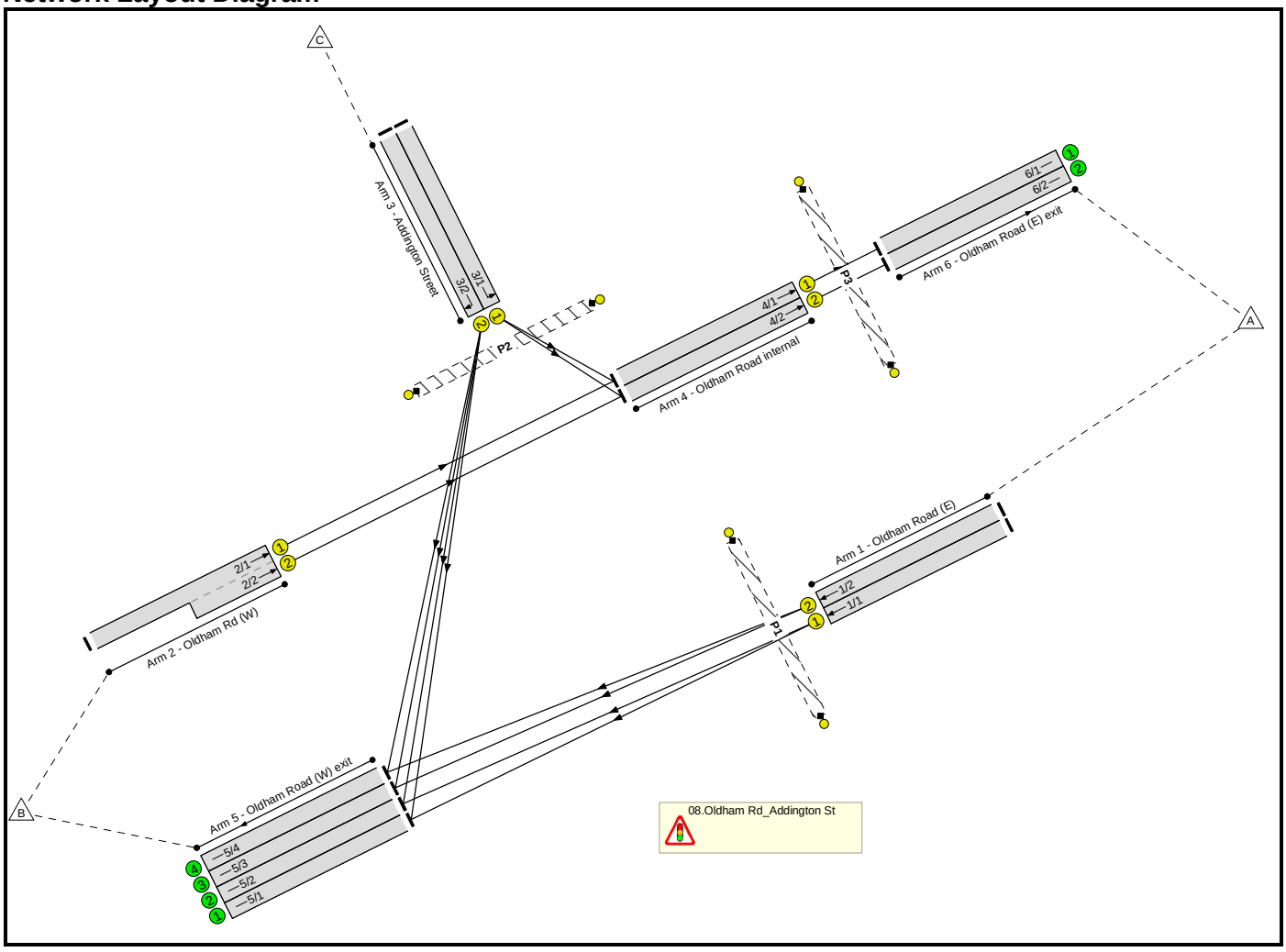
Full Input Data And Results

Full Input Data And Results

User and Project Details

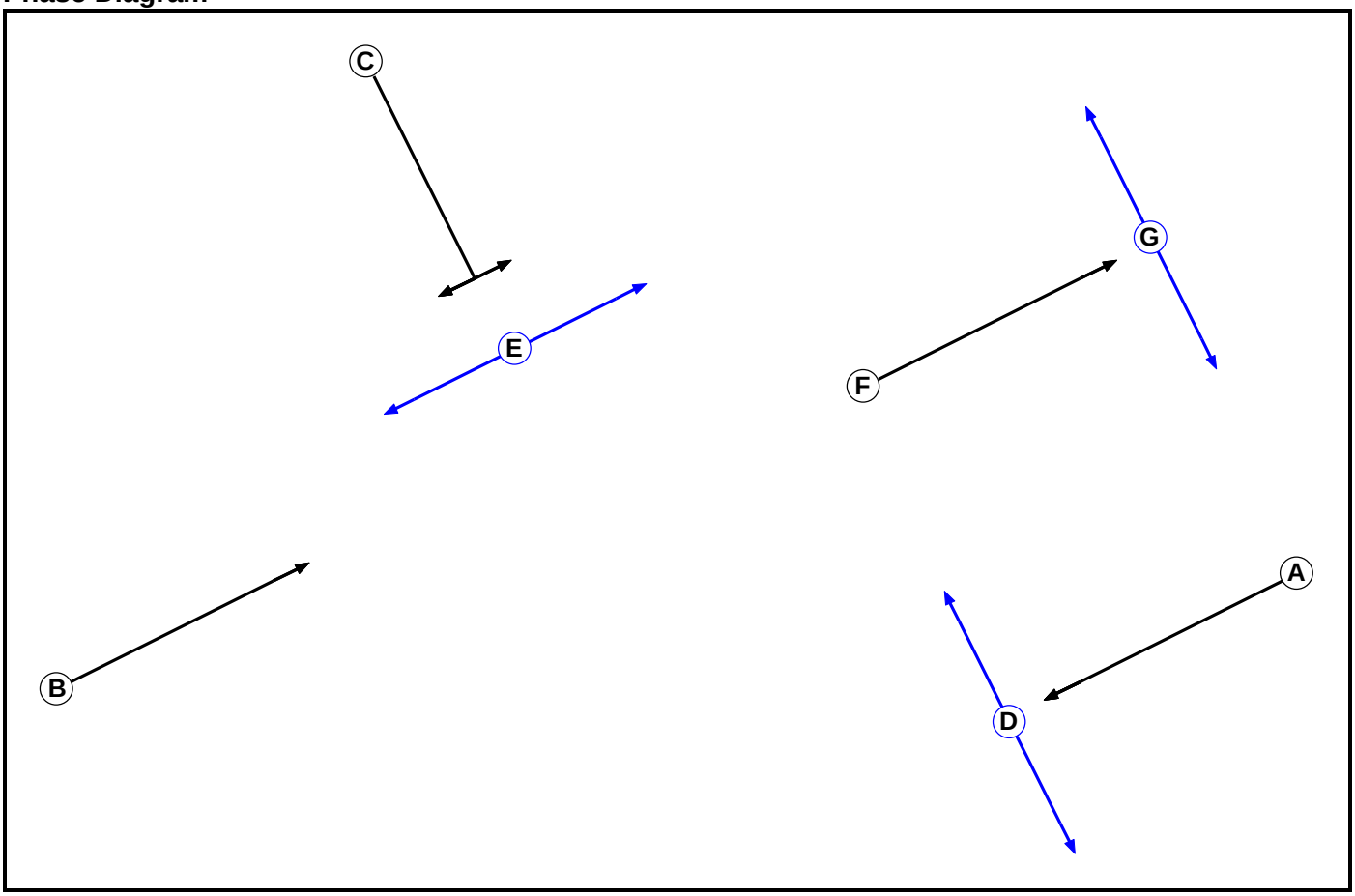
Project:	
Title:	
Location:	
Additional detail:	
File name:	08.Oldham St_Addington St.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	5
B	Traffic	1		7	5
C	Traffic	1		7	6
D	Pedestrian	1		5	5
E	Pedestrian	1		6	6
F	Traffic	2		7	7
G	Pedestrian	2		5	5

Full Input Data And Results

Phase Intergreens Matrix

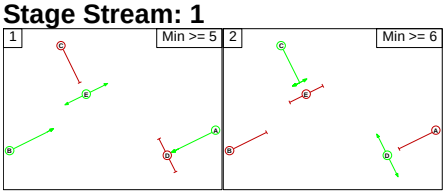
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G
A		-	5	5	-	-	-
B	-		5	-	-	-	-
C	6	6		-	5	-	-
D	7	-	-		-	-	-
E	-	-	8	-		-	-
F	-	-	-	-	-		5
G	-	-	-	-	-	7	

Phases in Stage

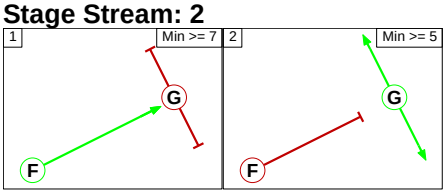
Stream	Stage No.	Phases in Stage
1	1	A B E
1	2	C D
2	1	F
2	2	G

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	A	Losing	2	2
1	2	B	Losing	2	2
2	1	C	Losing	1	1

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Full Input Data And Results

Prohibited Stage Change

Stage Stream: 1

	To Stage		
		1	2
From Stage	1		8
	2	7	

Stage Stream: 2

	To Stage		
		1	2
From Stage	1		5
	2	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: 08.Oldham Rd_Addington St
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: 08.Oldham Rd_Addington St

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 (Oldham Road (E))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
1/2 (Oldham Road (E))	U	A	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 5 Ahead	Inf
2/1 (Oldham Rd (W))	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
2/2 (Oldham Rd (W))	U	B	2	3	8.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
3/1 (Addington Street)	U	C	2	3	60.0	Geom	-	2.80	0.00	Y	Arm 4 Left	12.00
3/2 (Addington Street)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Right	21.00
4/1 (Oldham Road internal)	U	F	2	3	2.0	Geom	-	3.25	0.00	Y	Arm 6 Ahead	Inf
4/2 (Oldham Road internal)	U	F	2	3	2.0	Geom	-	3.00	0.00	Y	Arm 6 Ahead	Inf
5/1 (Oldham Road (W) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (Oldham Road (W) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/3 (Oldham Road (W) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/4 (Oldham Road (W) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Oldham Road (E) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2 (Oldham Road (E) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Base'	08:30	09:30	01:00	
2: 'PM Base'	17:00	18:00	01:00	
3: 'AM Proposed'	08:30	09:30	01:00	
4: 'PM Proposed'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	1034	0	1034
	B	288	0	0	288
	C	191	804	0	995
	Tot.	479	1838	0	2317

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: 08.Oldham Rd_Addington St	
1/1	512
1/2	522
2/1 (with short)	288(In) 147(Out)
2/2 (short)	141
3/1	191
3/2	804
4/1	245
4/2	234
5/1	457
5/2	457
5/3	462
5/4	462
6/1	245
6/2	234

Lane Saturation Flows

Junction: 08.Oldham Rd_Addington St								
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 (Oldham Road (E))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/2 (Oldham Road (E))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
2/1 (Oldham Rd (W))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/2 (Oldham Rd (W))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/1 (Addington Street)	2.80	0.00	Y	Arm 4 Left	12.00	100.0 %	1684	1684
3/2 (Addington Street)	3.00	0.00	Y	Arm 5 Right	21.00	100.0 %	1787	1787
4/1 (Oldham Road internal)	3.25	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1940	1940
4/2 (Oldham Road internal)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
5/1 (Oldham Road (W) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Oldham Road (W) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/3 (Oldham Road (W) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/4 (Oldham Road (W) exit Lane 4)	Infinite Saturation Flow						Inf	Inf
6/1 (Oldham Road (E) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Oldham Road (E) exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	672	0	672
	B	549	0	0	549
	C	414	876	0	1290
	Tot.	963	1548	0	2511

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: 08.Oldham Rd_Addington St	
1/1	332
1/2	340
2/1 (with short)	549(In) 248(Out)
2/2 (short)	301
3/1	414
3/2	876
4/1	513
4/2	450
5/1	385
5/2	385
5/3	389
5/4	389
6/1	513
6/2	450

Full Input Data And Results

Lane Saturation Flows

Junction: 08.Oldham Rd_Addington St								
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 (Oldham Road (E))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/2 (Oldham Road (E))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
2/1 (Oldham Rd (W))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/2 (Oldham Rd (W))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/1 (Addington Street)	2.80	0.00	Y	Arm 4 Left	12.00	100.0 %	1684	1684
3/2 (Addington Street)	3.00	0.00	Y	Arm 5 Right	21.00	100.0 %	1787	1787
4/1 (Oldham Road internal)	3.25	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1940	1940
4/2 (Oldham Road internal)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
5/1 (Oldham Road (W) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Oldham Road (W) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/3 (Oldham Road (W) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/4 (Oldham Road (W) exit Lane 4)	Infinite Saturation Flow						Inf	Inf
6/1 (Oldham Road (E) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Oldham Road (E) exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	1059	0	1059
	B	289	0	0	289
	C	191	841	0	1032
	Tot.	480	1900	0	2380

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: AM Proposed
Junction: 08.Oldham Rd_Addington St	
1/1	524
1/2	535
2/1 (with short)	289(In) 147(Out)
2/2 (short)	142
3/1	191
3/2	841
4/1	245
4/2	235
5/1	472
5/2	473
5/3	477
5/4	478
6/1	245
6/2	235

Lane Saturation Flows

Junction: 08.Oldham Rd_Addington St								
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 (Oldham Road (E))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/2 (Oldham Road (E))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
2/1 (Oldham Rd (W))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/2 (Oldham Rd (W))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/1 (Addington Street)	2.80	0.00	Y	Arm 4 Left	12.00	100.0 %	1684	1684
3/2 (Addington Street)	3.00	0.00	Y	Arm 5 Right	21.00	100.0 %	1787	1787
4/1 (Oldham Road internal)	3.25	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1940	1940
4/2 (Oldham Road internal)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
5/1 (Oldham Road (W) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Oldham Road (W) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/3 (Oldham Road (W) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/4 (Oldham Road (W) exit Lane 4)	Infinite Saturation Flow						Inf	Inf
6/1 (Oldham Road (E) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Oldham Road (E) exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	672	0	672
	B	562	0	0	562
	C	441	878	0	1319
	Tot.	1003	1550	0	2553

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: PM Proposed
Junction: 08.Oldham Rd_Addington St	
1/1	332
1/2	340
2/1 (with short)	562(In) 254(Out)
2/2 (short)	308
3/1	441
3/2	878
4/1	540
4/2	463
5/1	385
5/2	385
5/3	390
5/4	390
6/1	540
6/2	463

Full Input Data And Results

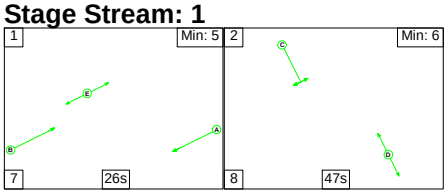
Lane Saturation Flows

Junction: 08.Oldham Rd_Addington St								
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 (Oldham Road (E))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/2 (Oldham Road (E))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
2/1 (Oldham Rd (W))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/2 (Oldham Rd (W))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/1 (Addington Street)	2.80	0.00	Y	Arm 4 Left	12.00	100.0 %	1684	1684
3/2 (Addington Street)	3.00	0.00	Y	Arm 5 Right	21.00	100.0 %	1787	1787
4/1 (Oldham Road internal)	3.25	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1940	1940
4/2 (Oldham Road internal)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
5/1 (Oldham Road (W) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Oldham Road (W) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/3 (Oldham Road (W) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/4 (Oldham Road (W) exit Lane 4)	Infinite Saturation Flow						Inf	Inf
6/1 (Oldham Road (E) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Oldham Road (E) exit Lane 2)	Infinite Saturation Flow						Inf	Inf

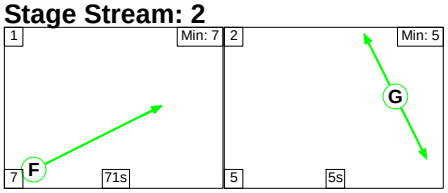
Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

Stage Timings

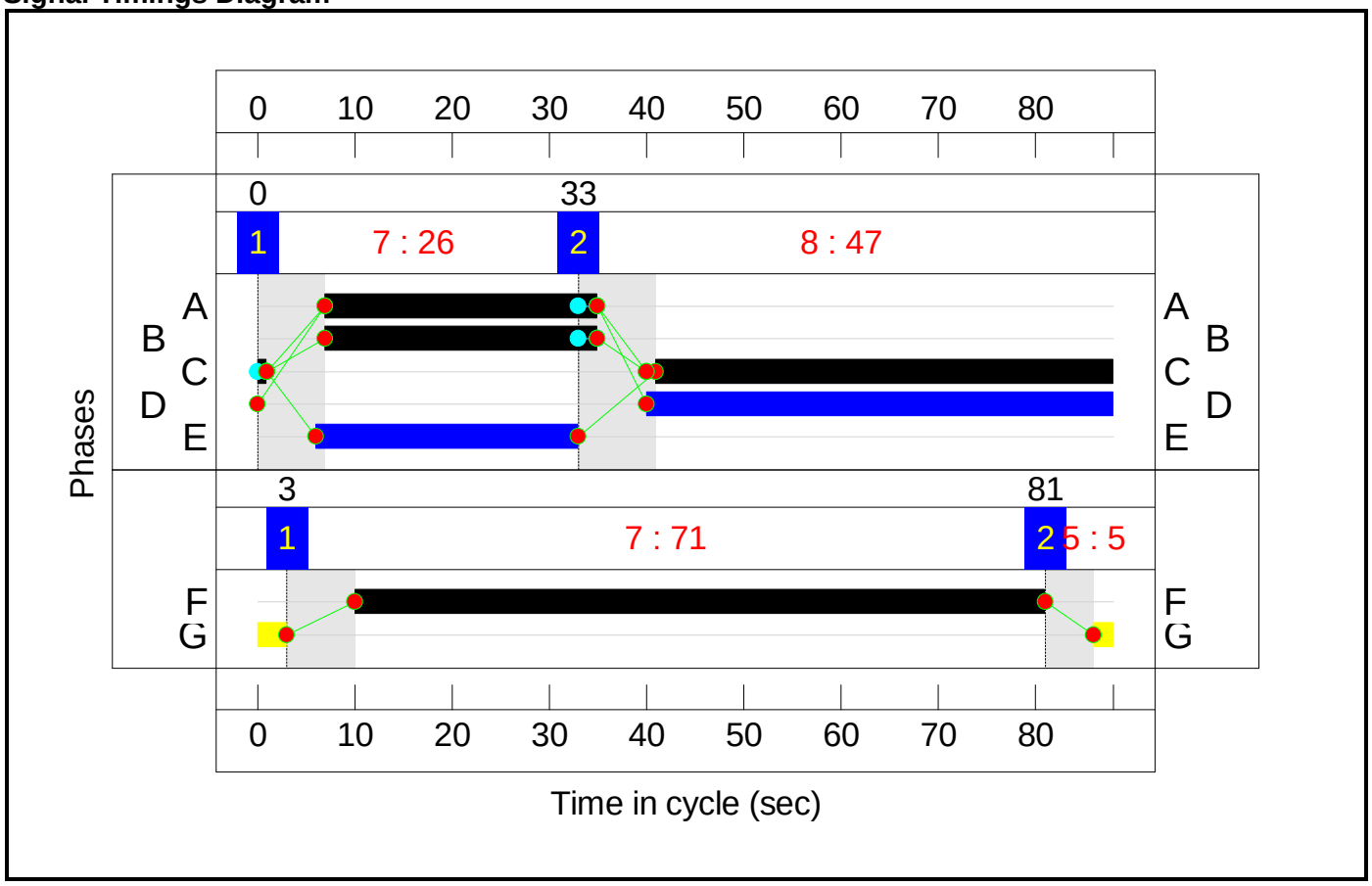
Stage Stream: 1

Stage	1	2
Duration	26	47
Change Point	0	33

Stage Stream: 2

Stage	1	2
Duration	71	5
Change Point	3	81

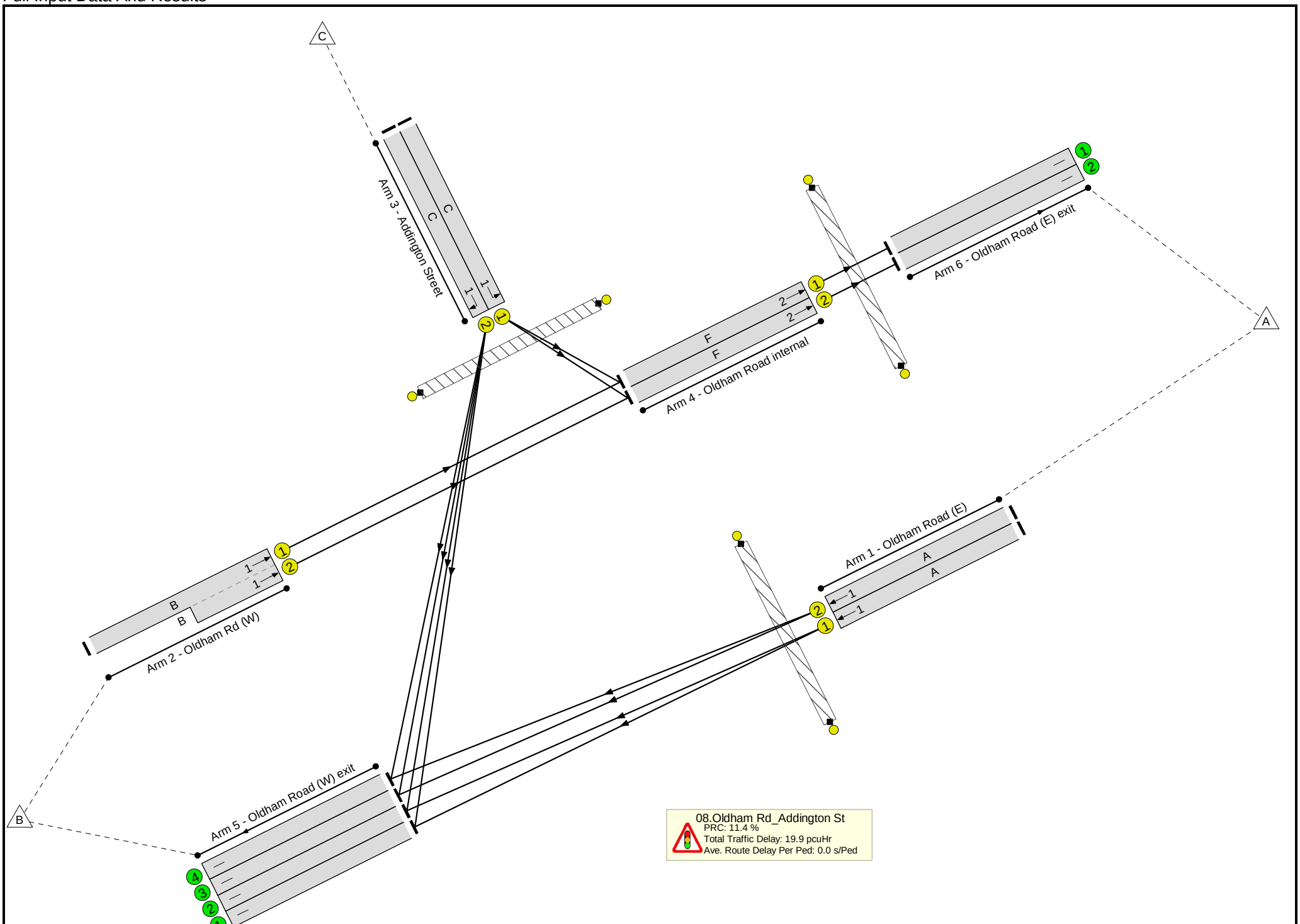
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**80.8%**
08.Oldham Rd_Addington St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**80.8%**
1/1	Oldham Road (E) Ahead	U	1	N/A	A		1	28	-	512	1965	648	79.1%
1/2	Oldham Road (E) Ahead	U	1	N/A	A		1	28	-	522	1985	654	79.8%
2/1+2/2	Oldham Rd (W) Ahead	U	1	N/A	B		1	28	-	288	1940:1940	485+465	30.3 : 30.3%
3/1	Addington Street Left	U	1	N/A	C		1	48	-	191	1684	938	20.4%
3/2	Addington Street Right	U	1	N/A	C		1	48	-	804	1787	995	80.8%
4/1	Oldham Road internal Ahead	U	2	N/A	F		1	71	-	245	1940	1587	15.4%
4/2	Oldham Road internal Ahead	U	2	N/A	F		1	71	-	234	1915	1567	14.9%
5/1	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	457	Inf	Inf	0.0%
5/2	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	457	Inf	Inf	0.0%
5/3	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	462	Inf	Inf	0.0%
5/4	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	462	Inf	Inf	0.0%
6/1	Oldham Road (E) exit	U	N/A	N/A	-		-	-	-	245	Inf	Inf	0.0%
6/2	Oldham Road (E) exit	U	N/A	N/A	-		-	-	-	234	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	1	-	D		1	48	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	1	-	E		1	27	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	2	-	G		1	5	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**13.5**	**6.3**	**0.0**	**19.9**	**-**	**-**	**-**	**-**
08.Oldham Rd_Addington St	**-**	**-**	**0**	**0**	**0**	**13.5**	**6.3**	**0.0**	**19.9**	**-**	**-**	**-**	**-**
1/1	512	512	-	-	-	3.8	1.8	-	5.6	39.7	11.2	1.8	13.1
1/2	522	522	-	-	-	3.9	1.9	-	5.8	40.1	11.6	1.9	13.5
2/1+2/2	288	288	-	-	-	1.7	0.2	-	1.9	24.1	2.6	0.2	2.8
3/1	191	191	-	-	-	0.5	0.1	-	0.6	12.2	2.3	0.1	2.4
3/2	804	804	-	-	-	3.5	2.1	-	5.6	24.9	15.6	2.1	17.7
4/1	245	245	-	-	-	0.0	0.1	-	0.1	1.9	0.4	0.1	0.5
4/2	234	234	-	-	-	0.0	0.1	-	0.1	1.9	0.3	0.1	0.4
5/1	457	457	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	457	457	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/3	462	462	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/4	462	462	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	245	245	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	234	234	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

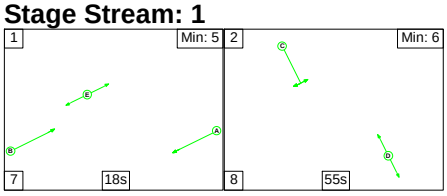
C1 Stream: 1 PRC for Signalled Lanes (%): 11.4 Total Delay for Signalled Lanes (pcuHr): 19.60 Cycle Time (s): 88
C1 Stream: 2 PRC for Signalled Lanes (%): 483.1 Total Delay for Signalled Lanes (pcuHr): 0.26 Cycle Time (s): 88
PRC Over All Lanes (%): 11.4 Total Delay Over All Lanes(pcuHr): 19.85

Full Input Data And Results

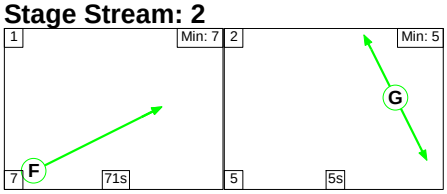
Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

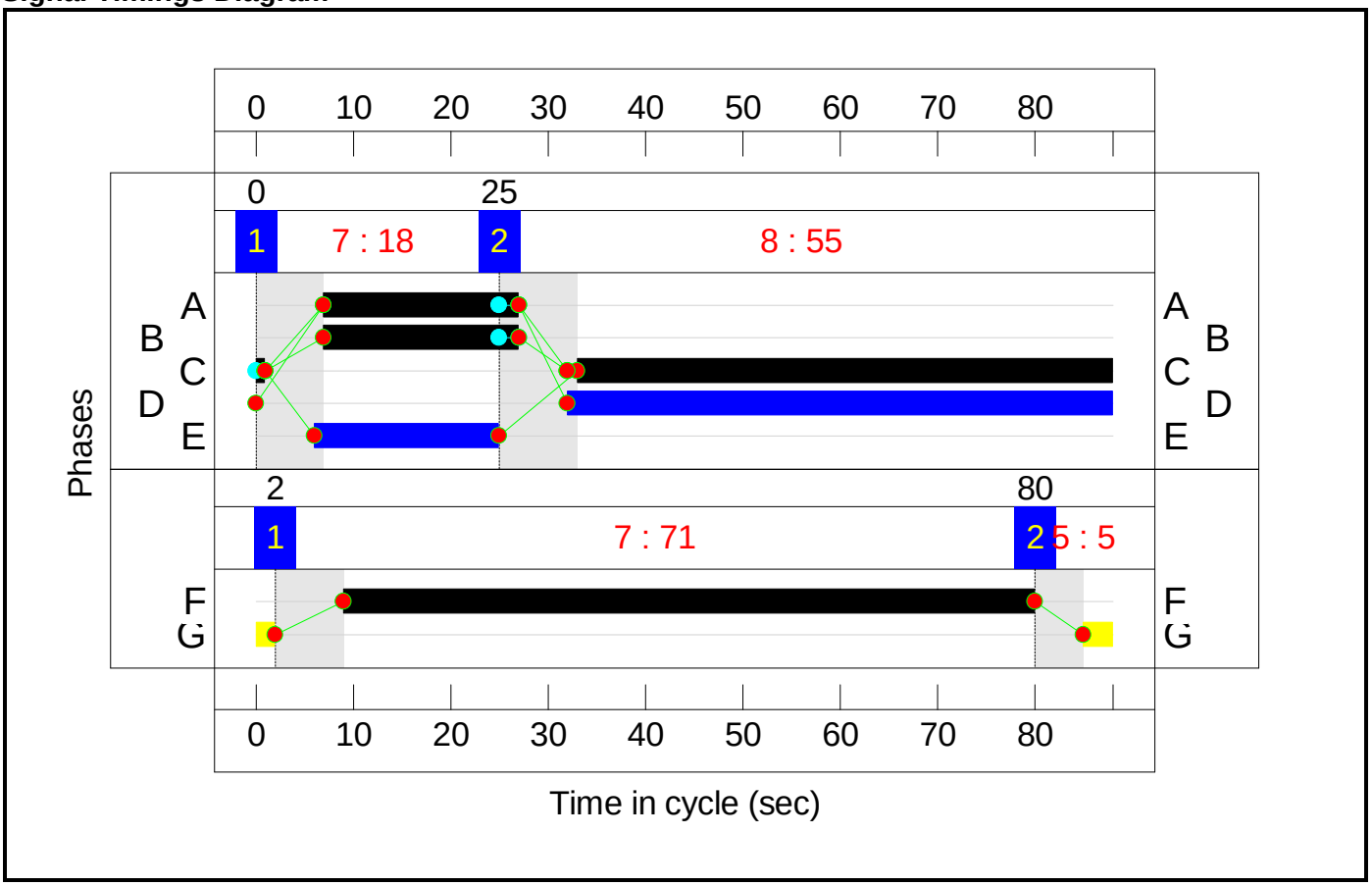
Stage Stream: 1

Stage	1	2
Duration	18	55
Change Point	0	25

Stage Stream: 2

Stage	1	2
Duration	71	5
Change Point	2	80

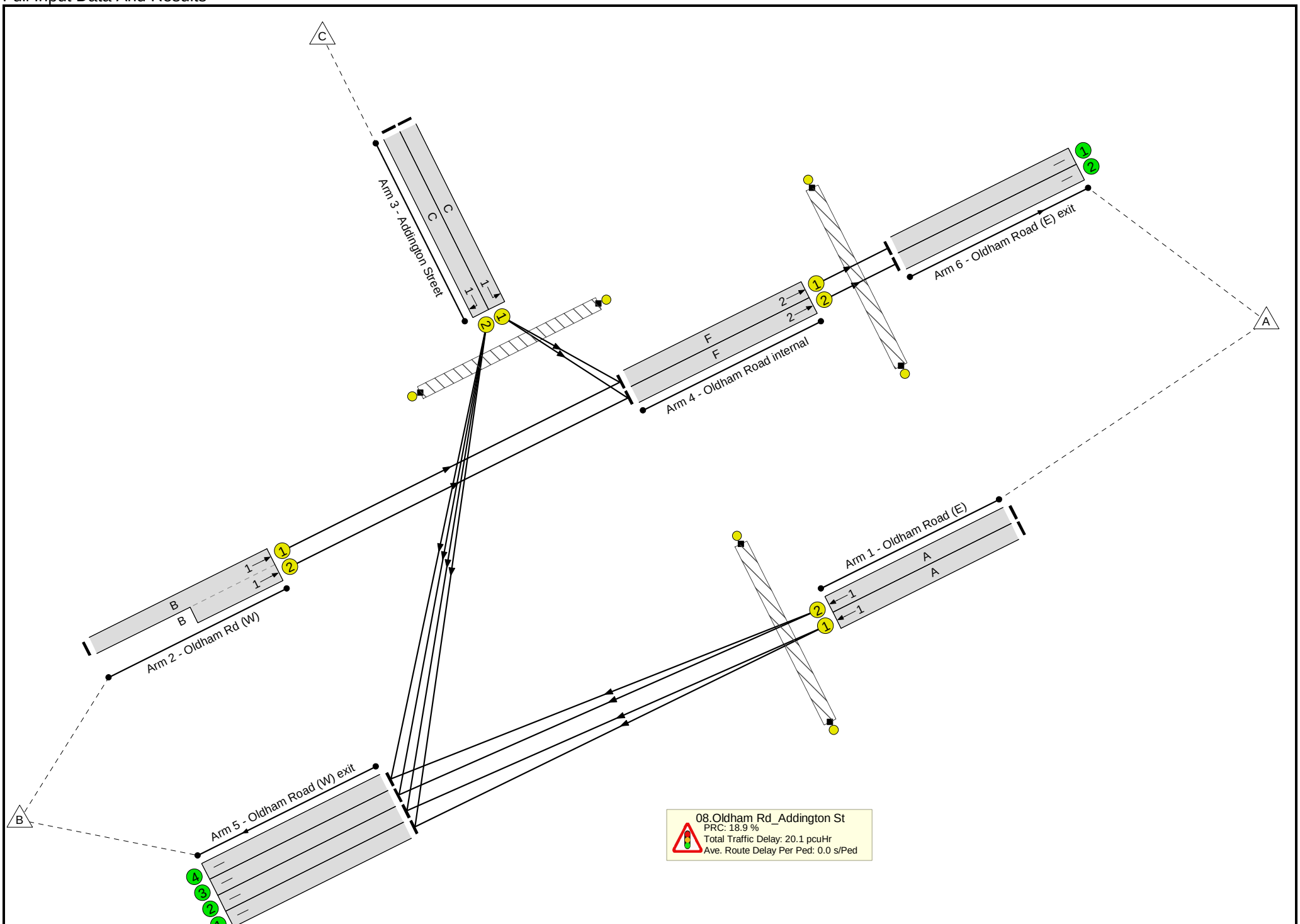
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.7%**
08.Oldham Rd_Addington St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.7%**
1/1	Oldham Road (E) Ahead	U	1	N/A	A		1	20	-	332	1965	469	70.8%
1/2	Oldham Road (E) Ahead	U	1	N/A	A		1	20	-	340	1985	474	71.8%
2/1+2/2	Oldham Rd (W) Ahead	U	1	N/A	B		1	20	-	549	1940:1940	329+400	75.3 : 75.3%
3/1	Addington Street Left	U	1	N/A	C		1	56	-	414	1684	1091	38.0%
3/2	Addington Street Right	U	1	N/A	C		1	56	-	876	1787	1157	75.7%
4/1	Oldham Road internal Ahead	U	2	N/A	F		1	71	-	513	1940	1587	32.3%
4/2	Oldham Road internal Ahead	U	2	N/A	F		1	71	-	450	1915	1567	28.7%
5/1	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	385	Inf	Inf	0.0%
5/2	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	385	Inf	Inf	0.0%
5/3	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	389	Inf	Inf	0.0%
5/4	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	389	Inf	Inf	0.0%
6/1	Oldham Road (E) exit	U	N/A	N/A	-		-	-	-	513	Inf	Inf	0.0%
6/2	Oldham Road (E) exit	U	N/A	N/A	-		-	-	-	450	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	1	-	D		1	56	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	1	-	E		1	19	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	2	-	G		1	5	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**13.9**	**6.2**	**0.0**	**20.1**	**-**	**-**	**-**	**-**
08.Oldham Rd_Addington St	**-**	**-**	**0**	**0**	**0**	**13.9**	**6.2**	**0.0**	**20.1**	**-**	**-**	**-**	**-**
1/1	332	332	-	-	-	2.8	1.2	-	4.0	43.6	7.4	1.2	8.6
1/2	340	340	-	-	-	2.9	1.2	-	4.2	44.0	7.6	1.2	8.8
2/1+2/2	549	549	-	-	-	4.5	1.5	-	6.0	39.6	6.6	1.5	8.1
3/1	414	414	-	-	-	0.8	0.3	-	1.1	9.9	4.7	0.3	5.0
3/2	876	876	-	-	-	2.6	1.5	-	4.1	17.0	14.6	1.5	16.1
4/1	513	513	-	-	-	0.1	0.2	-	0.4	2.5	1.0	0.2	1.3
4/2	450	450	-	-	-	0.1	0.2	-	0.3	2.1	2.1	0.2	2.3
5/1	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/3	389	389	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/4	389	389	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	513	513	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	450	450	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

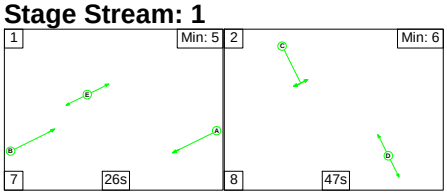
C1	Stream: 1 PRC for Signalled Lanes (%):	18.9	Total Delay for Signalled Lanes (pcuHr):	19.50	Cycle Time (s):	88
C1	Stream: 2 PRC for Signalled Lanes (%):	178.5	Total Delay for Signalled Lanes (pcuHr):	0.62	Cycle Time (s):	88
	PRC Over All Lanes (%):	18.9	Total Delay Over All Lanes(pcuHr):	20.12		

Full Input Data And Results

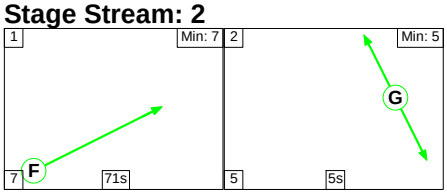
Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

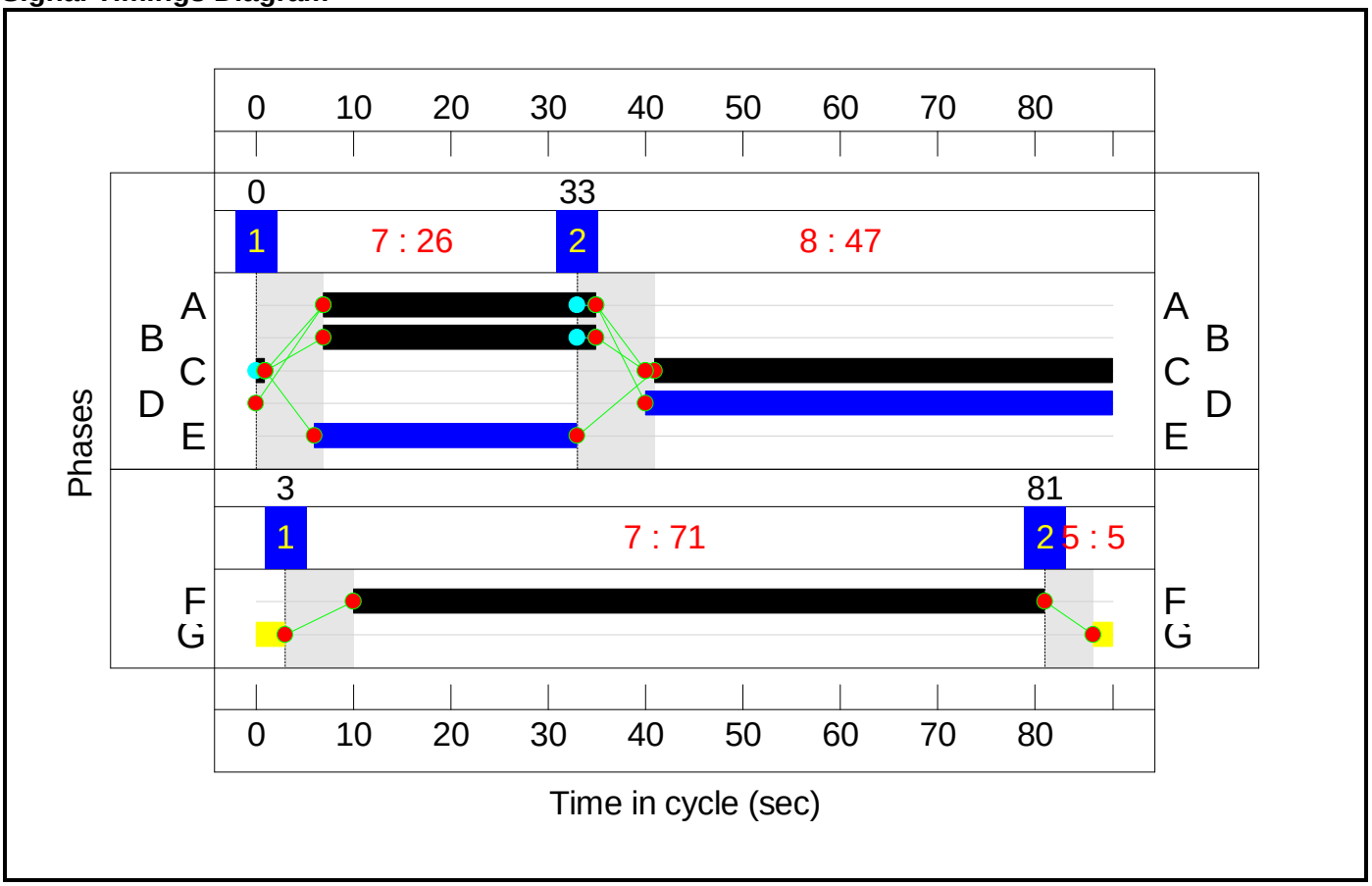
Stage Stream: 1

Stage	1	2
Duration	26	47
Change Point	0	33

Stage Stream: 2

Stage	1	2
Duration	71	5
Change Point	3	81

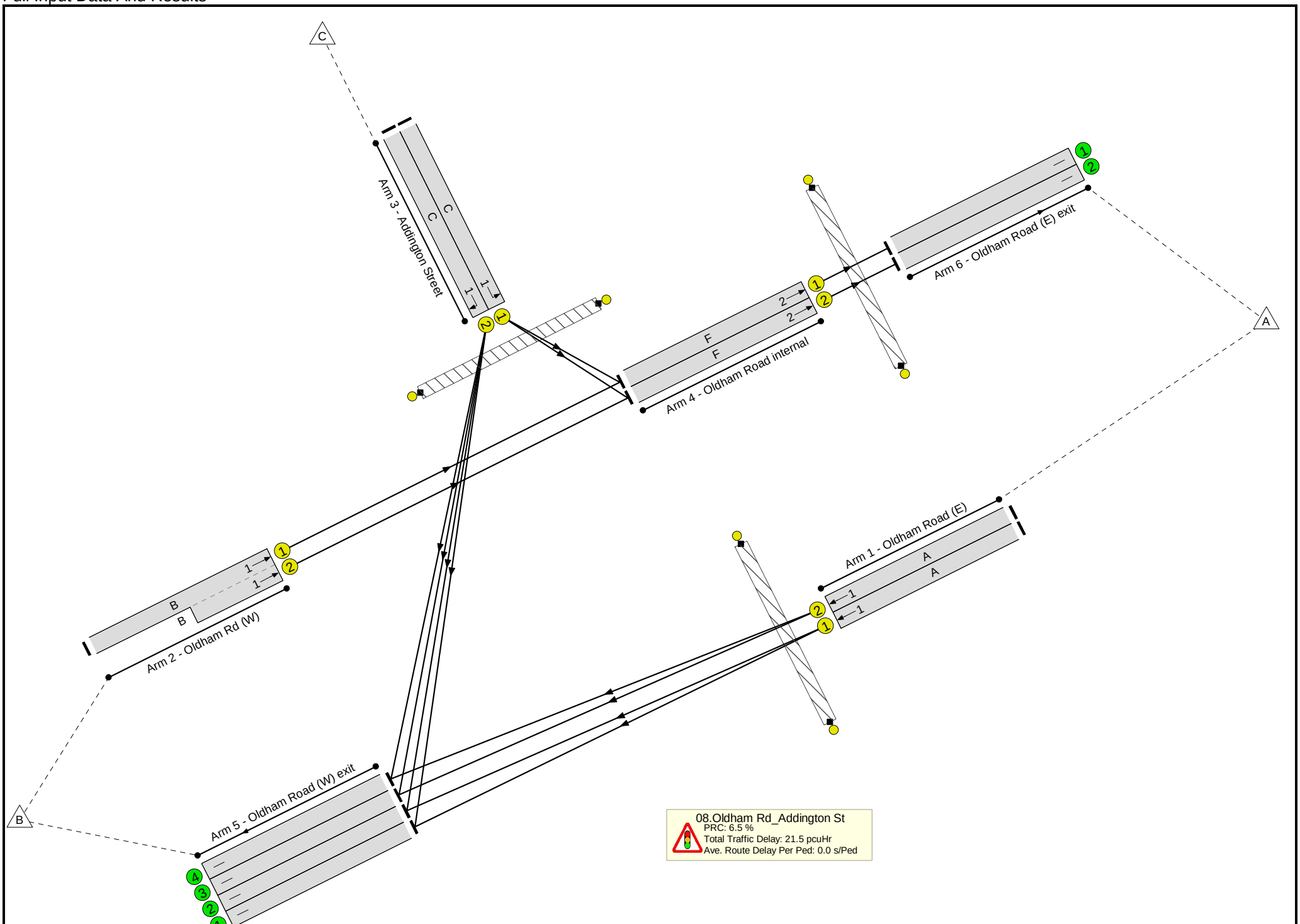
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.5%**
08.Oldham Rd_Addington St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.5%**
1/1	Oldham Road (E) Ahead	U	1	N/A	A		1	28	-	524	1965	648	80.9%
1/2	Oldham Road (E) Ahead	U	1	N/A	A		1	28	-	535	1985	654	81.8%
2/1+2/2	Oldham Rd (W) Ahead	U	1	N/A	B		1	28	-	289	1940:1940	484+468	30.4 : 30.4%
3/1	Addington Street Left	U	1	N/A	C		1	48	-	191	1684	938	20.4%
3/2	Addington Street Right	U	1	N/A	C		1	48	-	841	1787	995	84.5%
4/1	Oldham Road internal Ahead	U	2	N/A	F		1	71	-	245	1940	1587	15.4%
4/2	Oldham Road internal Ahead	U	2	N/A	F		1	71	-	235	1915	1567	15.0%
5/1	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	472	Inf	Inf	0.0%
5/2	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	473	Inf	Inf	0.0%
5/3	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	477	Inf	Inf	0.0%
5/4	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	478	Inf	Inf	0.0%
6/1	Oldham Road (E) exit	U	N/A	N/A	-		-	-	-	245	Inf	Inf	0.0%
6/2	Oldham Road (E) exit	U	N/A	N/A	-		-	-	-	235	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	1	-	D		1	48	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	1	-	E		1	27	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	2	-	G		1	5	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**14.1**	**7.4**	**0.0**	**21.5**	**-**	**-**	**-**	**-**
08.Oldham Rd_Addington St	**-**	**-**	**0**	**0**	**0**	**14.1**	**7.4**	**0.0**	**21.5**	**-**	**-**	**-**	**-**
1/1	524	524	-	-	-	3.9	2.1	-	6.0	41.1	11.6	2.1	13.7
1/2	535	535	-	-	-	4.0	2.2	-	6.2	41.7	11.9	2.2	14.1
2/1+2/2	289	289	-	-	-	1.7	0.2	-	1.9	24.1	2.6	0.2	2.8
3/1	191	191	-	-	-	0.5	0.1	-	0.6	12.2	2.3	0.1	2.4
3/2	841	841	-	-	-	3.8	2.6	-	6.5	27.6	17.1	2.6	19.7
4/1	245	245	-	-	-	0.0	0.1	-	0.1	1.9	0.4	0.1	0.5
4/2	235	235	-	-	-	0.0	0.1	-	0.1	1.9	0.3	0.1	0.4
5/1	472	472	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	473	473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/3	477	477	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/4	478	478	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	245	245	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	235	235	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

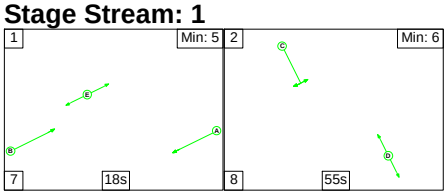
C1 Stream: 1 PRC for Signalled Lanes (%):	6.5	Total Delay for Signalled Lanes (pcuHr):	21.20	Cycle Time (s): 88
C1 Stream: 2 PRC for Signalled Lanes (%):	483.1	Total Delay for Signalled Lanes (pcuHr):	0.26	Cycle Time (s): 88
PRC Over All Lanes (%):	6.5	Total Delay Over All Lanes(pcuHr):	21.46	

Full Input Data And Results

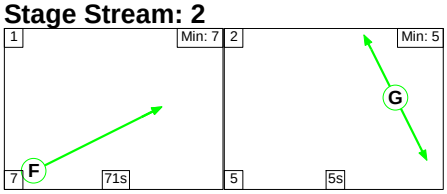
Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

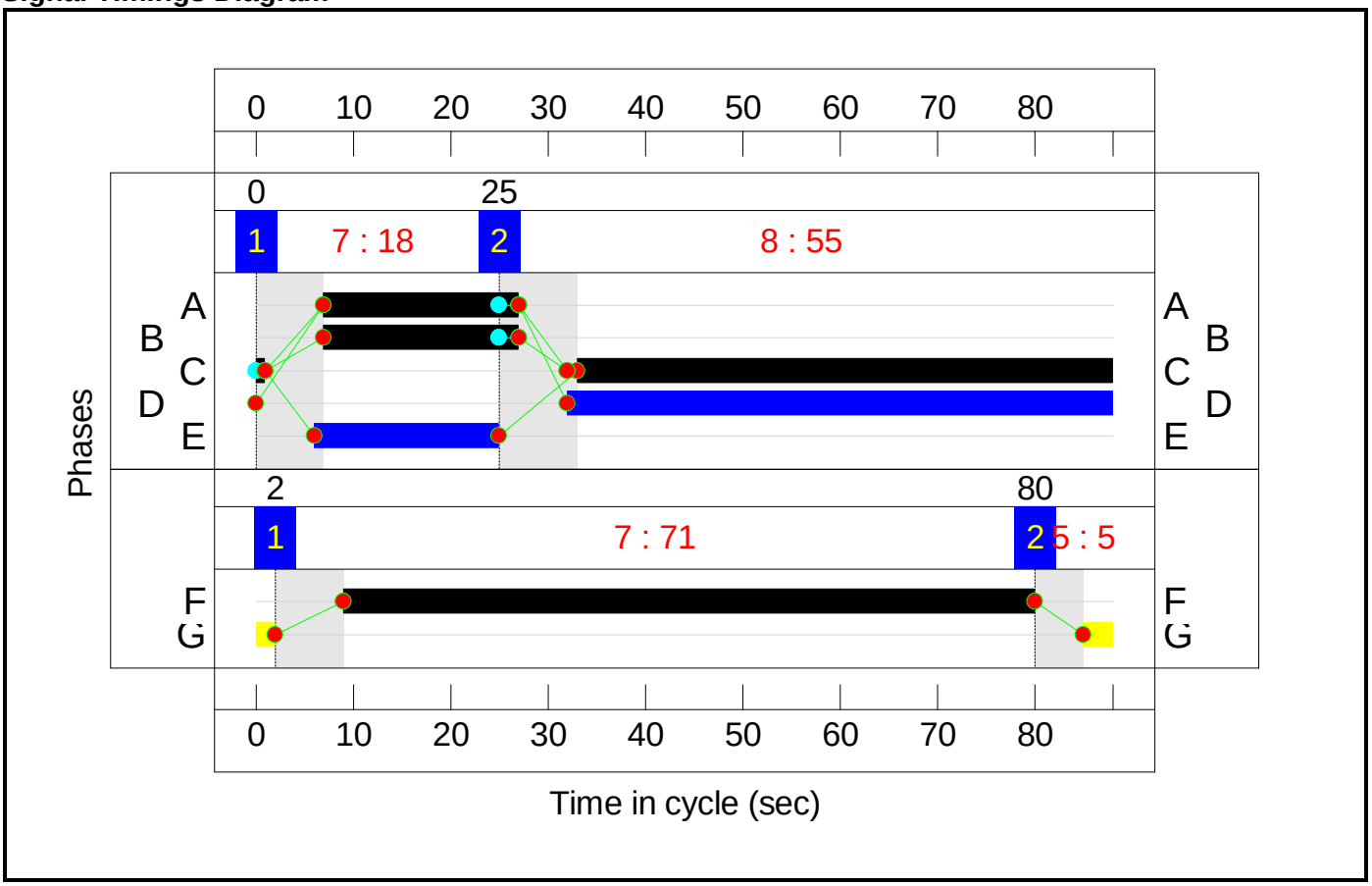
Stage Stream: 1

Stage	1	2
Duration	18	55
Change Point	0	25

Stage Stream: 2

Stage	1	2
Duration	71	5
Change Point	2	80

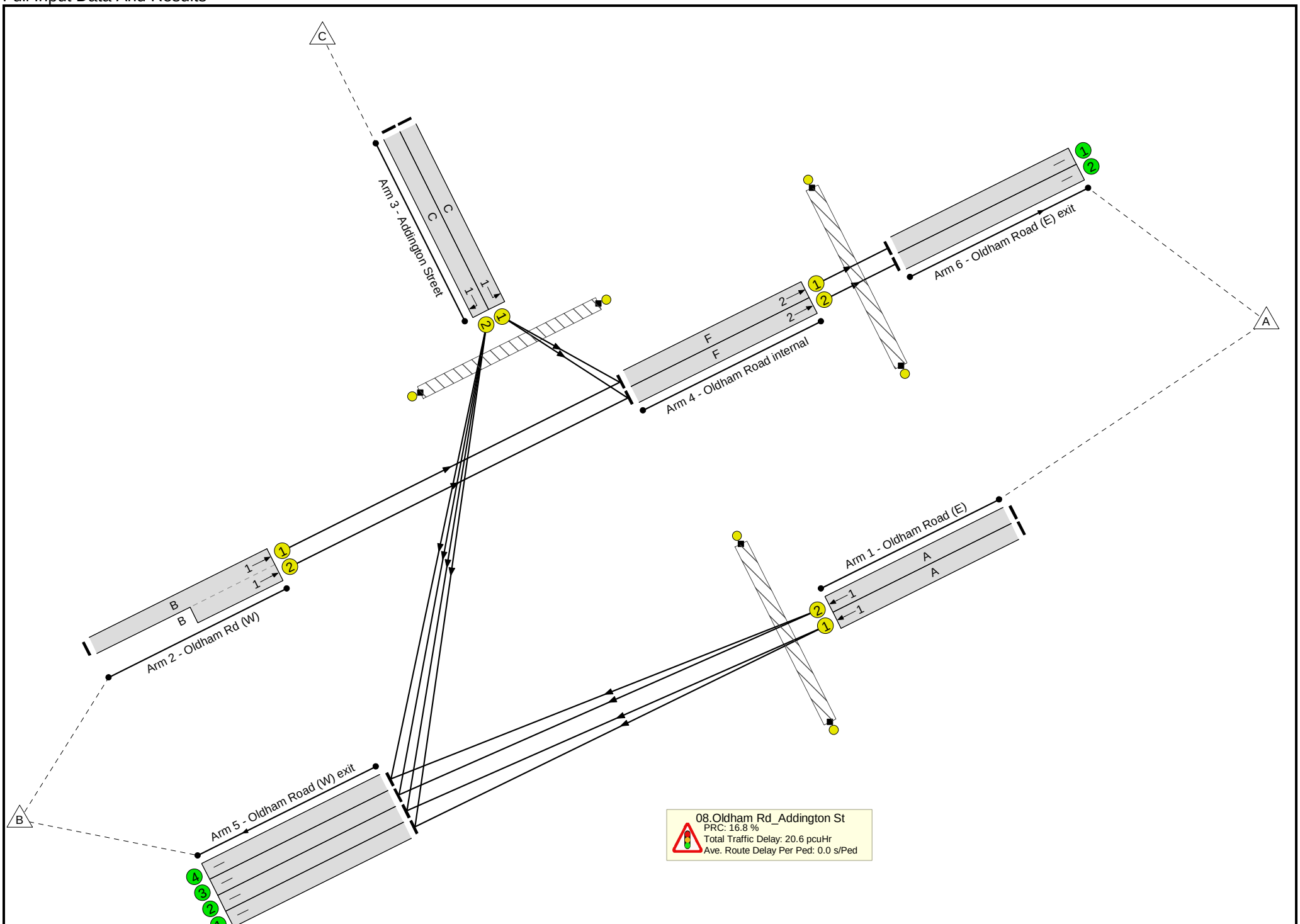
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.0%**
08.Oldham Rd_Addington St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.0%**
1/1	Oldham Road (E) Ahead	U	1	N/A	A		1	20	-	332	1965	469	70.8%
1/2	Oldham Road (E) Ahead	U	1	N/A	A		1	20	-	340	1985	474	71.8%
2/1+2/2	Oldham Rd (W) Ahead	U	1	N/A	B		1	20	-	562	1940:1940	330+400	77.0 : 77.0%
3/1	Addington Street Left	U	1	N/A	C		1	56	-	441	1684	1091	40.4%
3/2	Addington Street Right	U	1	N/A	C		1	56	-	878	1787	1157	75.9%
4/1	Oldham Road internal Ahead	U	2	N/A	F		1	71	-	540	1940	1587	34.0%
4/2	Oldham Road internal Ahead	U	2	N/A	F		1	71	-	463	1915	1567	29.6%
5/1	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	385	Inf	Inf	0.0%
5/2	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	385	Inf	Inf	0.0%
5/3	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	390	Inf	Inf	0.0%
5/4	Oldham Road (W) exit	U	N/A	N/A	-		-	-	-	390	Inf	Inf	0.0%
6/1	Oldham Road (E) exit	U	N/A	N/A	-		-	-	-	540	Inf	Inf	0.0%
6/2	Oldham Road (E) exit	U	N/A	N/A	-		-	-	-	463	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	1	-	D		1	56	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	1	-	E		1	19	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	2	-	G		1	5	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**14.1**	**6.4**	**0.0**	**20.6**	**-**	**-**	**-**	**-**
08.Oldham Rd_Addington St	**-**	**-**	**0**	**0**	**0**	**14.1**	**6.4**	**0.0**	**20.6**	**-**	**-**	**-**	**-**
1/1	332	332	-	-	-	2.8	1.2	-	4.0	43.6	7.4	1.2	8.6
1/2	340	340	-	-	-	2.9	1.2	-	4.2	44.0	7.6	1.2	8.8
2/1+2/2	562	562	-	-	-	4.7	1.6	-	6.3	40.4	6.8	1.6	8.4
3/1	441	441	-	-	-	0.9	0.3	-	1.2	10.2	5.0	0.3	5.4
3/2	878	878	-	-	-	2.6	1.6	-	4.2	17.1	14.6	1.6	16.2
4/1	540	540	-	-	-	0.1	0.3	-	0.4	2.6	1.1	0.3	1.4
4/2	463	463	-	-	-	0.1	0.2	-	0.3	2.1	2.1	0.2	2.4
5/1	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/3	390	390	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/4	390	390	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	540	540	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	463	463	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

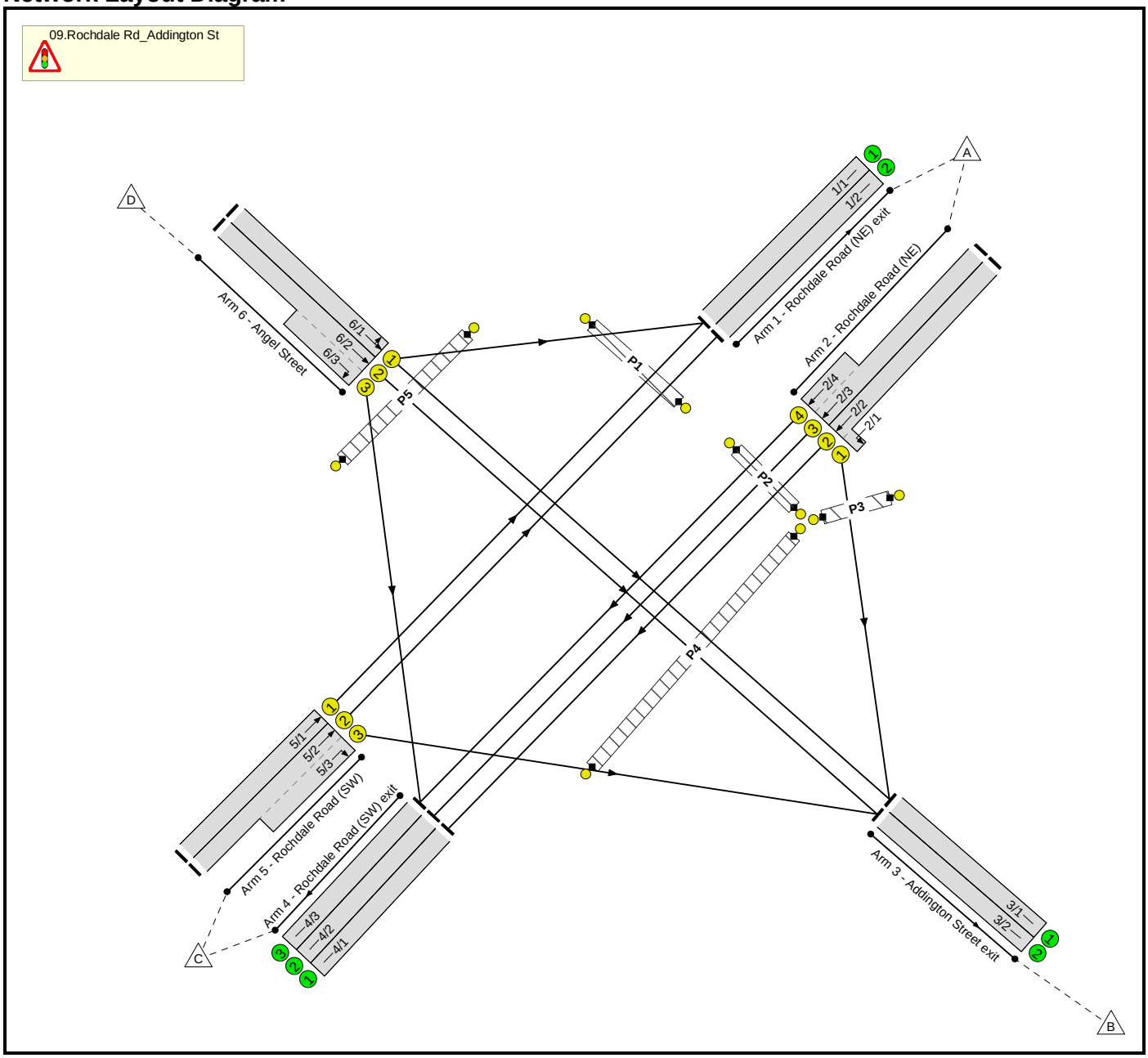
C1	Stream: 1 PRC for Signalled Lanes (%):	16.8	Total Delay for Signalled Lanes (pcuHr):	19.91	Cycle Time (s):	88
C1	Stream: 2 PRC for Signalled Lanes (%):	164.5	Total Delay for Signalled Lanes (pcuHr):	0.66	Cycle Time (s):	88
	PRC Over All Lanes (%):	16.8	Total Delay Over All Lanes(pcuHr):	20.57		

Full Input Data And Results

User and Project Details

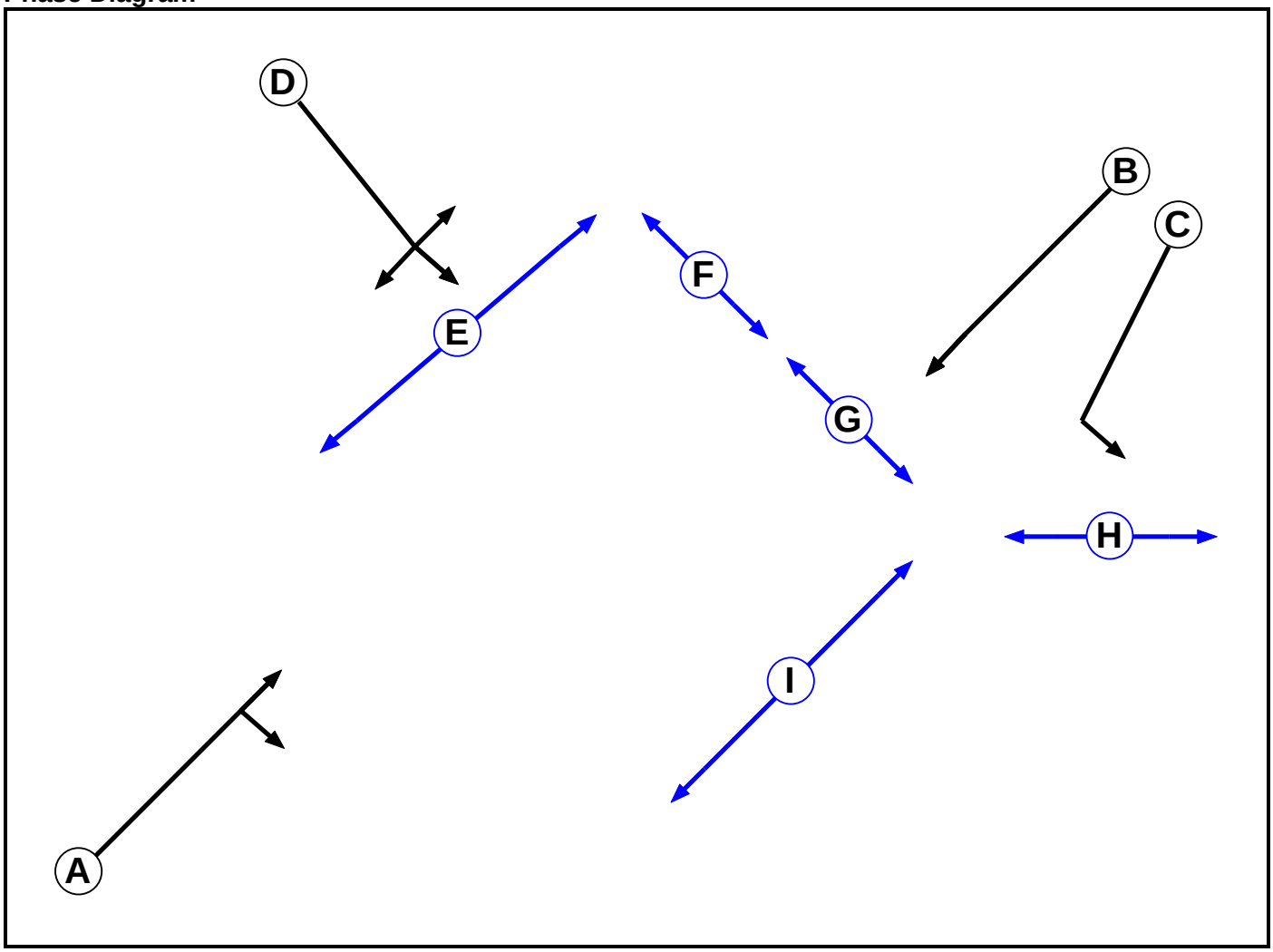
Project:	
Title:	
Location:	
Additional detail:	
File name:	09.Rochdale Rd_Addington St.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	4
C	Traffic		7	4
D	Traffic		7	7
E	Pedestrian		7	7
F	Pedestrian		5	3
G	Pedestrian		6	6
H	Pedestrian		5	1
I	Pedestrian		6	6

Full Input Data And Results

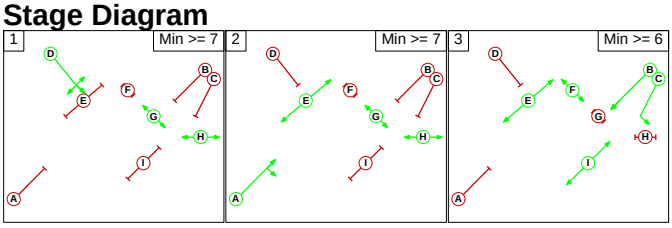
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I
A		7	8	6	-	8	-	-	10
B	5		-	5	-	-	5	-	-
C	5	-		5	-	-	-	5	-
D	7	7	8		5	8	-	-	9
E	-	-	-	10		-	-	-	-
F	6	-	-	6	-		-	-	-
G	-	9	-	-	-	-		-	-
H	-	-	5	-	-	-	-		-
I	8	-	-	8	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	D G H
2	A E G H
3	B C E F I

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	H	Losing	4	4
2	1	A	Losing	4	4
2	3	H	Losing	4	4
3	1	B	Losing	5	5
3	1	C	Losing	5	5
3	1	F	Losing	4	4
3	1	I	Losing	2	2
3	2	B	Losing	3	3
3	2	C	Losing	3	3
3	2	F	Losing	2	2

Full Input Data And Results

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		7	9
	2	10		10
	3	10	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: 09.Rochdale Rd_Addington St
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: 09.Rochdale Rd_Addington St

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 (Rochdale Road (NE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
1/2 (Rochdale Road (NE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/1 (Rochdale Road (NE))	U	C	2	3	1.0	Geom	-	4.90	0.00	Y	Arm 3 Left	21.00
2/2 (Rochdale Road (NE))	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
2/3 (Rochdale Road (NE))	U	B	2	3	60.0	Geom	-	3.40	0.00	N	Arm 4 Ahead	Inf
2/4 (Rochdale Road (NE))	U	B	2	3	5.0	Geom	-	3.30	0.00	Y	Arm 4 Ahead	17.00
3/1 (Addington Street exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/2 (Addington Street exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1 (Rochdale Road (SW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2 (Rochdale Road (SW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/3 (Rochdale Road (SW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Rochdale Road (SW))	U	A	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 1 Ahead	Inf
5/2 (Rochdale Road (SW))	U	A	2	3	60.0	Geom	-	3.50	0.00	N	Arm 1 Ahead	Inf
5/3 (Rochdale Road (SW))	U	A	2	3	9.0	Geom	-	3.40	0.00	Y	Arm 3 Right	19.00
6/1 (Angel Street)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 1 Left	12.00
											Arm 3 Ahead	Inf

6/2 (Angel Street)	U	D	2	3	60.0	Geom	-	3.40	0.00	N	Arm 3 Ahead	Inf
6/3 (Angel Street)	U	D	2	3	7.0	Geom	-	2.80	0.00	Y	Arm 4 Right	20.00

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Base'	08:30	09:30	01:00	
2: 'PM Base'	17:00	18:00	01:00	
3: 'AM Proposed'	08:30	09:30	01:00	
4: 'PM Proposed'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	167	504	0	671
	B	0	0	0	0	0
	C	182	99	0	0	281
	D	101	836	99	0	1036
	Tot.	283	1102	603	0	1988

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: 09.Rochdale Rd_Addington St	
1/1	156
1/2	127
2/1 (short)	167
2/2 (with short)	261(In) 94(Out)
2/3 (with short)	410(In) 221(Out)
2/4 (short)	189
3/1	524
3/2	578
4/1	94
4/2	221
4/3	288
5/1	55
5/2 (with short)	226(In) 127(Out)
5/3 (short)	99
6/1	458
6/2 (with short)	578(In) 479(Out)
6/3 (short)	99

Full Input Data And Results

Lane Saturation Flows

Junction: 09.Rochdale Rd_Addington St								
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 (Rochdale Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (Rochdale Road (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (Rochdale Road (NE))	4.90	0.00	Y	Arm 3 Left	21.00	100.0 %	1965	1965
2/2 (Rochdale Road (NE))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
2/3 (Rochdale Road (NE))	3.40	0.00	N	Arm 4 Ahead	Inf	100.0 %	2095	2095
2/4 (Rochdale Road (NE))	3.30	0.00	Y	Arm 4 Ahead	17.00	100.0 %	1787	1787
3/1 (Addington Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (Addington Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (Rochdale Road (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Rochdale Road (SW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/3 (Rochdale Road (SW) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/1 (Rochdale Road (SW))	3.40	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1955	1955
5/2 (Rochdale Road (SW))	3.50	0.00	N	Arm 1 Ahead	Inf	100.0 %	2105	2105
5/3 (Rochdale Road (SW))	3.40	0.00	Y	Arm 3 Right	19.00	100.0 %	1812	1812
6/1 (Angel Street)	3.50	0.00	Y	Arm 1 Left	12.00	22.1 %	1912	1912
				Arm 3 Ahead	Inf	77.9 %		
6/2 (Angel Street)	3.40	0.00	N	Arm 3 Ahead	Inf	100.0 %	2095	2095
6/3 (Angel Street)	2.80	0.00	Y	Arm 4 Right	20.00	100.0 %	1763	1763

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	122	396	0	518
	B	0	0	0	0	0
	C	376	281	0	0	657
	D	138	913	69	0	1120
	Tot.	514	1316	465	0	2295

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: 09.Rochdale Rd_Addington St	
1/1	382
1/2	132
2/1 (short)	122
2/2 (with short)	191(In) 69(Out)
2/3 (with short)	327(In) 177(Out)
2/4 (short)	150
3/1	494
3/2	822
4/1	69
4/2	177
4/3	219
5/1	244
5/2 (with short)	413(In) 132(Out)
5/3 (short)	281
6/1	510
6/2 (with short)	610(In) 541(Out)
6/3 (short)	69

Full Input Data And Results

Lane Saturation Flows

Junction: 09.Rochdale Rd_Addington St								
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 (Rochdale Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (Rochdale Road (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (Rochdale Road (NE))	4.90	0.00	Y	Arm 3 Left	21.00	100.0 %	1965	1965
2/2 (Rochdale Road (NE))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
2/3 (Rochdale Road (NE))	3.40	0.00	N	Arm 4 Ahead	Inf	100.0 %	2095	2095
2/4 (Rochdale Road (NE))	3.30	0.00	Y	Arm 4 Ahead	17.00	100.0 %	1787	1787
3/1 (Addington Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (Addington Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (Rochdale Road (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Rochdale Road (SW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/3 (Rochdale Road (SW) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/1 (Rochdale Road (SW))	3.40	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1955	1955
5/2 (Rochdale Road (SW))	3.50	0.00	N	Arm 1 Ahead	Inf	100.0 %	2105	2105
5/3 (Rochdale Road (SW))	3.40	0.00	Y	Arm 3 Right	19.00	100.0 %	1812	1812
6/1 (Angel Street)	3.50	0.00	Y	Arm 1 Left	12.00	27.1 %	1901	1901
				Arm 3 Ahead	Inf	72.9 %		
6/2 (Angel Street)	3.40	0.00	N	Arm 3 Ahead	Inf	100.0 %	2095	2095
6/3 (Angel Street)	2.80	0.00	Y	Arm 4 Right	20.00	100.0 %	1763	1763

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	188	504	0	692
	B	0	0	0	0	0
	C	183	99	0	0	282
	D	101	869	99	0	1069
	Tot.	284	1156	603	0	2043

Traffic Lane Flows

Lane	Scenario 3: AM Proposed
Junction: 09.Rochdale Rd_Addington St	
1/1	156
1/2	128
2/1 (short)	188
2/2 (with short)	265(In) 77(Out)
2/3 (with short)	427(In) 230(Out)
2/4 (short)	197
3/1	562
3/2	594
4/1	77
4/2	230
4/3	296
5/1	55
5/2 (with short)	227(In) 128(Out)
5/3 (short)	99
6/1	475
6/2 (with short)	594(In) 495(Out)
6/3 (short)	99

Full Input Data And Results

Lane Saturation Flows

Junction: 09.Rochdale Rd_Addington St								
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 (Rochdale Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (Rochdale Road (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (Rochdale Road (NE))	4.90	0.00	Y	Arm 3 Left	21.00	100.0 %	1965	1965
2/2 (Rochdale Road (NE))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
2/3 (Rochdale Road (NE))	3.40	0.00	N	Arm 4 Ahead	Inf	100.0 %	2095	2095
2/4 (Rochdale Road (NE))	3.30	0.00	Y	Arm 4 Ahead	17.00	100.0 %	1787	1787
3/1 (Addington Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (Addington Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (Rochdale Road (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Rochdale Road (SW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/3 (Rochdale Road (SW) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/1 (Rochdale Road (SW))	3.40	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1955	1955
5/2 (Rochdale Road (SW))	3.50	0.00	N	Arm 1 Ahead	Inf	100.0 %	2105	2105
5/3 (Rochdale Road (SW))	3.40	0.00	Y	Arm 3 Right	19.00	100.0 %	1812	1812
6/1 (Angel Street)	3.50	0.00	Y	Arm 1 Left	12.00	21.3 %	1914	1914
				Arm 3 Ahead	Inf	78.7 %		
6/2 (Angel Street)	3.40	0.00	N	Arm 3 Ahead	Inf	100.0 %	2095	2095
6/3 (Angel Street)	2.80	0.00	Y	Arm 4 Right	20.00	100.0 %	1763	1763

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	123	396	0	519
	B	0	0	0	0	0
	C	390	281	0	0	671
	D	138	942	69	0	1149
	Tot.	528	1346	465	0	2339

Traffic Lane Flows

Lane	Scenario 4: PM Proposed
Junction: 09.Rochdale Rd_Addington St	
1/1	388
1/2	140
2/1 (short)	123
2/2 (with short)	191(In) 68(Out)
2/3 (with short)	328(In) 177(Out)
2/4 (short)	151
3/1	509
3/2	837
4/1	68
4/2	177
4/3	220
5/1	250
5/2 (with short)	421(In) 140(Out)
5/3 (short)	281
6/1	524
6/2 (with short)	625(In) 556(Out)
6/3 (short)	69

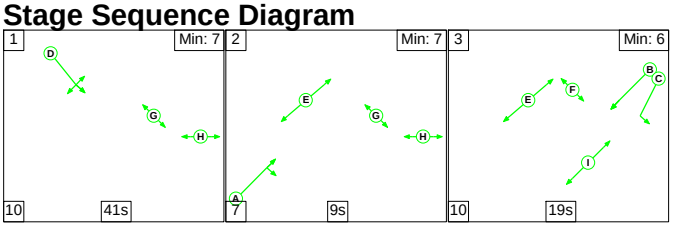
Full Input Data And Results

Lane Saturation Flows

Junction: 09.Rochdale Rd_Addington St								
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 (Rochdale Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (Rochdale Road (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (Rochdale Road (NE))	4.90	0.00	Y	Arm 3 Left	21.00	100.0 %	1965	1965
2/2 (Rochdale Road (NE))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
2/3 (Rochdale Road (NE))	3.40	0.00	N	Arm 4 Ahead	Inf	100.0 %	2095	2095
2/4 (Rochdale Road (NE))	3.30	0.00	Y	Arm 4 Ahead	17.00	100.0 %	1787	1787
3/1 (Addington Street exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (Addington Street exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (Rochdale Road (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Rochdale Road (SW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/3 (Rochdale Road (SW) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/1 (Rochdale Road (SW))	3.40	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1955	1955
5/2 (Rochdale Road (SW))	3.50	0.00	N	Arm 1 Ahead	Inf	100.0 %	2105	2105
5/3 (Rochdale Road (SW))	3.40	0.00	Y	Arm 3 Right	19.00	100.0 %	1812	1812
6/1 (Angel Street)	3.50	0.00	Y	Arm 1 Left	12.00	26.3 %	1902	1902
				Arm 3 Ahead	Inf	73.7 %		
6/2 (Angel Street)	3.40	0.00	N	Arm 3 Ahead	Inf	100.0 %	2095	2095
6/3 (Angel Street)	2.80	0.00	Y	Arm 4 Right	20.00	100.0 %	1763	1763

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

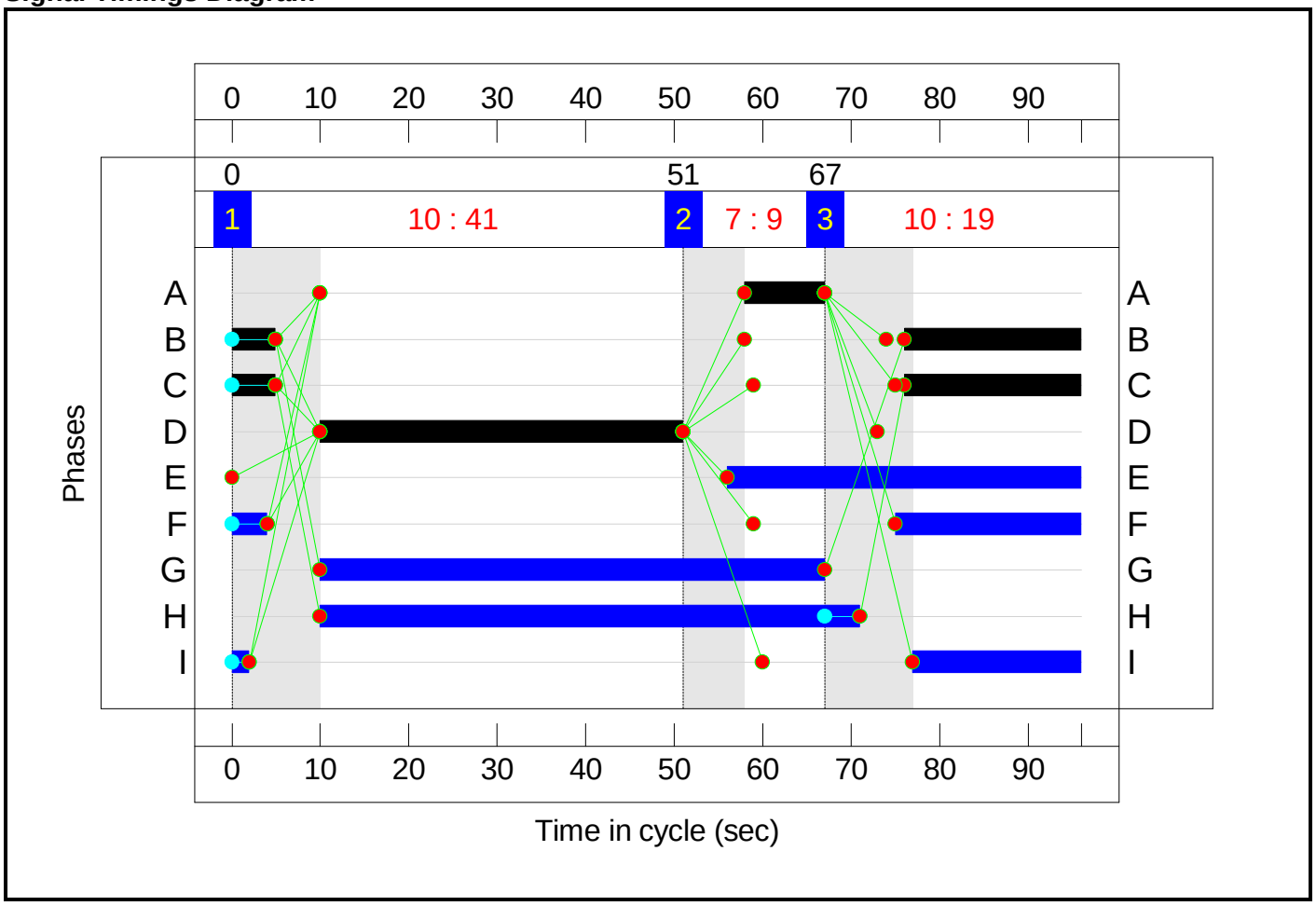


Full Input Data And Results

Stage Timings

Stage	1	2	3
Duration	41	9	19
Change Point	0	51	67

Signal Timings Diagram

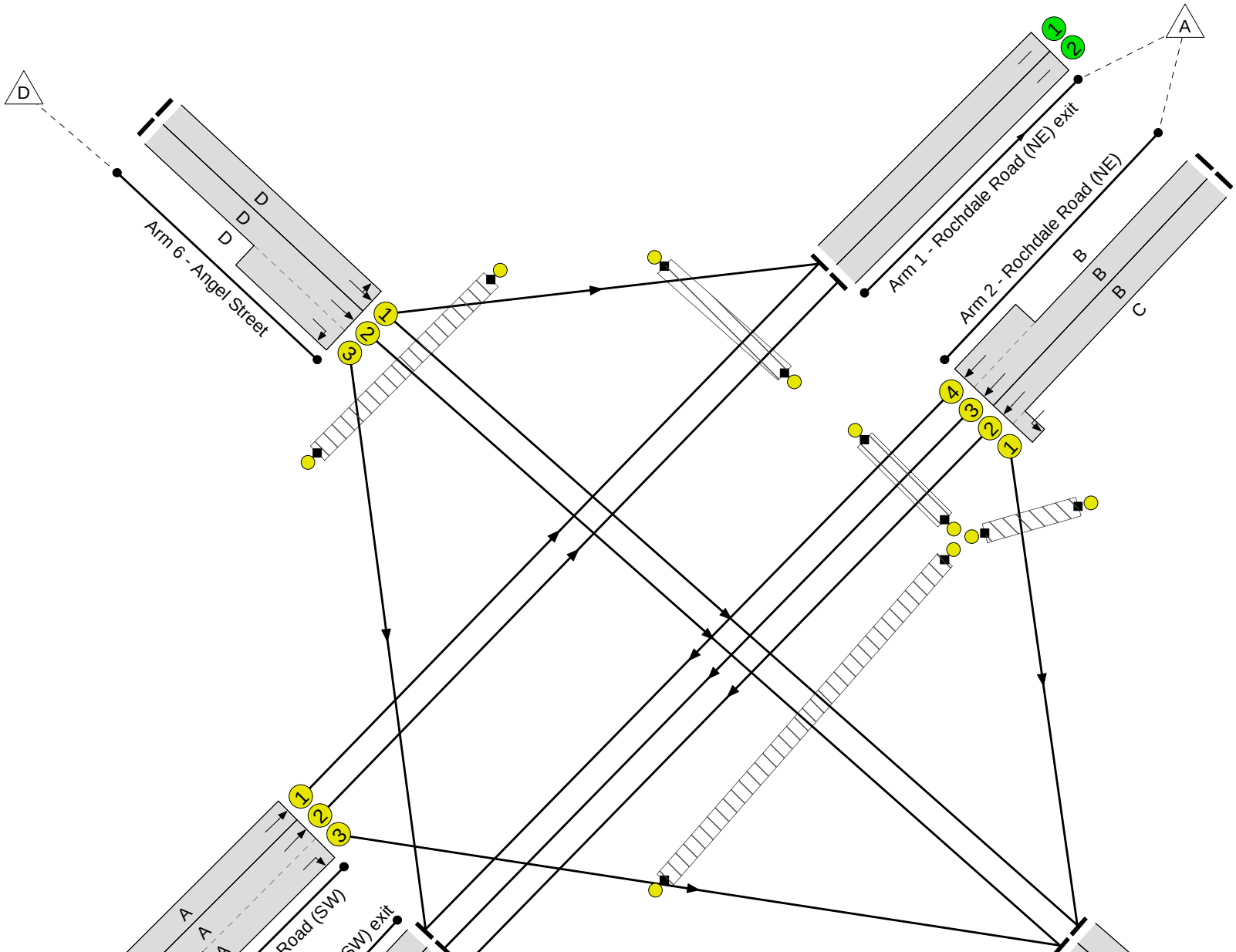


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

09.Rochdale Rd_Addington St
PRC: 48.1 %
Total Traffic Delay: 17.5 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.8%**
09.Rochdale Rd_Addington St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.8%**
1/1	Rochdale Road (NE) exit	U	N/A	N/A	-		-	-	-	156	Inf	Inf	0.0%
1/2	Rochdale Road (NE) exit	U	N/A	N/A	-		-	-	-	127	Inf	Inf	0.0%
2/2+2/1	Rochdale Road (NE) Left Ahead	U	N/A	N/A	B C		1	25	-	261	1965:1965	198+352	47.5 : 47.5%
2/3+2/4	Rochdale Road (NE) Ahead	U	N/A	N/A	B		1	25	-	410	2095:1787	373+319	59.3 : 59.3%
3/1	Addington Street exit	U	N/A	N/A	-		-	-	-	524	Inf	Inf	0.0%
3/2	Addington Street exit	U	N/A	N/A	-		-	-	-	578	Inf	Inf	0.0%
4/1	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	94	Inf	Inf	0.0%
4/2	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	221	Inf	Inf	0.0%
4/3	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	288	Inf	Inf	0.0%
5/1	Rochdale Road (SW) Ahead	U	N/A	N/A	A		1	9	-	55	1955	204	27.0%
5/2+5/3	Rochdale Road (SW) Ahead Right	U	N/A	N/A	A		1	9	-	226	2105:1812	219+189	57.9 : 52.5%
6/1	Angel Street Left Ahead	U	N/A	N/A	D		1	41	-	458	1912	836	54.8%
6/2+6/3	Angel Street Ahead Right	U	N/A	N/A	D		1	41	-	578	2095:1763	788+163	60.8 : 60.8%
Ped Link: P1	Rochdale Road (SE) exit ped	-	N/A	-	F		1	25	-	0	-	0	0.0%
Ped Link: P2	Rochdale Road (NW) ped	-	N/A	-	G		1	57	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	61	-	0	-	0	0.0%
Ped Link: P4	Addington Street Ped	-	N/A	-	I		1	21	-	0	-	0	0.0%
Ped Link: P5	Angel Street ped	-	N/A	-	E		1	40	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**14.2**	**3.4**	**0.0**	**17.5**	**-**	**-**	**-**	**-**
09.Rochdale Rd_Addington St	**-**	**-**	**0**	**0**	**0**	**14.2**	**3.4**	**0.0**	**17.5**	**-**	**-**	**-**	**-**
1/1	156	156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	127	127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2+2/1	261	261	-	-	-	2.1	0.5	-	2.5	35.0	5.2	0.5	5.6
2/3+2/4	410	410	-	-	-	3.3	0.7	-	4.0	34.9	4.8	0.7	5.5
3/1	524	524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	578	578	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	94	94	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	221	221	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/3	288	288	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	55	55	-	-	-	0.6	0.2	-	0.8	51.8	1.3	0.2	1.5
5/2+5/3	226	226	-	-	-	2.6	0.6	-	3.2	50.7	3.2	0.6	3.8
6/1	458	458	-	-	-	2.5	0.6	-	3.1	24.7	9.0	0.6	9.6
6/2+6/3	578	578	-	-	-	3.1	0.8	-	3.9	24.2	10.0	0.8	10.7
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-

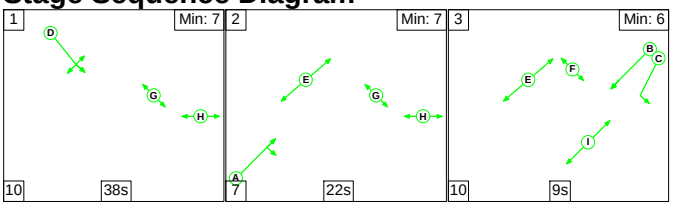
C1 PRC for Signalled Lanes (%): 48.1 Total Delay for Signalled Lanes (pcuHr): 17.51 Cycle Time (s): 96
PRC Over All Lanes (%): 48.1 Total Delay Over All Lanes(pcuHr): 17.51

Full Input Data And Results

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

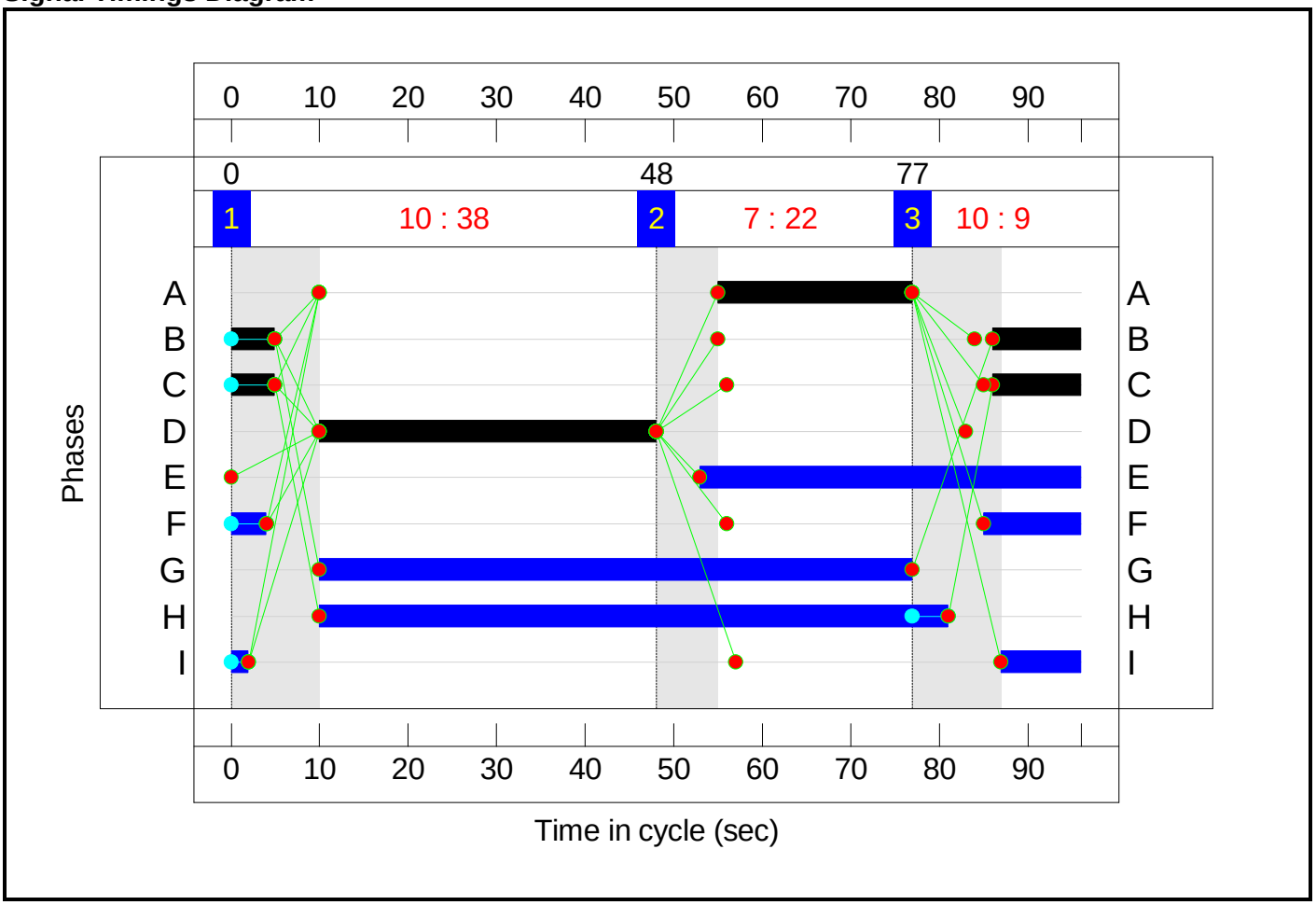
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	38	22	9
Change Point	0	48	77

Signal Timings Diagram

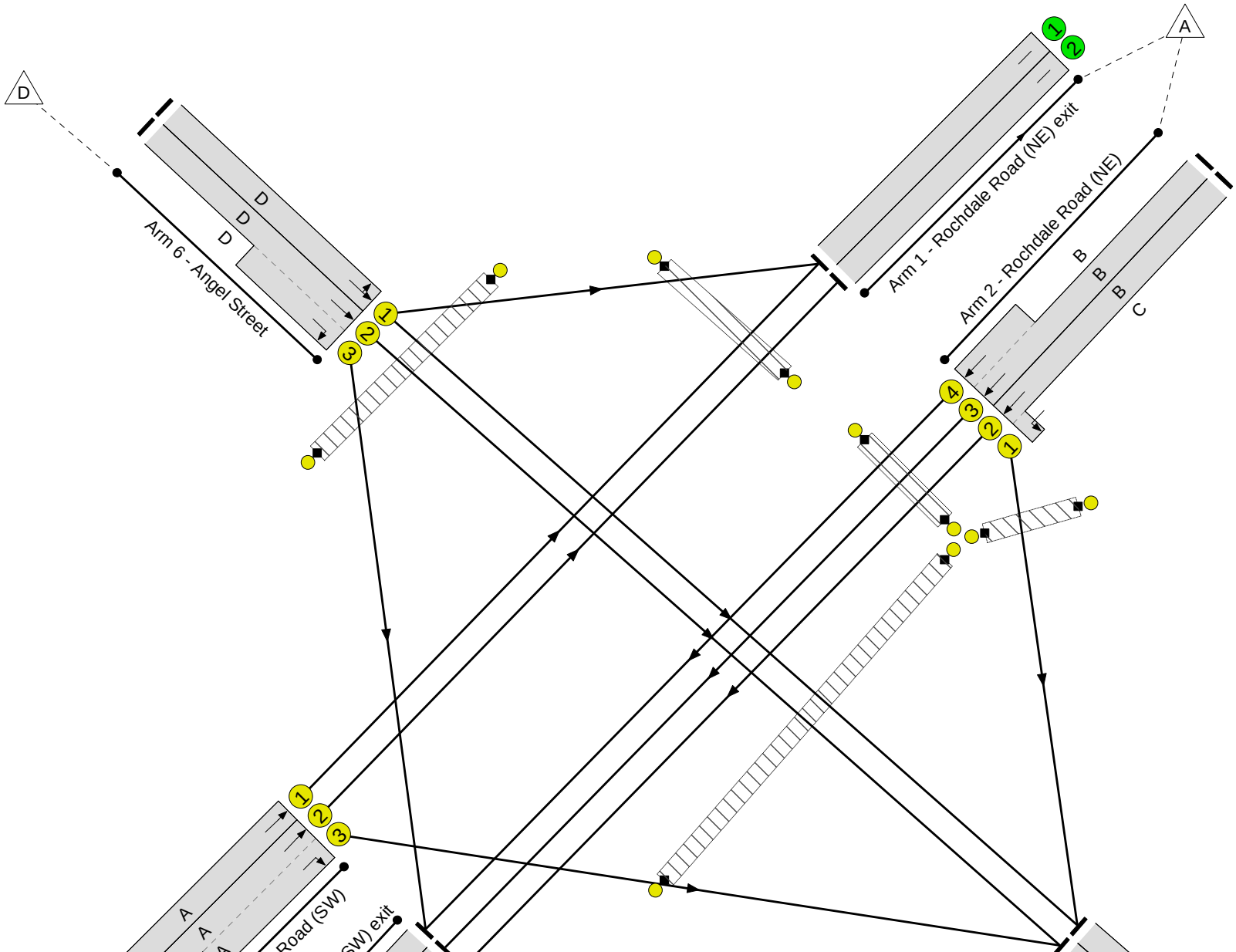


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

09.Rochdale Rd_Addington St
PRC: 28.8 %
Total Traffic Delay: 23.6 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**69.9%**
09.Rochdale Rd_Addington St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**69.9%**
1/1	Rochdale Road (NE) exit	U	N/A	N/A	-		-	-	-	382	Inf	Inf	0.0%
1/2	Rochdale Road (NE) exit	U	N/A	N/A	-		-	-	-	132	Inf	Inf	0.0%
2/2+2/1	Rochdale Road (NE) Left Ahead	U	N/A	N/A	B C		1	15	-	191	1965:1965	125+221	55.3 : 55.3%
2/3+2/4	Rochdale Road (NE) Ahead	U	N/A	N/A	B		1	15	-	327	2095:1787	264+224	67.0 : 67.0%
3/1	Addington Street exit	U	N/A	N/A	-		-	-	-	494	Inf	Inf	0.0%
3/2	Addington Street exit	U	N/A	N/A	-		-	-	-	822	Inf	Inf	0.0%
4/1	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
4/2	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%
4/3	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	219	Inf	Inf	0.0%
5/1	Rochdale Road (SW) Ahead	U	N/A	N/A	A		1	22	-	244	1955	468	52.1%
5/2+5/3	Rochdale Road (SW) Ahead Right	U	N/A	N/A	A		1	22	-	413	2105:1812	190+405	69.4 : 69.4%
6/1	Angel Street Left Ahead	U	N/A	N/A	D		1	38	-	510	1901	772	66.0%
6/2+6/3	Angel Street Ahead Right	U	N/A	N/A	D		1	38	-	610	2095:1763	774+99	69.9 : 69.9%
Ped Link: P1	Rochdale Road (SE) exit ped	-	N/A	-	F		1	15	-	0	-	0	0.0%
Ped Link: P2	Rochdale Road (NW) ped	-	N/A	-	G		1	67	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	71	-	0	-	0	0.0%
Ped Link: P4	Addington Street Ped	-	N/A	-	I		1	11	-	0	-	0	0.0%
Ped Link: P5	Angel Street ped	-	N/A	-	E		1	43	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**18.2**	**5.4**	**0.0**	**23.6**	**-**	**-**	**-**	**-**
09.Rochdale Rd_Addington St	**-**	**-**	**0**	**0**	**0**	**18.2**	**5.4**	**0.0**	**23.6**	**-**	**-**	**-**	**-**
1/1	382	382	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	132	132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2+2/1	191	191	-	-	-	1.9	0.6	-	2.5	47.8	4.1	0.6	4.7
2/3+2/4	327	327	-	-	-	3.3	1.0	-	4.3	47.5	4.3	1.0	5.3
3/1	494	494	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	822	822	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	69	69	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/3	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	244	244	-	-	-	2.2	0.5	-	2.7	39.7	5.6	0.5	6.2
5/2+5/3	413	413	-	-	-	3.7	1.1	-	4.8	41.6	6.7	1.1	7.8
6/1	510	510	-	-	-	3.3	1.0	-	4.2	29.9	10.9	1.0	11.9
6/2+6/3	610	610	-	-	-	3.9	1.2	-	5.0	29.5	12.3	1.2	13.5
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 28.8 Total Delay for Signalled Lanes (pcuHr): 23.56 Cycle Time (s): 96

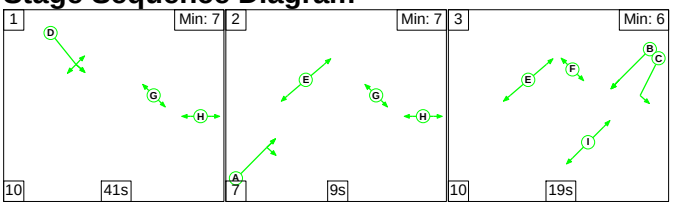
PRC Over All Lanes (%): 28.8 Total Delay Over All Lanes(pcuHr): 23.56

Full Input Data And Results

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

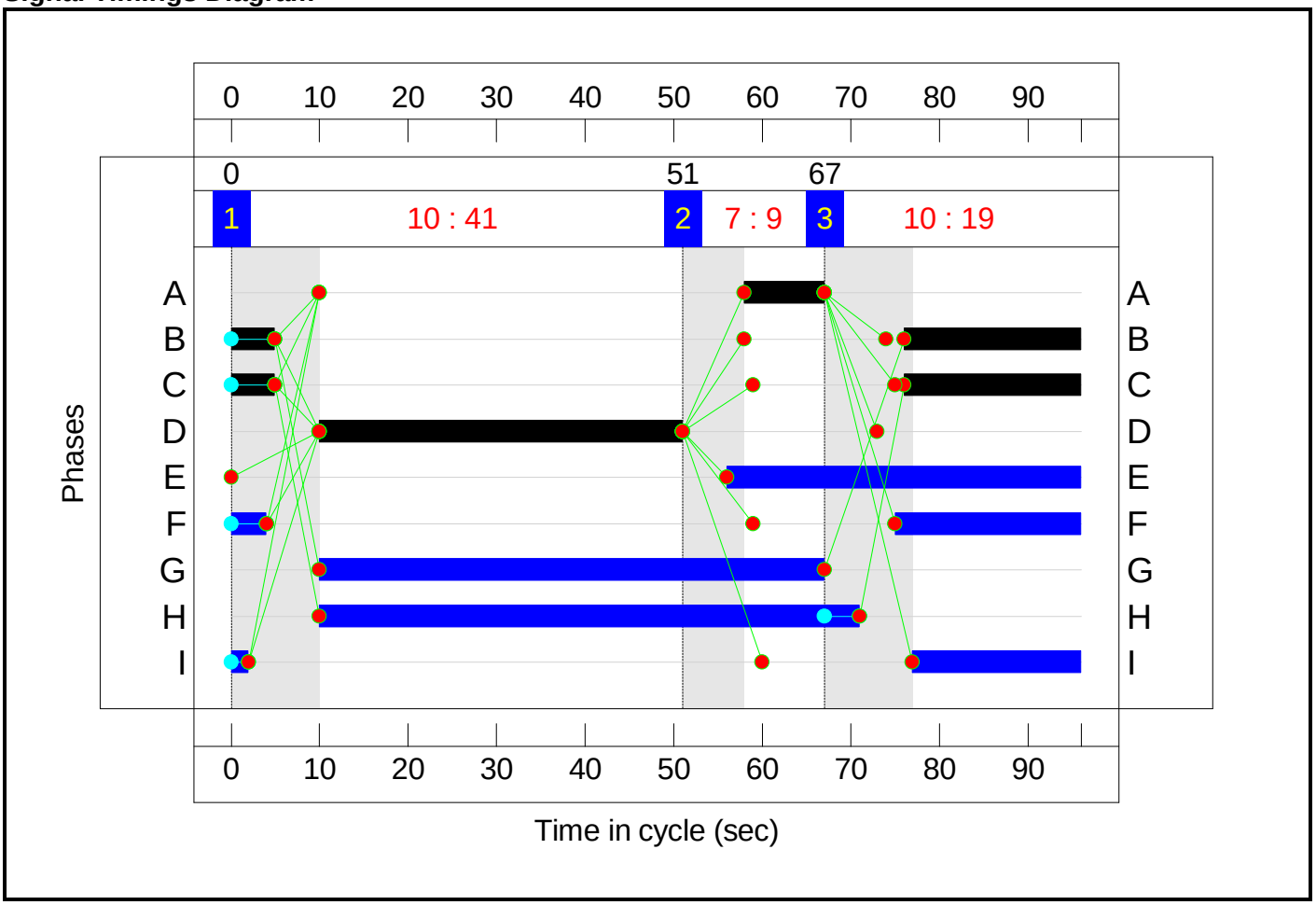
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	41	9	19
Change Point	0	51	67

Signal Timings Diagram

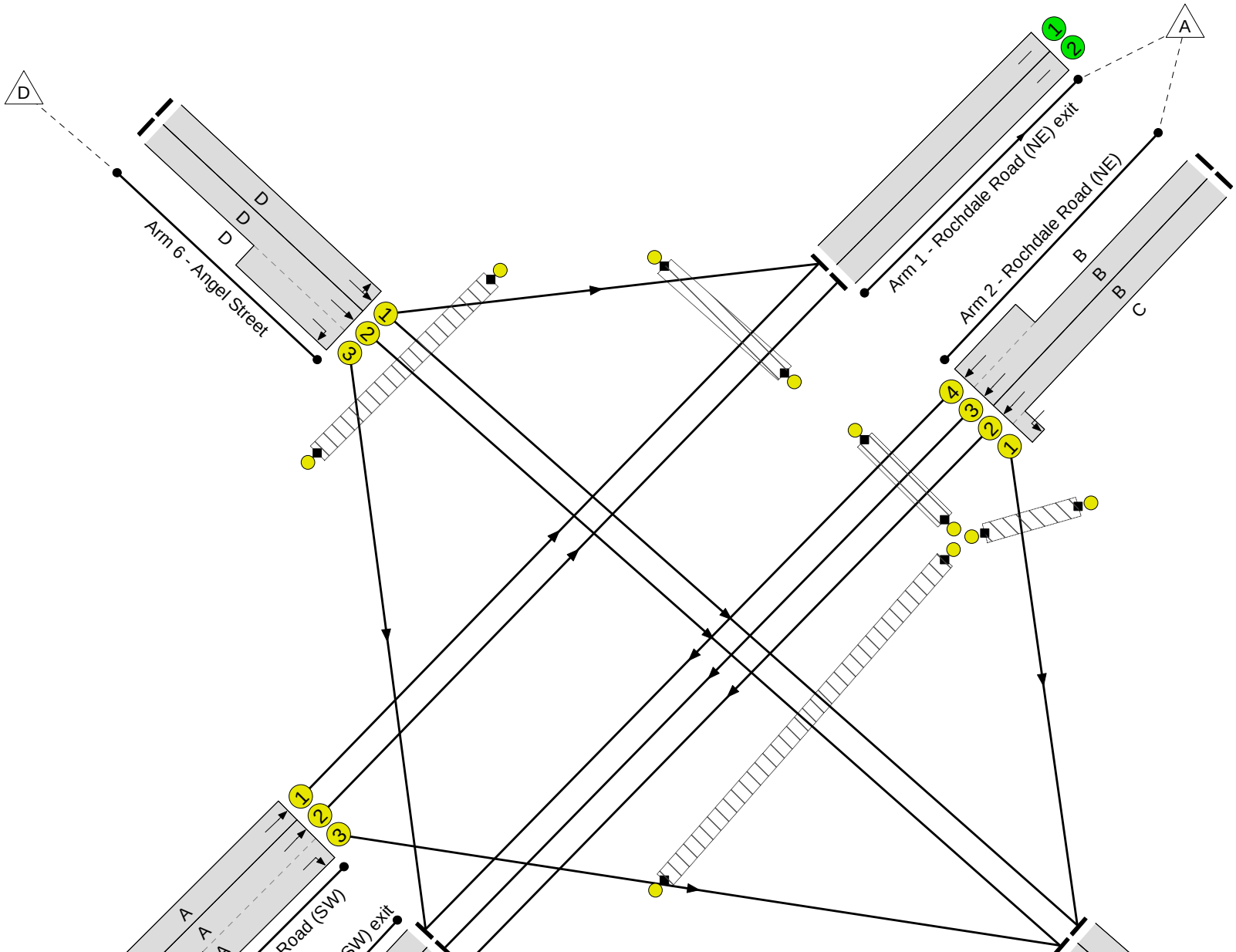


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

09.Rochdale Rd_Addington St
PRC: 43.9 %
Total Traffic Delay: 18.2 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**62.5%**
09.Rochdale Rd_Addington St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**62.5%**
1/1	Rochdale Road (NE) exit	U	N/A	N/A	-		-	-	-	156	Inf	Inf	0.0%
1/2	Rochdale Road (NE) exit	U	N/A	N/A	-		-	-	-	128	Inf	Inf	0.0%
2/2+2/1	Rochdale Road (NE) Left Ahead	U	N/A	N/A	B C		1	25	-	265	1965:1965	158+386	48.7 : 48.7%
2/3+2/4	Rochdale Road (NE) Ahead	U	N/A	N/A	B		1	25	-	427	2095:1787	373+319	61.7 : 61.7%
3/1	Addington Street exit	U	N/A	N/A	-		-	-	-	562	Inf	Inf	0.0%
3/2	Addington Street exit	U	N/A	N/A	-		-	-	-	594	Inf	Inf	0.0%
4/1	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	77	Inf	Inf	0.0%
4/2	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	230	Inf	Inf	0.0%
4/3	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	296	Inf	Inf	0.0%
5/1	Rochdale Road (SW) Ahead	U	N/A	N/A	A		1	9	-	55	1955	204	27.0%
5/2+5/3	Rochdale Road (SW) Ahead Right	U	N/A	N/A	A		1	9	-	227	2105:1812	219+189	58.4 : 52.5%
6/1	Angel Street Left Ahead	U	N/A	N/A	D		1	41	-	475	1914	837	56.7%
6/2+6/3	Angel Street Ahead Right	U	N/A	N/A	D		1	41	-	594	2095:1763	791+158	62.5 : 62.5%
Ped Link: P1	Rochdale Road (SE) exit ped	-	N/A	-	F		1	25	-	0	-	0	0.0%
Ped Link: P2	Rochdale Road (NW) ped	-	N/A	-	G		1	57	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	61	-	0	-	0	0.0%
Ped Link: P4	Addington Street Ped	-	N/A	-	I		1	21	-	0	-	0	0.0%
Ped Link: P5	Angel Street ped	-	N/A	-	E		1	40	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**14.6**	**3.6**	**0.0**	**18.2**	**-**	**-**	**-**	**-**
09.Rochdale Rd_Addington St	**-**	**-**	**0**	**0**	**0**	**14.6**	**3.6**	**0.0**	**18.2**	**-**	**-**	**-**	**-**
1/1	156	156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	128	128	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2+2/1	265	265	-	-	-	2.1	0.5	-	2.6	35.5	5.5	0.5	6.0
2/3+2/4	427	427	-	-	-	3.4	0.8	-	4.2	35.4	5.1	0.8	5.9
3/1	562	562	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	77	77	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	230	230	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/3	296	296	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	55	55	-	-	-	0.6	0.2	-	0.8	51.8	1.3	0.2	1.5
5/2+5/3	227	227	-	-	-	2.6	0.6	-	3.2	50.8	3.2	0.6	3.9
6/1	475	475	-	-	-	2.7	0.7	-	3.3	25.2	9.4	0.7	10.0
6/2+6/3	594	594	-	-	-	3.2	0.8	-	4.1	24.7	10.5	0.8	11.3
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-

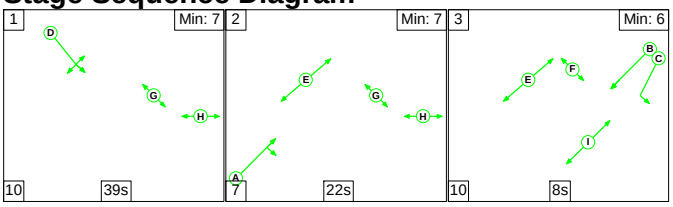
C1 PRC for Signalled Lanes (%): 43.9 Total Delay for Signalled Lanes (pcuHr): 18.20 Cycle Time (s): 96
PRC Over All Lanes (%): 43.9 Total Delay Over All Lanes(pcuHr): 18.20

Full Input Data And Results

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

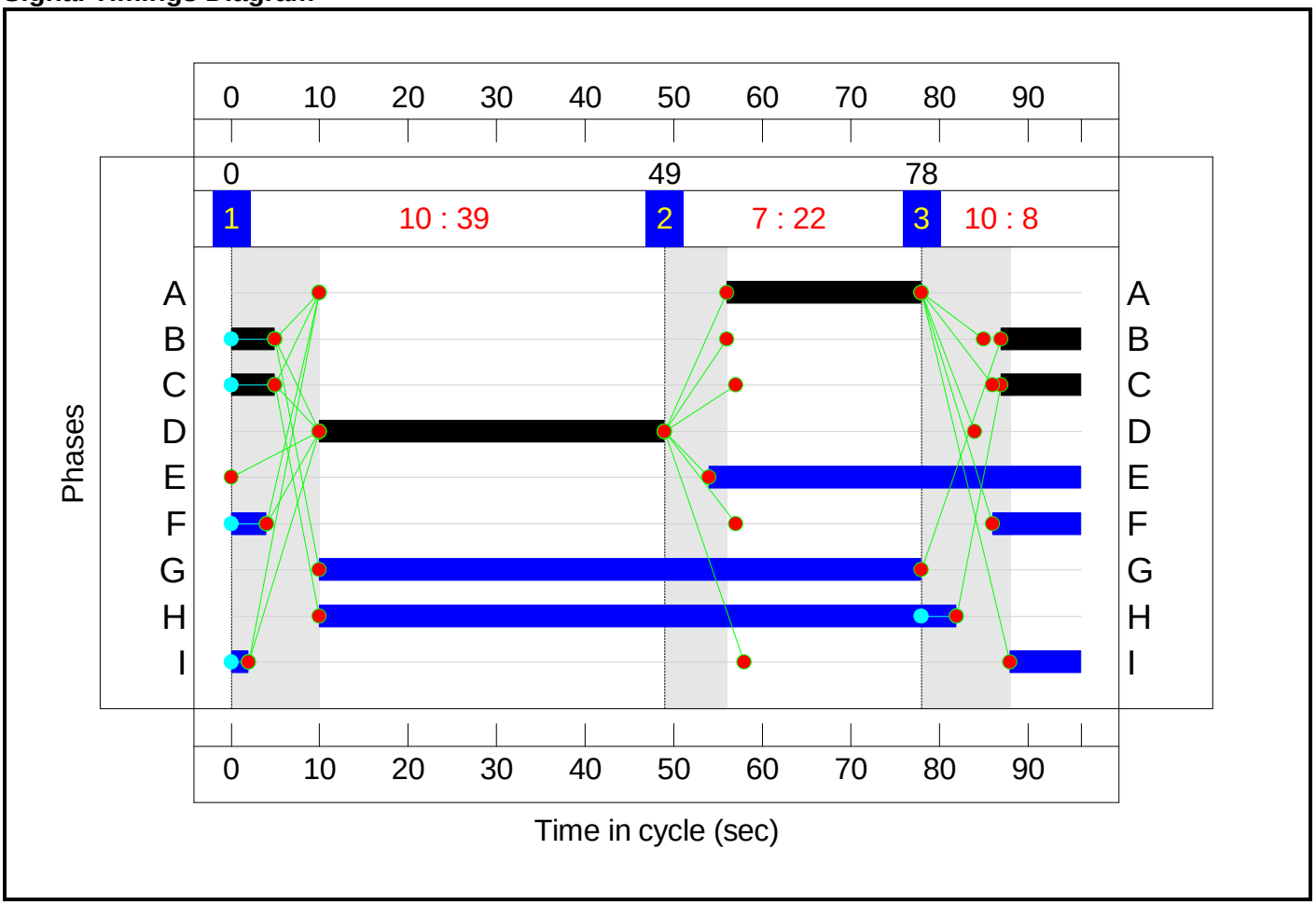
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	39	22	8
Change Point	0	49	78

Signal Timings Diagram

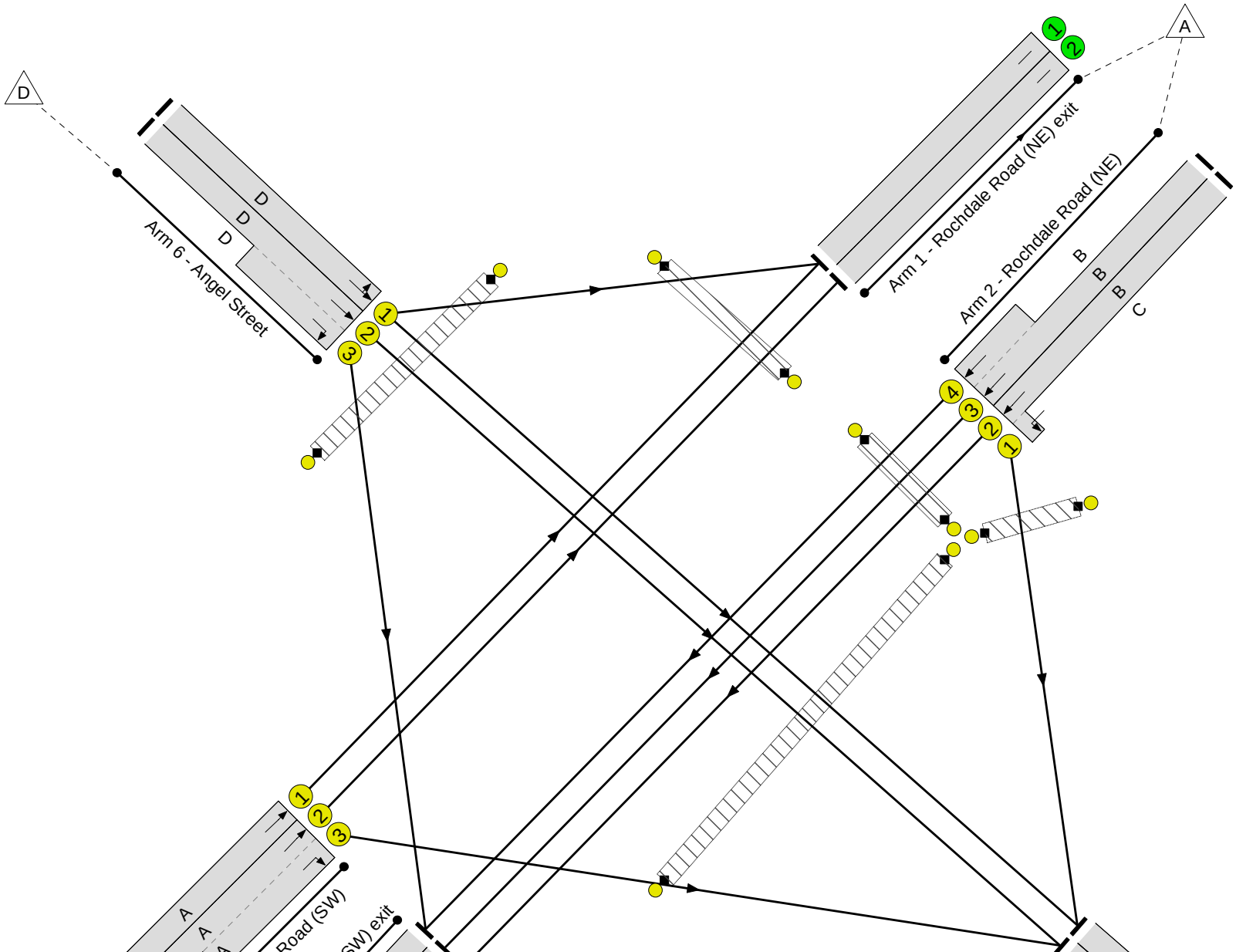


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

09.Rochdale Rd_Addington St
PRC: 28.6 %
Total Traffic Delay: 24.1 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**70.0%**
09.Rochdale Rd_Addington St	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**70.0%**
1/1	Rochdale Road (NE) exit	U	N/A	N/A	-		-	-	-	388	Inf	Inf	0.0%
1/2	Rochdale Road (NE) exit	U	N/A	N/A	-		-	-	-	140	Inf	Inf	0.0%
2/2+2/1	Rochdale Road (NE) Left Ahead	U	N/A	N/A	B C		1	14	-	191	1965:1965	115+209	58.9 : 58.9%
2/3+2/4	Rochdale Road (NE) Ahead	U	N/A	N/A	B		1	14	-	328	2095:1787	253+216	70.0 : 70.0%
3/1	Addington Street exit	U	N/A	N/A	-		-	-	-	509	Inf	Inf	0.0%
3/2	Addington Street exit	U	N/A	N/A	-		-	-	-	837	Inf	Inf	0.0%
4/1	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	68	Inf	Inf	0.0%
4/2	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%
4/3	Rochdale Road (SW) exit	U	N/A	N/A	-		-	-	-	220	Inf	Inf	0.0%
5/1	Rochdale Road (SW) Ahead	U	N/A	N/A	A		1	22	-	250	1955	468	53.4%
5/2+5/3	Rochdale Road (SW) Ahead Right	U	N/A	N/A	A		1	22	-	421	2105:1812	201+404	69.6 : 69.6%
6/1	Angel Street Left Ahead	U	N/A	N/A	D		1	39	-	524	1902	793	66.1%
6/2+6/3	Angel Street Ahead Right	U	N/A	N/A	D		1	39	-	625	2095:1763	795+99	69.9 : 69.9%
Ped Link: P1	Rochdale Road (SE) exit ped	-	N/A	-	F		1	14	-	0	-	0	0.0%
Ped Link: P2	Rochdale Road (NW) ped	-	N/A	-	G		1	68	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	72	-	0	-	0	0.0%
Ped Link: P4	Addington Street Ped	-	N/A	-	I		1	10	-	0	-	0	0.0%
Ped Link: P5	Angel Street ped	-	N/A	-	E		1	42	-	0	-	0	0.0%

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)
Network	**-**	**-**	**0**	**0**	**0**	**18.4**	**5.7**	**0.0**	**24.1**	**-**	**-**	**-**	**-**
09.Rochdale Rd_Addington St	**-**	**-**	**0**	**0**	**0**	**18.4**	**5.7**	**0.0**	**24.1**	**-**	**-**	**-**	**-**
1/1	388	388	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	140	140	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2+2/1	191	191	-	-	-	2.0	0.7	-	2.7	50.5	4.1	0.7	4.8
2/3+2/4	328	328	-	-	-	3.4	1.1	-	4.5	49.9	4.3	1.1	5.5
3/1	509	509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	837	837	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	68	68	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/3	220	220	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	250	250	-	-	-	2.2	0.6	-	2.8	40.0	5.8	0.6	6.3
5/2+5/3	421	421	-	-	-	3.7	1.1	-	4.9	41.5	6.7	1.1	7.8
6/1	524	524	-	-	-	3.3	1.0	-	4.3	29.2	11.2	1.0	12.2
6/2+6/3	625	625	-	-	-	3.9	1.2	-	5.0	28.8	12.5	1.2	13.7
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 28.6 Total Delay for Signalled Lanes (pcuHr): 24.12 Cycle Time (s): 96

PRC Over All Lanes (%): 28.6 Total Delay Over All Lanes(pcuHr): 24.12

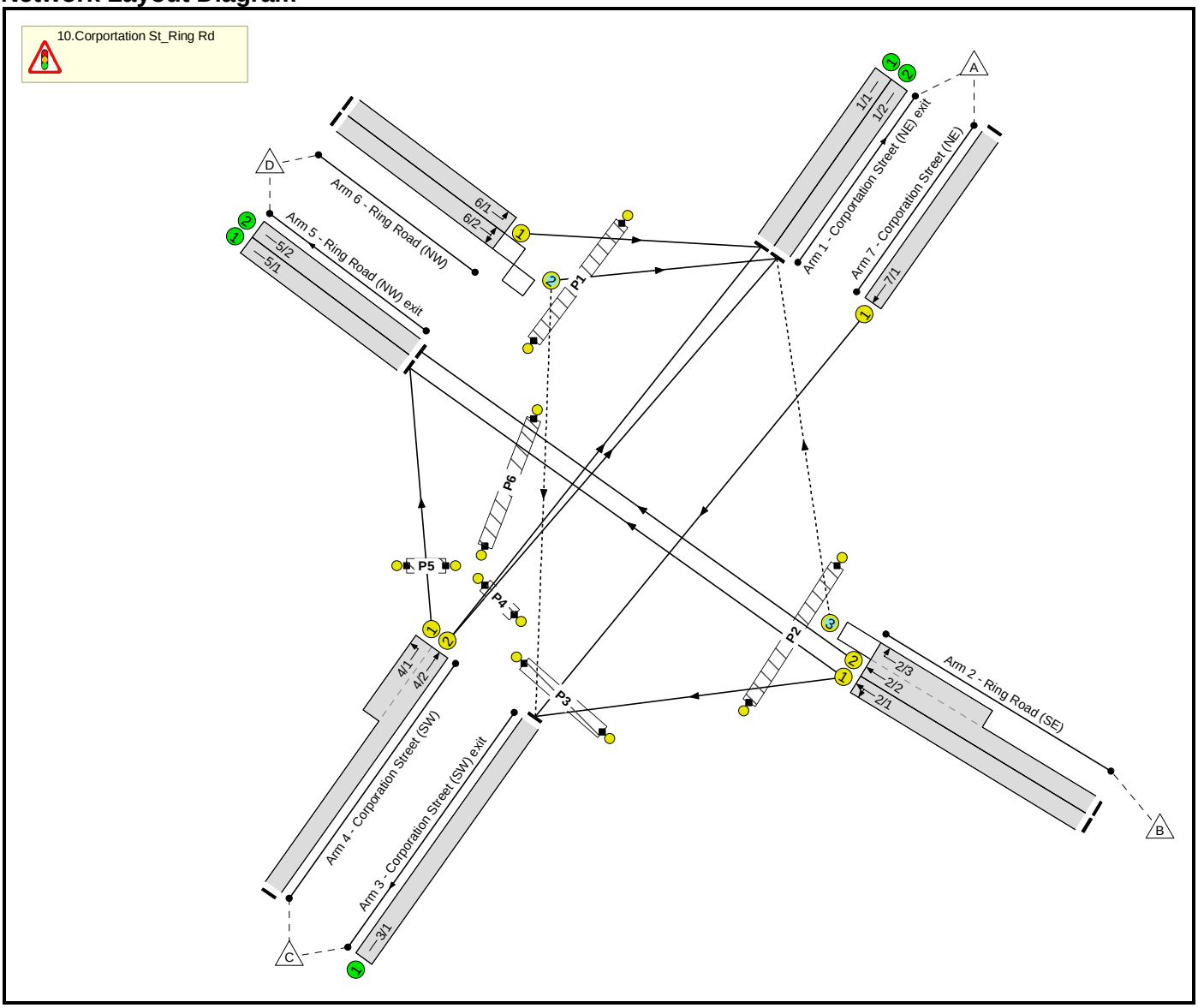
Full Input Data And Results

Full Input Data And Results

User and Project Details

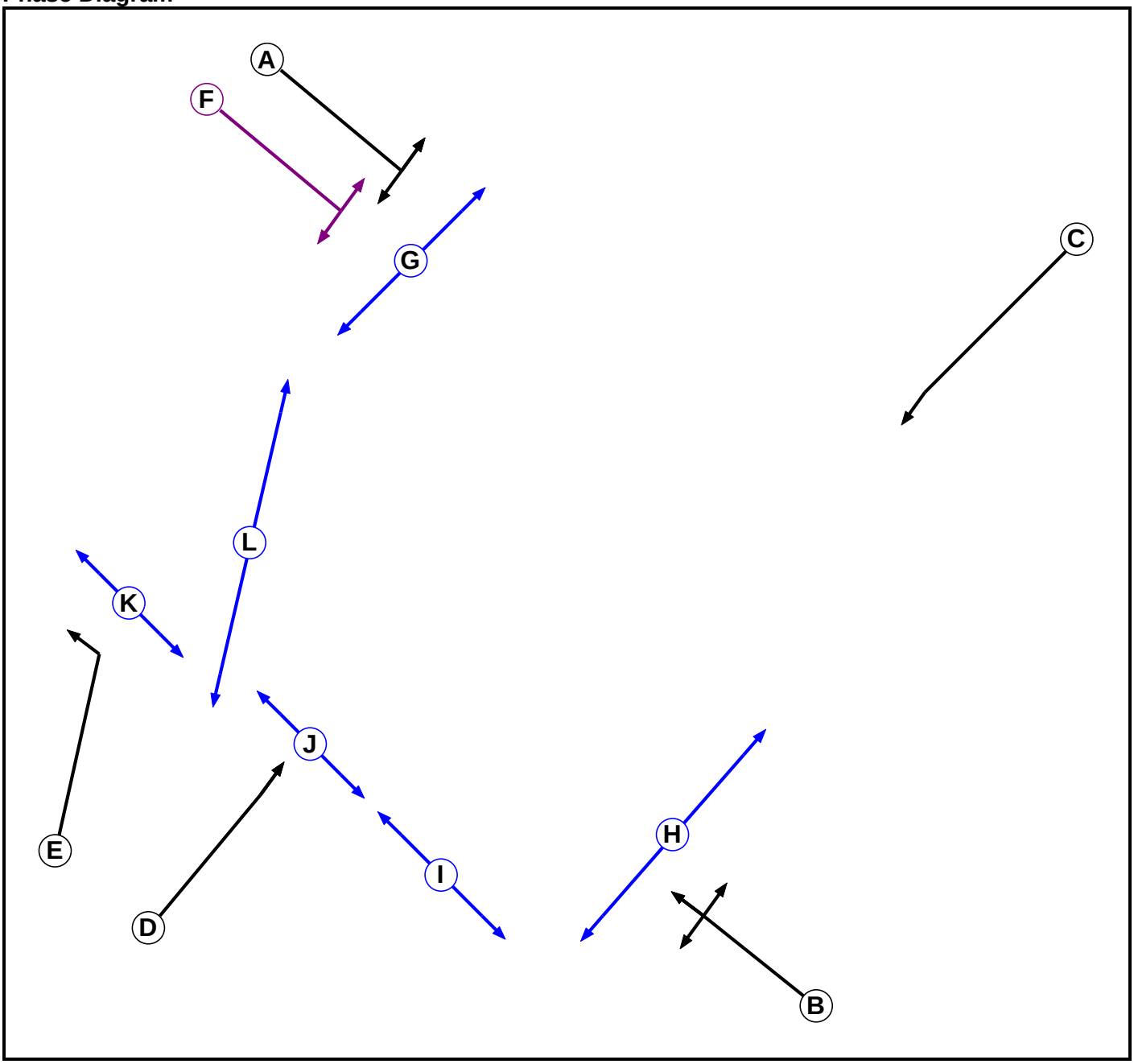
Project:	
Title:	
Location:	
Additional detail:	
File name:	10.Corporation St_Ring Rd.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Ind. Arrow	A	4	4
G	Pedestrian		5	5
H	Pedestrian		7	7
I	Pedestrian		5	5
J	Pedestrian		5	5
K	Pedestrian		5	5
L	Pedestrian		6	6

Phase Intergreens Matrix

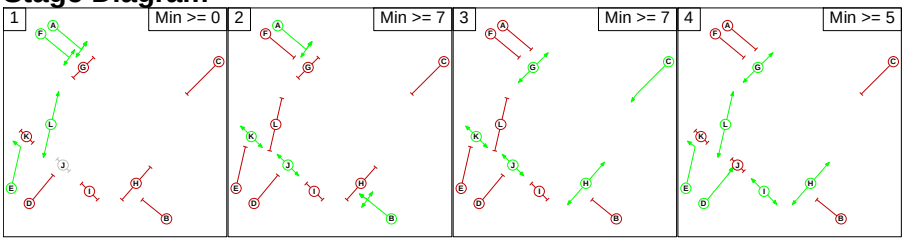
		Starting Phase											
		A	B	C	D	E	F	G	H	I	J	K	L
Terminating Phase	A		-	5	5	-	-	5	-	11	-	-	-
	B	-		6	6	8	5	-	5	8	-	-	9
	C	5	5		5	7	5	-	-	9	-	-	9
	D	6	5	5		-	6	-	-	-	5	-	-
	E	-	5	5	-		-	-	-	-	-	5	-
	F	-	8	6	5	-		5	-	11	-	-	-
	G	8	-	-	-	-	8		-	-	-	-	-
	H	-	11	-	-	-	-	-		-	-	-	-
	I	5	5	5	-	-	5	-	-		-	-	-
	J	-	-	-	7	-	-	-	-	-		-	-
	K	-	-	-	-	5	-	-	-	-	-		-
	L	-	9	9	-	-	-	-	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A E F L
2	A B J K
3	C G H J K
4	D E G H I L

Full Input Data And Results

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	E	Losing	4	4
1	2	F	Losing	1	1
3	4	K	Losing	2	2
4	1	D	Losing	2	2
4	1	H	Losing	6	6
4	1	I	Losing	3	3

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		9	9	11
	2	9		6	11
	3	9	11		9
	4	8	11	9	

Full Input Data And Results

Give-Way Lane Input Data

Junction: 10.Corportation St_Ring Rd											
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)**
2/3 (Ring Road (SE))	1/2 (Right)	1439	0	6/1	1.09	All	3.00	-	0.50	3	3.00
				6/2	1.09	All					
6/2 (Ring Road (NW))	3/1 (Right)	1439	0	2/1	1.09	All	4.00	2.00	0.50	4	4.00
				2/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: 10.Corportation St_Ring Rd

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 (Corportation Street (NE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
1/2 (Corportation Street (NE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/1 (Ring Road (SE))	U	B	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 3 Left	15.00
											Arm 5 Ahead	98.00
2/2 (Ring Road (SE))	U	B	2	3	60.0	Geom	-	3.40	0.00	N	Arm 5 Ahead	98.00
2/3 (Ring Road (SE))	O	B	2	3	10.0	Geom	-	3.40	0.00	Y	Arm 1 Right	28.00
3/1 (Corporation Street (SW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1 (Corporation Street (SW))	U	E	2	3	7.0	Geom	-	3.60	0.00	Y	Arm 5 Left	80.00
4/2 (Corporation Street (SW))	U	D	2	3	60.0	Geom	-	3.70	0.00	N	Arm 1 Ahead	Inf
5/1 (Ring Road (NW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (Ring Road (NW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Ring Road (NW))	U	A	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 1 Left	22.00
6/2 (Ring Road (NW))	O	A F	2	3	60.0	Geom	-	3.20	0.00	N	Arm 1 Left	24.00
											Arm 3 Right	32.00
7/1 (Corporation Street (NE))	U	C	2	3	8.7	Geom	-	3.70	0.00	Y	Arm 3 Ahead	Inf

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Base'	08:30	09:30	01:00	
2: 'PM Base'	17:00	18:00	01:00	
3: 'AM Proposed'	08:30	09:30	01:00	
4: 'PM Proposed'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	20	0	20
	B	68	0	67	940	1075
	C	70	0	0	117	187
	D	829	0	239	0	1068
	Tot.	967	0	326	1057	2350

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: 10.Corportation St_Ring Rd	
1/1	758
1/2	209
2/1	488
2/2 (with short)	587(In) 519(Out)
2/3 (short)	68
3/1	326
4/1 (short)	117
4/2 (with short)	187(In) 70(Out)
5/1	538
5/2	519
6/1	723
6/2	345
7/1	20

Full Input Data And Results

Lane Saturation Flows

Junction: 10.Corportation St_Ring Rd								
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 (Corportation Street (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (Corportation Street (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (Ring Road (SE))	3.90	0.00	Y	Arm 3 Left	15.00	13.7 %	1952	1952
				Arm 5 Ahead	98.00	86.3 %		
2/2 (Ring Road (SE))	3.40	0.00	N	Arm 5 Ahead	98.00	100.0 %	2063	2063
2/3 (Ring Road (SE))	3.40	0.00	Y	Arm 1 Right	28.00	100.0 %	1856	1856
3/1 (Corporation Street (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Corporation Street (SW))	3.60	0.00	Y	Arm 5 Left	80.00	100.0 %	1939	1939
4/2 (Corporation Street (SW))	3.70	0.00	N	Arm 1 Ahead	Inf	100.0 %	2125	2125
5/1 (Ring Road (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Ring Road (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Road (NW))	3.70	0.00	Y	Arm 1 Left	22.00	100.0 %	1858	1858
6/2 (Ring Road (NW))	3.20	0.00	N	Arm 1 Left	24.00	30.7 %	1973	1973
				Arm 3 Right	32.00	69.3 %		
7/1 (Corporation Street (NE))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	20	0	20
	B	106	0	50	1442	1598
	C	59	0	0	183	242
	D	1088	0	195	0	1283
	Tot.	1253	0	265	1625	3143

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: 10.Corportation St_Ring Rd	
1/1	931
1/2	322
2/1	745
2/2 (with short)	853(In) 747(Out)
2/3 (short)	106
3/1	265
4/1 (short)	183
4/2 (with short)	242(In) 59(Out)
5/1	878
5/2	747
6/1	902
6/2	381
7/1	20

Full Input Data And Results

Lane Saturation Flows

Junction: 10.Corportation St_Ring Rd								
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 (Corportation Street (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (Corportation Street (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (Ring Road (SE))	3.90	0.00	Y	Arm 3 Left	15.00	6.7 %	1964	1964
				Arm 5 Ahead	98.00	93.3 %		
2/2 (Ring Road (SE))	3.40	0.00	N	Arm 5 Ahead	98.00	100.0 %	2063	2063
2/3 (Ring Road (SE))	3.40	0.00	Y	Arm 1 Right	28.00	100.0 %	1856	1856
3/1 (Corporation Street (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Corporation Street (SW))	3.60	0.00	Y	Arm 5 Left	80.00	100.0 %	1939	1939
4/2 (Corporation Street (SW))	3.70	0.00	N	Arm 1 Ahead	Inf	100.0 %	2125	2125
5/1 (Ring Road (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Ring Road (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Road (NW))	3.70	0.00	Y	Arm 1 Left	22.00	100.0 %	1858	1858
6/2 (Ring Road (NW))	3.20	0.00	N	Arm 1 Left	24.00	48.8 %	1968	1968
				Arm 3 Right	32.00	51.2 %		
7/1 (Corporation Street (NE))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	20	0	20
	B	68	0	67	943	1078
	C	76	0	0	117	193
	D	862	0	244	0	1106
	Tot.	1006	0	331	1060	2397

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: AM Proposed
Junction: 10.Corportation St_Ring Rd	
1/1	774
1/2	232
2/1	491
2/2 (with short)	587(In) 519(Out)
2/3 (short)	68
3/1	331
4/1 (short)	117
4/2 (with short)	193(In) 76(Out)
5/1	541
5/2	519
6/1	736
6/2	370
7/1	20

Full Input Data And Results

Lane Saturation Flows

Junction: 10.Corportation St_Ring Rd								
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 (Corportation Street (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (Corportation Street (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (Ring Road (SE))	3.90	0.00	Y	Arm 3 Left	15.00	13.6 %	1953	1953
				Arm 5 Ahead	98.00	86.4 %		
2/2 (Ring Road (SE))	3.40	0.00	N	Arm 5 Ahead	98.00	100.0 %	2063	2063
2/3 (Ring Road (SE))	3.40	0.00	Y	Arm 1 Right	28.00	100.0 %	1856	1856
3/1 (Corporation Street (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Corporation Street (SW))	3.60	0.00	Y	Arm 5 Left	80.00	100.0 %	1939	1939
4/2 (Corporation Street (SW))	3.70	0.00	N	Arm 1 Ahead	Inf	100.0 %	2125	2125
5/1 (Ring Road (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Ring Road (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Road (NW))	3.70	0.00	Y	Arm 1 Left	22.00	100.0 %	1858	1858
6/2 (Ring Road (NW))	3.20	0.00	N	Arm 1 Left	24.00	34.1 %	1972	1972
				Arm 3 Right	32.00	65.9 %		
7/1 (Corporation Street (NE))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	20	0	20
	B	106	0	50	1475	1631
	C	86	0	0	186	272
	D	1090	0	195	0	1285
	Tot.	1282	0	265	1661	3208

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: PM Proposed
Junction: 10.Corportation St_Ring Rd	
1/1	951
1/2	331
2/1	762
2/2 (with short)	869(In) 763(Out)
2/3 (short)	106
3/1	265
4/1 (short)	186
4/2 (with short)	272(In) 86(Out)
5/1	898
5/2	763
6/1	908
6/2	377
7/1	20

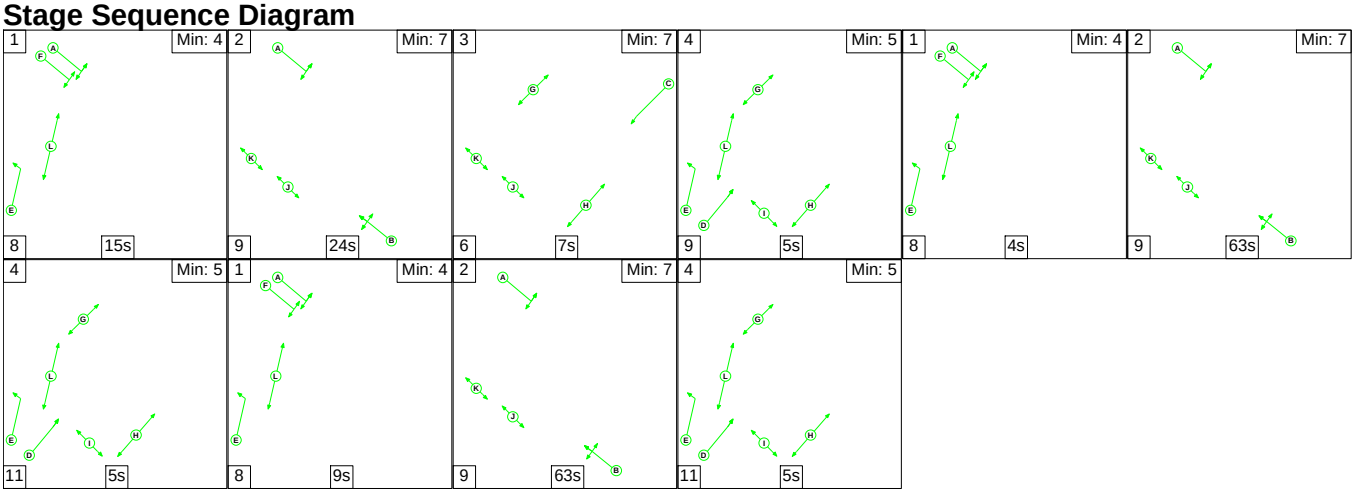
Full Input Data And Results

Lane Saturation Flows

Junction: 10.Corportation St_Ring Rd								
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 (Corportation Street (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (Corportation Street (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (Ring Road (SE))	3.90	0.00	Y	Arm 3 Left	15.00	6.6 %	1964	1964
				Arm 5 Ahead	98.00	93.4 %		
2/2 (Ring Road (SE))	3.40	0.00	N	Arm 5 Ahead	98.00	100.0 %	2063	2063
2/3 (Ring Road (SE))	3.40	0.00	Y	Arm 1 Right	28.00	100.0 %	1856	1856
3/1 (Corporation Street (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Corporation Street (SW))	3.60	0.00	Y	Arm 5 Left	80.00	100.0 %	1939	1939
4/2 (Corporation Street (SW))	3.70	0.00	N	Arm 1 Ahead	Inf	100.0 %	2125	2125
5/1 (Ring Road (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Ring Road (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Road (NW))	3.70	0.00	Y	Arm 1 Left	22.00	100.0 %	1858	1858
6/2 (Ring Road (NW))	3.20	0.00	N	Arm 1 Left	24.00	48.3 %	1968	1968
				Arm 3 Right	32.00	51.7 %		
7/1 (Corporation Street (NE))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

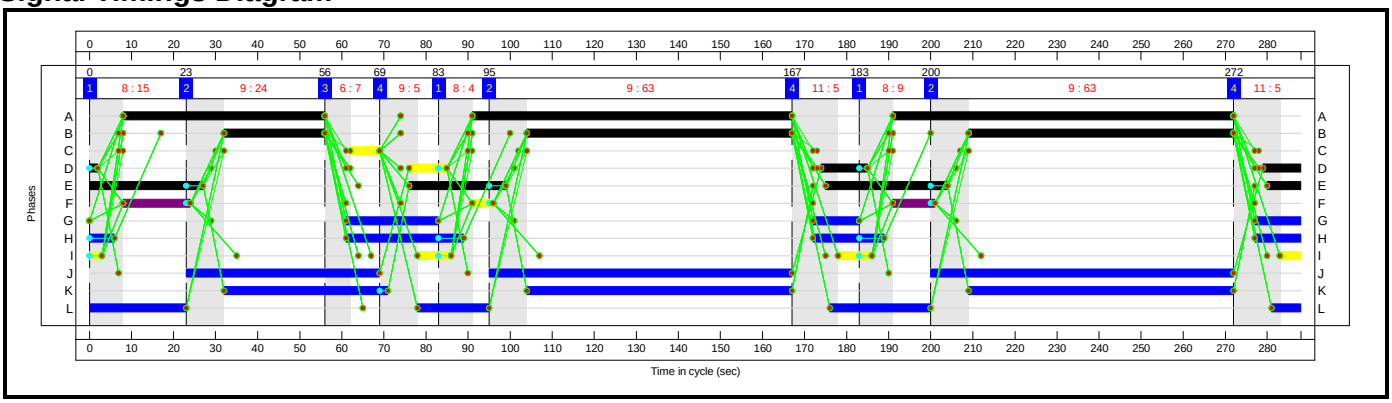


Full Input Data And Results

Stage Timings

Stage	1	2	3	4	1	2	4	1	2	4
Duration	15	24	7	5	4	63	5	9	63	5
Change Point	0	23	56	69	83	95	167	183	200	272

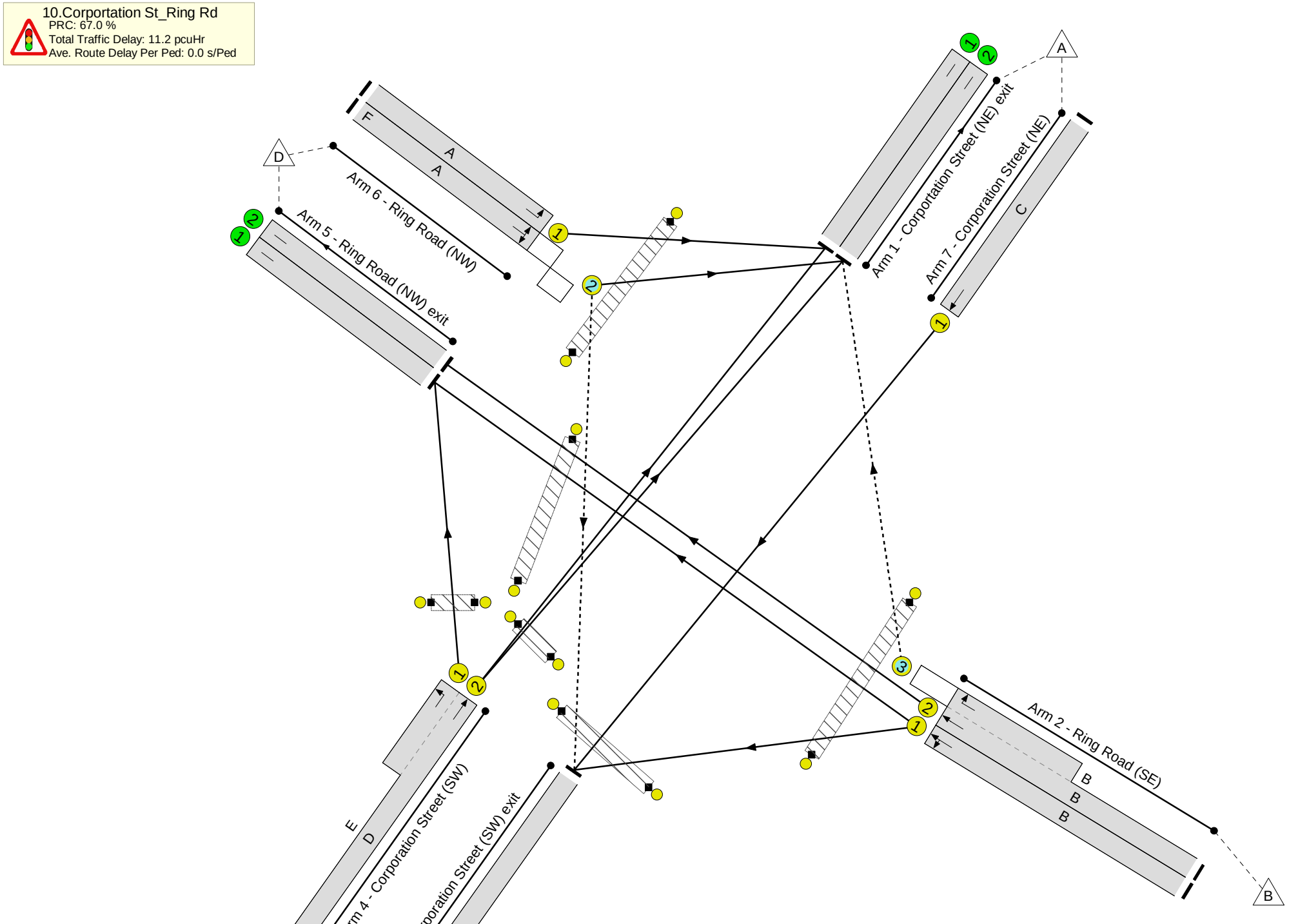
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.9%**
10.Corportation St_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.9%**
1/1	Corportation Street (NE) exit	U	N/A	N/A	-		-	-	-	758	Inf	Inf	0.0%
1/2	Corportation Street (NE) exit	U	N/A	N/A	-		-	-	-	209	Inf	Inf	0.0%
2/1	Ring Road (SE) Left Ahead	U	N/A	N/A	B		3	150	-	488	1952	1037	47.1%
2/2+2/3	Ring Road (SE) Right Ahead	U+O	N/A	N/A	B		3	150	-	587	2063:1856	1013+133	51.2 : 51.2%
3/1	Corporation Street (SW) exit	U	N/A	N/A	-		-	-	-	326	Inf	Inf	0.0%
4/2+4/1	Corporation Street (SW) Ahead Left	U	N/A	N/A	D E		3	31:87	-	187	2125:1939	249+416	28.1 : 28.1%
5/1	Ring Road (NW) exit	U	N/A	N/A	-		-	-	-	538	Inf	Inf	0.0%
5/2	Ring Road (NW) exit	U	N/A	N/A	-		-	-	-	519	Inf	Inf	0.0%
6/1	Ring Road (NW) Left	U	N/A	N/A	A		3	205	-	723	1858	1342	53.9%
6/2	Ring Road (NW) Left Right	O	N/A	N/A	A	F	3	205	31	345	1973	643	53.7%
7/1	Corporation Street (NE) Ahead	U	N/A	N/A	C		1	7	-	20	1985	55	36.3%
Ped Link: P1	Pedestrians across Cheetham Hill Road	-	N/A	-	G		3	44	-	0	-	0	0.0%
Ped Link: P2	Pedestrians across Miller Street	-	N/A	-	H		3	62	-	0	-	0	0.0%
Ped Link: P3	Pedestrians across Corporation Street Southbound Exit	-	N/A	-	I		3	24	-	0	-	0	0.0%
Ped Link: P4	Pedestrians across Corporation Street Northbound Ahead	-	N/A	-	J		3	190	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P5	Pedestrians across Corporation Street Northbound Left Turn	-	N/A	-	K		3	165	-	0	-	0	0.0%
Ped Link: P6	Pedestrians across Cheetham Hill Road Exit	-	N/A	-	L		3	71	-	0	-	0	0.0%

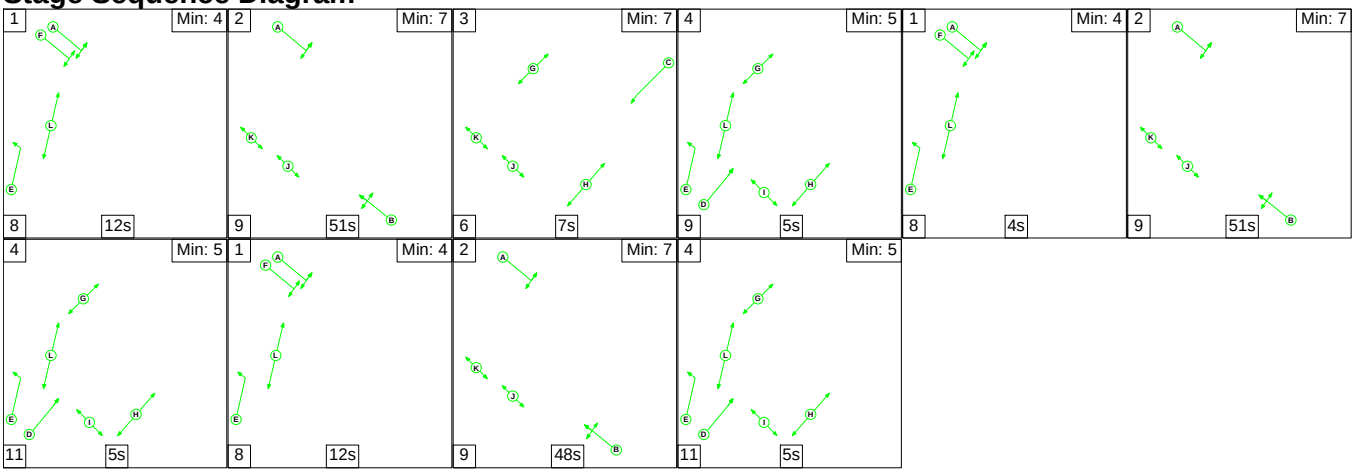
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**187**	**102**	**17**	**8.2**	**2.6**	**0.4**	**11.2**	**-**	**-**	**-**	**-**
10.Corportation St_Ring Rd	**-**	**-**	**187**	**102**	**17**	**8.2**	**2.6**	**0.4**	**11.2**	**-**	**-**	**-**	**-**
1/1	758	758	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	209	209	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	488	488	-	-	-	1.9	0.4	-	2.4	17.4	8.4	0.4	8.8
2/2+2/3	587	587	67	0	1	2.2	0.5	0.1	2.8	17.3	8.9	0.5	9.5
3/1	326	326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	187	187	-	-	-	1.6	0.2	-	1.8	34.0	2.6	0.2	2.8
5/1	538	538	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	723	723	-	-	-	1.3	0.6	-	1.8	9.2	11.0	0.6	11.6
6/2	345	345	120	102	17	0.4	0.6	0.3	1.3	13.8	3.9	0.6	4.5
7/1	20	20	-	-	-	0.8	0.3	-	1.0	187.9	1.6	0.3	1.8
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 67.0 Total Delay for Signalled Lanes (pcuHr): 11.17 Cycle Time (s): 288
PRC Over All Lanes (%): 67.0 Total Delay Over All Lanes(pcuHr): 11.17

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

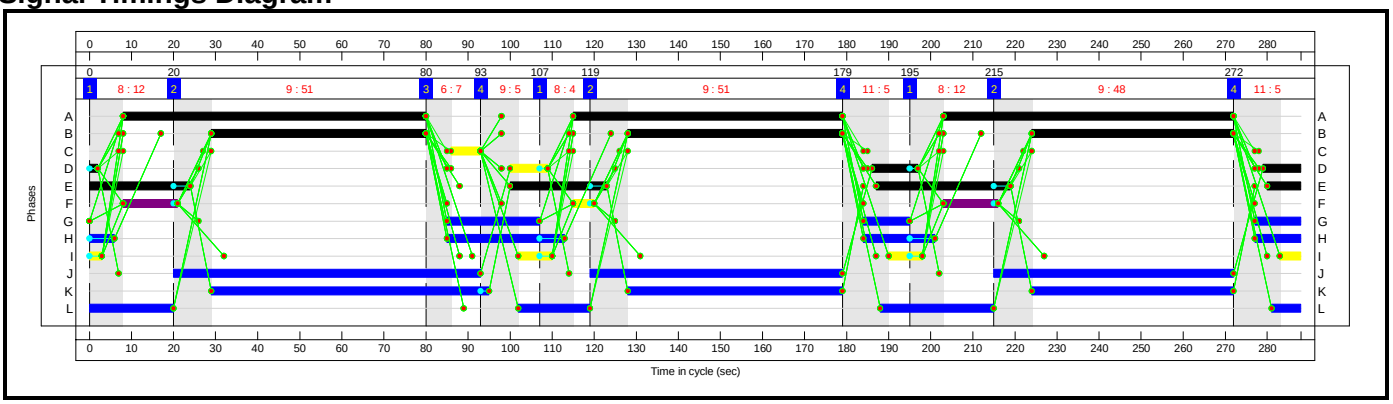
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	4	1	2	4
Duration	12	51	7	5	4	51	5	12	48	5
Change Point	0	20	80	93	107	119	179	195	215	272

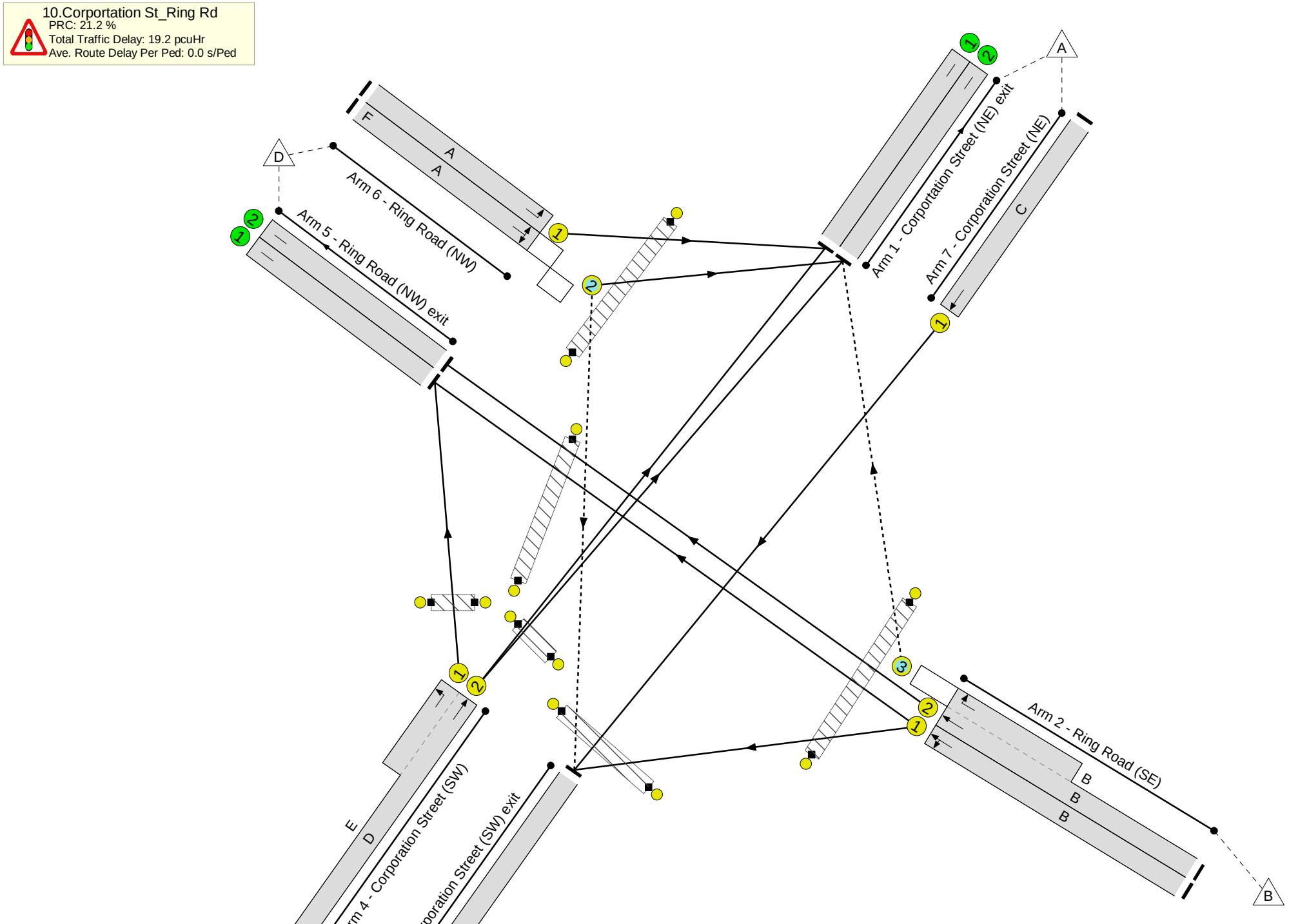
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.2%**
10.Corportation St_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.2%**
1/1	Corportation Street (NE) exit	U	N/A	N/A	-		-	-	-	931	Inf	Inf	0.0%
1/2	Corportation Street (NE) exit	U	N/A	N/A	-		-	-	-	322	Inf	Inf	0.0%
2/1	Ring Road (SE) Left Ahead	U	N/A	N/A	B		3	150	-	745	1964	1043	71.4%
2/2+2/3	Ring Road (SE) Right Ahead	U+O	N/A	N/A	B		3	150	-	853	2063:1856	1006+143	74.2 : 74.2%
3/1	Corporation Street (SW) exit	U	N/A	N/A	-		-	-	-	265	Inf	Inf	0.0%
4/2+4/1	Corporation Street (SW) Ahead Left	U	N/A	N/A	D E		3	31:87	-	242	2125:1939	170+528	34.7 : 34.7%
5/1	Ring Road (NW) exit	U	N/A	N/A	-		-	-	-	878	Inf	Inf	0.0%
5/2	Ring Road (NW) exit	U	N/A	N/A	-		-	-	-	747	Inf	Inf	0.0%
6/1	Ring Road (NW) Left	U	N/A	N/A	A		3	205	-	902	1858	1342	67.2%
6/2	Ring Road (NW) Left Right	O	N/A	N/A	A	F	3	205	31	381	1968	515	73.9%
7/1	Corporation Street (NE) Ahead	U	N/A	N/A	C		1	7	-	20	1985	55	36.3%
Ped Link: P1	Pedestrians across Cheetham Hill Road	-	N/A	-	G		3	44	-	0	-	0	0.0%
Ped Link: P2	Pedestrians across Miller Street	-	N/A	-	H		3	62	-	0	-	0	0.0%
Ped Link: P3	Pedestrians across Corporation Street Southbound Exit	-	N/A	-	I		3	24	-	0	-	0	0.0%
Ped Link: P4	Pedestrians across Corporation Street Northbound Ahead	-	N/A	-	J		3	190	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P5	Pedestrians across Corporation Street Northbound Left Turn	-	N/A	-	K		3	165	-	0	-	0	0.0%
Ped Link: P6	Pedestrians across Cheetham Hill Road Exit	-	N/A	-	L		3	71	-	0	-	0	0.0%

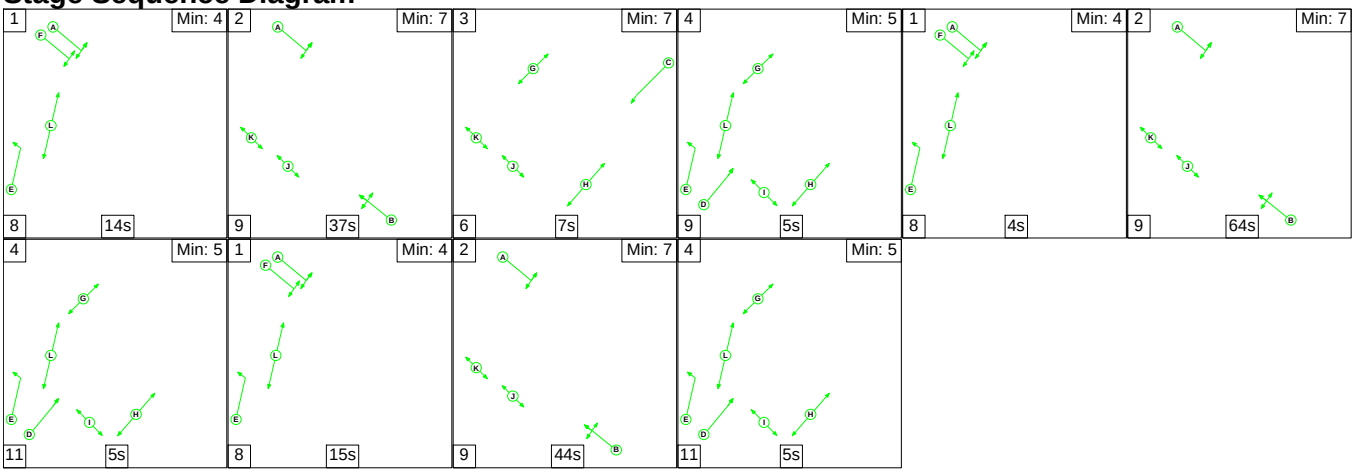
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**105**	**84**	**113**	**12.4**	**5.6**	**1.2**	**19.2**	**-**	**-**	**-**	**-**
10.Corportation St_Ring Rd	**-**	**-**	**105**	**84**	**113**	**12.4**	**5.6**	**1.2**	**19.2**	**-**	**-**	**-**	**-**
1/1	931	931	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	322	322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	745	745	-	-	-	3.5	1.2	-	4.8	23.0	15.5	1.2	16.8
2/2+2/3	853	853	105	0	1	3.8	1.4	0.3	5.6	23.4	16.4	1.4	17.8
3/1	265	265	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	242	242	-	-	-	1.9	0.3	-	2.2	32.6	4.2	0.3	4.4
5/1	878	878	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	747	747	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	902	902	-	-	-	1.9	1.0	-	2.9	11.5	16.5	1.0	17.6
6/2	381	381	0	84	111	0.5	1.4	0.9	2.8	26.2	4.5	1.4	5.9
7/1	20	20	-	-	-	0.8	0.3	-	1.0	187.9	1.6	0.3	1.8
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 21.2 Total Delay for Signalled Lanes (pcuHr): 19.21 Cycle Time (s): 288
PRC Over All Lanes (%): 21.2 Total Delay Over All Lanes(pcuHr): 19.21

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

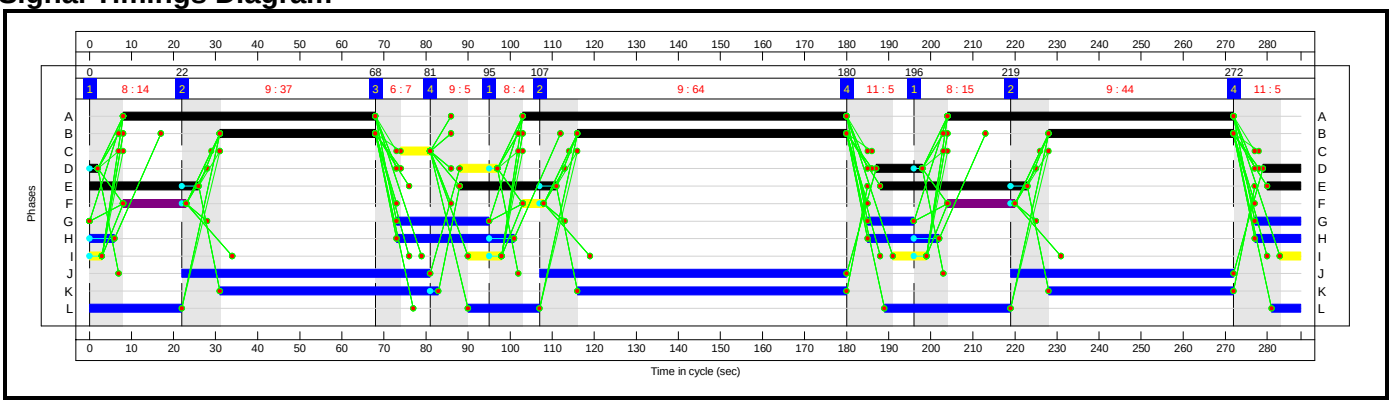
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	4	1	2	4
Duration	14	37	7	5	4	64	5	15	44	5
Change Point	0	22	68	81	95	107	180	196	219	272

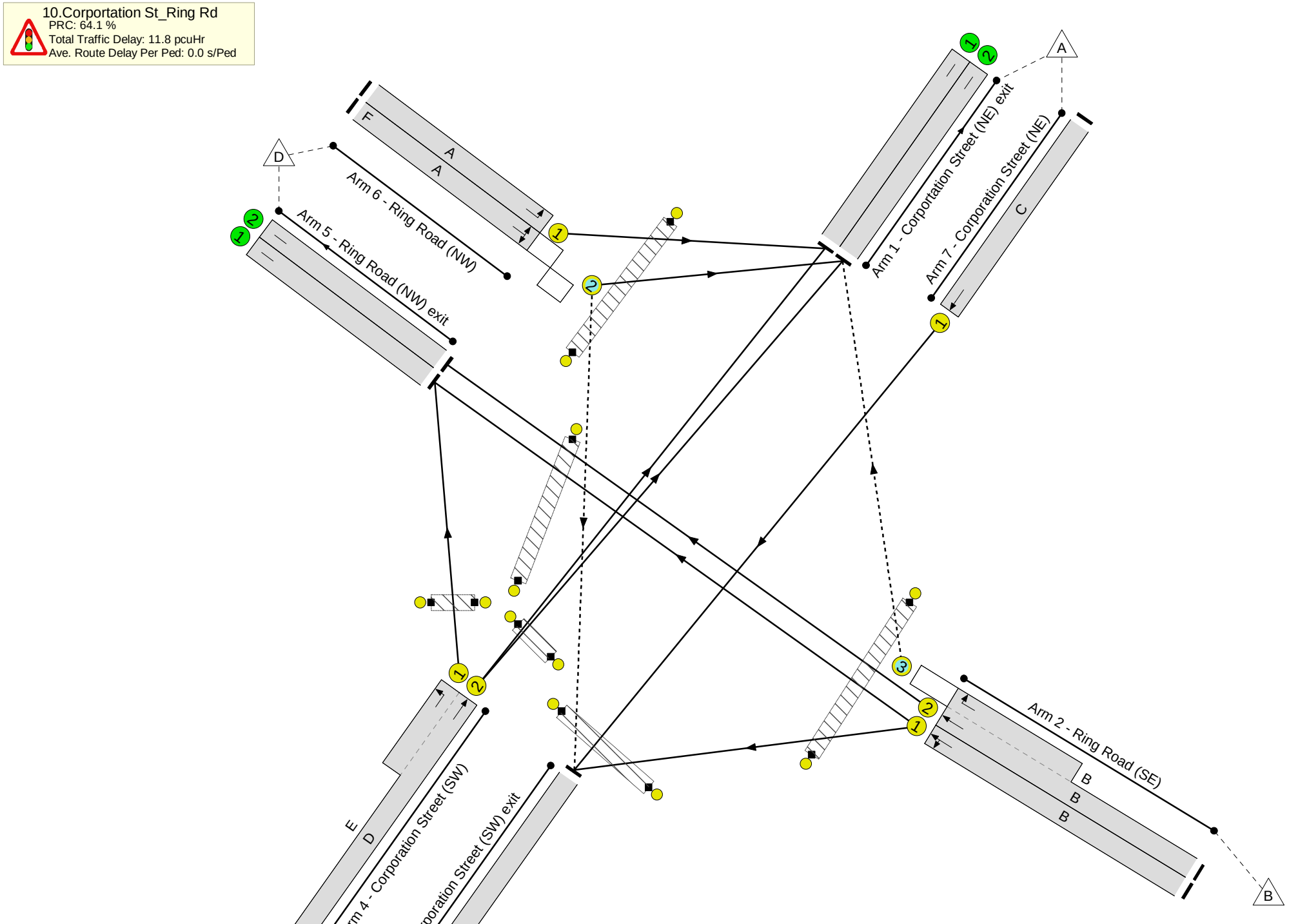
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**54.8%**
10.Corportation St_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**54.8%**
1/1	Corportation Street (NE) exit	U	N/A	N/A	-		-	-	-	774	Inf	Inf	0.0%
1/2	Corportation Street (NE) exit	U	N/A	N/A	-		-	-	-	232	Inf	Inf	0.0%
2/1	Ring Road (SE) Left Ahead	U	N/A	N/A	B		3	145	-	491	1953	1004	48.9%
2/2+2/3	Ring Road (SE) Right Ahead	U+O	N/A	N/A	B		3	145	-	587	2063:1856	982+129	52.9 : 52.9%
3/1	Corporation Street (SW) exit	U	N/A	N/A	-		-	-	-	331	Inf	Inf	0.0%
4/2+4/1	Corporation Street (SW) Ahead Left	U	N/A	N/A	D E		3	31:92	-	193	2125:1939	249+383	30.5 : 30.5%
5/1	Ring Road (NW) exit	U	N/A	N/A	-		-	-	-	541	Inf	Inf	0.0%
5/2	Ring Road (NW) exit	U	N/A	N/A	-		-	-	-	519	Inf	Inf	0.0%
6/1	Ring Road (NW) Left	U	N/A	N/A	A		3	205	-	736	1858	1342	54.8%
6/2	Ring Road (NW) Left Right	O	N/A	N/A	A	F	3	205	36	370	1972	676	54.7%
7/1	Corporation Street (NE) Ahead	U	N/A	N/A	C		1	7	-	20	1985	55	36.3%
Ped Link: P1	Pedestrians across Cheetham Hill Road	-	N/A	-	G		3	44	-	0	-	0	0.0%
Ped Link: P2	Pedestrians across Miller Street	-	N/A	-	H		3	62	-	0	-	0	0.0%
Ped Link: P3	Pedestrians across Corporation Street Southbound Exit	-	N/A	-	I		3	24	-	0	-	0	0.0%
Ped Link: P4	Pedestrians across Corporation Street Northbound Ahead	-	N/A	-	J		3	185	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P5	Pedestrians across Corporation Street Northbound Left Turn	-	N/A	-	K		3	160	-	0	-	0	0.0%
Ped Link: P6	Pedestrians across Cheetham Hill Road Exit	-	N/A	-	L		3	76	-	0	-	0	0.0%

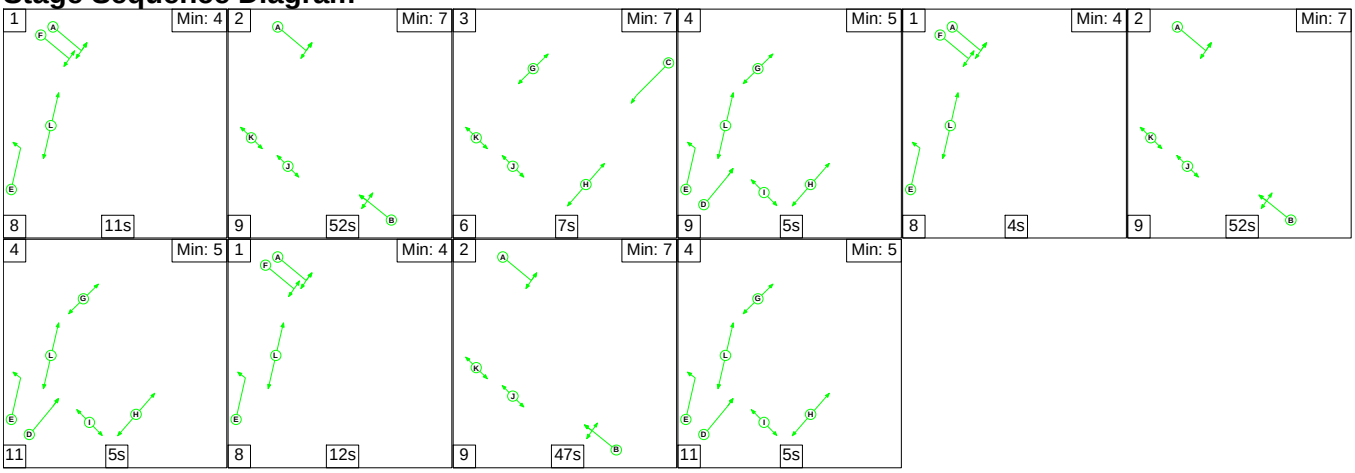
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**184**	**108**	**20**	**8.6**	**2.7**	**0.4**	**11.8**	**-**	**-**	**-**	**-**
10.Corportation St_Ring Rd	**-**	**-**	**184**	**108**	**20**	**8.6**	**2.7**	**0.4**	**11.8**	**-**	**-**	**-**	**-**
1/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	232	232	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	491	491	-	-	-	2.1	0.5	-	2.5	18.7	8.5	0.5	8.9
2/2+2/3	587	587	67	0	1	2.4	0.6	0.1	3.0	18.6	8.9	0.6	9.5
3/1	331	331	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	193	193	-	-	-	1.6	0.2	-	1.8	33.5	2.6	0.2	2.8
5/1	541	541	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	736	736	-	-	-	1.3	0.6	-	1.9	9.3	11.4	0.6	12.1
6/2	370	370	117	108	19	0.5	0.6	0.4	1.5	14.2	4.2	0.6	4.8
7/1	20	20	-	-	-	0.8	0.3	-	1.0	187.9	1.6	0.3	1.8
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 64.1 Total Delay for Signalled Lanes (pcuHr): 11.79 Cycle Time (s): 288
PRC Over All Lanes (%): 64.1 Total Delay Over All Lanes(pcuHr): 11.79

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

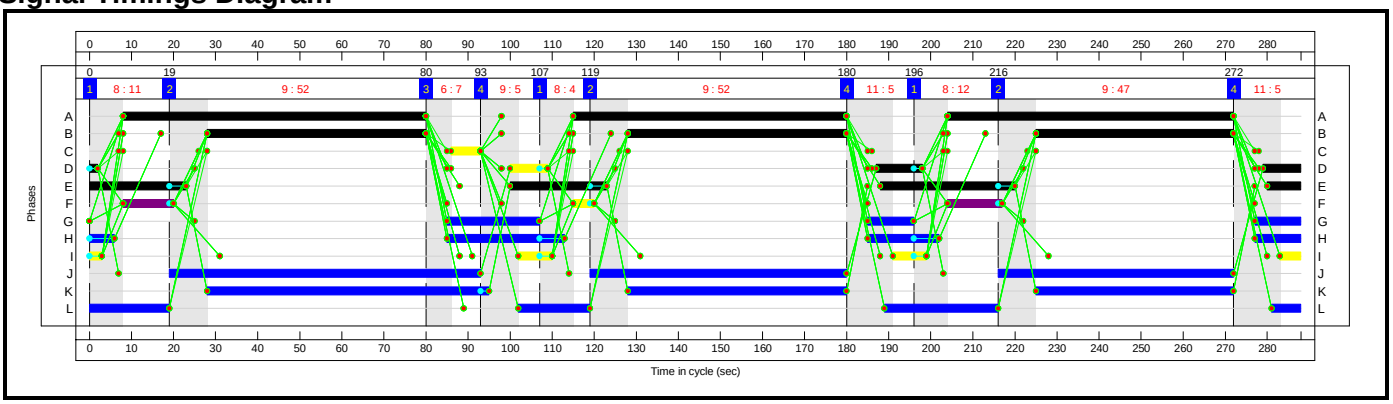
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	4	1	2	4
Duration	11	52	7	5	4	52	5	12	47	5
Change Point	0	19	80	93	107	119	180	196	216	272

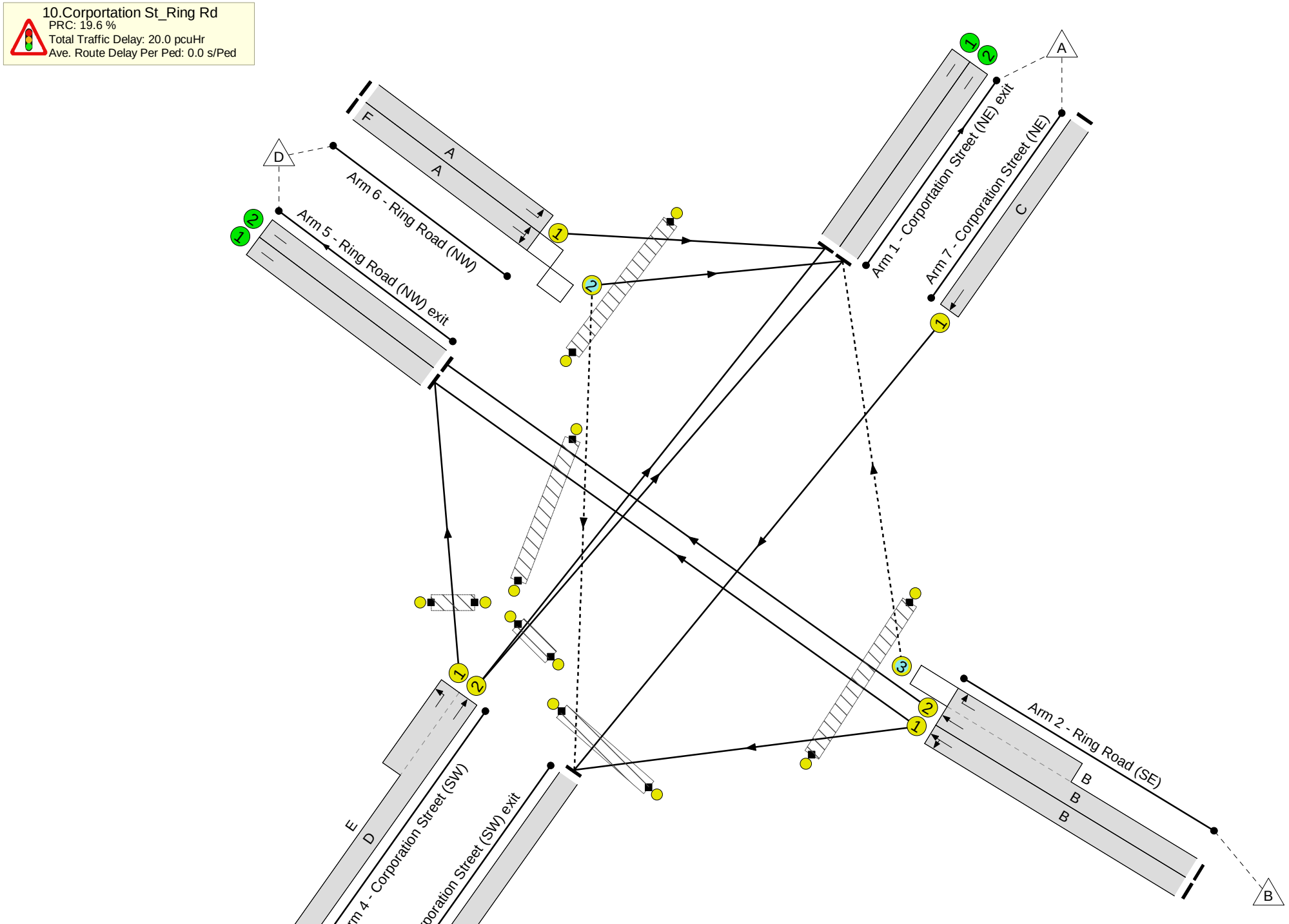
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.2%**
10.Corportation St_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.2%**
1/1	Corportation Street (NE) exit	U	N/A	N/A	-		-	-	-	951	Inf	Inf	0.0%
1/2	Corportation Street (NE) exit	U	N/A	N/A	-		-	-	-	331	Inf	Inf	0.0%
2/1	Ring Road (SE) Left Ahead	U	N/A	N/A	B		3	151	-	762	1964	1050	72.6%
2/2+2/3	Ring Road (SE) Right Ahead	U+O	N/A	N/A	B		3	151	-	869	2063:1856	1014+141	75.2 : 75.2%
3/1	Corporation Street (SW) exit	U	N/A	N/A	-		-	-	-	265	Inf	Inf	0.0%
4/2+4/1	Corporation Street (SW) Ahead Left	U	N/A	N/A	D E		3	31:86	-	272	2125:1939	231+499	37.3 : 37.3%
5/1	Ring Road (NW) exit	U	N/A	N/A	-		-	-	-	898	Inf	Inf	0.0%
5/2	Ring Road (NW) exit	U	N/A	N/A	-		-	-	-	763	Inf	Inf	0.0%
6/1	Ring Road (NW) Left	U	N/A	N/A	A		3	205	-	908	1858	1342	67.7%
6/2	Ring Road (NW) Left Right	O	N/A	N/A	A	F	3	205	30	377	1968	507	74.4%
7/1	Corporation Street (NE) Ahead	U	N/A	N/A	C		1	7	-	20	1985	55	36.3%
Ped Link: P1	Pedestrians across Cheetham Hill Road	-	N/A	-	G		3	44	-	0	-	0	0.0%
Ped Link: P2	Pedestrians across Miller Street	-	N/A	-	H		3	62	-	0	-	0	0.0%
Ped Link: P3	Pedestrians across Corporation Street Southbound Exit	-	N/A	-	I		3	24	-	0	-	0	0.0%
Ped Link: P4	Pedestrians across Corporation Street Northbound Ahead	-	N/A	-	J		3	191	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P5	Pedestrians across Corporation Street Northbound Left Turn	-	N/A	-	K		3	166	-	0	-	0	0.0%
Ped Link: P6	Pedestrians across Cheetham Hill Road Exit	-	N/A	-	L		3	70	-	0	-	0	0.0%

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)
Network	**-**	**-**	**105**	**84**	**112**	**12.9**	**5.9**	**1.2**	**20.0**	**-**	**-**	**-**	**-**
10.Corportation St_Ring Rd	**-**	**-**	**105**	**84**	**112**	**12.9**	**5.9**	**1.2**	**20.0**	**-**	**-**	**-**	**-**
1/1	951	951	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	331	331	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	762	762	-	-	-	3.6	1.3	-	4.9	23.2	16.1	1.3	17.4
2/2+2/3	869	869	105	0	1	3.9	1.5	0.3	5.7	23.6	17.0	1.5	18.5
3/1	265	265	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	272	272	-	-	-	2.3	0.3	-	2.6	33.9	4.3	0.3	4.6
5/1	898	898	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	763	763	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	908	908	-	-	-	1.9	1.0	-	2.9	11.6	16.6	1.0	17.7
6/2	377	377	0	84	111	0.5	1.4	0.9	2.8	27.0	4.5	1.4	5.9
7/1	20	20	-	-	-	0.8	0.3	-	1.0	187.9	1.6	0.3	1.8
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

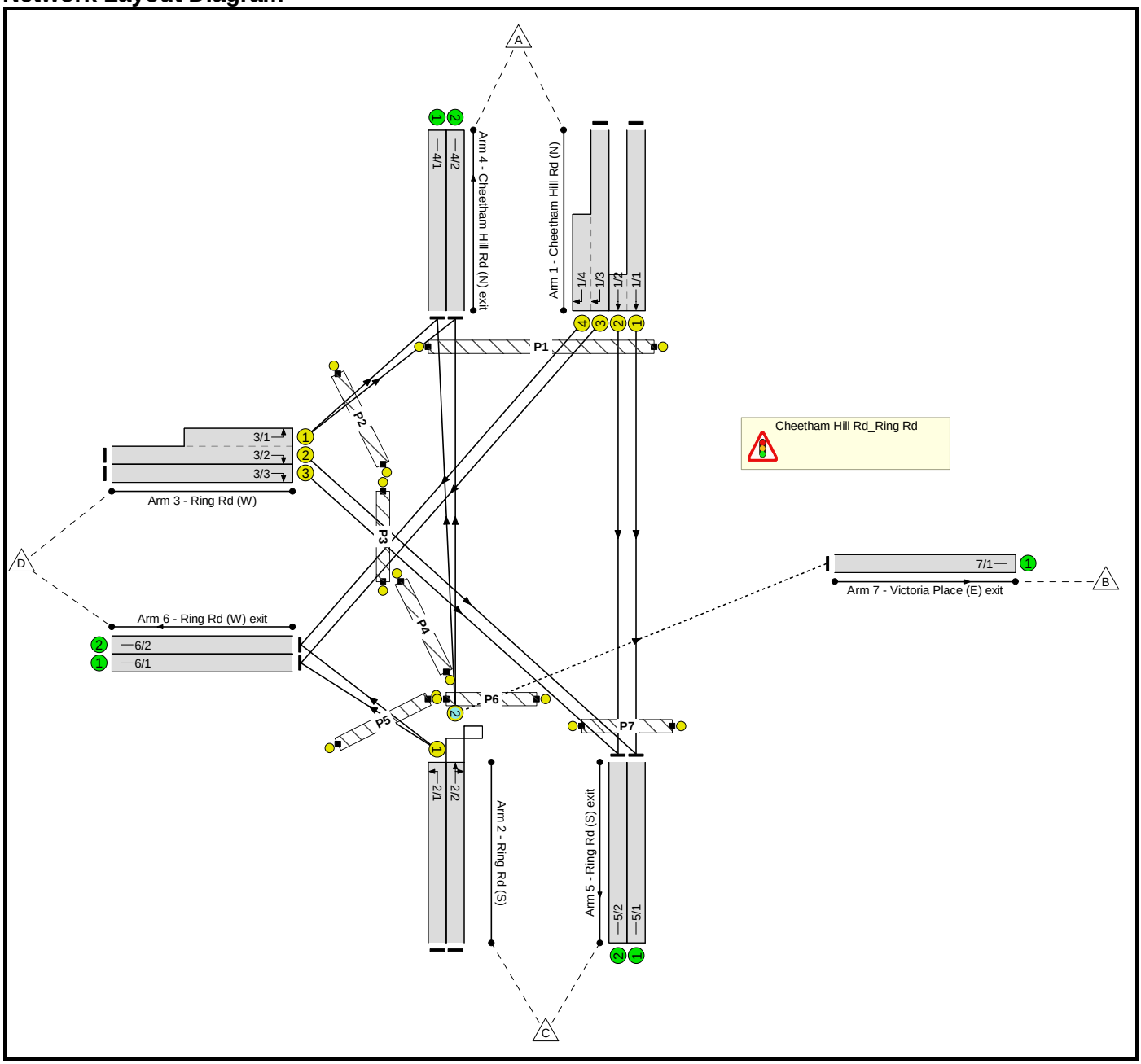
C1 PRC for Signalled Lanes (%): 19.6 Total Delay for Signalled Lanes (pcuHr): 19.99 Cycle Time (s): 288
PRC Over All Lanes (%): 19.6 Total Delay Over All Lanes(pcuHr): 19.99

Full Input Data And Results

User and Project Details

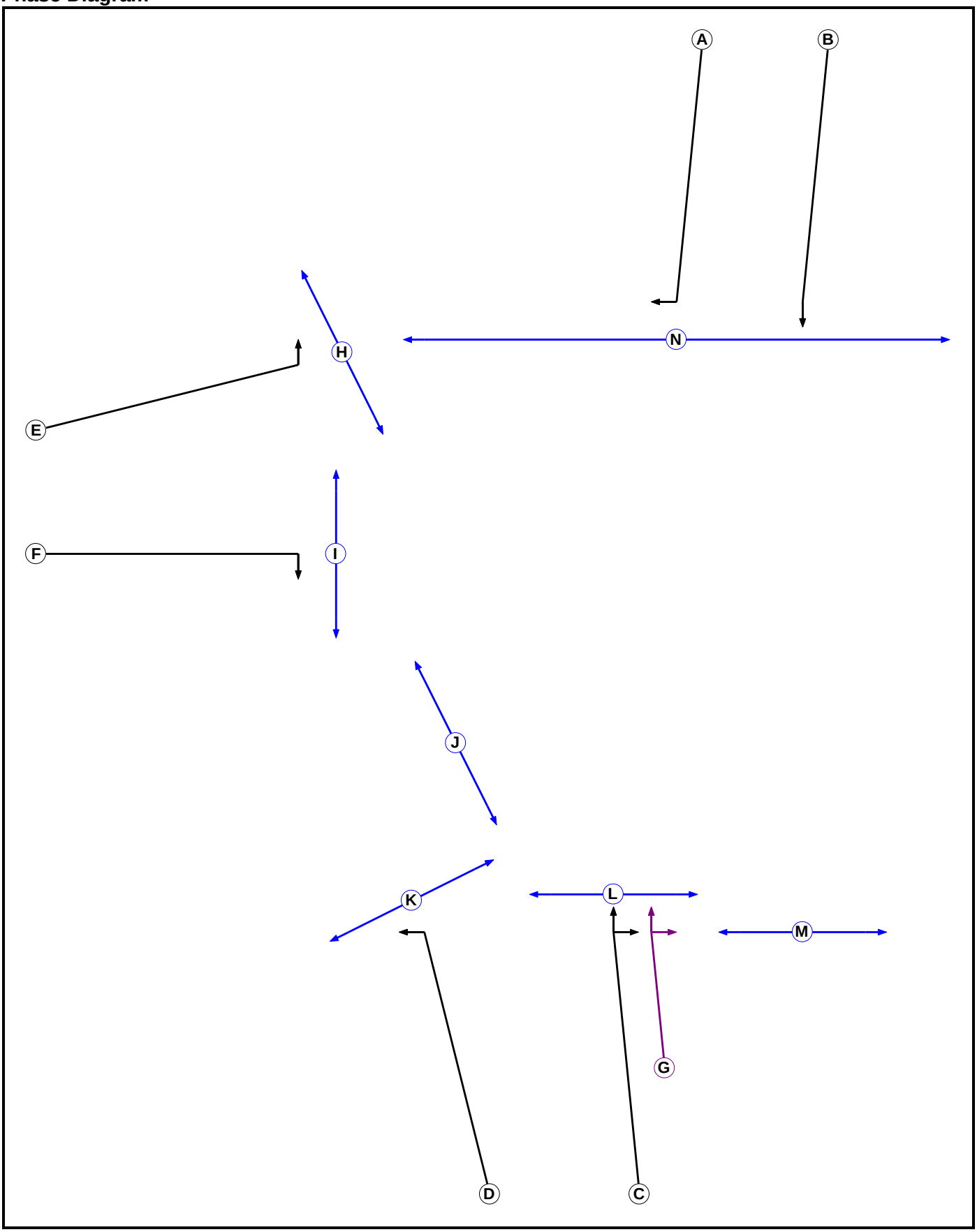
Project:	
Title:	
Location:	
Additional detail:	
File name:	11.Cheetham Hill Rd_Ring Rd.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Ind. Arrow	C	3	3
H	Pedestrian		5	4
I	Pedestrian		5	5
J	Pedestrian		6	6
K	Pedestrian		5	5
L	Pedestrian		5	5
M	Pedestrian		5	5
N	Pedestrian		16	16

Phase Intergreens Matrix

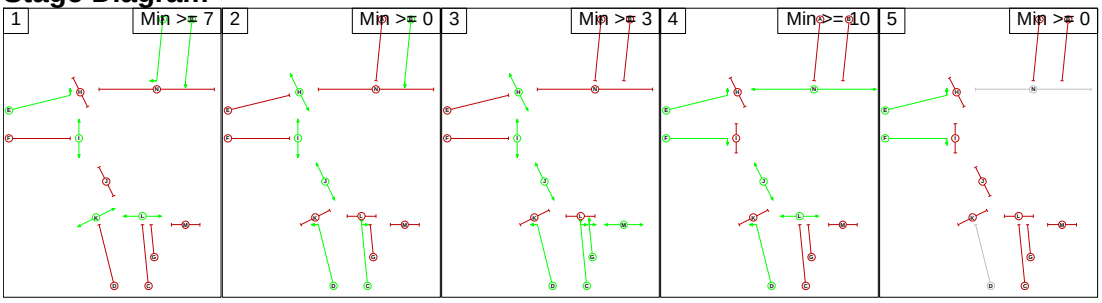
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N
A		-	7	8	-	5	7	-	-	11	-	-	-	5
B	-		-	-	-	5	5	-	-	-	-	-	9	5
C	5	-		-	7	6	-	-	-	-	-	5	-	8
D	4	-	-		-	-	-	-	-	-	5	-	-	-
E	-	-	4	-		-	4	5	-	-	-	-	-	-
F	6	6	5	-	-		5	-	5	-	-	-	12	-
G	5	7	-	-	7	6		-	-	-	-	5	-	8
H	-	-	-	-	6	-	-		-	-	-	-	-	-
I	-	-	-	-	-	6	-	-		-	-	-	-	-
J	8	-	-	-	-	-	-	-	-		-	-	-	-
K	-	-	-	7	-	-	-	-	-	-		-	-	-
L	-	-	5	-	-	-	5	-	-	-	-		-	-
M	-	7	-	-	-	7	-	-	-	-	-	-		-
N	6	6	7	-	-	-	7	-	-	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B E I K L
2	B C D H I J
3	C D G H I J M
4	D E F J L N
5	E F

Full Input Data And Results

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	E	Losing	3	3
1	2	K	Losing	1	1
1	2	L	Losing	2	2
1	4	K	Losing	1	1
1	5	A	Losing	1	1
1	5	B	Losing	1	1
1	5	K	Losing	6	6
1	5	L	Losing	6	6
2	1	H	Losing	1	1
2	4	H	Losing	1	1
2	5	B	Losing	1	1
2	5	H	Losing	1	1
2	5	J	Losing	7	7
3	1	H	Losing	1	1
3	4	H	Losing	1	1
3	4	I	Losing	1	1
3	5	H	Losing	1	1
3	5	I	Losing	1	1
3	5	J	Losing	7	7
4	1	D	Losing	3	3
4	2	L	Losing	2	2

Prohibited Stage Change

		To Stage				
		1	2	3	4	5
From Stage	1		11	11	11	6
	2	8		9	8	7
	3	8	7		8	7
	4	8	7	12		0
	5	6	6	12	2	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Cheetham Hill Rd_Ring Rd											
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)**
2/2 (Ring Rd (S))	7/1 (Right)	1439	0	1/1	1.09	All	3.00	1.00	0.50	3	3.00
				1/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: Cheetham Hill Rd_Ring Rd

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 (Cheetham Hill Rd (N))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
1/2 (Cheetham Hill Rd (N))	U	B	2	3	3.0	Geom	-	3.00	0.00	N	Arm 5 Ahead	Inf
1/3 (Cheetham Hill Rd (N))	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm 6 Right	34.00
1/4 (Cheetham Hill Rd (N))	U	A	2	3	8.0	Geom	-	3.00	0.00	N	Arm 6 Right	33.00
2/1 (Ring Rd (S))	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Left	47.00
2/2 (Ring Rd (S))	O	C G	2	3	60.0	Geom	-	3.50	0.00	N	Arm 4 Ahead Arm 7 Right	Inf Inf
3/1 (Ring Rd (W))	U	E	2	3	9.0	Geom	-	3.25	0.00	Y	Arm 4 Left	44.00
3/2 (Ring Rd (W))	U	F	2	3	60.0	Geom	-	3.00	0.00	N	Arm 5 Right	34.00
3/3 (Ring Rd (W))	U	F	2	3	60.0	Geom	-	3.00	0.00	N	Arm 5 Right	33.00
4/1 (Cheetham Hill Rd (N) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2 (Cheetham Hill Rd (N) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Ring Rd (S) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (Ring Rd (S) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Ring Rd (W) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2 (Ring Rd (W) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Victoria Place (E) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Base'	08:30	09:30	01:00	
2: 'PM Base'	17:00	18:00	01:00	
3: 'AM Proposed'	08:30	09:30	01:00	
4: 'PM Proposed'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	532	49	581
	B	0	0	0	0	0
	C	423	0	0	634	1057
	D	301	0	546	0	847
	Tot.	724	0	1078	683	2485

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: Cheetham Hill Rd_Ring Rd	
1/1 (with short)	532(In) 213(Out)
1/2 (short)	319
1/3 (with short)	49(In) 25(Out)
1/4 (short)	24
2/1	634
2/2	423
3/1 (short)	301
3/2 (with short)	587(In) 286(Out)
3/3	260
4/1	363
4/2	361
5/1	499
5/2	579
6/1	342
6/2	341
7/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Cheetham Hill Rd_Ring Rd								
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 (Cheetham Hill Rd (N))	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
1/2 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
1/3 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 6 Right	34.00	100.0 %	1968	1968
1/4 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 6 Right	33.00	100.0 %	1966	1966
2/1 (Ring Rd (S))	3.50	0.00	Y	Arm 6 Left	47.00	100.0 %	1904	1904
2/2 (Ring Rd (S))	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
				Arm 7 Right	Inf	0.0 %		
3/1 (Ring Rd (W))	3.25	0.00	Y	Arm 4 Left	44.00	100.0 %	1876	1876
3/2 (Ring Rd (W))	3.00	0.00	N	Arm 5 Right	34.00	100.0 %	1968	1968
3/3 (Ring Rd (W))	3.00	0.00	N	Arm 5 Right	33.00	100.0 %	1966	1966
4/1 (Cheetham Hill Rd (N) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Cheetham Hill Rd (N) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Ring Rd (S) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Ring Rd (S) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Rd (W) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Rd (W) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Victoria Place (E) exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	457	452	909
	B	0	0	0	0	0
	C	650	0	0	975	1625
	D	447	0	841	0	1288
	Tot.	1097	0	1298	1427	3822

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: Cheetham Hill Rd_Ring Rd	
1/1 (with short)	457(In) 208(Out)
1/2 (short)	249
1/3 (with short)	452(In) 226(Out)
1/4 (short)	226
2/1	975
2/2	650
3/1 (short)	447
3/2 (with short)	842(In) 395(Out)
3/3	446
4/1	549
4/2	548
5/1	603
5/2	695
6/1	714
6/2	713
7/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Cheetham Hill Rd_Ring Rd								
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 (Cheetham Hill Rd (N))	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
1/2 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
1/3 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 6 Right	34.00	100.0 %	1968	1968
1/4 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 6 Right	33.00	100.0 %	1966	1966
2/1 (Ring Rd (S))	3.50	0.00	Y	Arm 6 Left	47.00	100.0 %	1904	1904
2/2 (Ring Rd (S))	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
				Arm 7 Right	Inf	0.0 %		
3/1 (Ring Rd (W))	3.25	0.00	Y	Arm 4 Left	44.00	100.0 %	1876	1876
3/2 (Ring Rd (W))	3.00	0.00	N	Arm 5 Right	34.00	100.0 %	1968	1968
3/3 (Ring Rd (W))	3.00	0.00	N	Arm 5 Right	33.00	100.0 %	1966	1966
4/1 (Cheetham Hill Rd (N) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Cheetham Hill Rd (N) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Ring Rd (S) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Ring Rd (S) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Rd (W) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Rd (W) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Victoria Place (E) exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	539	49	588
	B	0	0	0	0	0
	C	424	0	0	636	1060
	D	301	0	577	0	878
	Tot.	725	0	1116	685	2526

Traffic Lane Flows

Lane	Scenario 3: AM Proposed
Junction: Cheetham Hill Rd_Ring Rd	
1/1 (with short)	539(In) 213(Out)
1/2 (short)	326
1/3 (with short)	49(In) 25(Out)
1/4 (short)	24
2/1	636
2/2	424
3/1 (short)	301
3/2 (with short)	600(In) 299(Out)
3/3	278
4/1	363
4/2	362
5/1	512
5/2	604
6/1	343
6/2	342
7/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Cheetham Hill Rd_Ring Rd								
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 (Cheetham Hill Rd (N))	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
1/2 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
1/3 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 6 Right	34.00	100.0 %	1968	1968
1/4 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 6 Right	33.00	100.0 %	1966	1966
2/1 (Ring Rd (S))	3.50	0.00	Y	Arm 6 Left	47.00	100.0 %	1904	1904
2/2 (Ring Rd (S))	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
				Arm 7 Right	Inf	0.0 %		
3/1 (Ring Rd (W))	3.25	0.00	Y	Arm 4 Left	44.00	100.0 %	1876	1876
3/2 (Ring Rd (W))	3.00	0.00	N	Arm 5 Right	34.00	100.0 %	1968	1968
3/3 (Ring Rd (W))	3.00	0.00	N	Arm 5 Right	33.00	100.0 %	1966	1966
4/1 (Cheetham Hill Rd (N) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Cheetham Hill Rd (N) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Ring Rd (S) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Ring Rd (S) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Rd (W) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Rd (W) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Victoria Place (E) exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	457	452	909
	B	0	0	0	0	0
	C	664	0	0	997	1661
	D	447	0	843	0	1290
	Tot.	1111	0	1300	1449	3860

Traffic Lane Flows

Lane	Scenario 4: PM Proposed
Junction: Cheetham Hill Rd_Ring Rd	
1/1 (with short)	457(In) 208(Out)
1/2 (short)	249
1/3 (with short)	452(In) 226(Out)
1/4 (short)	226
2/1	997
2/2	664
3/1 (short)	447
3/2 (with short)	843(In) 396(Out)
3/3	447
4/1	556
4/2	555
5/1	604
5/2	696
6/1	725
6/2	724
7/1	0

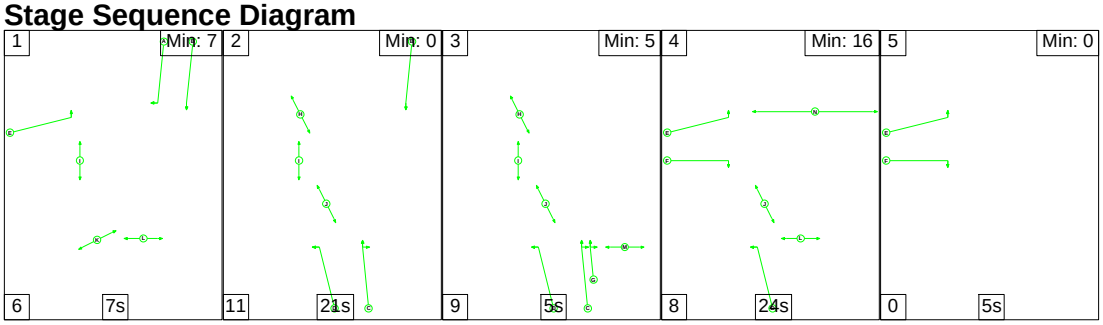
Full Input Data And Results

Lane Saturation Flows

Junction: Cheetham Hill Rd_Ring Rd								
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 (Cheetham Hill Rd (N))	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
1/2 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
1/3 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 6 Right	34.00	100.0 %	1968	1968
1/4 (Cheetham Hill Rd (N))	3.00	0.00	N	Arm 6 Right	33.00	100.0 %	1966	1966
2/1 (Ring Rd (S))	3.50	0.00	Y	Arm 6 Left	47.00	100.0 %	1904	1904
2/2 (Ring Rd (S))	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
				Arm 7 Right	Inf	0.0 %		
3/1 (Ring Rd (W))	3.25	0.00	Y	Arm 4 Left	44.00	100.0 %	1876	1876
3/2 (Ring Rd (W))	3.00	0.00	N	Arm 5 Right	34.00	100.0 %	1968	1968
3/3 (Ring Rd (W))	3.00	0.00	N	Arm 5 Right	33.00	100.0 %	1966	1966
4/1 (Cheetham Hill Rd (N) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Cheetham Hill Rd (N) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Ring Rd (S) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Ring Rd (S) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Rd (W) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Rd (W) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Victoria Place (E) exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

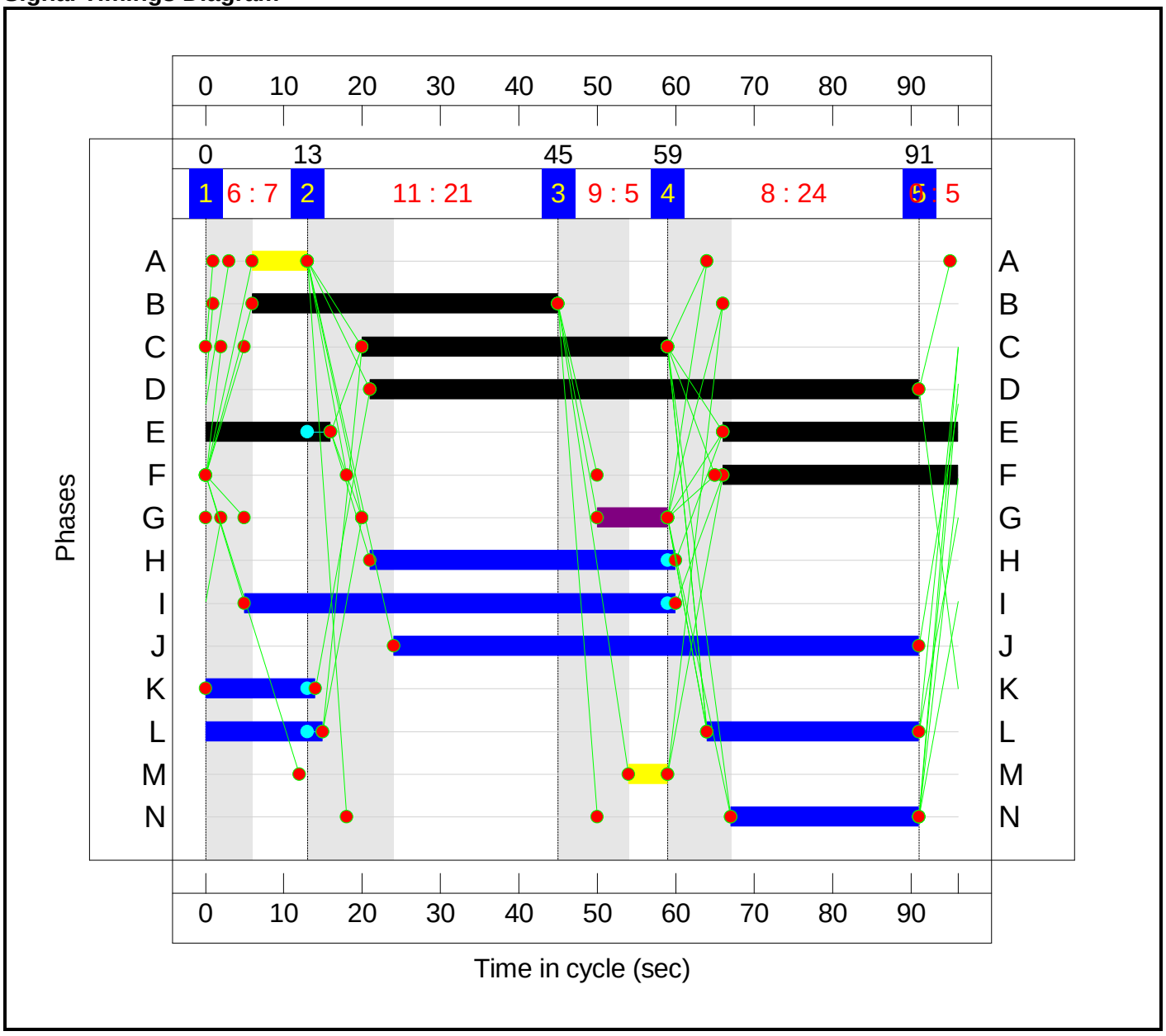


Full Input Data And Results

Stage Timings

Stage	1	2	3	4	5
Duration	7	21	5	24	5
Change Point	0	13	45	59	91

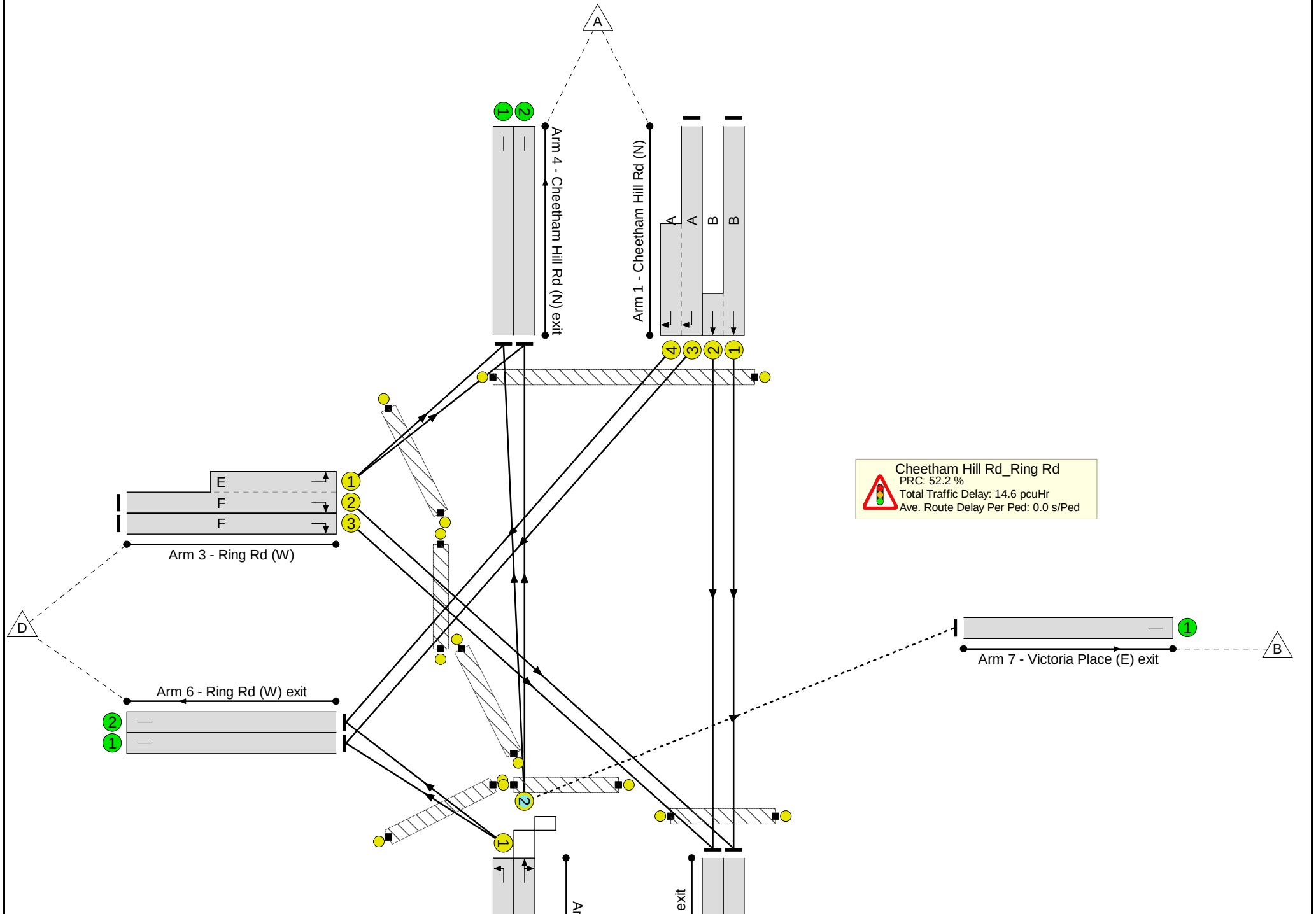
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**59.1%**
Cheetham Hill Rd_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**59.1%**
1/1+1/2	Cheetham Hill Rd (N) Ahead	U	N/A	N/A	B		1	39	-	532	1915:2055	367+549	58.1 : 58.1%
1/3+1/4	Cheetham Hill Rd (N) Right	U	N/A	N/A	A		1	7	-	49	1968:1966	164+164	15.2 : 14.6%
2/1	Ring Rd (S) Left	U	N/A	N/A	D		1	70	-	634	1904	1408	45.0%
2/2	Ring Rd (S) Ahead Right	O	N/A	N/A	C	G	1	39	9	423	2105	877	48.2%
3/2+3/1	Ring Rd (W) Left Right	U	N/A	N/A	F E		1	30:46	-	587	1968:1876	484+509	59.1 : 59.1%
3/3	Ring Rd (W) Right	U	N/A	N/A	F		1	30	-	260	1966	635	41.0%
4/1	Cheetham Hill Rd (N) exit	U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
4/2	Cheetham Hill Rd (N) exit	U	N/A	N/A	-		-	-	-	361	Inf	Inf	0.0%
5/1	Ring Rd (S) exit	U	N/A	N/A	-		-	-	-	499	Inf	Inf	0.0%
5/2	Ring Rd (S) exit	U	N/A	N/A	-		-	-	-	579	Inf	Inf	0.0%
6/1	Ring Rd (W) exit	U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
6/2	Ring Rd (W) exit	U	N/A	N/A	-		-	-	-	341	Inf	Inf	0.0%
7/1	Victoria Place (E) exit	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	N		1	24	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		1	39	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	I		1	55	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	J		1	67	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	K		1	14	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	L		2	42	-	0	-	0	0.0%
Ped Link: P7	Unnamed Ped Link	-	N/A	-	M		1	5	-	0	-	0	0.0%

Full Input Data And Results

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)
Network	**-**	**-**	**0**	**0**	**0**	**11.9**	**2.7**	**0.0**	**14.6**	**-**	**-**	**-**	**-**
Cheetham Hill Rd_Ring Rd	**-**	**-**	**0**	**0**	**0**	**11.9**	**2.7**	**0.0**	**14.6**	**-**	**-**	**-**	**-**
1/1+1/2	532	532	-	-	-	2.9	0.7	-	3.6	24.6	8.3	0.7	9.0
1/3+1/4	49	49	-	-	-	0.6	0.1	-	0.6	47.3	0.6	0.1	0.7
2/1	634	634	-	-	-	0.9	0.4	-	1.3	7.2	6.5	0.4	6.9
2/2	423	423	0	0	0	2.4	0.5	0.0	2.9	24.4	8.2	0.5	8.7
3/2+3/1	587	587	-	-	-	3.3	0.7	-	4.0	24.6	6.0	0.7	6.8
3/3	260	260	-	-	-	1.8	0.3	-	2.2	30.2	5.3	0.3	5.7
4/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	361	361	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	579	579	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-

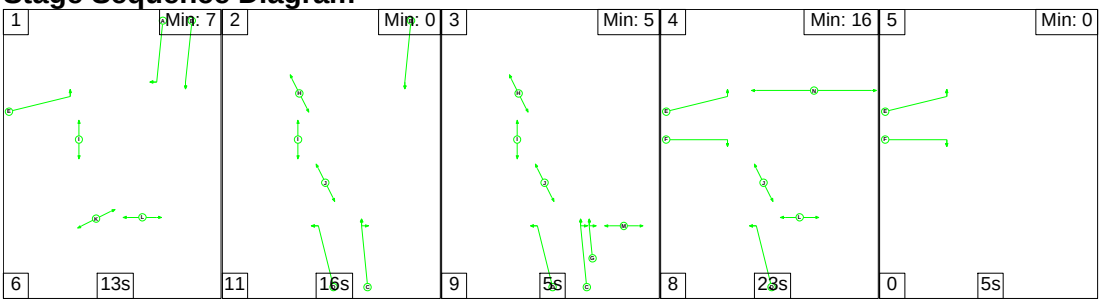
C1 PRC for Signalled Lanes (%): 52.2 Total Delay for Signalled Lanes (pcuHr): 14.61 Cycle Time (s): 96

PRC Over All Lanes (%): 52.2 Total Delay Over All Lanes(pcuHr): 14.61

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

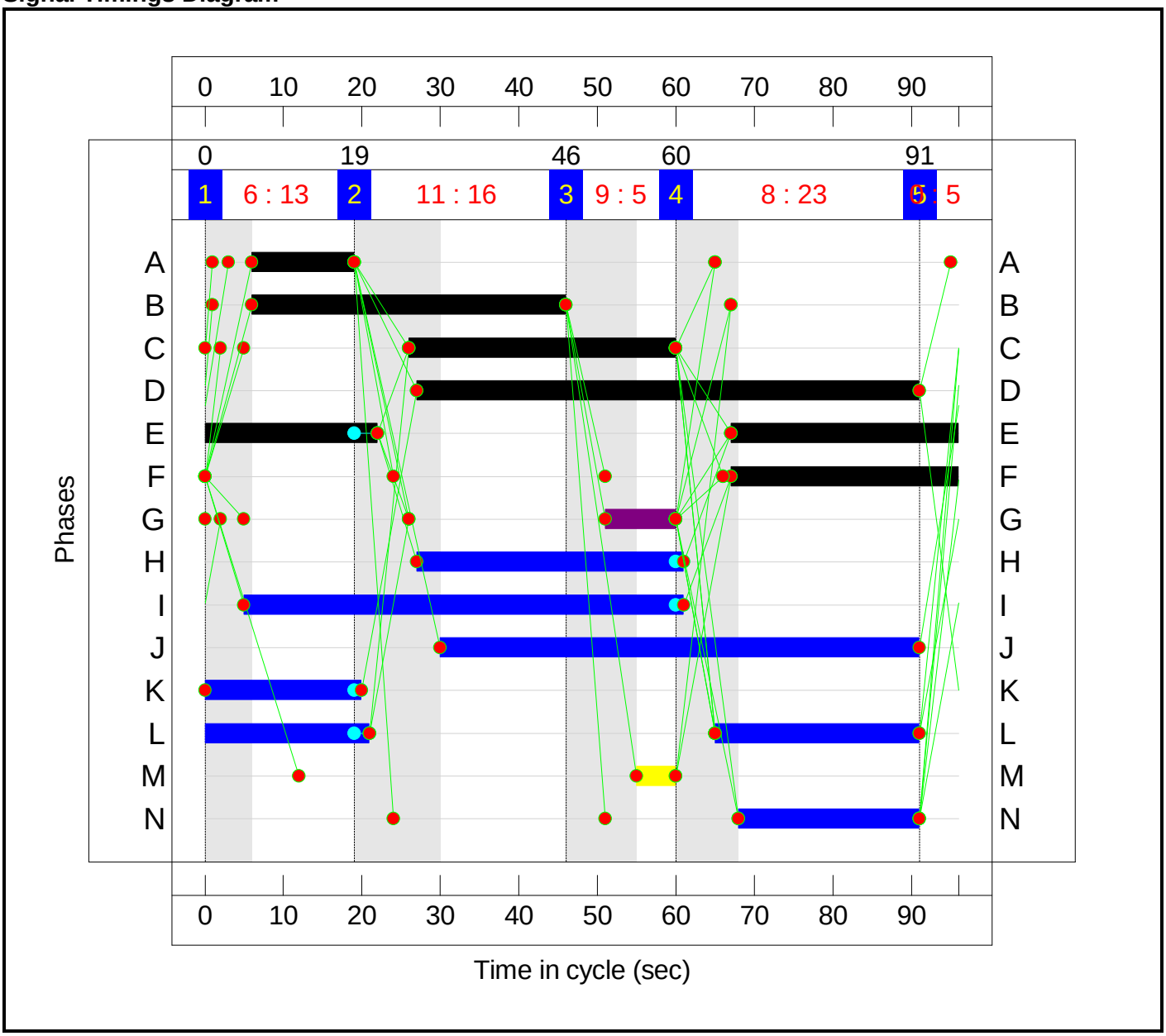
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5
Duration	13	16	5	23	5
Change Point	0	19	46	60	91

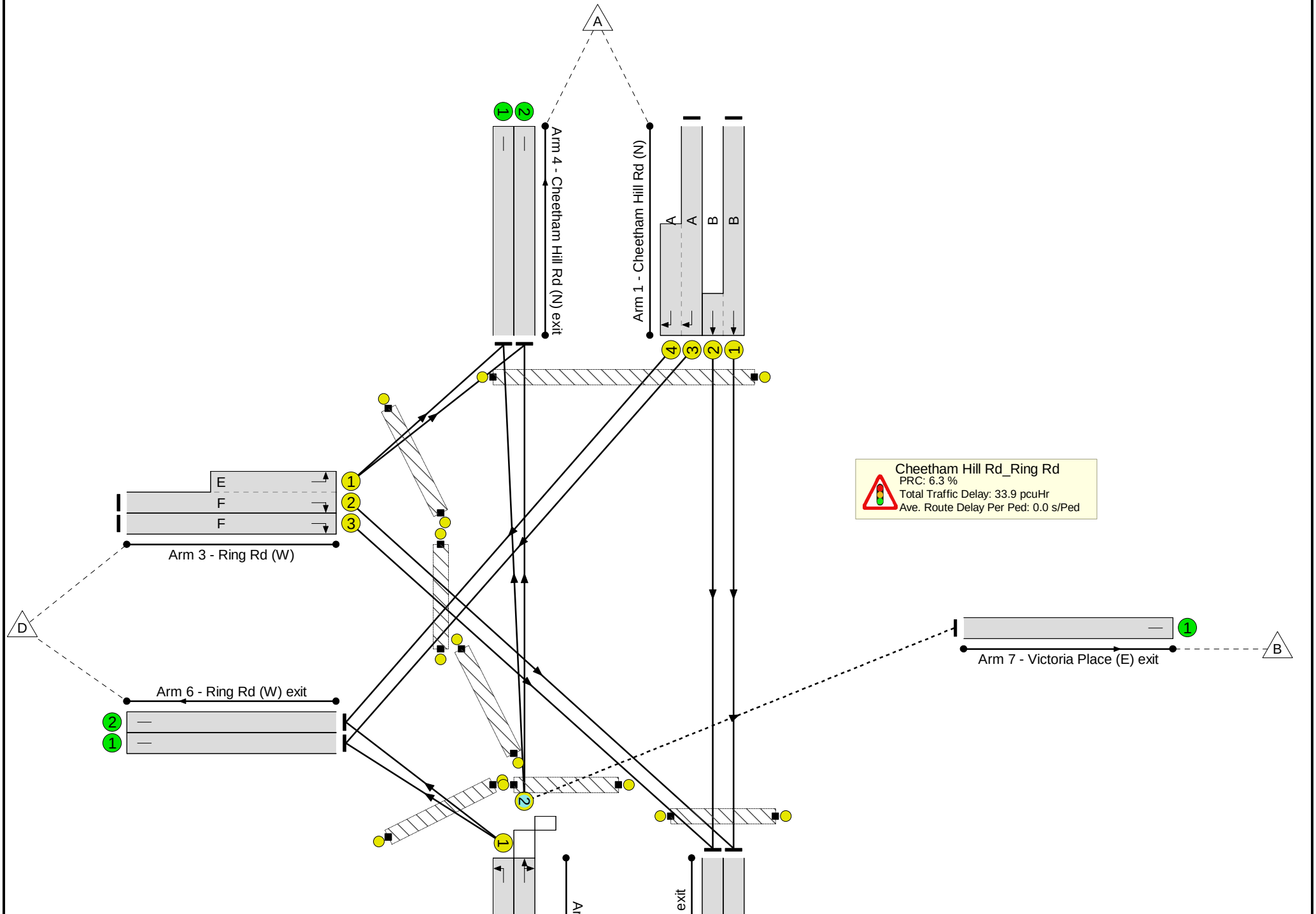
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.7%**
Cheetham Hill Rd_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.7%**
1/1+1/2	Cheetham Hill Rd (N) Ahead	U	N/A	N/A	B		1	40	-	457	1915:2055	433+519	48.0 : 48.0%
1/3+1/4	Cheetham Hill Rd (N) Right	U	N/A	N/A	A		1	13	-	452	1968:1966	287+287	78.7 : 78.8%
2/1	Ring Rd (S) Left	U	N/A	N/A	D		1	64	-	975	1904	1289	75.6%
2/2	Ring Rd (S) Ahead Right	O	N/A	N/A	C	G	1	34	9	650	2105	767	84.7%
3/2+3/1	Ring Rd (W) Left Right	U	N/A	N/A	F E		1	29:51	-	842	1968:1876	469+530	84.3 : 84.3%
3/3	Ring Rd (W) Right	U	N/A	N/A	F		1	29	-	446	1966	614	72.6%
4/1	Cheetham Hill Rd (N) exit	U	N/A	N/A	-		-	-	-	549	Inf	Inf	0.0%
4/2	Cheetham Hill Rd (N) exit	U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
5/1	Ring Rd (S) exit	U	N/A	N/A	-		-	-	-	603	Inf	Inf	0.0%
5/2	Ring Rd (S) exit	U	N/A	N/A	-		-	-	-	695	Inf	Inf	0.0%
6/1	Ring Rd (W) exit	U	N/A	N/A	-		-	-	-	714	Inf	Inf	0.0%
6/2	Ring Rd (W) exit	U	N/A	N/A	-		-	-	-	713	Inf	Inf	0.0%
7/1	Victoria Place (E) exit	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	N		1	23	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		1	34	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	I		1	56	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	J		1	61	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	K		1	20	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	L		2	47	-	0	-	0	0.0%
Ped Link: P7	Unnamed Ped Link	-	N/A	-	M		1	5	-	0	-	0	0.0%

Full Input Data And Results

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)
Network	**-**	**-**	**0**	**0**	**0**	**23.5**	**10.3**	**0.0**	**33.9**	**-**	**-**	**-**	**-**
Cheetham Hill Rd_Ring Rd	**-**	**-**	**0**	**0**	**0**	**23.5**	**10.3**	**0.0**	**33.9**	**-**	**-**	**-**	**-**
1/1+1/2	457	457	-	-	-	2.3	0.5	-	2.8	21.8	5.6	0.5	6.1
1/3+1/4	452	452	-	-	-	5.0	1.8	-	6.8	53.9	5.8	1.8	7.6
2/1	975	975	-	-	-	2.8	1.5	-	4.3	15.9	17.1	1.5	18.6
2/2	650	650	0	0	0	5.1	2.6	0.0	7.7	42.7	15.9	2.6	18.5
3/2+3/1	842	842	-	-	-	4.8	2.6	-	7.4	31.4	9.0	2.6	11.6
3/3	446	446	-	-	-	3.6	1.3	-	4.9	39.9	10.5	1.3	11.8
4/1	549	549	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	548	548	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	603	603	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	695	695	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	714	714	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-

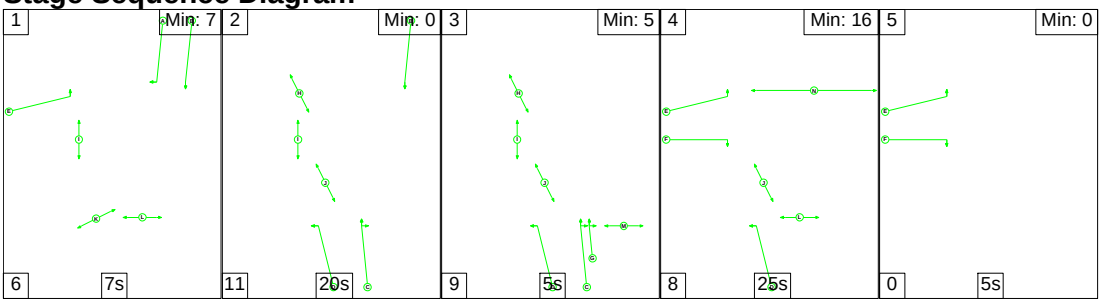
C1 PRC for Signalled Lanes (%): 6.3 Total Delay for Signalled Lanes (pcuHr): 33.85 Cycle Time (s): 96

PRC Over All Lanes (%): 6.3 Total Delay Over All Lanes(pcuHr): 33.85

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

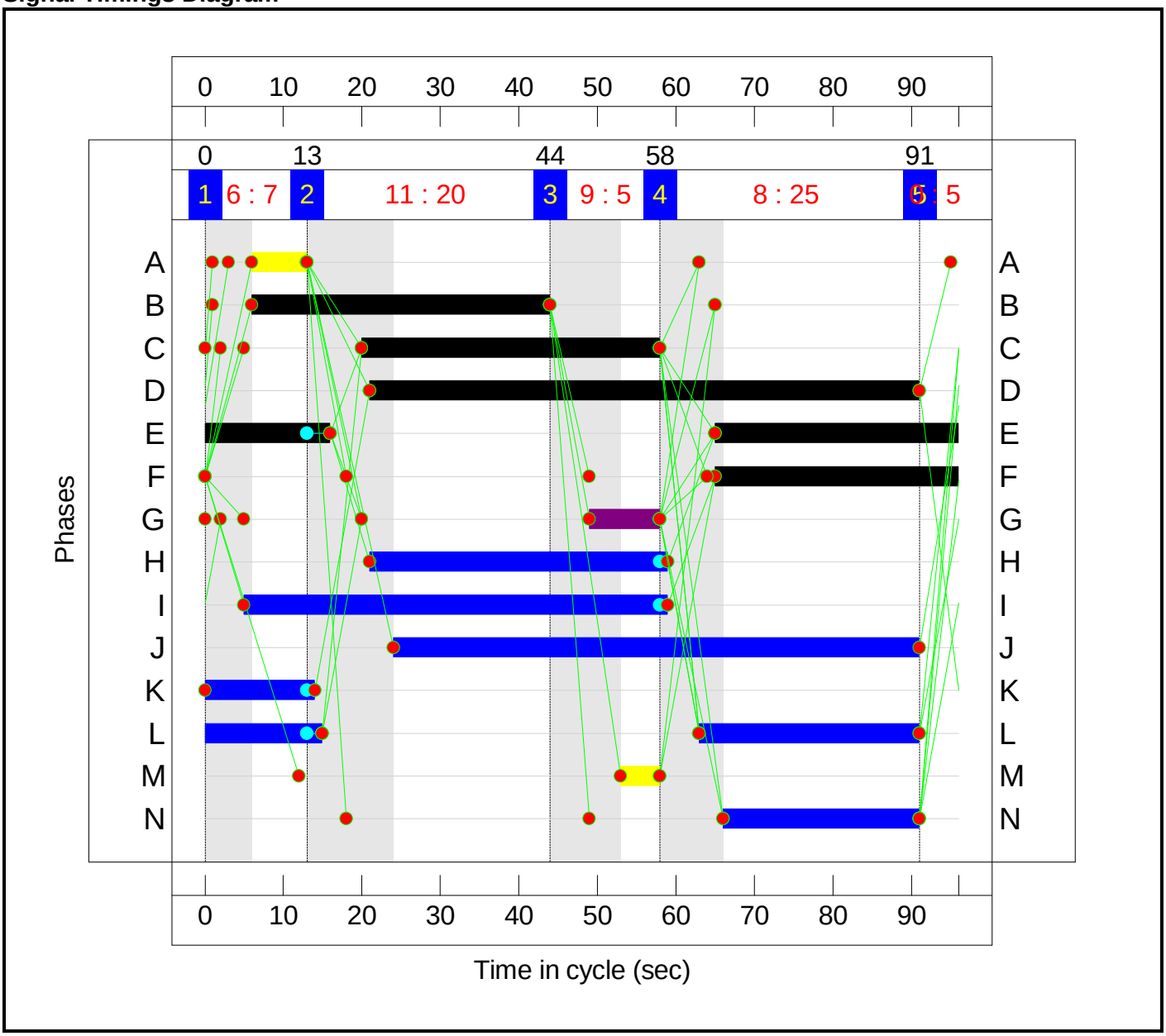
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5
Duration	7	20	5	25	5
Change Point	0	13	44	58	91

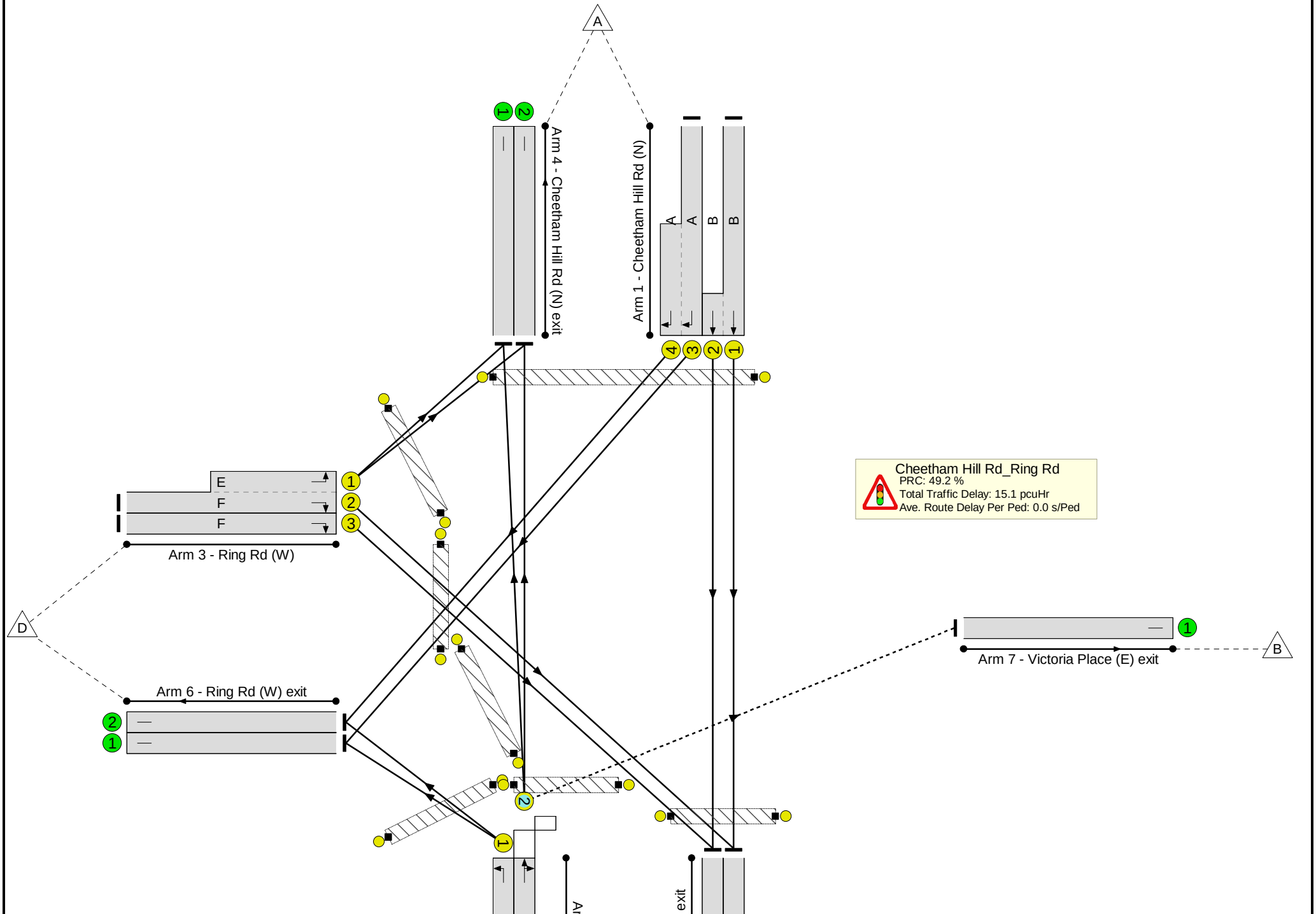
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.3%**
Cheetham Hill Rd_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.3%**
1/1+1/2	Cheetham Hill Rd (N) Ahead	U	N/A	N/A	B		1	38	-	539	1915:2055	353+540	60.3 : 60.3%
1/3+1/4	Cheetham Hill Rd (N) Right	U	N/A	N/A	A		1	7	-	49	1968:1966	164+164	15.2 : 14.6%
2/1	Ring Rd (S) Left	U	N/A	N/A	D		1	70	-	636	1904	1408	45.2%
2/2	Ring Rd (S) Ahead Right	O	N/A	N/A	C	G	1	38	9	424	2105	855	49.6%
3/2+3/1	Ring Rd (W) Left Right	U	N/A	N/A	F E		1	31:47	-	600	1968:1876	497+500	60.2 : 60.2%
3/3	Ring Rd (W) Right	U	N/A	N/A	F		1	31	-	278	1966	655	42.4%
4/1	Cheetham Hill Rd (N) exit	U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
4/2	Cheetham Hill Rd (N) exit	U	N/A	N/A	-		-	-	-	362	Inf	Inf	0.0%
5/1	Ring Rd (S) exit	U	N/A	N/A	-		-	-	-	512	Inf	Inf	0.0%
5/2	Ring Rd (S) exit	U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
6/1	Ring Rd (W) exit	U	N/A	N/A	-		-	-	-	343	Inf	Inf	0.0%
6/2	Ring Rd (W) exit	U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
7/1	Victoria Place (E) exit	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	N		1	25	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		1	38	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	I		1	54	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	J		1	67	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	K		1	14	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	L		2	43	-	0	-	0	0.0%
Ped Link: P7	Unnamed Ped Link	-	N/A	-	M		1	5	-	0	-	0	0.0%

Full Input Data And Results

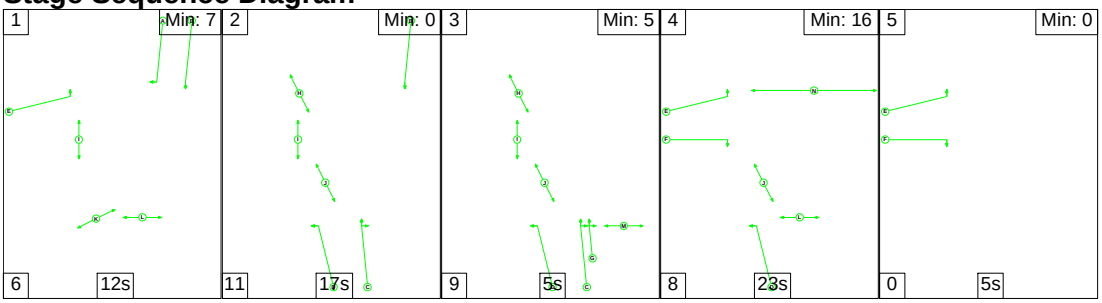
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.2**	**2.9**	**0.0**	**15.1**	**-**	**-**	**-**	**-**
Cheetham Hill Rd_Ring Rd	**-**	**-**	**0**	**0**	**0**	**12.2**	**2.9**	**0.0**	**15.1**	**-**	**-**	**-**	**-**
1/1+1/2	539	539	-	-	-	3.1	0.8	-	3.9	25.9	8.8	0.8	9.6
1/3+1/4	49	49	-	-	-	0.6	0.1	-	0.6	47.3	0.6	0.1	0.7
2/1	636	636	-	-	-	0.9	0.4	-	1.3	7.2	6.5	0.4	6.9
2/2	424	424	0	0	0	2.5	0.5	0.0	3.0	25.4	8.4	0.5	8.9
3/2+3/1	600	600	-	-	-	3.3	0.8	-	4.0	24.2	6.2	0.8	7.0
3/3	278	278	-	-	-	1.9	0.4	-	2.3	29.6	5.7	0.4	6.1
4/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	362	362	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	512	512	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	343	343	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 49.2 Total Delay for Signalled Lanes (pcuHr): 15.11 Cycle Time (s): 96
PRC Over All Lanes (%): 49.2 Total Delay Over All Lanes(pcuHr): 15.11

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

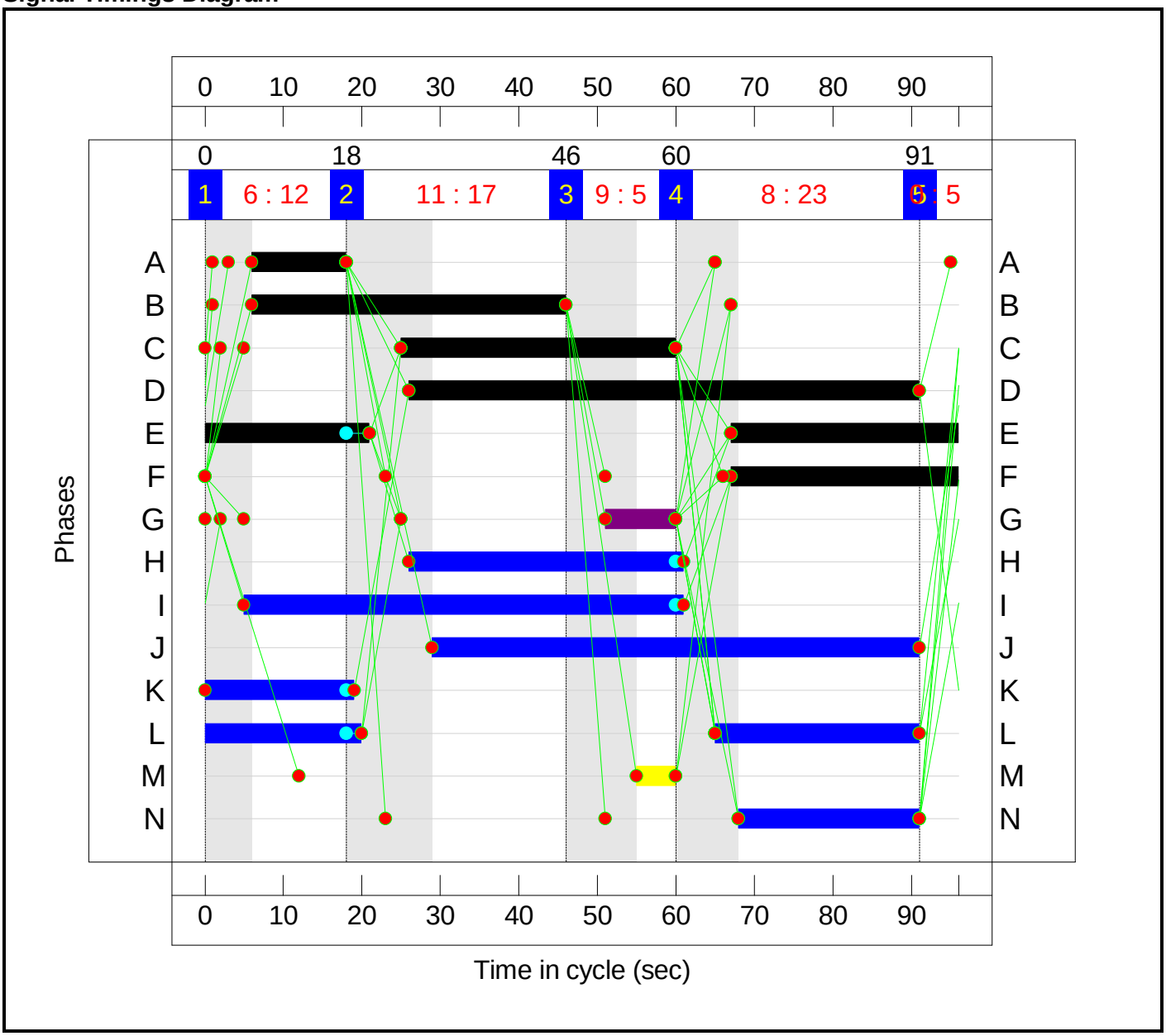
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5
Duration	12	17	5	23	5
Change Point	0	18	46	60	91

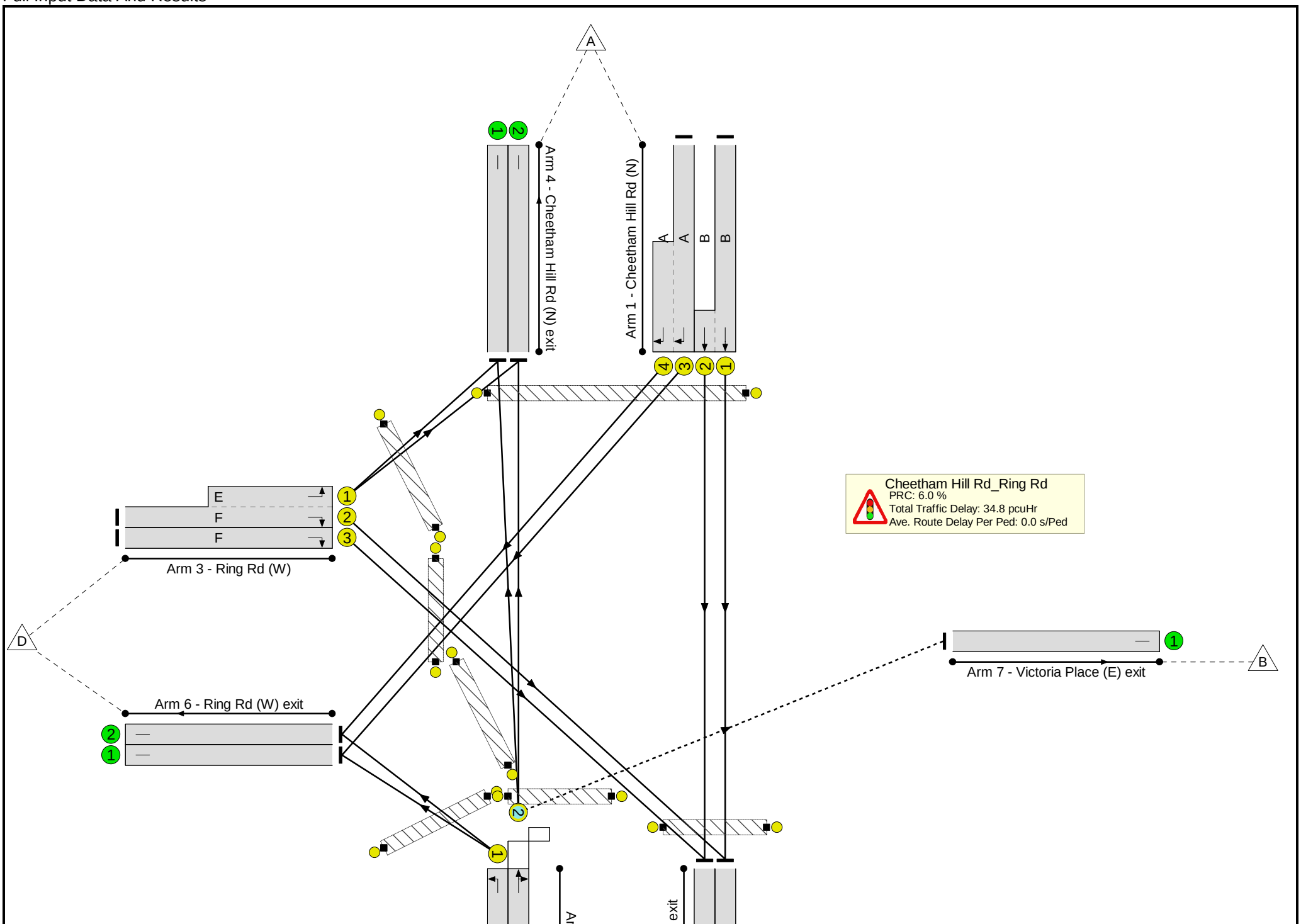
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.9%**
Cheetham Hill Rd_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.9%**
1/1+1/2	Cheetham Hill Rd (N) Ahead	U	N/A	N/A	B		1	40	-	457	1915:2055	433+519	48.0 : 48.0%
1/3+1/4	Cheetham Hill Rd (N) Right	U	N/A	N/A	A		1	12	-	452	1968:1966	267+266	84.8 : 84.9%
2/1	Ring Rd (S) Left	U	N/A	N/A	D		1	65	-	997	1904	1309	76.2%
2/2	Ring Rd (S) Ahead Right	O	N/A	N/A	C	G	1	35	9	664	2105	789	84.1%
3/2+3/1	Ring Rd (W) Left Right	U	N/A	N/A	F E		1	29:50	-	843	1968:1876	469+529	84.5 : 84.5%
3/3	Ring Rd (W) Right	U	N/A	N/A	F		1	29	-	447	1966	614	72.8%
4/1	Cheetham Hill Rd (N) exit	U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%
4/2	Cheetham Hill Rd (N) exit	U	N/A	N/A	-		-	-	-	555	Inf	Inf	0.0%
5/1	Ring Rd (S) exit	U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
5/2	Ring Rd (S) exit	U	N/A	N/A	-		-	-	-	696	Inf	Inf	0.0%
6/1	Ring Rd (W) exit	U	N/A	N/A	-		-	-	-	725	Inf	Inf	0.0%
6/2	Ring Rd (W) exit	U	N/A	N/A	-		-	-	-	724	Inf	Inf	0.0%
7/1	Victoria Place (E) exit	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	N		1	23	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		1	35	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	I		1	56	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	J		1	62	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	K		1	19	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	L		2	46	-	0	-	0	0.0%
Ped Link: P7	Unnamed Ped Link	-	N/A	-	M		1	5	-	0	-	0	0.0%

Full Input Data And Results

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)
Network	**-**	**-**	**0**	**0**	**0**	**23.7**	**11.2**	**0.0**	**34.8**	**-**	**-**	**-**	**-**
Cheetham Hill Rd_Ring Rd	**-**	**-**	**0**	**0**	**0**	**23.7**	**11.2**	**0.0**	**34.8**	**-**	**-**	**-**	**-**
1/1+1/2	457	457	-	-	-	2.3	0.5	-	2.8	21.8	5.6	0.5	6.1
1/3+1/4	452	452	-	-	-	5.1	2.6	-	7.7	61.5	5.8	2.6	8.5
2/1	997	997	-	-	-	2.7	1.6	-	4.3	15.6	17.2	1.6	18.8
2/2	664	664	0	0	0	5.1	2.5	0.0	7.6	41.2	16.0	2.5	18.6
3/2+3/1	843	843	-	-	-	4.8	2.6	-	7.5	31.9	9.2	2.6	11.9
3/3	447	447	-	-	-	3.6	1.3	-	5.0	40.0	10.6	1.3	11.9
4/1	556	556	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	555	555	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	696	696	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	725	725	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	724	724	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 6.0 Total Delay for Signalled Lanes (pcuHr): 34.82 Cycle Time (s): 96

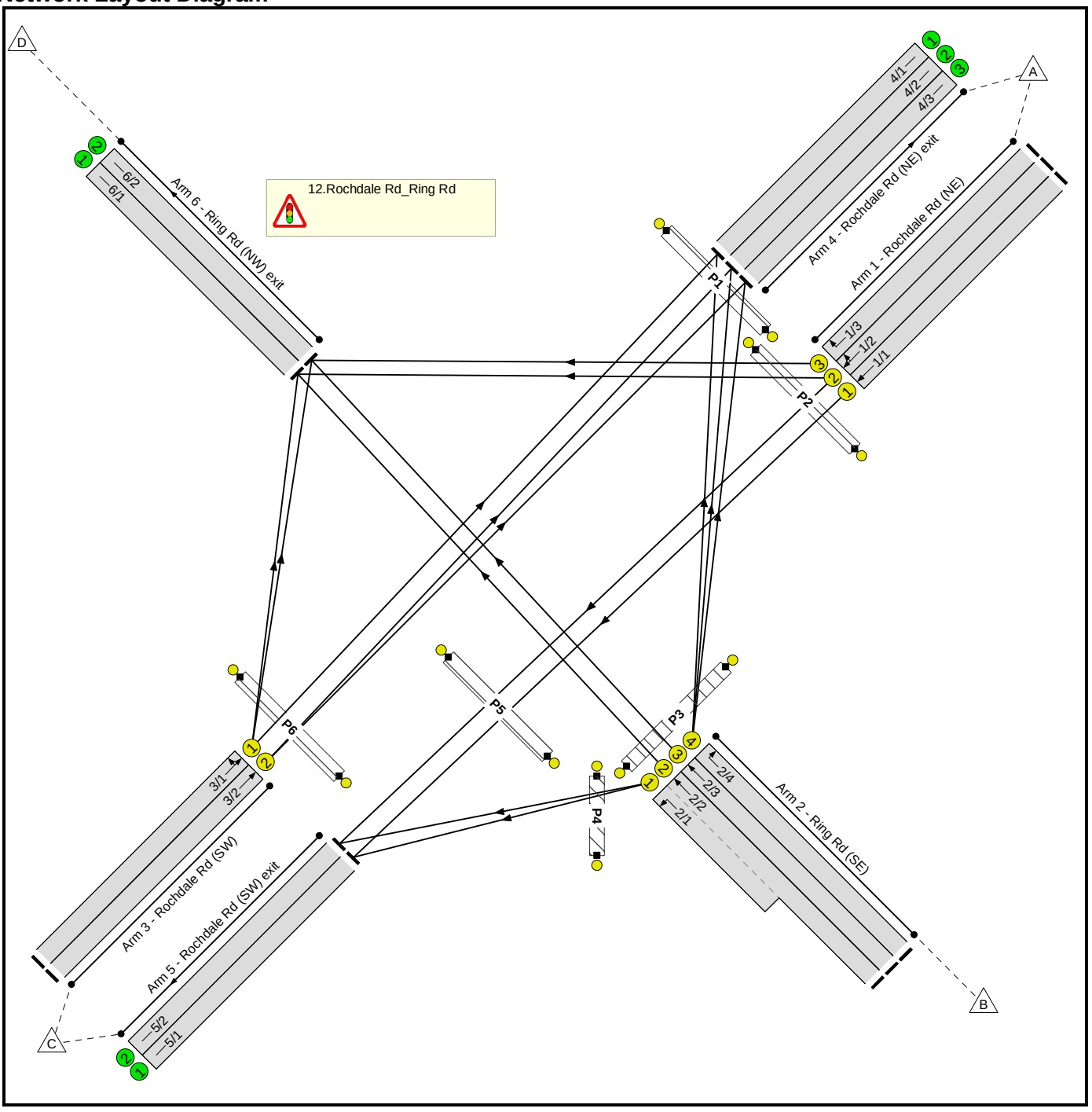
PRC Over All Lanes (%): 6.0 Total Delay Over All Lanes(pcuHr): 34.82

Full Input Data And Results

User and Project Details

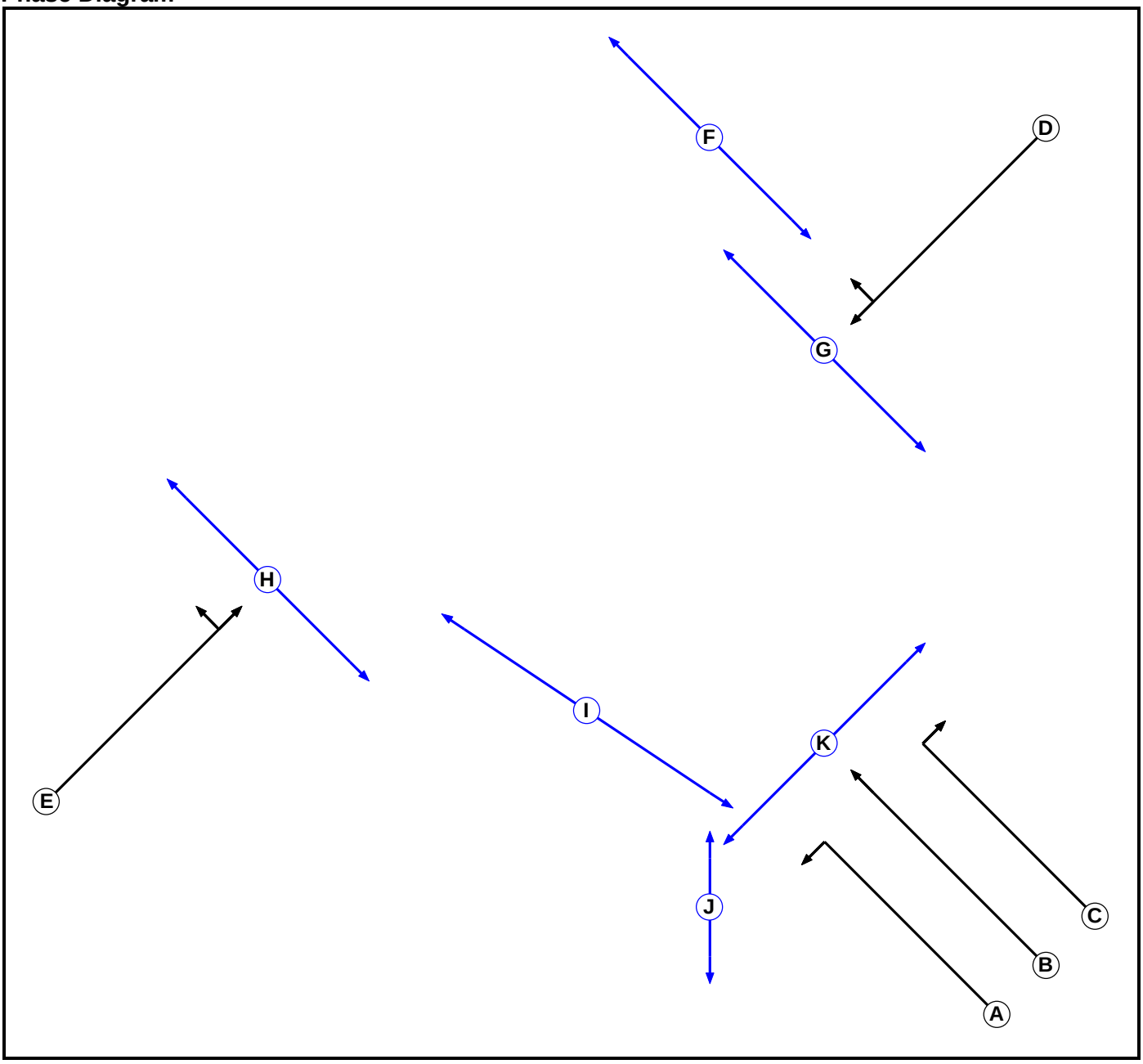
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Additional detail:	
File name:	12.Rochdale Rd_Ring Rd.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	6
F	Pedestrian		6	6
G	Pedestrian		6	6
H	Pedestrian		5	5
I	Pedestrian		5	2
J	Pedestrian		5	5
K	Pedestrian		8	8

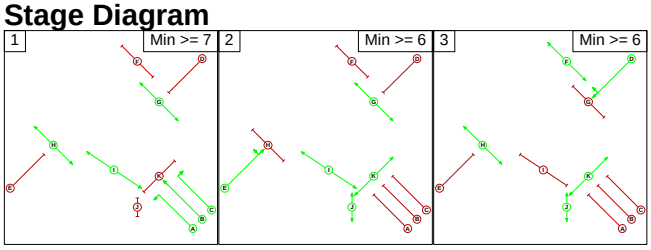
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K
A		-	-	4	-	-	-	-	-	5	-
B	-		-	5	6	-	-	-	-	-	5
C	-	-		6	5	11	-	-	-	-	5
D	8	8	6		8	-	5	-	8	-	-
E	-	5	5	5		9	-	5	-	-	-
F	-	-	9	-	9		-	-	-	-	-
G	-	-	-	10	-	-		-	-	-	-
H	-	-	-	-	6	-	-		-	-	-
I	-	-	-	7	-	-	-	-		-	-
J	5	-	-	-	-	-	-	-	-		-
K	-	6	6	-	-	-	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B C G H I
2	E G I J K
3	D F H J K

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	A	Losing	4	4
1	3	B	Losing	4	4
1	3	C	Losing	4	4
1	3	I	Losing	3	3
2	1	E	Losing	1	1
2	3	E	Losing	1	1
2	3	I	Losing	3	3
3	1	J	Losing	2	2
3	2	D	Losing	1	1

Prohibited Stage Change

From Stage \ To Stage	1	2	3
1		6	15
2	6		10
3	9	9	

Full Input Data And Results

Give-Way Lane Input Data

Junction: 12.Rochdale Rd_Ring Rd
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: 12.Rochdale Rd_Ring Rd

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 (Rochdale Rd (NE))	U	D	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
1/2 (Rochdale Rd (NE))	U	D	2	3	60.0	Geom	-	3.40	0.00	N	Arm 5 Ahead	Inf
											Arm 6 Right	Inf
1/3 (Rochdale Rd (NE))	U	D	2	3	60.0	Geom	-	3.60	0.00	Y	Arm 6 Right	17.00
2/1 (Ring Rd (SE))	U	A	2	3	12.0	Geom	-	3.25	0.00	Y	Arm 5 Left	10.00
2/2 (Ring Rd (SE))	U	B	2	3	60.0	Geom	-	3.25	0.00	N	Arm 6 Ahead	Inf
2/3 (Ring Rd (SE))	U	B	2	3	60.0	Geom	-	3.25	0.00	N	Arm 6 Ahead	Inf
2/4 (Ring Rd (SE))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Right	17.00
3/1 (Rochdale Rd (SW))	U	E	2	3	60.0	Geom	-	2.80	0.00	Y	Arm 4 Ahead	Inf
											Arm 6 Left	9.00
3/2 (Rochdale Rd (SW))	U	E	2	3	60.0	Geom	-	3.00	0.00	N	Arm 4 Ahead	Inf
4/1 (Rochdale Rd (NE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2 (Rochdale Rd (NE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/3 (Rochdale Rd (NE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Rochdale Rd (SW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (Rochdale Rd (SW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Ring Rd (NW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2 (Ring Rd (NW) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Base'	08:30	09:30	01:00	
2: 'PM Base'	17:00	18:00	01:00	
3: 'AM Proposed'	08:30	09:30	01:00	
4: 'PM Proposed'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	279	331	610
	B	102	0	165	818	1085
	C	178	0	0	94	272
	D	0	0	0	0	0
	Tot.	280	0	444	1243	1967

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: 12.Rochdale Rd_Ring Rd	
1/1	202
1/2	219
1/3	189
2/1 (short)	165
2/2 (with short)	568(In) 403(Out)
2/3	415
2/4	102
3/1	116
3/2	156
4/1	56
4/2	112
4/3	112
5/1	285
5/2	159
6/1	592
6/2	651

Full Input Data And Results

Lane Saturation Flows

Junction: 12.Rochdale Rd_Ring Rd								
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 (Rochdale Rd (NE))	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Rochdale Rd (NE))	3.40	0.00	N	Arm 5 Ahead	Inf	35.2 %	2095	2095
				Arm 6 Right	Inf	64.8 %		
1/3 (Rochdale Rd (NE))	3.60	0.00	Y	Arm 6 Right	17.00	100.0 %	1815	1815
2/1 (Ring Rd (SE))	3.25	0.00	Y	Arm 5 Left	10.00	100.0 %	1687	1687
2/2 (Ring Rd (SE))	3.25	0.00	N	Arm 6 Ahead	Inf	100.0 %	2080	2080
2/3 (Ring Rd (SE))	3.25	0.00	N	Arm 6 Ahead	Inf	100.0 %	2080	2080
2/4 (Ring Rd (SE))	3.25	0.00	Y	Arm 4 Right	17.00	100.0 %	1783	1783
3/1 (Rochdale Rd (SW))	2.80	0.00	Y	Arm 4 Ahead	Inf	19.0 %	1670	1670
				Arm 6 Left	9.00	81.0 %		
3/2 (Rochdale Rd (SW))	3.00	0.00	N	Arm 4 Ahead	Inf	100.0 %	2055	2055
4/1 (Rochdale Rd (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Rochdale Rd (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/3 (Rochdale Rd (NE) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/1 (Rochdale Rd (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Rochdale Rd (SW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Rd (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Rd (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	188	281	469
	B	169	0	134	931	1234
	C	482	0	0	124	606
	D	0	0	0	0	0
	Tot.	651	0	322	1336	2309

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: 12.Rochdale Rd_Ring Rd	
1/1	155
1/2	171
1/3	143
2/1 (short)	134
2/2 (with short)	592(In) 458(Out)
2/3	473
2/4	169
3/1	280
3/2	326
4/1	212
4/2	219
4/3	220
5/1	222
5/2	100
6/1	658
6/2	678

Full Input Data And Results

Lane Saturation Flows

Junction: 12.Rochdale Rd_Ring Rd								
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 (Rochdale Rd (NE))	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Rochdale Rd (NE))	3.40	0.00	N	Arm 5 Ahead	Inf	19.3 %	2095	2095
				Arm 6 Right	Inf	80.7 %		
1/3 (Rochdale Rd (NE))	3.60	0.00	Y	Arm 6 Right	17.00	100.0 %	1815	1815
2/1 (Ring Rd (SE))	3.25	0.00	Y	Arm 5 Left	10.00	100.0 %	1687	1687
2/2 (Ring Rd (SE))	3.25	0.00	N	Arm 6 Ahead	Inf	100.0 %	2080	2080
2/3 (Ring Rd (SE))	3.25	0.00	N	Arm 6 Ahead	Inf	100.0 %	2080	2080
2/4 (Ring Rd (SE))	3.25	0.00	Y	Arm 4 Right	17.00	100.0 %	1783	1783
3/1 (Rochdale Rd (SW))	2.80	0.00	Y	Arm 4 Ahead	Inf	55.7 %	1765	1765
				Arm 6 Left	9.00	44.3 %		
3/2 (Rochdale Rd (SW))	3.00	0.00	N	Arm 4 Ahead	Inf	100.0 %	2055	2055
4/1 (Rochdale Rd (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Rochdale Rd (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/3 (Rochdale Rd (NE) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/1 (Rochdale Rd (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Rochdale Rd (SW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Rd (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Rd (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	279	331	610
	B	103	0	165	821	1089
	C	178	0	0	94	272
	D	0	0	0	0	0
	Tot.	281	0	444	1246	1971

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: AM Proposed
Junction: 12.Rochdale Rd_Ring Rd	
1/1	202
1/2	219
1/3	189
2/1 (short)	165
2/2 (with short)	570(In) 405(Out)
2/3	416
2/4	103
3/1	116
3/2	156
4/1	56
4/2	112
4/3	113
5/1	285
5/2	159
6/1	594
6/2	652

Full Input Data And Results

Lane Saturation Flows

Junction: 12.Rochdale Rd_Ring Rd								
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 (Rochdale Rd (NE))	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Rochdale Rd (NE))	3.40	0.00	N	Arm 5 Ahead	Inf	35.2 %	2095	2095
				Arm 6 Right	Inf	64.8 %		
1/3 (Rochdale Rd (NE))	3.60	0.00	Y	Arm 6 Right	17.00	100.0 %	1815	1815
2/1 (Ring Rd (SE))	3.25	0.00	Y	Arm 5 Left	10.00	100.0 %	1687	1687
2/2 (Ring Rd (SE))	3.25	0.00	N	Arm 6 Ahead	Inf	100.0 %	2080	2080
2/3 (Ring Rd (SE))	3.25	0.00	N	Arm 6 Ahead	Inf	100.0 %	2080	2080
2/4 (Ring Rd (SE))	3.25	0.00	Y	Arm 4 Right	17.00	100.0 %	1783	1783
3/1 (Rochdale Rd (SW))	2.80	0.00	Y	Arm 4 Ahead	Inf	19.0 %	1670	1670
				Arm 6 Left	9.00	81.0 %		
3/2 (Rochdale Rd (SW))	3.00	0.00	N	Arm 4 Ahead	Inf	100.0 %	2055	2055
4/1 (Rochdale Rd (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Rochdale Rd (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/3 (Rochdale Rd (NE) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/1 (Rochdale Rd (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Rochdale Rd (SW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Rd (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Rd (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	188	281	469
	B	183	0	134	960	1277
	C	482	0	0	128	610
	D	0	0	0	0	0
	Tot.	665	0	322	1369	2356

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: PM Proposed
Junction: 12.Rochdale Rd_Ring Rd	
1/1	155
1/2	171
1/3	143
2/1 (short)	134
2/2 (with short)	605(In) 471(Out)
2/3	489
2/4	183
3/1	281
3/2	329
4/1	214
4/2	225
4/3	226
5/1	222
5/2	100
6/1	673
6/2	696

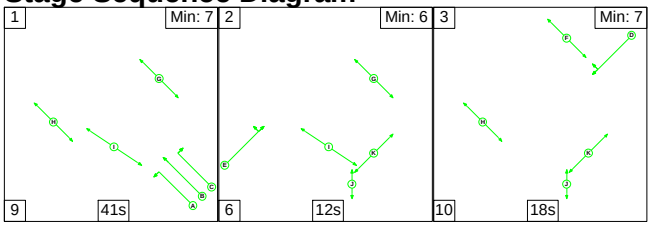
Full Input Data And Results

Lane Saturation Flows

Junction: 12.Rochdale Rd_Ring Rd								
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 (Rochdale Rd (NE))	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Rochdale Rd (NE))	3.40	0.00	N	Arm 5 Ahead	Inf	19.3 %	2095	2095
				Arm 6 Right	Inf	80.7 %		
1/3 (Rochdale Rd (NE))	3.60	0.00	Y	Arm 6 Right	17.00	100.0 %	1815	1815
2/1 (Ring Rd (SE))	3.25	0.00	Y	Arm 5 Left	10.00	100.0 %	1687	1687
2/2 (Ring Rd (SE))	3.25	0.00	N	Arm 6 Ahead	Inf	100.0 %	2080	2080
2/3 (Ring Rd (SE))	3.25	0.00	N	Arm 6 Ahead	Inf	100.0 %	2080	2080
2/4 (Ring Rd (SE))	3.25	0.00	Y	Arm 4 Right	17.00	100.0 %	1783	1783
3/1 (Rochdale Rd (SW))	2.80	0.00	Y	Arm 4 Ahead	Inf	54.4 %	1761	1761
				Arm 6 Left	9.00	45.6 %		
3/2 (Rochdale Rd (SW))	3.00	0.00	N	Arm 4 Ahead	Inf	100.0 %	2055	2055
4/1 (Rochdale Rd (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Rochdale Rd (NE) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/3 (Rochdale Rd (NE) exit Lane 3)	Infinite Saturation Flow						Inf	Inf
5/1 (Rochdale Rd (SW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Rochdale Rd (SW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Ring Rd (NW) exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Ring Rd (NW) exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'AM Base' (FG1: 'AM Base', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

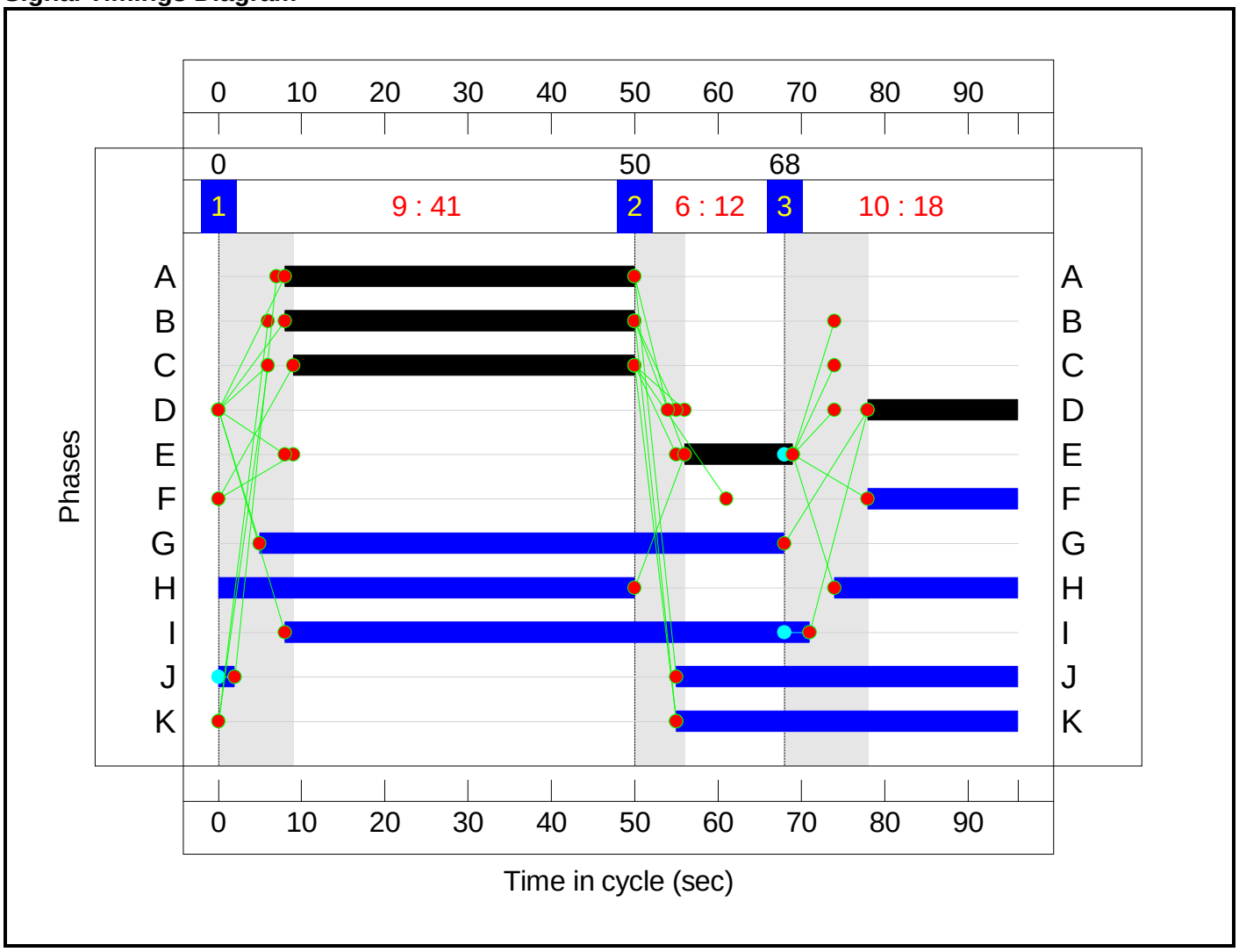


Full Input Data And Results

Stage Timings

Stage	1	2	3
Duration	41	12	18
Change Point	0	50	68

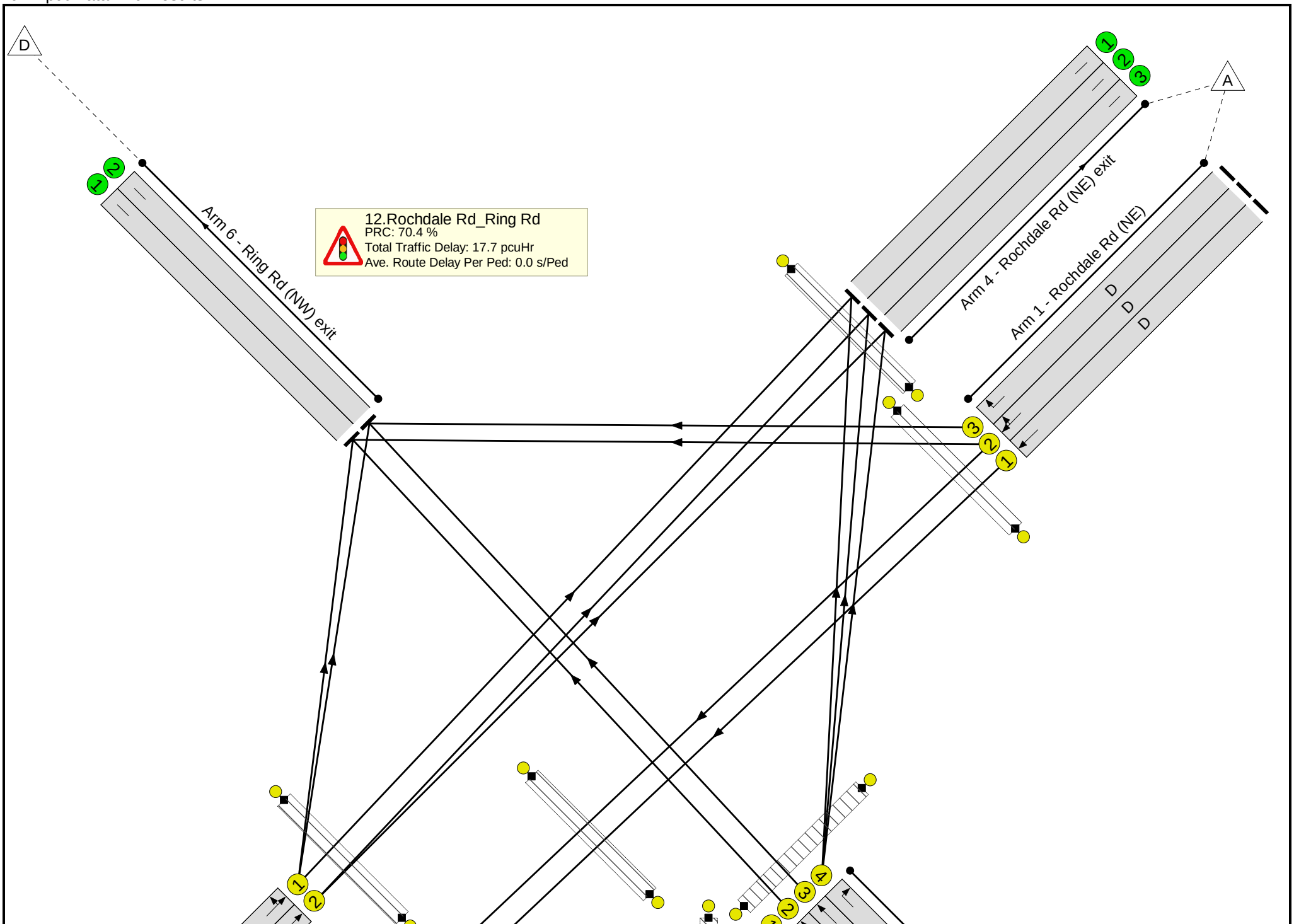
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**52.8%**
12.Rochdale Rd_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**52.8%**
1/1	Rochdale Rd (NE) Ahead	U	N/A	N/A	D		1	18	-	202	1940	384	52.6%
1/2	Rochdale Rd (NE) Ahead Right	U	N/A	N/A	D		1	18	-	219	2095	415	52.8%
1/3	Rochdale Rd (NE) Right	U	N/A	N/A	D		1	18	-	189	1815	359	52.6%
2/2+2/1	Ring Rd (SE) Left Ahead	U	N/A	N/A	B A		1	42	-	568	2080:1687	767+314	52.6 : 52.6%
2/3	Ring Rd (SE) Ahead	U	N/A	N/A	B		1	42	-	415	2080	932	44.5%
2/4	Ring Rd (SE) Right	U	N/A	N/A	C		1	41	-	102	1783	780	13.1%
3/1	Rochdale Rd (SW) Ahead Left	U	N/A	N/A	E		1	13	-	116	1670	244	47.6%
3/2	Rochdale Rd (SW) Ahead	U	N/A	N/A	E		1	13	-	156	2055	300	52.1%
4/1	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
4/2	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%
4/3	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%
5/1	Rochdale Rd (SW) exit	U	N/A	N/A	-		-	-	-	285	Inf	Inf	0.0%
5/2	Rochdale Rd (SW) exit	U	N/A	N/A	-		-	-	-	159	Inf	Inf	0.0%
6/1	Ring Rd (NW) exit	U	N/A	N/A	-		-	-	-	592	Inf	Inf	0.0%
6/2	Ring Rd (NW) exit	U	N/A	N/A	-		-	-	-	651	Inf	Inf	0.0%

Full Input Data And Results

Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	18	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	63	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	K		1	41	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	J		1	43	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	I		1	63	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	H		1	72	-	0	-	0	0.0%

Full Input Data And Results

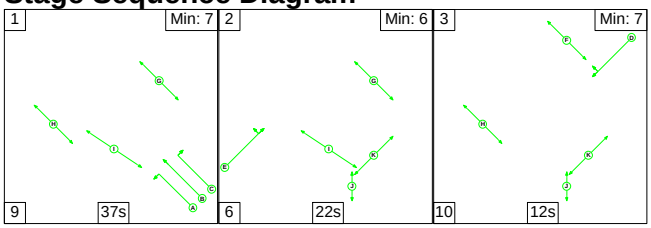
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**14.0**	**3.7**	**0.0**	**17.7**	**-**	**-**	**-**	**-**
12.Rochdale Rd_Ring Rd	**-**	**-**	**0**	**0**	**0**	**14.0**	**3.7**	**0.0**	**17.7**	**-**	**-**	**-**	**-**
1/1	202	202	-	-	-	1.9	0.6	-	2.5	44.3	4.8	0.6	5.3
1/2	219	219	-	-	-	2.1	0.6	-	2.7	43.6	5.2	0.6	5.7
1/3	189	189	-	-	-	1.8	0.6	-	2.4	45.0	4.5	0.6	5.0
2/2+2/1	568	568	-	-	-	2.8	0.6	-	3.3	21.1	7.3	0.6	7.8
2/3	415	415	-	-	-	2.1	0.4	-	2.5	21.8	7.6	0.4	8.0
2/4	102	102	-	-	-	0.5	0.1	-	0.5	18.8	1.6	0.1	1.7
3/1	116	116	-	-	-	1.2	0.5	-	1.7	51.7	2.8	0.5	3.3
3/2	156	156	-	-	-	1.6	0.5	-	2.2	50.3	3.8	0.5	4.4
4/1	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/3	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	285	285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	159	159	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	592	592	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 70.4 Total Delay for Signalled Lanes (pcuHr): 17.72 Cycle Time (s): 96
PRC Over All Lanes (%): 70.4 Total Delay Over All Lanes(pcuHr): 17.72

Full Input Data And Results

Scenario 2: 'PM Base' (FG2: 'PM Base', Plan 1: 'Network Control Plan 1')

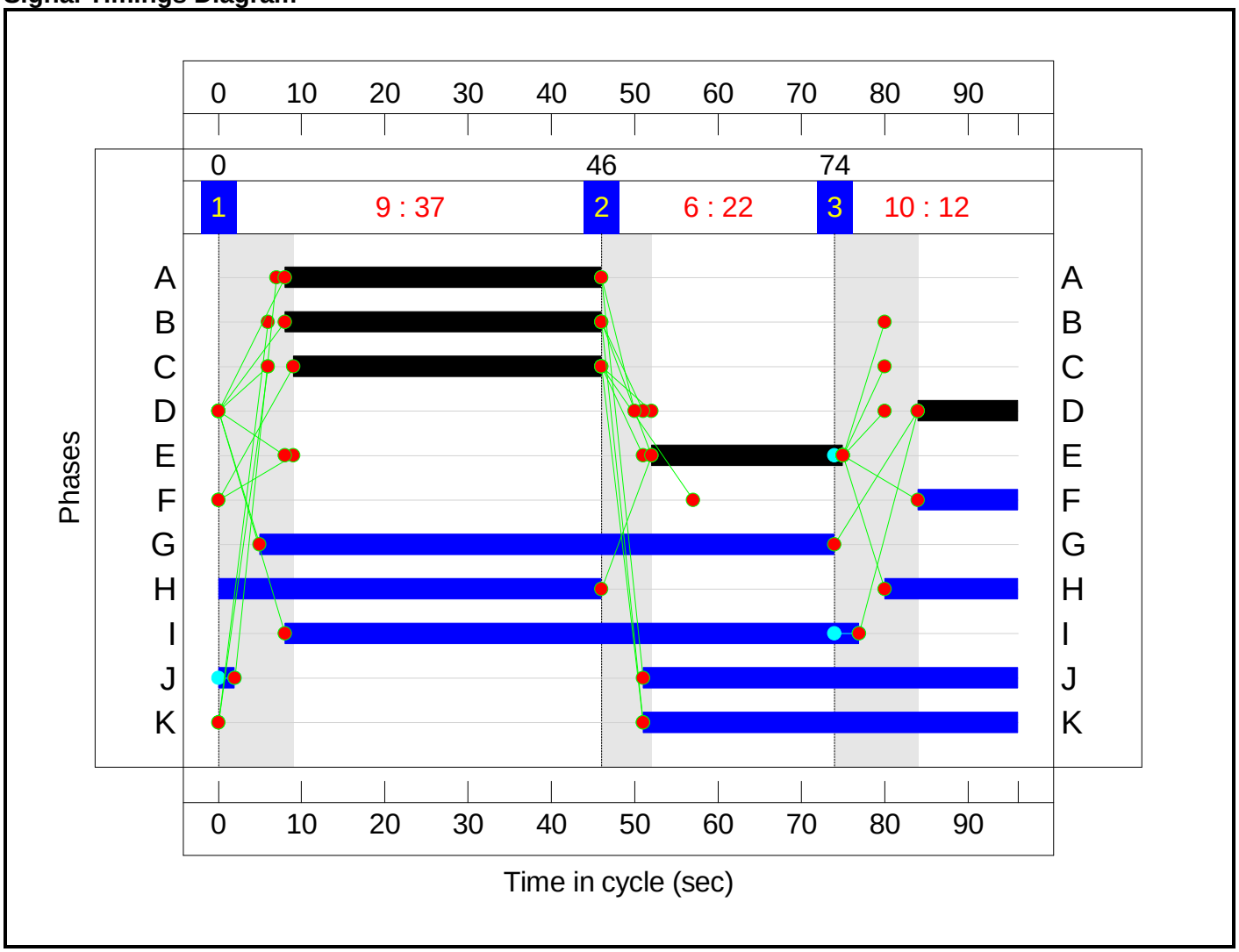
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	37	22	12
Change Point	0	46	74

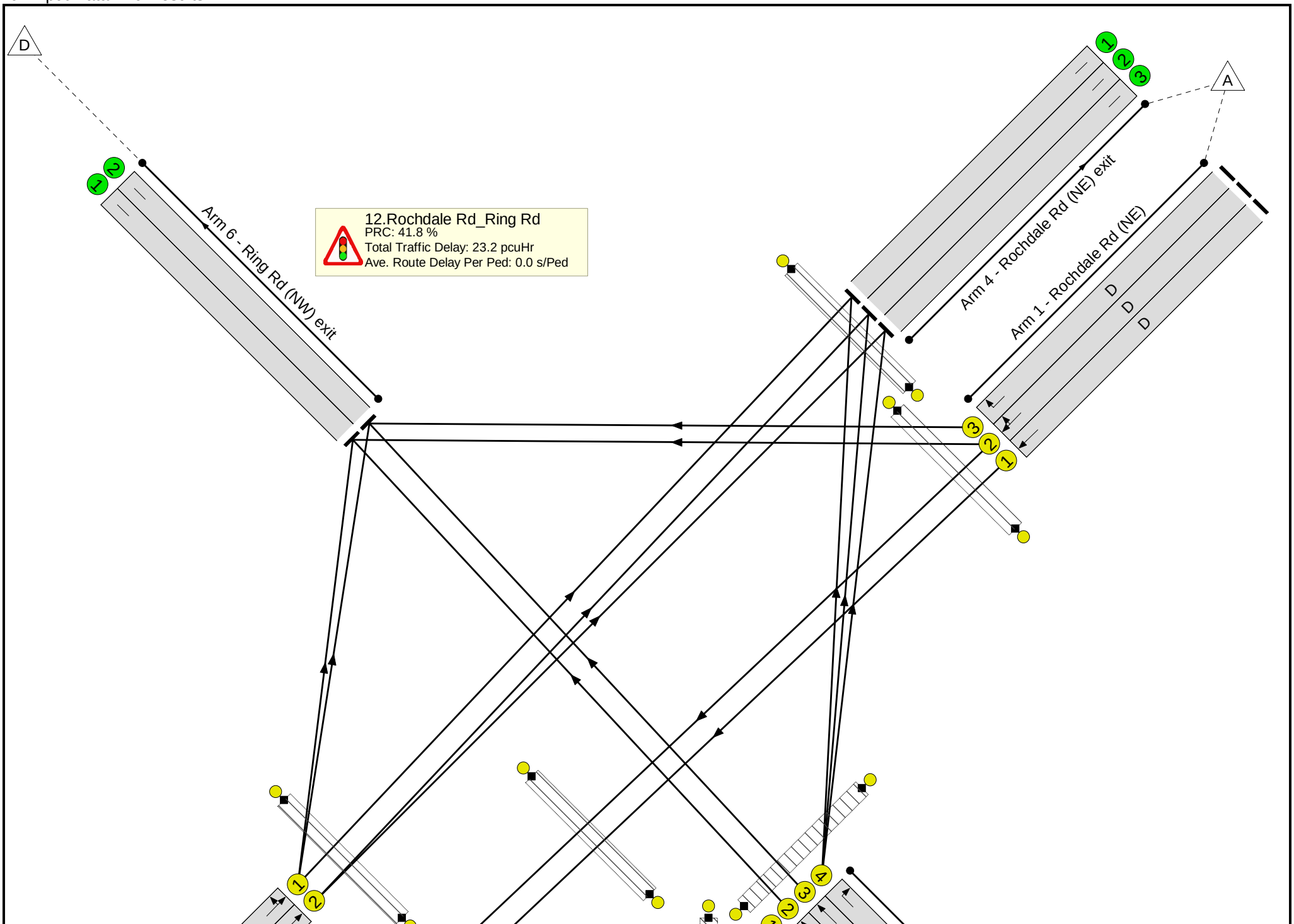
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.5%**
12.Rochdale Rd_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.5%**
1/1	Rochdale Rd (NE) Ahead	U	N/A	N/A	D		1	12	-	155	1940	263	59.0%
1/2	Rochdale Rd (NE) Ahead Right	U	N/A	N/A	D		1	12	-	171	2095	284	60.3%
1/3	Rochdale Rd (NE) Right	U	N/A	N/A	D		1	12	-	143	1815	246	58.2%
2/2+2/1	Ring Rd (SE) Left Ahead	U	N/A	N/A	B A		1	38	-	592	2080:1687	737+216	62.2 : 62.2%
2/3	Ring Rd (SE) Ahead	U	N/A	N/A	B		1	38	-	473	2080	845	56.0%
2/4	Ring Rd (SE) Right	U	N/A	N/A	C		1	37	-	169	1783	706	23.9%
3/1	Rochdale Rd (SW) Ahead Left	U	N/A	N/A	E		1	23	-	280	1765	441	63.5%
3/2	Rochdale Rd (SW) Ahead	U	N/A	N/A	E		1	23	-	326	2055	514	63.5%
4/1	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	212	Inf	Inf	0.0%
4/2	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	219	Inf	Inf	0.0%
4/3	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	220	Inf	Inf	0.0%
5/1	Rochdale Rd (SW) exit	U	N/A	N/A	-		-	-	-	222	Inf	Inf	0.0%
5/2	Rochdale Rd (SW) exit	U	N/A	N/A	-		-	-	-	100	Inf	Inf	0.0%
6/1	Ring Rd (NW) exit	U	N/A	N/A	-		-	-	-	658	Inf	Inf	0.0%
6/2	Ring Rd (NW) exit	U	N/A	N/A	-		-	-	-	678	Inf	Inf	0.0%

Full Input Data And Results

Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	12	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	69	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	K		1	45	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	J		1	47	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	I		1	69	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	H		1	62	-	0	-	0	0.0%

Full Input Data And Results

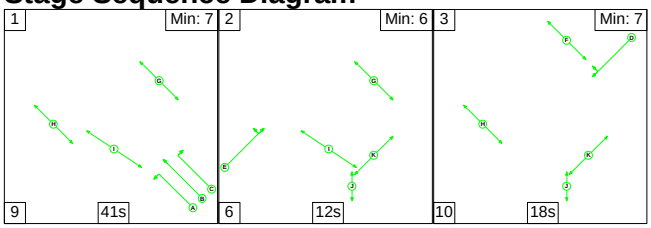
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**17.7**	**5.5**	**0.0**	**23.2**	**-**	**-**	**-**	**-**
12.Rochdale Rd_Ring Rd	**-**	**-**	**0**	**0**	**0**	**17.7**	**5.5**	**0.0**	**23.2**	**-**	**-**	**-**	**-**
1/1	155	155	-	-	-	1.7	0.7	-	2.4	55.5	3.9	0.7	4.6
1/2	171	171	-	-	-	1.9	0.7	-	2.6	54.8	4.3	0.7	5.0
1/3	143	143	-	-	-	1.5	0.7	-	2.2	56.2	3.6	0.7	4.3
2/2+2/1	592	592	-	-	-	3.4	0.8	-	4.3	25.9	9.3	0.8	10.1
2/3	473	473	-	-	-	2.9	0.6	-	3.5	26.7	9.6	0.6	10.2
2/4	169	169	-	-	-	0.9	0.2	-	1.1	22.7	3.0	0.2	3.2
3/1	280	280	-	-	-	2.5	0.9	-	3.4	43.1	6.6	0.9	7.5
3/2	326	326	-	-	-	2.9	0.9	-	3.8	41.6	7.7	0.9	8.6
4/1	212	212	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/3	220	220	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	222	222	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	100	100	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	658	658	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 41.8 Total Delay for Signalled Lanes (pcuHr): 23.19 Cycle Time (s): 96
PRC Over All Lanes (%): 41.8 Total Delay Over All Lanes(pcuHr): 23.19

Full Input Data And Results

Scenario 3: 'AM Proposed' (FG3: 'AM Proposed', Plan 1: 'Network Control Plan 1')

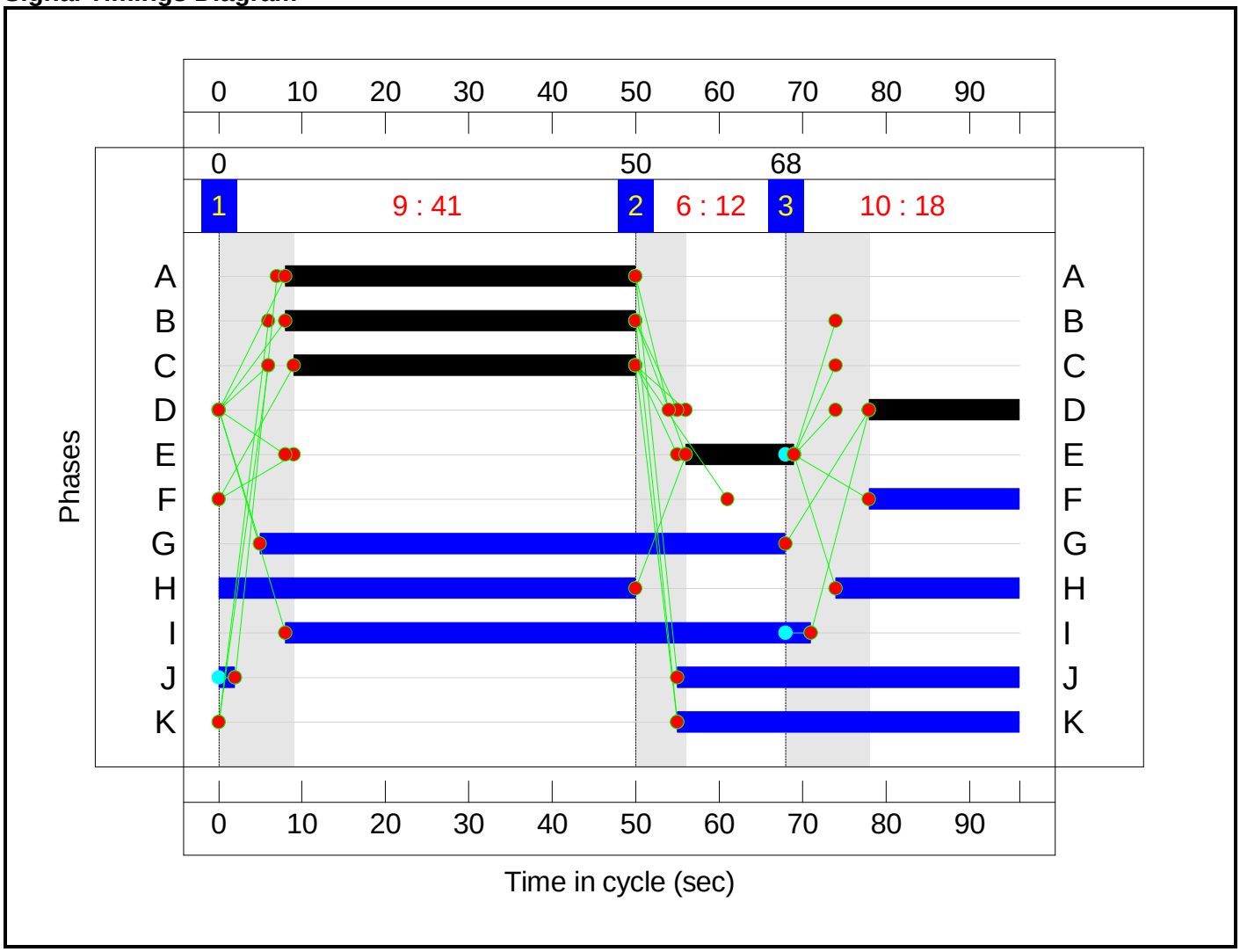
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	41	12	18
Change Point	0	50	68

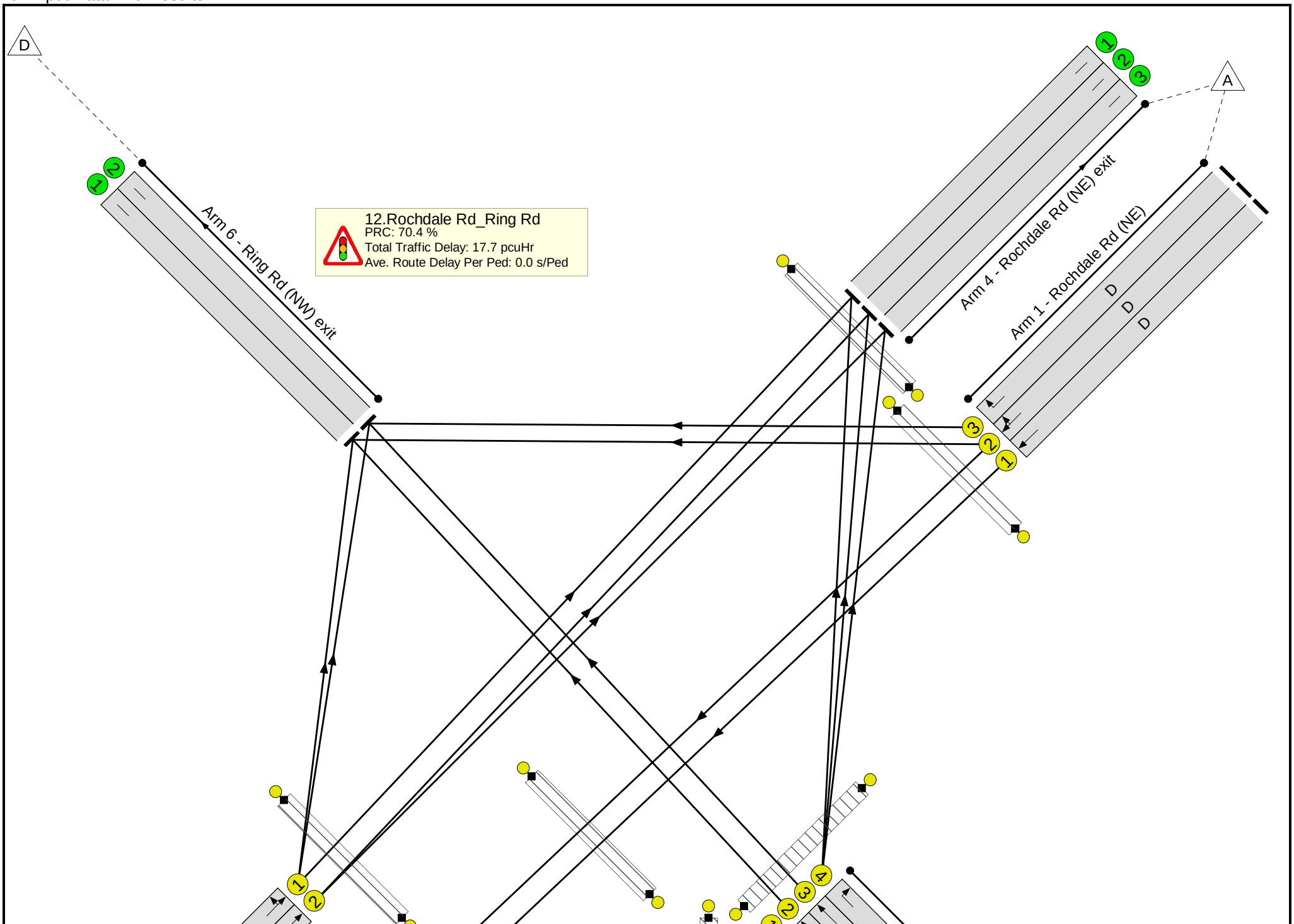
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**52.8%**
12.Rochdale Rd_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**52.8%**
1/1	Rochdale Rd (NE) Ahead	U	N/A	N/A	D		1	18	-	202	1940	384	52.6%
1/2	Rochdale Rd (NE) Ahead Right	U	N/A	N/A	D		1	18	-	219	2095	415	52.8%
1/3	Rochdale Rd (NE) Right	U	N/A	N/A	D		1	18	-	189	1815	359	52.6%
2/2+2/1	Ring Rd (SE) Left Ahead	U	N/A	N/A	B A		1	42	-	570	2080:1687	767+313	52.8 : 52.8%
2/3	Ring Rd (SE) Ahead	U	N/A	N/A	B		1	42	-	416	2080	932	44.7%
2/4	Ring Rd (SE) Right	U	N/A	N/A	C		1	41	-	103	1783	780	13.2%
3/1	Rochdale Rd (SW) Ahead Left	U	N/A	N/A	E		1	13	-	116	1670	244	47.6%
3/2	Rochdale Rd (SW) Ahead	U	N/A	N/A	E		1	13	-	156	2055	300	52.1%
4/1	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
4/2	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%
4/3	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	113	Inf	Inf	0.0%
5/1	Rochdale Rd (SW) exit	U	N/A	N/A	-		-	-	-	285	Inf	Inf	0.0%
5/2	Rochdale Rd (SW) exit	U	N/A	N/A	-		-	-	-	159	Inf	Inf	0.0%
6/1	Ring Rd (NW) exit	U	N/A	N/A	-		-	-	-	594	Inf	Inf	0.0%
6/2	Ring Rd (NW) exit	U	N/A	N/A	-		-	-	-	652	Inf	Inf	0.0%

Full Input Data And Results

Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	18	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	63	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	K		1	41	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	J		1	43	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	I		1	63	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	H		1	72	-	0	-	0	0.0%

Full Input Data And Results

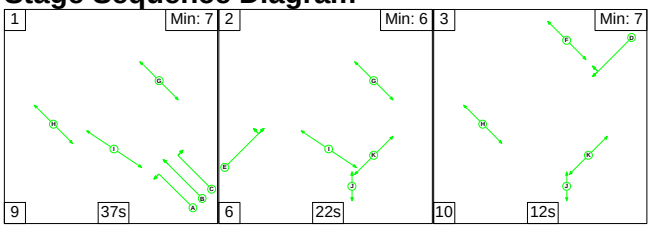
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**14.1**	**3.7**	**0.0**	**17.7**	**-**	**-**	**-**	**-**
12.Rochdale Rd_Ring Rd	**-**	**-**	**0**	**0**	**0**	**14.1**	**3.7**	**0.0**	**17.7**	**-**	**-**	**-**	**-**
1/1	202	202	-	-	-	1.9	0.6	-	2.5	44.3	4.8	0.6	5.3
1/2	219	219	-	-	-	2.1	0.6	-	2.7	43.6	5.2	0.6	5.7
1/3	189	189	-	-	-	1.8	0.6	-	2.4	45.0	4.5	0.6	5.0
2/2+2/1	570	570	-	-	-	2.8	0.6	-	3.3	21.1	7.3	0.6	7.9
2/3	416	416	-	-	-	2.1	0.4	-	2.5	21.8	7.6	0.4	8.0
2/4	103	103	-	-	-	0.5	0.1	-	0.5	18.8	1.6	0.1	1.7
3/1	116	116	-	-	-	1.2	0.5	-	1.7	51.7	2.8	0.5	3.3
3/2	156	156	-	-	-	1.6	0.5	-	2.2	50.3	3.8	0.5	4.4
4/1	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/3	113	113	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	285	285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	159	159	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	652	652	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 70.4 Total Delay for Signalled Lanes (pcuHr): 17.75 Cycle Time (s): 96
PRC Over All Lanes (%): 70.4 Total Delay Over All Lanes(pcuHr): 17.75

Full Input Data And Results

Scenario 4: 'PM Proposed' (FG4: 'PM Proposed', Plan 1: 'Network Control Plan 1')

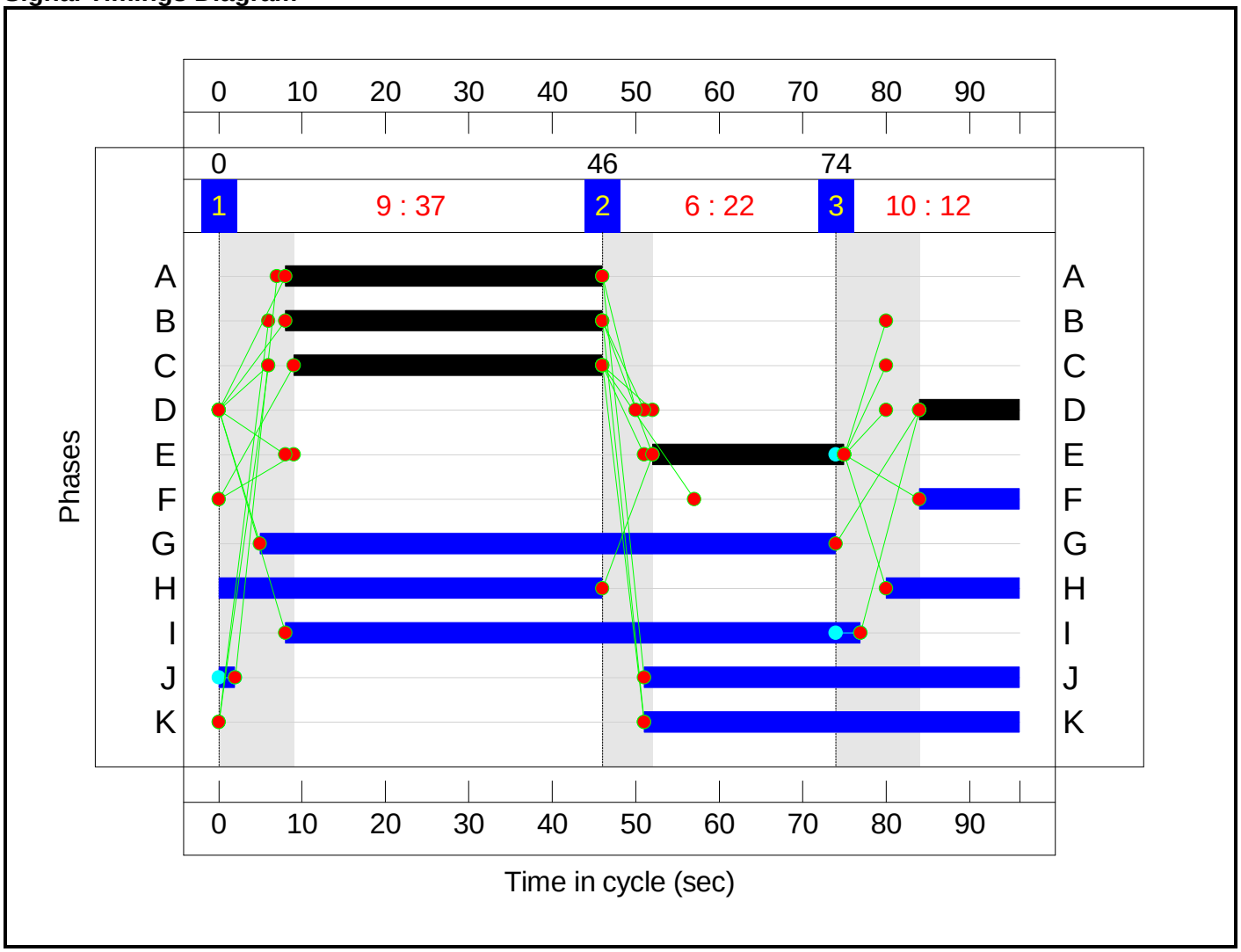
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	37	22	12
Change Point	0	46	74

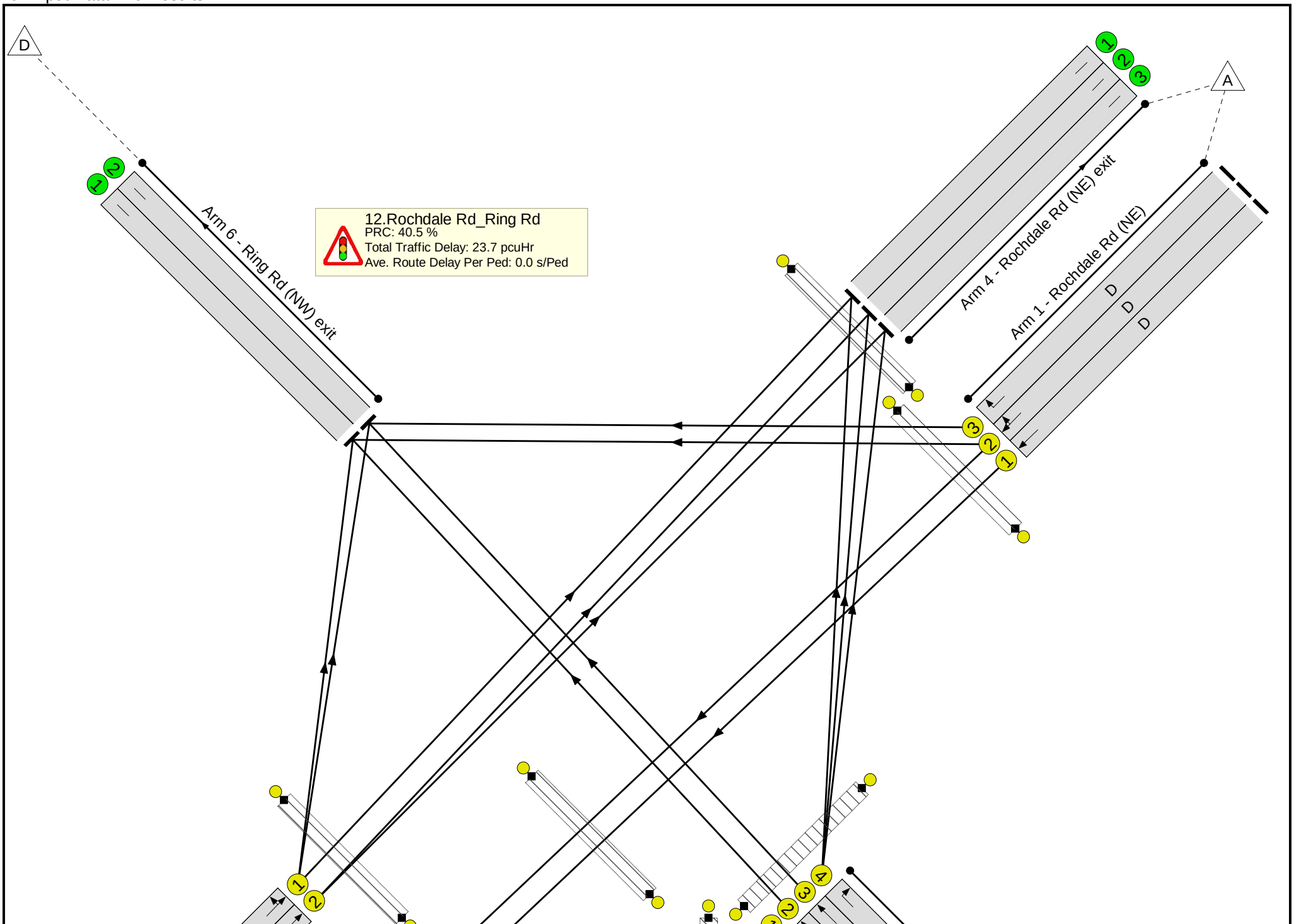
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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 (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**64.0%**
12.Rochdale Rd_Ring Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**64.0%**
1/1	Rochdale Rd (NE) Ahead	U	N/A	N/A	D		1	12	-	155	1940	263	59.0%
1/2	Rochdale Rd (NE) Ahead Right	U	N/A	N/A	D		1	12	-	171	2095	284	60.3%
1/3	Rochdale Rd (NE) Right	U	N/A	N/A	D		1	12	-	143	1815	246	58.2%
2/2+2/1	Ring Rd (SE) Left Ahead	U	N/A	N/A	B A		1	38	-	605	2080:1687	739+210	63.8 : 63.8%
2/3	Ring Rd (SE) Ahead	U	N/A	N/A	B		1	38	-	489	2080	845	57.9%
2/4	Ring Rd (SE) Right	U	N/A	N/A	C		1	37	-	183	1783	706	25.9%
3/1	Rochdale Rd (SW) Ahead Left	U	N/A	N/A	E		1	23	-	281	1761	440	63.8%
3/2	Rochdale Rd (SW) Ahead	U	N/A	N/A	E		1	23	-	329	2055	514	64.0%
4/1	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	214	Inf	Inf	0.0%
4/2	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%
4/3	Rochdale Rd (NE) exit	U	N/A	N/A	-		-	-	-	226	Inf	Inf	0.0%
5/1	Rochdale Rd (SW) exit	U	N/A	N/A	-		-	-	-	222	Inf	Inf	0.0%
5/2	Rochdale Rd (SW) exit	U	N/A	N/A	-		-	-	-	100	Inf	Inf	0.0%
6/1	Ring Rd (NW) exit	U	N/A	N/A	-		-	-	-	673	Inf	Inf	0.0%
6/2	Ring Rd (NW) exit	U	N/A	N/A	-		-	-	-	696	Inf	Inf	0.0%

Full Input Data And Results

Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	12	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	69	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	K		1	45	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	J		1	47	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	I		1	69	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	H		1	62	-	0	-	0	0.0%

Full Input Data And Results

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)
Network	**-**	**-**	**0**	**0**	**0**	**18.1**	**5.6**	**0.0**	**23.7**	**-**	**-**	**-**	**-**
12.Rochdale Rd_Ring Rd	**-**	**-**	**0**	**0**	**0**	**18.1**	**5.6**	**0.0**	**23.7**	**-**	**-**	**-**	**-**
1/1	155	155	-	-	-	1.7	0.7	-	2.4	55.5	3.9	0.7	4.6
1/2	171	171	-	-	-	1.9	0.7	-	2.6	54.8	4.3	0.7	5.0
1/3	143	143	-	-	-	1.5	0.7	-	2.2	56.2	3.6	0.7	4.3
2/2+2/1	605	605	-	-	-	3.5	0.9	-	4.4	26.3	9.6	0.9	10.4
2/3	489	489	-	-	-	3.0	0.7	-	3.7	27.2	10.1	0.7	10.7
2/4	183	183	-	-	-	1.0	0.2	-	1.2	23.0	3.3	0.2	3.4
3/1	281	281	-	-	-	2.5	0.9	-	3.4	43.3	6.6	0.9	7.5
3/2	329	329	-	-	-	2.9	0.9	-	3.8	41.8	7.8	0.9	8.7
4/1	214	214	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/3	226	226	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	222	222	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	100	100	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	673	673	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	696	696	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 40.5 Total Delay for Signalled Lanes (pcuHr): 23.71 Cycle Time (s): 96
PRC Over All Lanes (%): 40.5 Total Delay Over All Lanes(pcuHr): 23.71