

J2:11/1	Infinite Saturation Flow	Inf	Inf
J2:11/2	Infinite Saturation Flow	Inf	Inf
J2:12/1	Infinite Saturation Flow	Inf	Inf
J2:12/2	Infinite Saturation Flow	Inf	Inf

Scenario 7: '2031 Bkgd PM' (FG9: '2031 Bkgd PM', Plan 1: '2017 Observed AM')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	2	296	0	312	95	516	1221
	B	273	36	415	130	39	214	1107
	C	0	453	18	312	95	516	1394
	D	636	282	480	5	284	8	1695
	E	223	99	168	280	1	128	899
	F	688	306	520	2	60	7	1583
	Tot.	1822	1472	1601	1041	574	1389	7899

Traffic Lane Flows

Lane	Scenario 7: 2031 Bkgd PM
Junction: J1: M1 Junction 14	
J1:1/1 (short)	1126
J1:1/2 (with short)	2343(In) 1217(Out)
J1:1/3	1059
J1:2/1	1287
J1:2/2	1075
J1:3/1 (short)	296
J1:3/2 (with short)	766(In) 470(Out)
J1:3/3	455
J1:4/1	648
J1:4/2	1008
J1:4/3	455
J1:5/1	415
J1:5/2 (with short)	692(In) 243(Out)
J1:5/3 (short)	449
J1:6/1	923
J1:6/2	471
J1:7/1	713
J1:7/2 (with short)	904(In) 740(Out)
J1:7/3 (short)	164
J1:8/1	147
J1:8/2 (with short)	635(In) 619(Out)
J1:8/3 (short)	16
J1:9/1	1472
J1:10/1	855
J1:10/2	746
J1:11/1	716
J1:11/2	759
J1:11/3	754
J1:12/1	1273
J1:12/2	549
Junction: J2: Northfields Roundabout	
J2:1/1	731
J2:1/2 (with short)	852(In) 785(Out)
J2:1/3 (short)	67

J2:2/1	841
J2:2/2	1163
J2:2/3	68
J2:3/1	674
J2:3/2	724
J2:3/3	297
J2:4/1	716
J2:4/2	759
J2:4/3 (with short)	754(In) 375(Out)
J2:4/4 (short)	379
J2:5/1	27
J2:5/2	328
J2:5/3	10
J2:6/1	497
J2:6/2	764
J2:6/3	375
J2:6/4	384
J2:7/1	314
J2:7/2 (with short)	585(In) 206(Out)
J2:7/3 (short)	379
J2:8/1	561
J2:8/2	590
J2:8/3	379
J2:9/1	562
J2:9/2	479
J2:10/1	1515
J2:10/2	1887
J2:11/1	140
J2:11/2	434
J2:12/1	561
J2:12/2	828

Lane Saturation Flows

Junction: J1: M1 Junction 14								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A509 (S))	3.50	0.00	Y	Arm J1:12 Left	Inf	100.0 %	1965	1965
J1:1/2 (A509 (S))	3.50	0.00	N	Arm J1:2 Ahead Arm J1:12 Left	Inf Inf	65.4 % 34.6 %	2105	2105
J1:1/3 (A509 (S))	3.50	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	1965	1965
J1:2/1	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (M1 S/B Off-Slip)	3.50	0.00	Y	Arm J1:9 Left	20.00	100.0 %	1828	1828
J1:3/2 (M1 S/B Off-Slip)	3.50	0.00	N	Arm J1:4 Ahead	Inf	100.0 %	2105	2105
J1:3/3 (M1 S/B Off-Slip)	3.50	0.00	N	Arm J1:4 Ahead	Inf	100.0 %	2105	2105
J1:4/1	Infinite Saturation Flow						Inf	Inf
J1:4/2	Infinite Saturation Flow						Inf	Inf
J1:4/3	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A509 London Road)	3.50	0.00	Y	Arm J1:10 Left	30.00	100.0 %	1871	1871
J1:5/2 (A509 London Road)	3.50	0.00	N	Arm J1:7 Ahead	Inf	100.0 %	2105	2105
J1:5/3 (A509 London Road)	3.50	0.00	N	Arm J1:7 Ahead	Inf	100.0 %	2105	2105
J1:6/1 (M1 N/B Off-Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (M1 N/B Off-Slip Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J1:7/1	This lane uses a directly entered Saturation Flow						1900	1900
J1:7/2	This lane uses a directly entered Saturation Flow						1900	1900
J1:7/3	This lane uses a directly entered Saturation Flow						1900	1900
J1:8/1	This lane uses a directly entered Saturation Flow						1900	1900
J1:8/2	This lane uses a directly entered Saturation Flow						1900	1900
J1:8/3	3.50	0.00	Y	Arm J1:2 Right	25.00	100.0 %	1854	1854
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:10/1	Infinite Saturation Flow						Inf	Inf
J1:10/2	Infinite Saturation Flow						Inf	Inf
J1:11/1	Infinite Saturation Flow						Inf	Inf
J1:11/2	Infinite Saturation Flow						Inf	Inf
J1:11/3	Infinite Saturation Flow						Inf	Inf
J1:12/1	Infinite Saturation Flow						Inf	Inf
J1:12/2	Infinite Saturation Flow						Inf	Inf

Junction: J2: Northfields Roundabout								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (A4145 Childs Way (S))	3.50	0.00	Y	Arm J2:2 Ahead	Inf	99.7 %	1965	1965
				Arm J2:9 Left	Inf	0.3 %		
J2:1/2 (A4145 Childs Way (S))	3.50	0.00	N	Arm J2:2 Ahead	Inf	100.0 %	2105	2105
J2:1/3 (A4145 Childs Way (S))	3.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1965	1965
J2:2/1	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (A509 (W))	3.50	0.00	Y	Arm J2:10 Left	Inf	100.0 %	1965	1965
J2:3/2 (A509 (W))	3.50	0.00	N	Arm J2:10 Left	Inf	100.0 %	2105	2105
J2:3/3 (A509 (W))	3.50	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	1965	1965
J2:4/1 (A509 (N))	3.50	0.00	Y	Arm J2:6 Ahead	Inf	68.0 %	1965	1965
				Arm J2:11 Left	Inf	32.0 %		
J2:4/2 (A509 (N))	3.50	0.00	N	Arm J2:6 Ahead	Inf	100.0 %	2105	2105
J2:4/3 (A509 (N))	3.50	0.00	N	Arm J2:6 Ahead	Inf	100.0 %	2105	2105
J2:4/4 (A509 (N))	3.50	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1965	1965
J2:5/1	This lane uses a directly entered Saturation Flow						1900	1900
J2:5/2	This lane uses a directly entered Saturation Flow						1900	1900
J2:5/3	This lane uses a directly entered Saturation Flow						1900	1900
J2:6/1	This lane uses a directly entered Saturation Flow						1900	1900
J2:6/2	This lane uses a directly entered Saturation Flow						1900	1900
J2:6/3	This lane uses a directly entered Saturation Flow						1900	1900
J2:6/4	This lane uses a directly entered Saturation Flow						1900	1900
J2:7/1 (A5130 (E))	3.50	0.00	Y	Arm J2:8 Ahead	Inf	59.2 %	1965	1965
				Arm J2:12 Left	Inf	40.8 %		
J2:7/2 (A5130 (E))	3.50	0.00	N	Arm J2:8 Ahead	Inf	100.0 %	2105	2105
J2:7/3 (A5130 (E))	3.50	0.00	Y	Arm J2:8 Ahead	Inf	100.0 %	1965	1965
J2:8/1	This lane uses a directly entered Saturation Flow						1900	1900
J2:8/2	This lane uses a directly entered Saturation Flow						1900	1900
J2:8/3	This lane uses a directly entered Saturation Flow						1900	1900
J2:9/1	Infinite Saturation Flow						Inf	Inf
J2:9/2	Infinite Saturation Flow						Inf	Inf
J2:10/1	Infinite Saturation Flow						Inf	Inf
J2:10/2	Infinite Saturation Flow						Inf	Inf

J2:11/1	Infinite Saturation Flow	Inf	Inf
J2:11/2	Infinite Saturation Flow	Inf	Inf
J2:12/1	Infinite Saturation Flow	Inf	Inf
J2:12/2	Infinite Saturation Flow	Inf	Inf

Scenario 8: '2031 WD PM' (FG10: '2031 WD PM', Plan 1: '2017 Observed AM')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	2	315	0	318	95	512	1242
	B	273	36	444	132	39	213	1137
	C	0	453	18	318	95	512	1396
	D	648	282	480	5	283	8	1706
	E	227	99	168	279	1	128	902
	F	701	306	520	2	60	7	1596
	Tot.	1851	1491	1630	1054	573	1380	7979

Traffic Lane Flows

Lane	Scenario 8: 2031 WD PM
Junction: J1: M1 Junction 14	
J1:1/1 (short)	1138
J1:1/2 (with short)	2368(In) 1230(Out)
J1:1/3	1063
J1:2/1	1285
J1:2/2	1077
J1:3/1 (short)	315
J1:3/2 (with short)	788(In) 473(Out)
J1:3/3	454
J1:4/1	647
J1:4/2	1012
J1:4/3	454
J1:5/1	444
J1:5/2 (with short)	693(In) 233(Out)
J1:5/3 (short)	460
J1:6/1	925
J1:6/2	471
J1:7/1	706
J1:7/2 (with short)	914(In) 745(Out)
J1:7/3 (short)	169
J1:8/1	142
J1:8/2 (with short)	640(In) 626(Out)
J1:8/3 (short)	14
J1:9/1	1491
J1:10/1	869
J1:10/2	761
J1:11/1	714
J1:11/2	752
J1:11/3	768
J1:12/1	1280
J1:12/2	571
Junction: J2: Northfields Roundabout	
J2:1/1	739
J2:1/2 (with short)	857(In) 790(Out)
J2:1/3 (short)	67

J2:2/1	857
J2:2/2	1164
J2:2/3	68
J2:3/1	681
J2:3/2	729
J2:3/3	296
J2:4/1	714
J2:4/2	752
J2:4/3 (with short)	768(In) 383(Out)
J2:4/4 (short)	385
J2:5/1	45
J2:5/2	313
J2:5/3	6
J2:6/1	499
J2:6/2	753
J2:6/3	383
J2:6/4	390
J2:7/1	311
J2:7/2 (with short)	591(In) 216(Out)
J2:7/3 (short)	375
J2:8/1	566
J2:8/2	606
J2:8/3	375
J2:9/1	567
J2:9/2	487
J2:10/1	1538
J2:10/2	1893
J2:11/1	158
J2:11/2	415
J2:12/1	563
J2:12/2	817

Lane Saturation Flows

Junction: J1: M1 Junction 14								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A509 (S))	3.50	0.00	Y	Arm J1:12 Left	Inf	100.0 %	1965	1965
J1:1/2 (A509 (S))	3.50	0.00	N	Arm J1:2 Ahead Arm J1:12 Left	Inf Inf	64.4 % 35.6 %	2105	2105
J1:1/3 (A509 (S))	3.50	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	1965	1965
J1:2/1	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (M1 S/B Off-Slip)	3.50	0.00	Y	Arm J1:9 Left	20.00	100.0 %	1828	1828
J1:3/2 (M1 S/B Off-Slip)	3.50	0.00	N	Arm J1:4 Ahead	Inf	100.0 %	2105	2105
J1:3/3 (M1 S/B Off-Slip)	3.50	0.00	N	Arm J1:4 Ahead	Inf	100.0 %	2105	2105
J1:4/1	Infinite Saturation Flow						Inf	Inf
J1:4/2	Infinite Saturation Flow						Inf	Inf
J1:4/3	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A509 London Road)	3.50	0.00	Y	Arm J1:10 Left	30.00	100.0 %	1871	1871
J1:5/2 (A509 London Road)	3.50	0.00	N	Arm J1:7 Ahead	Inf	100.0 %	2105	2105
J1:5/3 (A509 London Road)	3.50	0.00	N	Arm J1:7 Ahead	Inf	100.0 %	2105	2105
J1:6/1 (M1 N/B Off-Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (M1 N/B Off-Slip Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J1:7/1	This lane uses a directly entered Saturation Flow						1900	1900
J1:7/2	This lane uses a directly entered Saturation Flow						1900	1900
J1:7/3	This lane uses a directly entered Saturation Flow						1900	1900
J1:8/1	This lane uses a directly entered Saturation Flow						1900	1900
J1:8/2	This lane uses a directly entered Saturation Flow						1900	1900
J1:8/3	3.50	0.00	Y	Arm J1:2 Right	25.00	100.0 %	1854	1854
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:10/1	Infinite Saturation Flow						Inf	Inf
J1:10/2	Infinite Saturation Flow						Inf	Inf
J1:11/1	Infinite Saturation Flow						Inf	Inf
J1:11/2	Infinite Saturation Flow						Inf	Inf
J1:11/3	Infinite Saturation Flow						Inf	Inf
J1:12/1	Infinite Saturation Flow						Inf	Inf
J1:12/2	Infinite Saturation Flow						Inf	Inf

Junction: J2: Northfields Roundabout								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (A4145 Childs Way (S))	3.50	0.00	Y	Arm J2:2 Ahead	Inf	99.7 %	1965	1965
				Arm J2:9 Left	Inf	0.3 %		
J2:1/2 (A4145 Childs Way (S))	3.50	0.00	N	Arm J2:2 Ahead	Inf	100.0 %	2105	2105
J2:1/3 (A4145 Childs Way (S))	3.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1965	1965
J2:2/1	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (A509 (W))	3.50	0.00	Y	Arm J2:10 Left	Inf	100.0 %	1965	1965
J2:3/2 (A509 (W))	3.50	0.00	N	Arm J2:10 Left	Inf	100.0 %	2105	2105
J2:3/3 (A509 (W))	3.50	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	1965	1965
J2:4/1 (A509 (N))	3.50	0.00	Y	Arm J2:6 Ahead	Inf	67.9 %	1965	1965
				Arm J2:11 Left	Inf	32.1 %		
J2:4/2 (A509 (N))	3.50	0.00	N	Arm J2:6 Ahead	Inf	100.0 %	2105	2105
J2:4/3 (A509 (N))	3.50	0.00	N	Arm J2:6 Ahead	Inf	100.0 %	2105	2105
J2:4/4 (A509 (N))	3.50	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1965	1965
J2:5/1	This lane uses a directly entered Saturation Flow						1900	1900
J2:5/2	This lane uses a directly entered Saturation Flow						1900	1900
J2:5/3	This lane uses a directly entered Saturation Flow						1900	1900
J2:6/1	This lane uses a directly entered Saturation Flow						1900	1900
J2:6/2	This lane uses a directly entered Saturation Flow						1900	1900
J2:6/3	This lane uses a directly entered Saturation Flow						1900	1900
J2:6/4	This lane uses a directly entered Saturation Flow						1900	1900
J2:7/1 (A5130 (E))	3.50	0.00	Y	Arm J2:8 Ahead	Inf	58.8 %	1965	1965
				Arm J2:12 Left	Inf	41.2 %		
J2:7/2 (A5130 (E))	3.50	0.00	N	Arm J2:8 Ahead	Inf	100.0 %	2105	2105
J2:7/3 (A5130 (E))	3.50	0.00	Y	Arm J2:8 Ahead	Inf	100.0 %	1965	1965
J2:8/1	This lane uses a directly entered Saturation Flow						1900	1900
J2:8/2	This lane uses a directly entered Saturation Flow						1900	1900
J2:8/3	This lane uses a directly entered Saturation Flow						1900	1900
J2:9/1	Infinite Saturation Flow						Inf	Inf
J2:9/2	Infinite Saturation Flow						Inf	Inf
J2:10/1	Infinite Saturation Flow						Inf	Inf
J2:10/2	Infinite Saturation Flow						Inf	Inf

J2:11/1	Infinite Saturation Flow	Inf	Inf
J2:11/2	Infinite Saturation Flow	Inf	Inf
J2:12/1	Infinite Saturation Flow	Inf	Inf
J2:12/2	Infinite Saturation Flow	Inf	Inf

Scenario 1: '2020 Bkgd AM' (FG2: '2020 Bkgd AM', Plan 1: '2017 Observed AM')

C1

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	31	17
Change Point	12	49

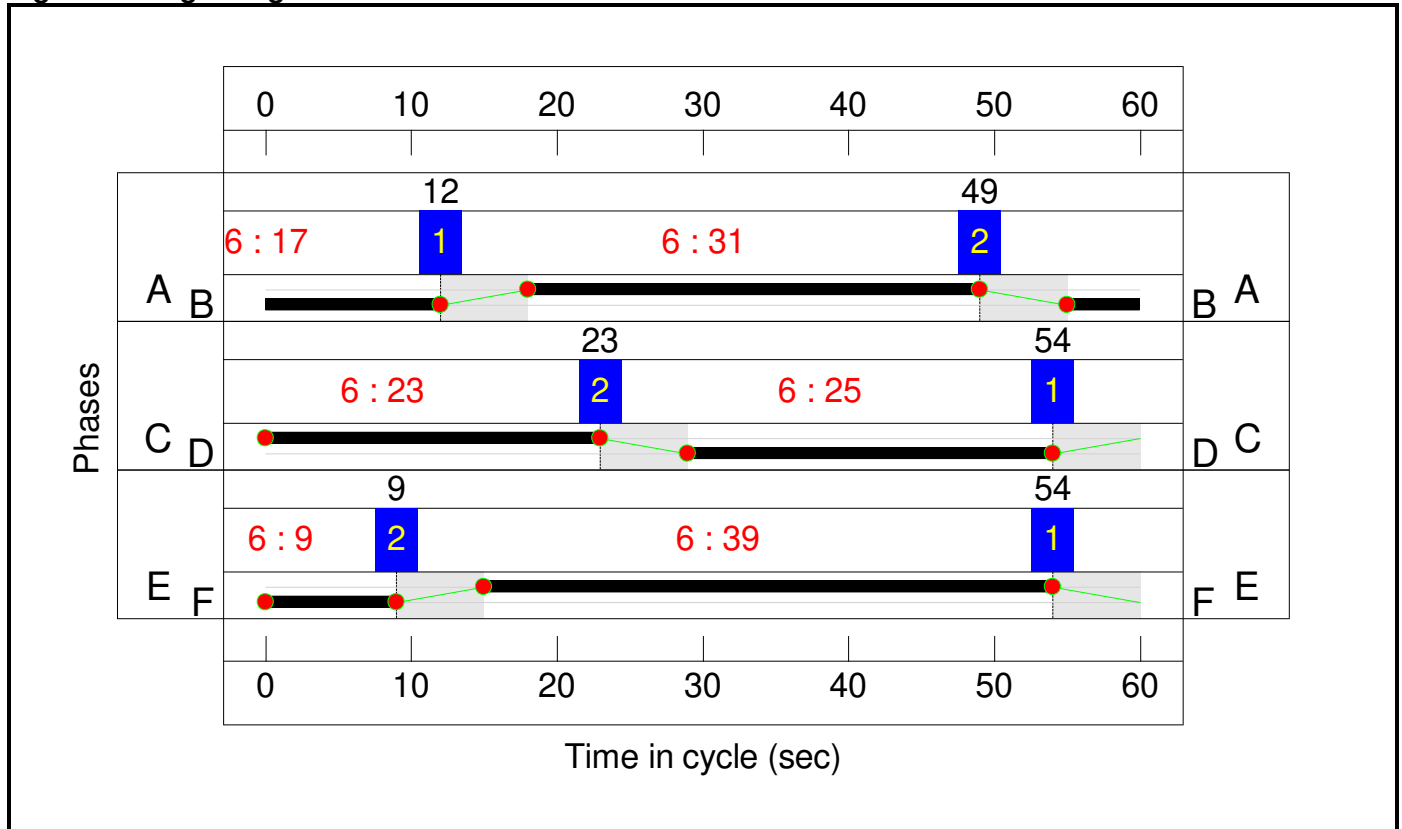
Stage Stream: 2

Stage	1	2
Duration	23	25
Change Point	54	23

Stage Stream: 3

Stage	1	2
Duration	9	39
Change Point	54	9

Signal Timings Diagram



C2

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	9	39
Change Point	27	42

Stage Stream: 2

Stage	1	2
Duration	12	36
Change Point	46	4

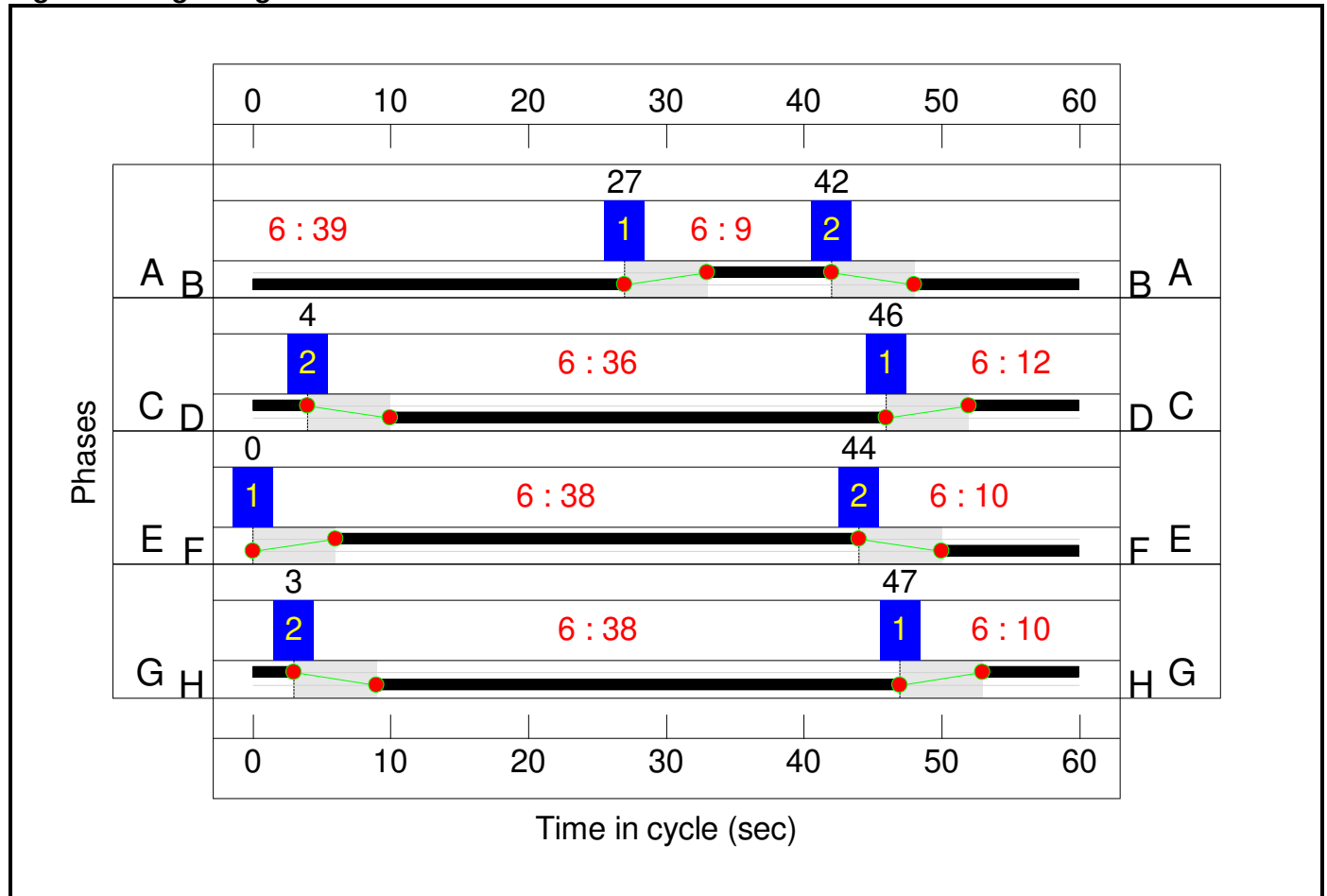
Stage Stream: 3

Stage	1	2
Duration	38	10
Change Point	0	44

Stage Stream: 4

Stage	1	2
Duration	10	38
Change Point	47	3

Signal Timings Diagram



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: M1 Junction 14 / Northfields Roundabout Model	-	-	N/A	-	-		-	-	-	-	-	-	124.0%
J1: M1 Junction 14	-	-	N/A	-	-		-	-	-	-	-	-	103.0%
1/2+1/1	A509 (S) Ahead Left	U	1:1	N/A	C1:A		1	31	-	1360	2105:1965	996+1035	61.8 : 60.1%
1/3	A509 (S) Ahead	U	1:1	N/A	C1:A		1	31	-	515	1965	1048	45.6%
2/1	Right Ahead	U	1:2	N/A	C1:D		1	25	-	753	1900	823	85.0%
2/2	Right	U	1:2	N/A	C1:D		1	25	-	522	1900	823	58.8%
3/2+3/1	M1 S/B Off-Slip Ahead Left	U	1:2	N/A	C1:C		1	23	-	996	2105:1828	842+274	89.8 : 87.4%
3/3	M1 S/B Off-Slip Ahead	U	1:2	N/A	C1:C		1	23	-	718	2105	842	85.3%
5/1	A509 London Road Left	O	N/A	N/A	-		-	-	-	339	1871	464	73.1%
5/2+5/3	A509 London Road Ahead	O	N/A	N/A	-		-	-	-	768	2105:2105	457+457	78.4 : 89.8%
6/2	M1 N/B Off-Slip Ahead	U	1:3	N/A	C1:F		1	9	-	309	1800	300	103.0%
7/1	Ahead	U	1:3	N/A	C1:E		1	39	-	1114	1900	1267	87.9%
7/2+7/3	Right Ahead	U	1:3	N/A	C1:E		1	39	-	1128	1900:1900	1180+90	88.8 : 88.8%
8/1	Ahead	U	1:1	N/A	C1:B		1	17	-	80	1900	570	14.0%
8/2+8/3	Right Ahead	U	1:1	N/A	C1:B		1	17	-	389	1900:1854	570+10	65.5 : 65.1%
J2: Northfields Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	124.0%
1/1	A4145 Childs Way (S) Ahead Left	U	2:1	N/A	C2:A		1	9	-	403	1965	327	123.1%
1/2+1/3	A4145 Childs Way (S) Ahead	U	2:1	N/A	C2:A		1	9	-	483	2105:1965	351+39	124.0 : 124.0%
2/1	Ahead	U	2:2	N/A	C2:D		1	36	-	547	1900	1172	40.3%

2/2	Ahead	U	2:2	N/A	C2:D		1	36	-	556	1900	1172	40.3%
2/3	Right	U	2:2	N/A	C2:D		1	36	-	50	1900	1172	4.3%
3/1	A509 (W) Left	U	2:2	N/A	C2:C		1	12	-	370	1965	426	86.9%
3/2	A509 (W) Left	U	2:2	N/A	C2:C		1	12	-	402	2105	456	88.1%
3/3	A509 (W) Ahead	U	2:2	N/A	C2:C		1	12	-	200	1965	426	47.0%
4/1	A509 (N) Ahead Left	U	2:3	N/A	C2:E		1	38	-	1021	1965	1277	79.9%
4/2	A509 (N) Ahead	U	2:3	N/A	C2:E		1	38	-	1057	2105	1368	77.3%
4/3+4/4	A509 (N) Ahead	U	2:3	N/A	C2:E		1	38	-	1474	2105:1965	817+817	90.2 : 90.2%
5/1	Ahead	U	2:3	N/A	C2:F		1	10	-	125	1900	348	35.9%
5/2	Right Ahead	U	2:3	N/A	C2:F		1	10	-	116	1900	348	33.3%
5/3	Right	U	2:3	N/A	C2:F		1	10	-	9	1900	348	2.6%
6/1	Ahead	U	2:4	N/A	C2:H		1	38	-	806	1900	1235	65.3%
6/2	Ahead	U	2:4	N/A	C2:H		1	38	-	1061	1900	1235	85.9%
6/3	Right	U	2:4	N/A	C2:H		1	38	-	738	1900	1235	59.8%
6/4	Right	U	2:4	N/A	C2:H		1	38	-	741	1900	1235	60.0%
7/1	A5130 (E) Ahead Left	U	2:4	N/A	C2:G		1	10	-	318	1965	360	88.3%
7/2+7/3	A5130 (E) Ahead	U	2:4	N/A	C2:G		1	10	-	478	2105:1965	386+134	92.0 : 92.0%
8/1	Ahead	U	2:1	N/A	C2:B		1	39	-	939	1900	1267	74.1%
8/2	Right Ahead	U	2:1	N/A	C2:B		1	39	-	1096	1900	1267	86.5%
8/3	Right	U	2:1	N/A	C2:B		1	39	-	123	1900	1267	9.7%

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: M1 Junction 14 / Northfields Roundabout Model	-	-	1875	0	0	62.0	135.2	0.0	197.2	-	-	-	-
J1: M1 Junction 14	-	-	1875	0	0	27.2	23.1	0.0	50.2	-	-	-	-
1/2+1/1	1238	1238	-	-	-	5.7	0.8	-	6.5	18.9	27.3	0.8	28.1
1/3	478	478	-	-	-	1.9	0.4	-	2.4	17.8	7.5	0.4	7.9
2/1	700	700	-	-	-	1.8	0.0	-	1.8	9.4	11.7	0.0	11.7
2/2	484	484	-	-	-	0.2	0.0	-	0.2	1.4	0.4	0.0	0.4
3/2+3/1	996	996	-	-	-	4.4	3.9	-	8.3	29.8	11.8	3.9	15.6
3/3	718	718	-	-	-	3.3	2.8	-	6.0	30.3	10.8	2.8	13.5
5/1	339	339	339	0	0	0.7	1.3	-	2.0	21.6	4.5	1.3	5.9
5/2+5/3	768	768	1536	0	0	2.1	2.6	-	4.6	21.7	6.3	2.6	8.8
6/2	309	300	-	-	-	2.4	11.3	-	13.8	160.2	5.3	11.3	16.6
7/1	1114	1114	-	-	-	1.8	0.0	-	1.8	5.7	17.8	0.0	17.8
7/2+7/3	1128	1128	-	-	-	1.9	0.0	-	1.9	6.0	17.4	0.0	17.4
8/1	80	80	-	-	-	0.5	0.0	-	0.5	21.7	1.3	0.0	1.3
8/2+8/3	380	380	-	-	-	0.5	0.0	-	0.5	4.8	1.3	0.0	1.3
J2: Northfields Roundabout	-	-	0	0	0	34.8	112.2	0.0	146.9	-	-	-	-
1/1	403	327	-	-	-	4.5	40.3	-	44.7	399.7	8.0	40.3	48.2
1/2+1/3	483	399	-	-	-	5.2	49.2	-	54.4	405.2	8.7	49.2	57.8
2/1	472	472	-	-	-	0.2	0.0	-	0.2	1.7	2.6	0.0	2.6
2/2	472	472	-	-	-	0.6	0.0	-	0.6	4.3	2.6	0.0	2.6
2/3	50	50	-	-	-	0.0	0.0	-	0.0	0.3	0.5	0.0	0.5
3/1	370	370	-	-	-	2.3	3.0	-	5.3	51.8	5.9	3.0	8.9
3/2	402	402	-	-	-	2.5	3.3	-	5.9	52.4	6.5	3.3	9.8
3/3	200	200	-	-	-	1.1	0.4	-	1.6	28.5	2.9	0.4	3.3
4/1	1021	1021	-	-	-	2.5	2.0	-	4.4	15.7	10.1	2.0	12.1

4/2	1057	1057	-	-	-	2.9	1.7	-	4.5	15.5	10.1	1.7	11.8
4/3+4/4	1474	1474	-	-	-	3.6	4.4	-	8.0	19.4	13.7	4.4	18.1
5/1	125	125	-	-	-	0.5	0.0	-	0.5	14.4	1.0	0.0	1.0
5/2	116	116	-	-	-	0.5	0.0	-	0.5	15.3	0.9	0.0	0.9
5/3	9	9	-	-	-	0.0	0.0	-	0.0	15.2	0.1	0.0	0.1
6/1	806	806	-	-	-	0.1	0.0	-	0.1	0.6	0.6	0.0	0.6
6/2	1061	1061	-	-	-	0.3	0.0	-	0.3	1.2	1.0	0.0	1.0
6/3	738	738	-	-	-	0.1	0.0	-	0.1	0.7	0.5	0.0	0.5
6/4	741	741	-	-	-	0.1	0.0	-	0.1	0.6	0.3	0.0	0.3
7/1	318	318	-	-	-	2.1	3.3	-	5.4	60.8	5.1	3.3	8.4
7/2+7/3	478	478	-	-	-	3.1	4.7	-	7.8	58.7	5.7	4.7	10.4
8/1	939	939	-	-	-	1.1	0.0	-	1.1	4.2	5.7	0.0	5.7
8/2	1096	1096	-	-	-	1.3	0.0	-	1.3	4.1	5.7	0.0	5.7
8/3	123	123	-	-	-	0.0	0.0	-	0.0	0.1	0.1	0.0	0.1

C1	Stream: 1 PRC for Signalled Lanes (%)	37.5	Total Delay for Signalled Lanes (pcuHr)	9.86	Cycle Time (s)	60
C1	Stream: 2 PRC for Signalled Lanes (%)	0.2	Total Delay for Signalled Lanes (pcuHr)	16.32	Cycle Time (s)	60
C1	Stream: 3 PRC for Signalled Lanes (%)	-14.4	Total Delay for Signalled Lanes (pcuHr)	17.40	Cycle Time (s)	60
C2	Stream: 1 PRC for Signalled Lanes (%)	-37.8	Total Delay for Signalled Lanes (pcuHr)	101.48	Cycle Time (s)	60
C2	Stream: 2 PRC for Signalled Lanes (%)	2.1	Total Delay for Signalled Lanes (pcuHr)	13.55	Cycle Time (s)	60
C2	Stream: 3 PRC for Signalled Lanes (%)	-0.3	Total Delay for Signalled Lanes (pcuHr)	17.98	Cycle Time (s)	60
C2	Stream: 4 PRC for Signalled Lanes (%)	-2.2	Total Delay for Signalled Lanes (pcuHr)	13.92	Cycle Time (s)	60
	PRC Over All Lanes (%)	-37.8	Total Delay Over All Lanes(pcuHr)	197.18		

Scenario 2: '2020 WD AM' (FG3: '2020 WD AM', Plan 1: '2017 Observed AM')

C1

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	31	17
Change Point	12	49

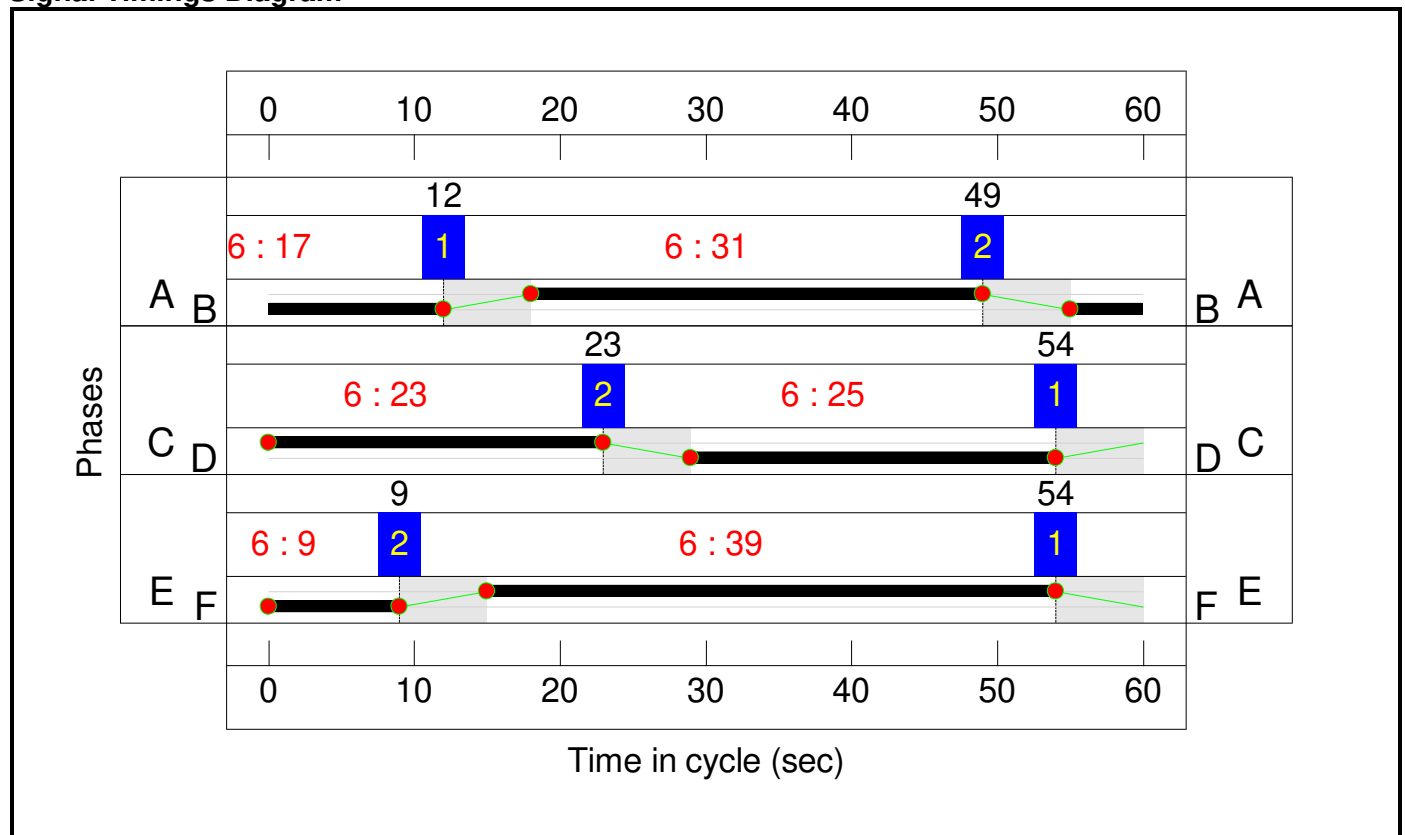
Stage Stream: 2

Stage	1	2
Duration	23	25
Change Point	54	23

Stage Stream: 3

Stage	1	2
Duration	9	39
Change Point	54	9

Signal Timings Diagram



C2

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	9	39
Change Point	27	42

Stage Stream: 2

Stage	1	2
Duration	12	36
Change Point	46	4

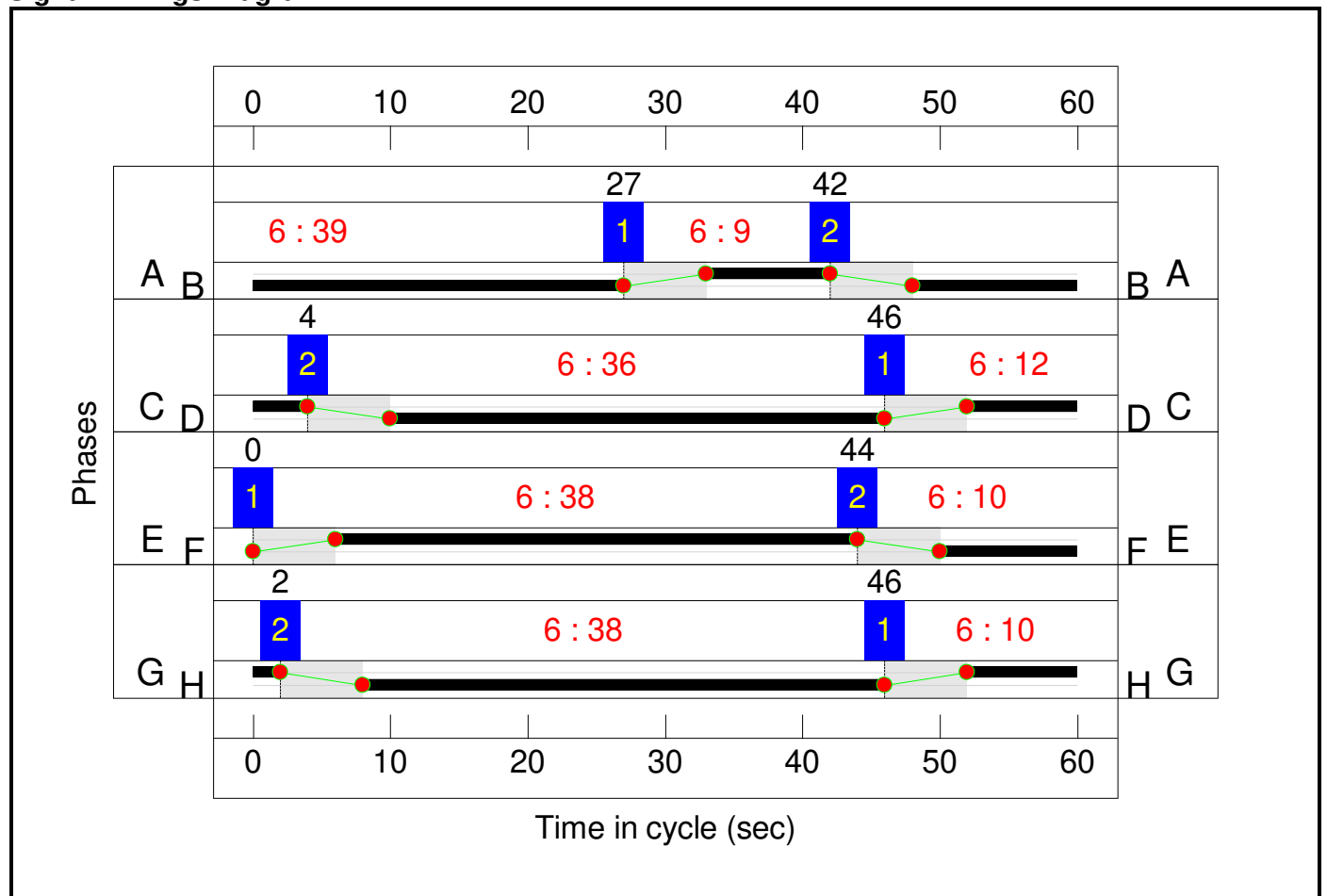
Stage Stream: 3

Stage	1	2
Duration	38	10
Change Point	0	44

Stage Stream: 4

Stage	1	2
Duration	10	38
Change Point	46	2

Signal Timings Diagram



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: M1 Junction 14 / Northfields Roundabout Model	-	-	N/A	-	-		-	-	-	-	-	-	123.7%
J1: M1 Junction 14	-	-	N/A	-	-		-	-	-	-	-	-	103.0%
1/2+1/1	A509 (S) Ahead Left	U	1:1	N/A	C1:A		1	31	-	1380	2105:1965	997+1035	62.7 : 61.1%
1/3	A509 (S) Ahead	U	1:1	N/A	C1:A		1	31	-	511	1965	1048	45.3%
2/1	Right Ahead	U	1:2	N/A	C1:D		1	25	-	757	1900	823	85.4%
2/2	Right	U	1:2	N/A	C1:D		1	25	-	518	1900	823	58.5%
3/2+3/1	M1 S/B Off-Slip Ahead Left	U	1:2	N/A	C1:C		1	23	-	1035	2105:1828	842+322	90.7 : 84.2%
3/3	M1 S/B Off-Slip Ahead	U	1:2	N/A	C1:C		1	23	-	710	2105	842	84.3%
5/1	A509 London Road Left	O	N/A	N/A	-		-	-	-	354	1871	461	76.8%
5/2+5/3	A509 London Road Ahead	O	N/A	N/A	-		-	-	-	768	2105:2105	454+454	78.6 : 90.5%
6/2	M1 N/B Off-Slip Ahead	U	1:3	N/A	C1:F		1	9	-	309	1800	300	103.0%
7/1	Ahead	U	1:3	N/A	C1:E		1	39	-	1121	1900	1267	88.5%
7/2+7/3	Right Ahead	U	1:3	N/A	C1:E		1	39	-	1121	1900:1900	1179+92	88.2 : 88.2%
8/1	Ahead	U	1:1	N/A	C1:B		1	17	-	79	1900	570	13.9%
8/2+8/3	Right Ahead	U	1:1	N/A	C1:B		1	17	-	390	1900:1854	570+10	65.6 : 65.2%
J2: Northfields Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	123.7%
1/1	A4145 Childs Way (S) Ahead Left	U	2:1	N/A	C2:A		1	9	-	404	1965	327	123.4%
1/2+1/3	A4145 Childs Way (S) Ahead	U	2:1	N/A	C2:A		1	9	-	482	2105:1965	351+39	123.7 : 123.7%
2/1	Ahead	U	2:2	N/A	C2:D		1	36	-	547	1900	1172	40.2%

2/2	Ahead	U	2:2	N/A	C2:D		1	36	-	556	1900	1172	40.4%
2/3	Right	U	2:2	N/A	C2:D		1	36	-	50	1900	1172	4.3%
3/1	A509 (W) Left	U	2:2	N/A	C2:C		1	12	-	379	1965	426	89.0%
3/2	A509 (W) Left	U	2:2	N/A	C2:C		1	12	-	409	2105	456	89.7%
3/3	A509 (W) Ahead	U	2:2	N/A	C2:C		1	12	-	200	1965	426	47.0%
4/1	A509 (N) Ahead Left	U	2:3	N/A	C2:E		1	38	-	1019	1965	1277	79.8%
4/2	A509 (N) Ahead	U	2:3	N/A	C2:E		1	38	-	1059	2105	1368	77.4%
4/3+4/4	A509 (N) Ahead	U	2:3	N/A	C2:E		1	38	-	1505	2105:1965	820+813	92.2 : 92.2%
5/1	Ahead	U	2:3	N/A	C2:F		1	10	-	126	1900	348	36.2%
5/2	Right Ahead	U	2:3	N/A	C2:F		1	10	-	116	1900	348	33.3%
5/3	Right	U	2:3	N/A	C2:F		1	10	-	8	1900	348	2.3%
6/1	Ahead	U	2:4	N/A	C2:H		1	38	-	805	1900	1235	65.2%
6/2	Ahead	U	2:4	N/A	C2:H		1	38	-	1062	1900	1235	86.0%
6/3	Right	U	2:4	N/A	C2:H		1	38	-	757	1900	1235	61.3%
6/4	Right	U	2:4	N/A	C2:H		1	38	-	753	1900	1235	61.0%
7/1	A5130 (E) Ahead Left	U	2:4	N/A	C2:G		1	10	-	317	1965	360	88.0%
7/2+7/3	A5130 (E) Ahead	U	2:4	N/A	C2:G		1	10	-	479	2105:1965	386+135	92.0 : 92.0%
8/1	Ahead	U	2:1	N/A	C2:B		1	39	-	957	1900	1267	75.6%
8/2	Right Ahead	U	2:1	N/A	C2:B		1	39	-	1108	1900	1267	87.5%
8/3	Right	U	2:1	N/A	C2:B		1	39	-	124	1900	1267	9.8%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 14 / Northfields Roundabout Model	-	-	1890	0	0	63.4	137.2	0.0	200.7	-	-	-	-
J1: M1 Junction 14	-	-	1890	0	0	27.6	23.2	0.0	50.8	-	-	-	-
1/2+1/1	1257	1257	-	-	-	5.8	0.8	-	6.7	19.0	27.4	0.8	28.2
1/3	475	475	-	-	-	1.9	0.4	-	2.3	17.7	7.5	0.4	7.9
2/1	703	703	-	-	-	1.8	0.0	-	1.8	9.4	11.7	0.0	11.7
2/2	482	482	-	-	-	0.2	0.0	-	0.2	1.4	0.4	0.0	0.4
3/2+3/1	1035	1035	-	-	-	4.6	3.8	-	8.4	29.0	11.9	3.8	15.7
3/3	710	710	-	-	-	3.2	2.6	-	5.8	29.4	10.6	2.6	13.2
5/1	354	354	354	0	0	0.8	1.6	-	2.4	24.6	4.9	1.6	6.5
5/2+5/3	768	768	1536	0	0	2.1	2.6	-	4.8	22.3	6.3	2.6	8.9
6/2	309	300	-	-	-	2.4	11.3	-	13.8	160.2	5.3	11.3	16.6
7/1	1121	1121	-	-	-	1.8	0.0	-	1.8	5.8	18.0	0.0	18.0
7/2+7/3	1121	1121	-	-	-	1.9	0.0	-	1.9	6.1	17.3	0.0	17.3
8/1	79	79	-	-	-	0.5	0.0	-	0.5	21.9	1.3	0.0	1.3
8/2+8/3	381	381	-	-	-	0.5	0.0	-	0.5	4.9	1.3	0.0	1.3
J2: Northfields Roundabout	-	-	0	0	0	35.9	114.0	0.0	149.9	-	-	-	-
1/1	404	327	-	-	-	4.5	40.7	-	45.2	403.2	8.0	40.7	48.7
1/2+1/3	482	399	-	-	-	5.2	48.7	-	53.8	402.0	8.6	48.7	57.3
2/1	471	471	-	-	-	0.2	0.0	-	0.2	1.8	2.6	0.0	2.6
2/2	473	473	-	-	-	0.6	0.0	-	0.6	4.5	2.6	0.0	2.6
2/3	50	50	-	-	-	0.0	0.0	-	0.0	0.3	0.5	0.0	0.5
3/1	379	379	-	-	-	2.4	3.5	-	5.9	56.3	6.1	3.5	9.6
3/2	409	409	-	-	-	2.6	3.7	-	6.3	55.8	6.6	3.7	10.3
3/3	200	200	-	-	-	1.1	0.4	-	1.6	28.5	2.9	0.4	3.3
4/1	1019	1019	-	-	-	2.5	1.9	-	4.4	15.7	10.1	1.9	12.1

4/2	1059	1059	-	-	-	2.9	1.7	-	4.5	15.5	10.1	1.7	11.8
4/3+4/4	1505	1505	-	-	-	3.8	5.4	-	9.2	22.0	14.5	5.4	19.9
5/1	126	126	-	-	-	0.5	0.0	-	0.5	14.6	1.0	0.0	1.0
5/2	116	116	-	-	-	0.5	0.0	-	0.5	15.1	0.9	0.0	0.9
5/3	8	8	-	-	-	0.0	0.0	-	0.0	15.1	0.1	0.0	0.1
6/1	805	805	-	-	-	0.2	0.0	-	0.2	1.1	0.8	0.0	0.8
6/2	1062	1062	-	-	-	0.5	0.0	-	0.5	1.7	1.0	0.0	1.0
6/3	757	757	-	-	-	0.2	0.0	-	0.2	1.1	0.6	0.0	0.6
6/4	753	753	-	-	-	0.2	0.0	-	0.2	1.1	0.6	0.0	0.6
7/1	317	317	-	-	-	2.1	3.2	-	5.3	60.1	5.1	3.2	8.3
7/2+7/3	479	479	-	-	-	3.1	4.7	-	7.8	58.6	5.7	4.7	10.4
8/1	957	957	-	-	-	1.2	0.0	-	1.2	4.6	6.1	0.0	6.1
8/2	1108	1108	-	-	-	1.4	0.0	-	1.4	4.6	11.6	0.0	11.6
8/3	124	124	-	-	-	0.0	0.0	-	0.0	0.1	0.1	0.0	0.1

C1	Stream: 1 PRC for Signalled Lanes (%)	37.1	Total Delay for Signalled Lanes (pcuHr):	9.98	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-0.8	Total Delay for Signalled Lanes (pcuHr):	16.18	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%)	-14.4	Total Delay for Signalled Lanes (pcuHr):	17.43	Cycle Time (s):	60
C2	Stream: 1 PRC for Signalled Lanes (%)	-37.5	Total Delay for Signalled Lanes (pcuHr):	101.70	Cycle Time (s):	60
C2	Stream: 2 PRC for Signalled Lanes (%)	0.4	Total Delay for Signalled Lanes (pcuHr):	14.68	Cycle Time (s):	60
C2	Stream: 3 PRC for Signalled Lanes (%)	-2.4	Total Delay for Signalled Lanes (pcuHr):	19.22	Cycle Time (s):	60
C2	Stream: 4 PRC for Signalled Lanes (%)	-2.2	Total Delay for Signalled Lanes (pcuHr):	14.29	Cycle Time (s):	60
	PRC Over All Lanes (%)	-37.5	Total Delay Over All Lanes(pcuHr):	200.65		

Scenario 3: '2031 Bkgd AM' (FG4: '2031 Bkgd AM', Plan 1: '2017 Observed AM')

C1

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	31	17
Change Point	12	49

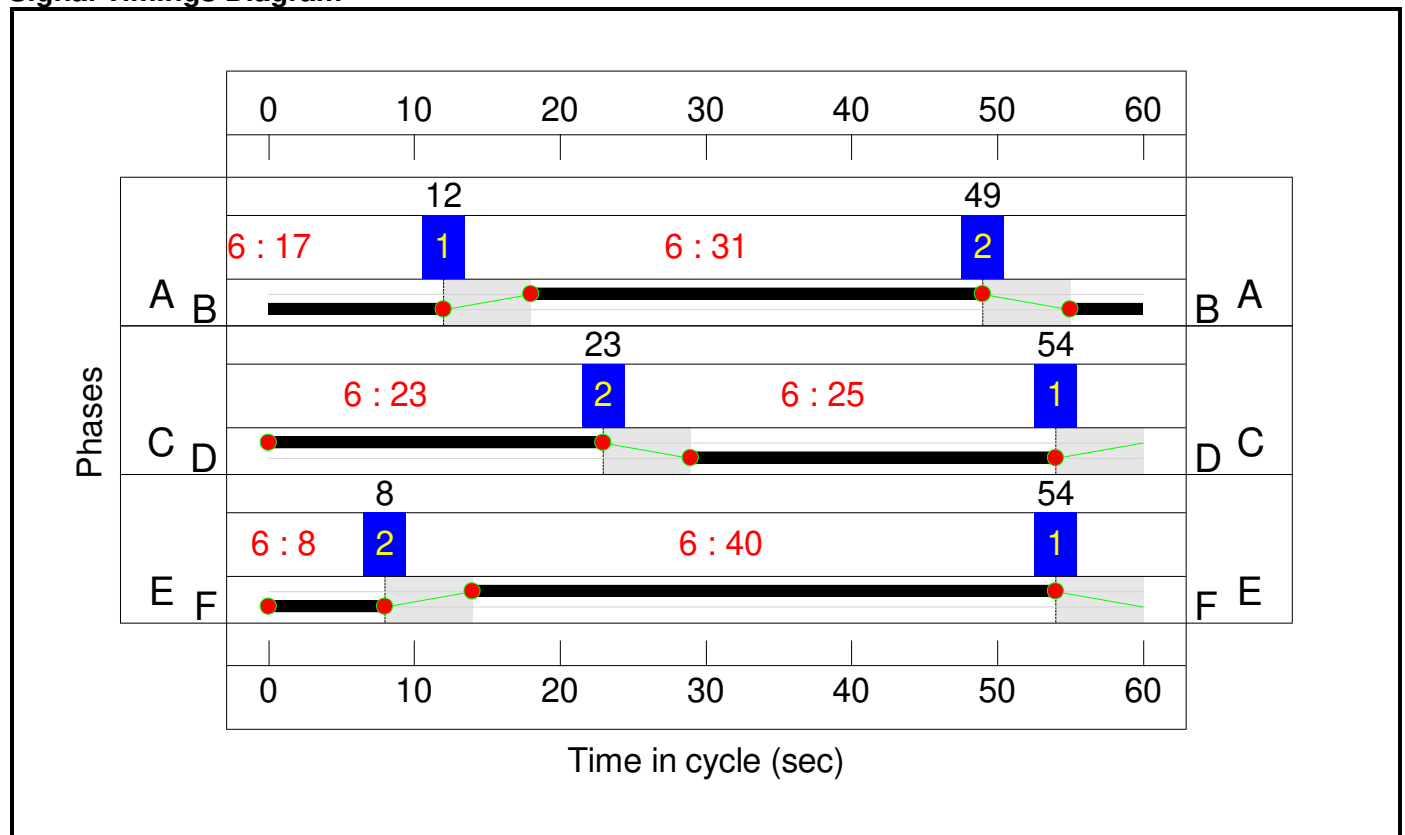
Stage Stream: 2

Stage	1	2
Duration	23	25
Change Point	54	23

Stage Stream: 3

Stage	1	2
Duration	8	40
Change Point	54	8

Signal Timings Diagram



C2

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	8	40
Change Point	30	44

Stage Stream: 2

Stage	1	2
Duration	12	36
Change Point	48	6

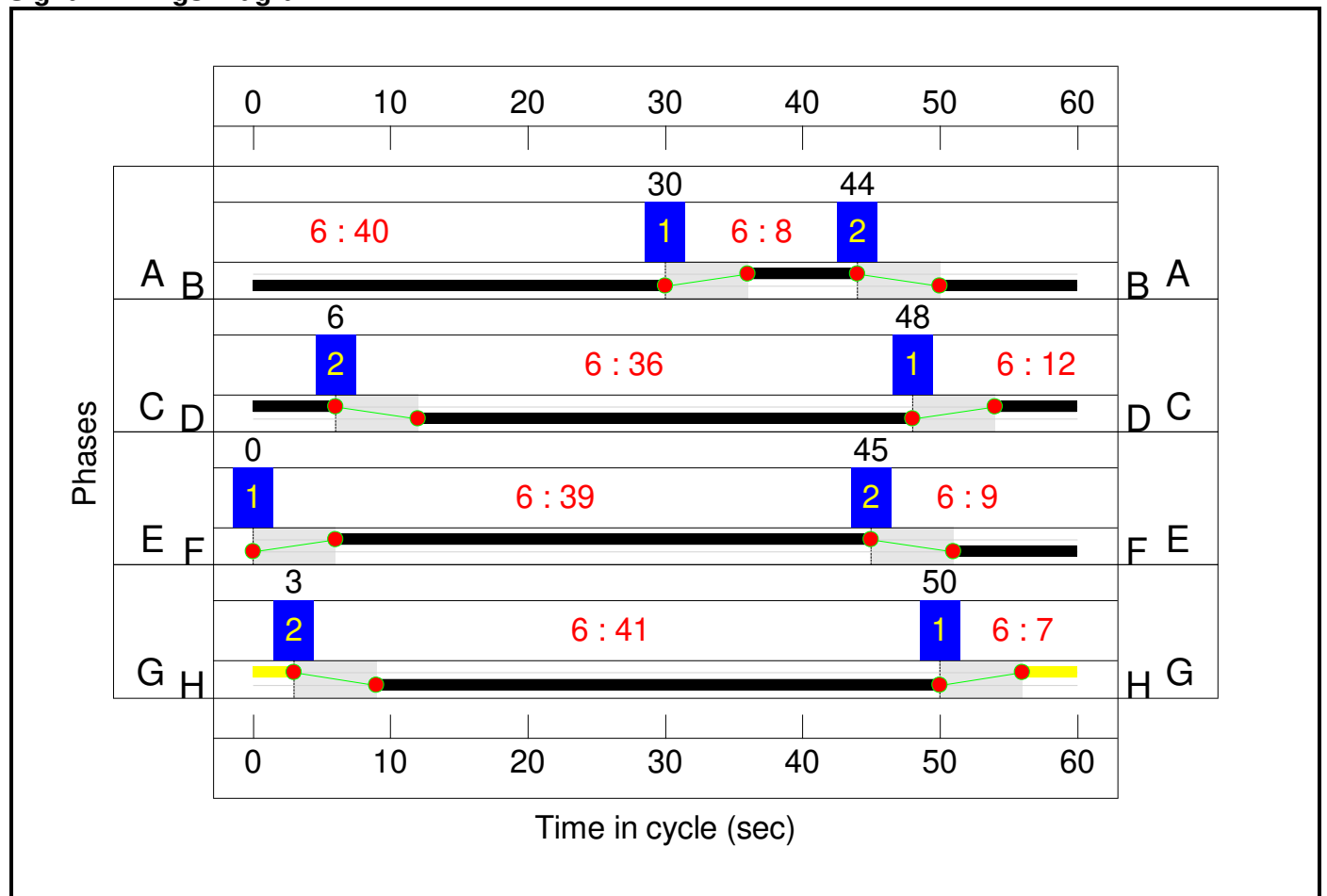
Stage Stream: 3

Stage	1	2
Duration	39	9
Change Point	0	45

Stage Stream: 4

Stage	1	2
Duration	7	41
Change Point	50	3

Signal Timings Diagram



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: M1 Junction 14 / Northfields Roundabout Model	-	-	N/A	-	-		-	-	-	-	-	-	157.7%
J1: M1 Junction 14	-	-	N/A	-	-		-	-	-	-	-	-	131.9%
1/2+1/1	A509 (S) Ahead Left	U	1:1	N/A	C1:A		1	31	-	1593	2105:1965	966+1048	65.9 : 64.7%
1/3	A509 (S) Ahead	U	1:1	N/A	C1:A		1	31	-	549	1965	1048	42.1%
2/1	Right Ahead	U	1:2	N/A	C1:D		1	25	-	903	1900	823	88.4%
2/2	Right	U	1:2	N/A	C1:D		1	25	-	557	1900	823	54.4%
3/2+3/1	M1 S/B Off-Slip Ahead Left	U	1:2	N/A	C1:C		1	23	-	1123	2105:1828	842+283	100.7 : 97.2%
3/3	M1 S/B Off-Slip Ahead	U	1:2	N/A	C1:C		1	23	-	848	2105	842	100.7%
5/1	A509 London Road Left	O	N/A	N/A	-		-	-	-	389	1871	419	92.9%
5/2+5/3	A509 London Road Ahead	O	N/A	N/A	-		-	-	-	882	2105:2105	419+419	98.1 : 112.4%
6/2	M1 N/B Off-Slip Ahead	U	1:3	N/A	C1:F		1	8	-	356	1800	270	131.9%
7/1	Ahead	U	1:3	N/A	C1:E		1	40	-	1259	1900	1298	96.5%
7/2+7/3	Right Ahead	U	1:3	N/A	C1:E		1	40	-	1319	1900:1900	1212+90	97.4 : 90.4%
8/1	Ahead	U	1:1	N/A	C1:B		1	17	-	94	1900	570	14.7%
8/2+8/3	Right Ahead	U	1:1	N/A	C1:B		1	17	-	447	1900:1854	570+10	60.5 : 58.4%
J2: Northfields Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	157.7%
1/1	A4145 Childs Way (S) Ahead Left	U	2:1	N/A	C2:A		1	8	-	461	1965	295	156.4%
1/2+1/3	A4145 Childs Way (S) Ahead	U	2:1	N/A	C2:A		1	8	-	554	2105:1965	316+36	157.7 : 157.7%
2/1	Ahead	U	2:2	N/A	C2:D		1	36	-	467	1900	1172	25.7%

2/2	Ahead	U	2:2	N/A	C2:D		1	36	-	795	1900	1172	49.2%
2/3	Right	U	2:2	N/A	C2:D		1	36	-	58	1900	1172	4.9%
3/1	A509 (W) Left	U	2:2	N/A	C2:C		1	12	-	423	1965	426	99.4%
3/2	A509 (W) Left	U	2:2	N/A	C2:C		1	12	-	457	2105	456	100.2%
3/3	A509 (W) Ahead	U	2:2	N/A	C2:C		1	12	-	230	1965	426	54.0%
4/1	A509 (N) Ahead Left	U	2:3	N/A	C2:E		1	39	-	1161	1965	1310	88.4%
4/2	A509 (N) Ahead	U	2:3	N/A	C2:E		1	39	-	1230	2105	1403	87.4%
4/3+4/4	A509 (N) Ahead	U	2:3	N/A	C2:E		1	39	-	1693	2105:1965	901+705	103.0 : 103.1%
5/1	Ahead	U	2:3	N/A	C2:F		1	9	-	147	1900	317	46.3%
5/2	Right Ahead	U	2:3	N/A	C2:F		1	9	-	133	1900	317	42.0%
5/3	Right	U	2:3	N/A	C2:F		1	9	-	8	1900	317	2.5%
6/1	Ahead	U	2:4	N/A	C2:H		1	41	-	915	1900	1330	68.6%
6/2	Ahead	U	2:4	N/A	C2:H		1	41	-	1232	1900	1330	92.3%
6/3	Right	U	2:4	N/A	C2:H		1	41	-	950	1900	1330	68.3%
6/4	Right	U	2:4	N/A	C2:H		1	41	-	749	1900	1330	53.8%
7/1	A5130 (E) Ahead Left	U	2:4	N/A	C2:G		1	7	-	294	1965	262	112.2%
7/2+7/3	A5130 (E) Ahead	U	2:4	N/A	C2:G		1	7	-	619	2105:1965	281+262	114.0 : 114.1%
8/1	Ahead	U	2:1	N/A	C2:B		1	40	-	1110	1900	1298	80.9%
8/2	Right Ahead	U	2:1	N/A	C2:B		1	40	-	1069	1900	1298	76.8%
8/3	Right	U	2:1	N/A	C2:B		1	40	-	299	1900	1298	20.2%

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: M1 Junction 14 / Northfields Roundabout Model	-	-	2049	0	0	86.9	433.1	0.0	520.0	-	-	-	-
J1: M1 Junction 14	-	-	2049	0	0	35.7	120.1	0.0	155.7	-	-	-	-
1/2+1/1	1315	1315	-	-	-	4.9	0.9	-	5.8	15.9	25.3	0.9	26.3
1/3	442	442	-	-	-	1.7	0.4	-	2.0	16.5	6.7	0.4	7.1
2/1	728	728	-	-	-	1.7	0.0	-	1.7	8.6	12.1	0.0	12.1
2/2	448	448	-	-	-	0.0	0.0	-	0.0	0.3	0.2	0.0	0.2
3/2+3/1	1123	1117	-	-	-	5.4	19.3	-	24.7	79.0	14.2	19.3	33.5
3/3	848	842	-	-	-	4.4	16.1	-	20.6	87.3	14.2	16.1	30.4
5/1	389	389	389	0	0	1.3	4.9	-	6.2	57.7	6.2	4.9	11.1
5/2+5/3	882	830	1660	0	0	5.2	33.5	-	38.7	157.8	22.6	33.5	56.1
6/2	356	270	-	-	-	5.2	45.0	-	50.2	507.9	7.7	45.0	52.7
7/1	1253	1253	-	-	-	2.5	0.0	-	2.5	7.2	20.6	0.0	20.6
7/2+7/3	1261	1261	-	-	-	2.2	0.0	-	2.2	6.4	20.0	0.0	20.0
8/1	84	84	-	-	-	0.5	0.0	-	0.5	23.0	1.4	0.0	1.4
8/2+8/3	351	351	-	-	-	0.5	0.0	-	0.5	5.6	1.3	0.0	1.3
J2: Northfields Roundabout	-	-	0	0	0	51.3	313.0	0.0	364.3	-	-	-	-
1/1	461	295	-	-	-	8.0	84.5	-	92.5	722.1	11.6	84.5	96.0
1/2+1/3	554	372	-	-	-	7.8	102.7	-	110.5	718.3	12.7	102.7	115.4
2/1	301	301	-	-	-	0.1	0.0	-	0.1	0.7	0.2	0.0	0.2
2/2	576	576	-	-	-	0.8	0.0	-	0.8	5.1	4.8	0.0	4.8
2/3	58	58	-	-	-	0.0	0.0	-	0.0	0.1	0.5	0.0	0.5
3/1	423	423	-	-	-	2.8	9.6	-	12.4	105.3	6.9	9.6	16.6
3/2	457	456	-	-	-	3.0	10.9	-	13.9	109.8	7.6	10.9	18.6
3/3	230	230	-	-	-	1.3	0.6	-	1.9	30.0	3.4	0.6	4.0
4/1	1158	1158	-	-	-	2.8	3.6	-	6.5	20.1	12.1	3.6	15.8

4/2	1226	1226	-	-	-	3.3	3.3	-	6.6	19.5	12.5	3.3	15.9
4/3+4/4	1656	1618	-	-	-	5.2	36.1	-	41.4	89.9	27.1	36.1	63.2
5/1	147	147	-	-	-	1.2	0.0	-	1.2	28.5	1.9	0.0	1.9
5/2	133	133	-	-	-	1.1	0.0	-	1.1	30.1	1.7	0.0	1.7
5/3	8	8	-	-	-	0.1	0.0	-	0.1	30.4	0.1	0.0	0.1
6/1	913	913	-	-	-	0.1	0.0	-	0.1	0.3	0.4	0.0	0.4
6/2	1228	1228	-	-	-	0.3	0.0	-	0.3	0.9	4.4	0.0	4.4
6/3	908	908	-	-	-	0.0	0.0	-	0.0	0.2	0.5	0.0	0.5
6/4	716	716	-	-	-	0.0	0.0	-	0.0	0.1	0.1	0.0	0.1
7/1	294	262	-	-	-	3.2	19.7	-	22.9	280.4	5.5	19.7	25.2
7/2+7/3	619	543	-	-	-	7.0	41.9	-	48.8	284.1	6.1	41.9	48.0
8/1	1051	1051	-	-	-	1.9	0.0	-	1.9	6.6	9.5	0.0	9.5
8/2	997	997	-	-	-	1.3	0.0	-	1.3	4.6	5.9	0.0	5.9
8/3	262	262	-	-	-	0.0	0.0	-	0.0	0.1	0.1	0.0	0.1

C1	Stream: 1 PRC for Signalled Lanes (%)	36.6	Total Delay for Signalled Lanes (pcuHr)	8.90	Cycle Time (s)	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-11.9	Total Delay for Signalled Lanes (pcuHr)	46.99	Cycle Time (s)	60
C1	Stream: 3 PRC for Signalled Lanes (%)	-46.5	Total Delay for Signalled Lanes (pcuHr)	54.96	Cycle Time (s)	60
C2	Stream: 1 PRC for Signalled Lanes (%)	-75.2	Total Delay for Signalled Lanes (pcuHr)	206.22	Cycle Time (s)	60
C2	Stream: 2 PRC for Signalled Lanes (%)	-11.3	Total Delay for Signalled Lanes (pcuHr)	29.10	Cycle Time (s)	60
C2	Stream: 3 PRC for Signalled Lanes (%)	-14.6	Total Delay for Signalled Lanes (pcuHr)	56.79	Cycle Time (s)	60
C2	Stream: 4 PRC for Signalled Lanes (%)	-26.8	Total Delay for Signalled Lanes (pcuHr)	72.18	Cycle Time (s)	60
	PRC Over All Lanes (%)	-75.2	Total Delay Over All Lanes(pcuHr)	520.04		

Scenario 4: '2031 WD AM' (FG5: '2031 WD AM', Plan 1: '2017 Observed AM')

C1

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	31	17
Change Point	12	49

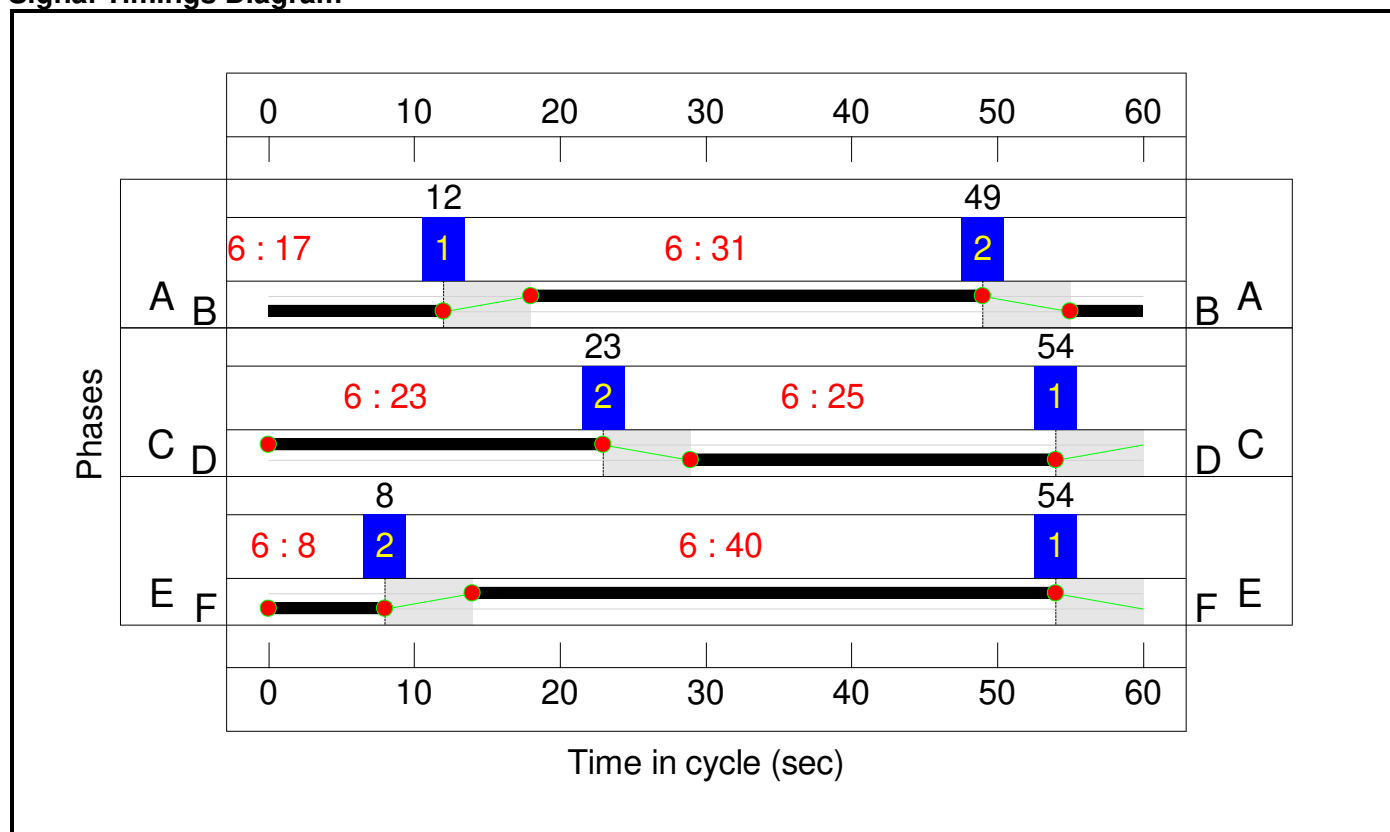
Stage Stream: 2

Stage	1	2
Duration	23	25
Change Point	54	23

Stage Stream: 3

Stage	1	2
Duration	8	40
Change Point	54	8

Signal Timings Diagram



C2

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	8	40
Change Point	30	44

Stage Stream: 2

Stage	1	2
Duration	12	36
Change Point	48	6

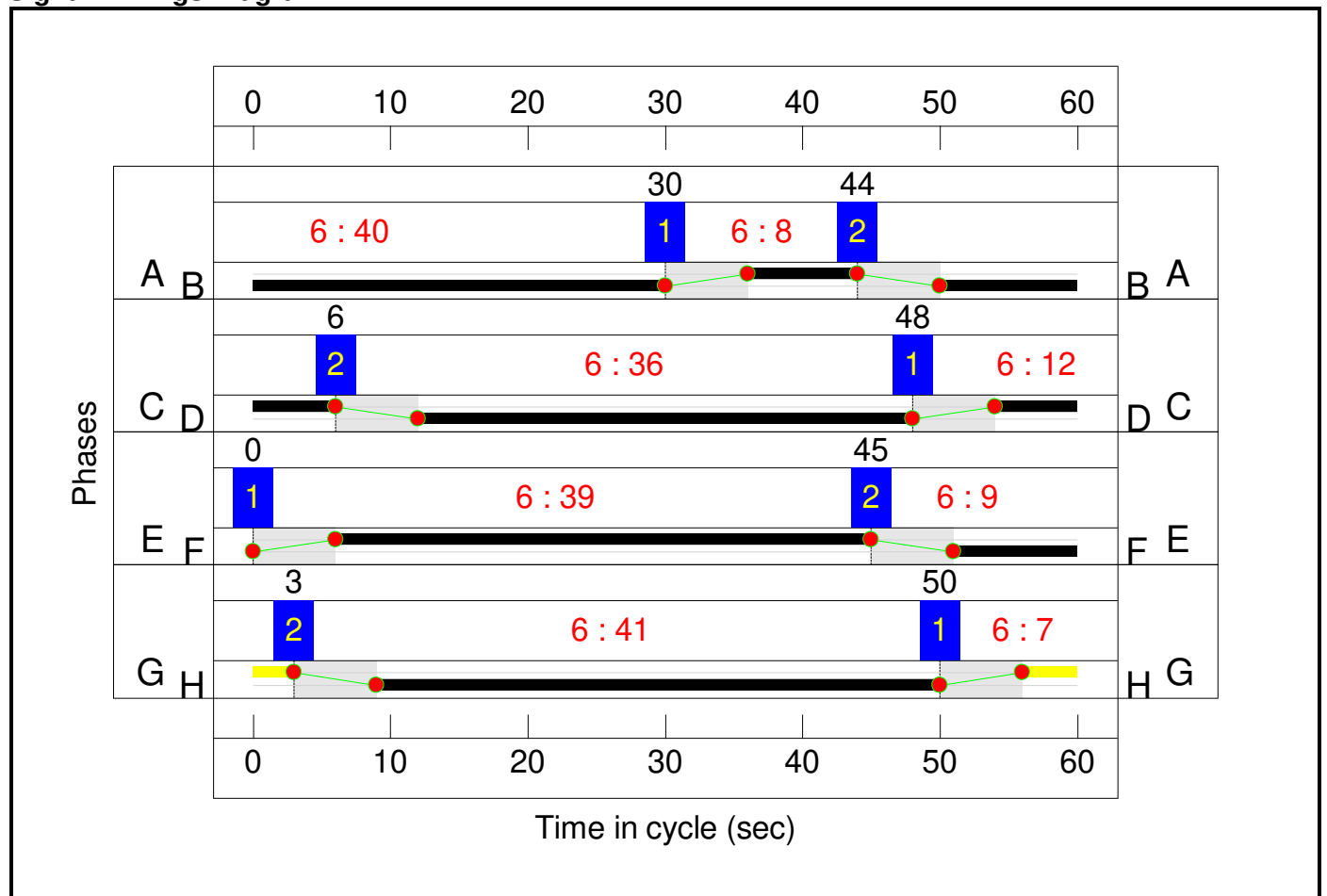
Stage Stream: 3

Stage	1	2
Duration	39	9
Change Point	0	45

Stage Stream: 4

Stage	1	2
Duration	7	41
Change Point	50	3

Signal Timings Diagram



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: M1 Junction 14 / Northfields Roundabout Model	-	-	N/A	-	-		-	-	-	-	-	-	158.7%
J1: M1 Junction 14	-	-	N/A	-	-		-	-	-	-	-	-	131.9%
1/2+1/1	A509 (S) Ahead Left	U	1:1	N/A	C1:A		1	31	-	1624	2105:1965	923+1048	69.1 : 66.9%
1/3	A509 (S) Ahead	U	1:1	N/A	C1:A		1	31	-	534	1965	1048	40.2%
2/1	Right Ahead	U	1:2	N/A	C1:D		1	25	-	918	1900	823	90.4%
2/2	Right	U	1:2	N/A	C1:D		1	25	-	542	1900	823	51.9%
3/2+3/1	M1 S/B Off-Slip Ahead Left	U	1:2	N/A	C1:C		1	23	-	1150	2105:1828	842+332	100.2 : 92.2%
3/3	M1 S/B Off-Slip Ahead	U	1:2	N/A	C1:C		1	23	-	821	2105	842	97.5%
5/1	A509 London Road Left	O	N/A	N/A	-		-	-	-	404	1871	421	96.1%
5/2+5/3	A509 London Road Ahead	O	N/A	N/A	-		-	-	-	870	2105:2105	420+420	95.0 : 112.1%
6/2	M1 N/B Off-Slip Ahead	U	1:3	N/A	C1:F		1	8	-	356	1800	270	131.9%
7/1	Ahead	U	1:3	N/A	C1:E		1	40	-	1243	1900	1298	95.6%
7/2+7/3	Right Ahead	U	1:3	N/A	C1:E		1	40	-	1292	1900:1900	1209+93	95.8 : 88.9%
8/1	Ahead	U	1:1	N/A	C1:B		1	17	-	93	1900	570	14.6%
8/2+8/3	Right Ahead	U	1:1	N/A	C1:B		1	17	-	448	1900:1854	570+10	60.8 : 58.5%
J2: Northfields Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	158.7%
1/1	A4145 Childs Way (S) Ahead Left	U	2:1	N/A	C2:A		1	8	-	465	1965	295	157.8%
1/2+1/3	A4145 Childs Way (S) Ahead	U	2:1	N/A	C2:A		1	8	-	556	2105:1965	316+35	158.7 : 158.7%
2/1	Ahead	U	2:2	N/A	C2:D		1	36	-	473	1900	1172	25.9%

2/2	Ahead	U	2:2	N/A	C2:D		1	36	-	798	1900	1172	49.2%
2/3	Right	U	2:2	N/A	C2:D		1	36	-	57	1900	1172	4.8%
3/1	A509 (W) Left	U	2:2	N/A	C2:C		1	12	-	428	1965	426	100.5%
3/2	A509 (W) Left	U	2:2	N/A	C2:C		1	12	-	459	2105	456	100.6%
3/3	A509 (W) Ahead	U	2:2	N/A	C2:C		1	12	-	227	1965	426	53.3%
4/1	A509 (N) Ahead Left	U	2:3	N/A	C2:E		1	39	-	1126	1965	1310	85.9%
4/2	A509 (N) Ahead	U	2:3	N/A	C2:E		1	39	-	1193	2105	1403	84.9%
4/3+4/4	A509 (N) Ahead	U	2:3	N/A	C2:E		1	39	-	1691	2105:1965	903+703	103.3 : 103.4%
5/1	Ahead	U	2:3	N/A	C2:F		1	9	-	142	1900	317	44.8%
5/2	Right Ahead	U	2:3	N/A	C2:F		1	9	-	130	1900	317	41.1%
5/3	Right	U	2:3	N/A	C2:F		1	9	-	12	1900	317	3.8%
6/1	Ahead	U	2:4	N/A	C2:H		1	41	-	895	1900	1330	67.2%
6/2	Ahead	U	2:4	N/A	C2:H		1	41	-	1200	1900	1330	90.1%
6/3	Right	U	2:4	N/A	C2:H		1	41	-	951	1900	1330	68.4%
6/4	Right	U	2:4	N/A	C2:H		1	41	-	745	1900	1330	53.6%
7/1	A5130 (E) Ahead Left	U	2:4	N/A	C2:G		1	7	-	295	1965	262	112.6%
7/2+7/3	A5130 (E) Ahead	U	2:4	N/A	C2:G		1	7	-	619	2105:1965	281+262	114.0 : 114.1%
8/1	Ahead	U	2:1	N/A	C2:B		1	40	-	1111	1900	1298	81.0%
8/2	Right Ahead	U	2:1	N/A	C2:B		1	40	-	1065	1900	1298	76.5%
8/3	Right	U	2:1	N/A	C2:B		1	40	-	299	1900	1298	20.2%

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: M1 Junction 14 / Northfields Roundabout Model	-	-	2042	0	0	86.7	429.9	0.0	516.6	-	-	-	-
J1: M1 Junction 14	-	-	2042	0	0	35.1	110.6	0.0	145.7	-	-	-	-
1/2+1/1	1339	1339	-	-	-	5.0	1.1	-	6.0	16.2	25.3	1.1	26.3
1/3	421	421	-	-	-	1.6	0.3	-	1.9	16.4	6.2	0.3	6.6
2/1	744	744	-	-	-	1.8	0.0	-	1.8	8.5	12.4	0.0	12.4
2/2	428	428	-	-	-	0.0	0.0	-	0.0	0.3	0.2	0.0	0.2
3/2+3/1	1150	1148	-	-	-	5.4	13.0	-	18.4	57.5	14.1	13.0	27.1
3/3	821	821	-	-	-	4.0	10.0	-	14.0	61.6	13.5	10.0	23.5
5/1	404	404	404	0	0	1.4	6.7	-	8.2	72.7	6.5	6.7	13.2
5/2+5/3	870	819	1638	0	0	5.0	34.5	-	39.5	163.4	22.6	34.5	57.1
6/2	356	270	-	-	-	5.2	45.0	-	50.2	507.9	7.7	45.0	52.7
7/1	1241	1241	-	-	-	2.4	0.0	-	2.4	6.9	20.4	0.0	20.4
7/2+7/3	1241	1241	-	-	-	2.2	0.0	-	2.2	6.3	19.6	0.0	19.6
8/1	83	83	-	-	-	0.5	0.0	-	0.5	23.2	1.3	0.0	1.3
8/2+8/3	352	352	-	-	-	0.6	0.0	-	0.6	5.7	1.3	0.0	1.3
J2: Northfields Roundabout	-	-	0	0	0	51.6	319.3	0.0	370.9	-	-	-	-
1/1	465	295	-	-	-	8.1	86.5	-	94.6	732.5	11.7	86.5	98.2
1/2+1/3	556	371	-	-	-	7.9	104.1	-	112.1	725.6	12.8	104.1	116.9
2/1	303	303	-	-	-	0.1	0.0	-	0.1	0.7	0.3	0.0	0.3
2/2	576	576	-	-	-	0.8	0.0	-	0.8	5.1	4.8	0.0	4.8
2/3	57	57	-	-	-	0.0	0.0	-	0.0	0.1	0.5	0.0	0.5
3/1	428	426	-	-	-	2.9	10.9	-	13.8	116.0	7.2	10.9	18.1
3/2	459	456	-	-	-	3.1	11.5	-	14.6	114.2	7.7	11.5	19.2
3/3	227	227	-	-	-	1.3	0.6	-	1.9	29.8	3.3	0.6	3.9
4/1	1125	1125	-	-	-	2.7	2.9	-	5.7	18.2	11.5	2.9	14.5

4/2	1192	1192	-	-	-	3.1	2.7	-	5.8	17.5	11.8	2.7	14.5
4/3+4/4	1660	1617	-	-	-	5.5	38.0	-	43.5	94.4	27.5	38.0	65.5
5/1	142	142	-	-	-	1.1	0.0	-	1.1	28.3	1.8	0.0	1.8
5/2	130	130	-	-	-	1.1	0.0	-	1.1	30.0	1.6	0.0	1.6
5/3	12	12	-	-	-	0.1	0.0	-	0.1	29.0	0.2	0.0	0.2
6/1	894	894	-	-	-	0.1	0.0	-	0.1	0.2	0.3	0.0	0.3
6/2	1199	1199	-	-	-	0.3	0.0	-	0.3	0.8	3.3	0.0	3.3
6/3	910	910	-	-	-	0.0	0.0	-	0.0	0.2	0.5	0.0	0.5
6/4	712	712	-	-	-	0.0	0.0	-	0.0	0.1	0.1	0.0	0.1
7/1	295	262	-	-	-	3.2	20.2	-	23.4	285.3	5.5	20.2	25.7
7/2+7/3	619	543	-	-	-	7.0	41.9	-	48.8	284.1	6.1	41.9	48.0
8/1	1052	1052	-	-	-	2.0	0.0	-	2.0	6.7	9.5	0.0	9.5
8/2	993	993	-	-	-	1.3	0.0	-	1.3	4.5	5.9	0.0	5.9
8/3	262	262	-	-	-	0.0	0.0	-	0.0	0.1	0.1	0.0	0.1

C1	Stream: 1 PRC for Signalled Lanes (%):	30.2	Total Delay for Signalled Lanes (pcuHr):	9.04	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-11.4	Total Delay for Signalled Lanes (pcuHr):	34.23	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	-46.5	Total Delay for Signalled Lanes (pcuHr):	54.80	Cycle Time (s):	60
C2	Stream: 1 PRC for Signalled Lanes (%):	-76.3	Total Delay for Signalled Lanes (pcuHr):	209.88	Cycle Time (s):	60
C2	Stream: 2 PRC for Signalled Lanes (%):	-11.8	Total Delay for Signalled Lanes (pcuHr):	31.10	Cycle Time (s):	60
C2	Stream: 3 PRC for Signalled Lanes (%):	-14.9	Total Delay for Signalled Lanes (pcuHr):	57.29	Cycle Time (s):	60
C2	Stream: 4 PRC for Signalled Lanes (%):	-26.8	Total Delay for Signalled Lanes (pcuHr):	72.61	Cycle Time (s):	60
	PRC Over All Lanes (%):	-76.3	Total Delay Over All Lanes(pcuHr):	516.61		

Scenario 5: '2020 Bkgd PM' (FG7: '2020 Bkgd PM', Plan 1: '2017 Observed AM')

C1

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	19
Change Point	24	59

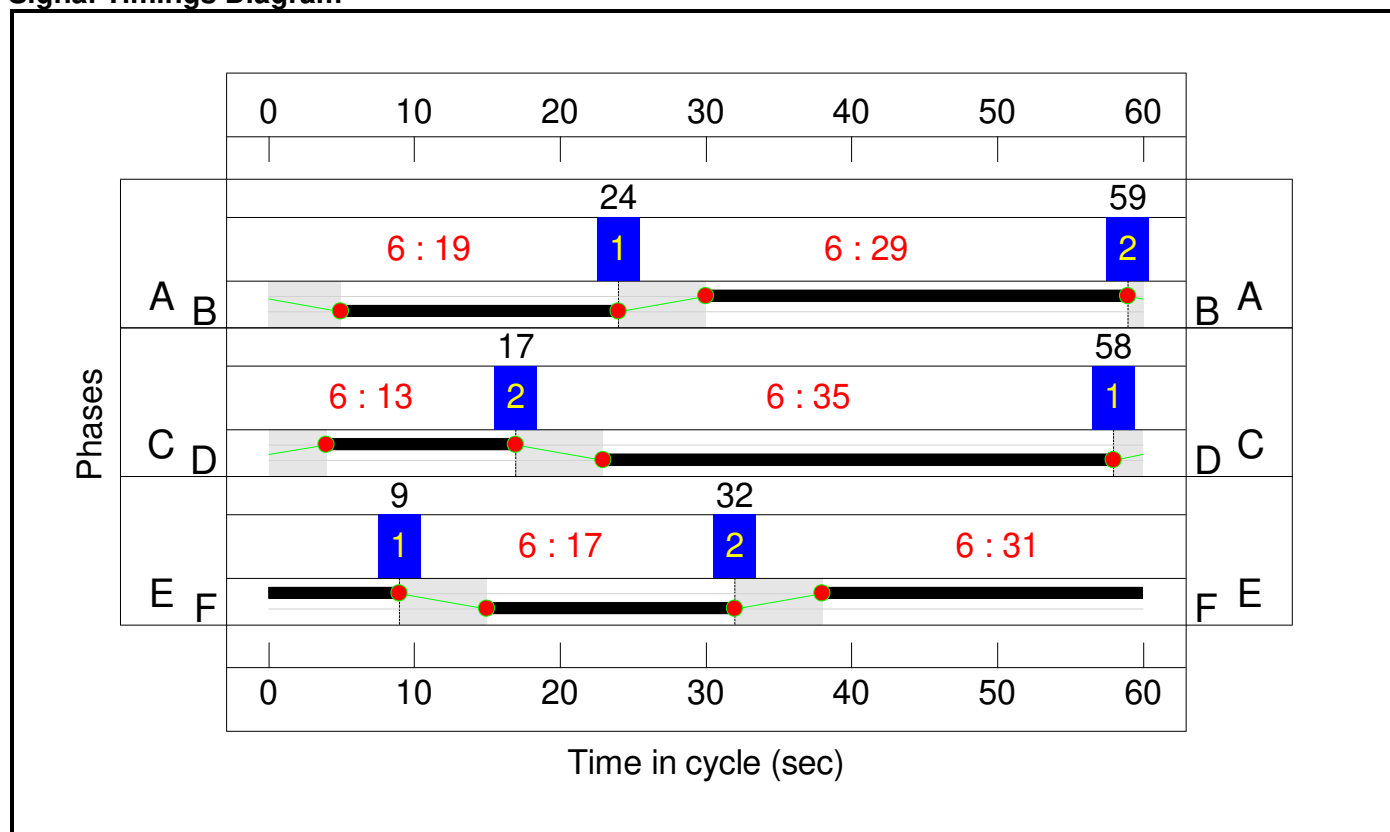
Stage Stream: 2

Stage	1	2
Duration	13	35
Change Point	58	17

Stage Stream: 3

Stage	1	2
Duration	17	31
Change Point	9	32

Signal Timings Diagram



C2

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	17	31
Change Point	5	28

Stage Stream: 2

Stage	1	2
Duration	17	31
Change Point	34	57

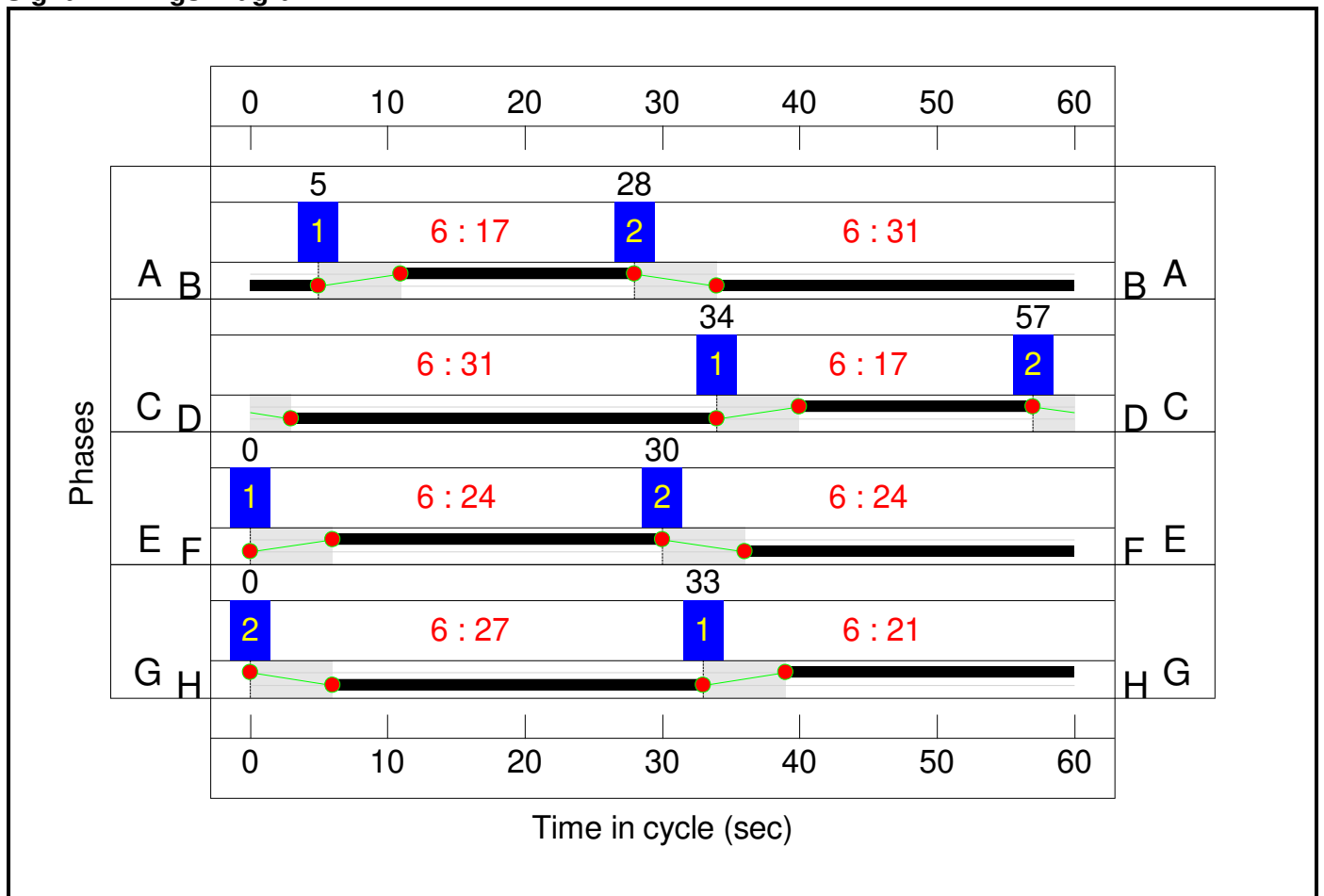
Stage Stream: 3

Stage	1	2
Duration	24	24
Change Point	0	30

Stage Stream: 4

Stage	1	2
Duration	21	27
Change Point	33	0

Signal Timings Diagram



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: M1 Junction 14 / Northfields Roundabout Model	-	-	N/A	-	-		-	-	-	-	-	-	110.2%
J1: M1 Junction 14	-	-	N/A	-	-		-	-	-	-	-	-	102.7%
1/2+1/1	A509 (S) Ahead Left	U	1:1	N/A	C1:A		1	29	-	2007	2105:1965	1052+982	94.7 : 94.6%
1/3	A509 (S) Ahead	U	1:1	N/A	C1:A		1	29	-	919	1965	982	89.3%
2/1	Right Ahead	U	1:2	N/A	C1:D		1	35	-	1112	1900	1140	95.2%
2/2	Right	U	1:2	N/A	C1:D		1	35	-	919	1900	1140	76.9%
3/2+3/1	M1 S/B Off-Slip Ahead Left	U	1:2	N/A	C1:C		1	13	-	732	2105:1828	491+427	96.9 : 60.0%
3/3	M1 S/B Off-Slip Ahead	U	1:2	N/A	C1:C		1	13	-	326	2105	491	66.4%
5/1	A509 London Road Left	O	N/A	N/A	-		-	-	-	357	1871	469	76.1%
5/2+5/3	A509 London Road Ahead	O	N/A	N/A	-		-	-	-	706	2105:2105	222+465	102.7 : 102.7%
6/2	M1 N/B Off-Slip Ahead	U	1:3	N/A	C1:F		1	17	-	405	1800	540	75.0%
7/1	Ahead	U	1:3	N/A	C1:E		1	31	-	704	1900	1013	69.5%
7/2+7/3	Right Ahead	U	1:3	N/A	C1:E		1	31	-	804	1900:1900	860+181	76.2 : 75.2%
8/1	Ahead	U	1:1	N/A	C1:B		1	19	-	127	1900	633	19.5%
8/2+8/3	Right Ahead	U	1:1	N/A	C1:B		1	19	-	545	1900:1965	633+0	85.5 : 0.0%
J2: Northfields Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	110.2%
1/1	A4145 Childs Way (S) Ahead Left	U	2:1	N/A	C2:A		1	17	-	559	1965	590	94.8%
1/2+1/3	A4145 Childs Way (S) Ahead	U	2:1	N/A	C2:A		1	17	-	660	2105:1965	632+61	95.3 : 95.3%
2/1	Ahead	U	2:2	N/A	C2:D		1	31	-	663	1900	1013	65.4%

2/2	Ahead	U	2:2	N/A	C2:D		1	31	-	918	1900	1013	90.6%
2/3	Right	U	2:2	N/A	C2:D		1	31	-	59	1900	1013	5.8%
3/1	A509 (W) Left	U	2:2	N/A	C2:C		1	17	-	649	1965	590	110.1%
3/2	A509 (W) Left	U	2:2	N/A	C2:C		1	17	-	696	2105	632	110.2%
3/3	A509 (W) Ahead	U	2:2	N/A	C2:C		1	17	-	256	1965	590	43.4%
4/1	A509 (N) Ahead Left	U	2:3	N/A	C2:E		1	24	-	616	1965	819	75.2%
4/2	A509 (N) Ahead	U	2:3	N/A	C2:E		1	24	-	655	2105	877	74.5%
4/3+4/4	A509 (N) Ahead	U	2:3	N/A	C2:E		1	24	-	648	2105:1965	585+568	55.8 : 55.9%
5/1	Ahead	U	2:3	N/A	C2:F		1	24	-	31	1900	792	3.9%
5/2	Right Ahead	U	2:3	N/A	C2:F		1	24	-	277	1900	792	35.0%
5/3	Right	U	2:3	N/A	C2:F		1	24	-	7	1900	792	0.9%
6/1	Ahead	U	2:4	N/A	C2:H		1	27	-	428	1900	887	48.3%
6/2	Ahead	U	2:4	N/A	C2:H		1	27	-	658	1900	887	74.0%
6/3	Right	U	2:4	N/A	C2:H		1	27	-	329	1900	887	36.9%
6/4	Right	U	2:4	N/A	C2:H		1	27	-	323	1900	887	36.2%
7/1	A5130 (E) Ahead Left	U	2:4	N/A	C2:G		1	21	-	243	1965	721	33.7%
7/2+7/3	A5130 (E) Ahead	U	2:4	N/A	C2:G		1	21	-	531	2105:1965	406+601	52.8 : 52.8%
8/1	Ahead	U	2:1	N/A	C2:B		1	31	-	462	1900	1013	45.4%
8/2	Right Ahead	U	2:1	N/A	C2:B		1	31	-	537	1900	1013	52.8%
8/3	Right	U	2:1	N/A	C2:B		1	31	-	317	1900	1013	31.3%

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: M1 Junction 14 / Northfields Roundabout Model	-	-	1744	0	0	73.2	125.9	0.0	199.1	-	-	-	-
J1: M1 Junction 14	-	-	1744	0	0	37.6	36.2	0.0	73.9	-	-	-	-
1/2+1/1	1925	1925	-	-	-	9.2	7.7	-	17.0	31.7	32.6	7.7	40.3
1/3	877	877	-	-	-	3.5	3.9	-	7.3	30.2	12.0	3.9	15.9
2/1	1085	1085	-	-	-	2.9	0.0	-	2.9	9.7	13.9	0.0	13.9
2/2	877	877	-	-	-	2.3	0.0	-	2.3	9.4	5.6	0.0	5.6
3/2+3/1	732	732	-	-	-	4.5	1.9	-	6.4	31.5	7.8	1.9	9.7
3/3	326	326	-	-	-	1.9	1.0	-	2.9	31.6	4.9	1.0	5.9
5/1	357	357	357	0	0	0.2	1.6	-	1.8	18.1	3.1	1.6	4.6
5/2+5/3	706	693	1387	0	0	1.3	18.7	-	20.0	102.0	22.4	18.7	41.1
6/2	405	405	-	-	-	2.1	1.5	-	3.6	32.0	6.1	1.5	7.5
7/1	704	704	-	-	-	3.4	0.0	-	3.4	17.1	11.0	0.0	11.0
7/2+7/3	791	791	-	-	-	3.2	0.0	-	3.2	14.6	11.7	0.0	11.7
8/1	124	124	-	-	-	0.4	0.0	-	0.4	10.2	1.9	0.0	1.9
8/2+8/3	541	541	-	-	-	2.8	0.0	-	2.8	18.4	5.5	0.0	5.5
J2: Northfields Roundabout	-	-	0	0	0	35.5	89.7	0.0	125.2	-	-	-	-
1/1	559	559	-	-	-	3.2	6.4	-	9.6	62.0	9.0	6.4	15.4
1/2+1/3	660	660	-	-	-	3.7	7.1	-	10.8	58.8	9.7	7.1	16.8
2/1	663	663	-	-	-	0.4	0.0	-	0.4	2.0	1.6	0.0	1.6
2/2	918	918	-	-	-	1.3	0.0	-	1.3	5.3	5.3	0.0	5.3
2/3	59	59	-	-	-	0.0	0.0	-	0.0	0.2	0.5	0.0	0.5
3/1	649	589	-	-	-	5.9	34.5	-	40.4	224.0	12.8	34.5	47.3
3/2	696	631	-	-	-	6.4	37.0	-	43.3	224.2	13.7	37.0	50.7
3/3	256	256	-	-	-	1.2	0.4	-	1.6	22.3	3.4	0.4	3.8
4/1	616	616	-	-	-	2.2	1.5	-	3.7	21.9	9.7	1.5	11.2

4/2	653	653	-	-	-	2.4	1.4	-	3.8	21.0	10.3	1.4	11.7
4/3+4/4	644	644	-	-	-	1.8	0.6	-	2.4	13.5	4.7	0.6	5.4
5/1	31	31	-	-	-	0.1	0.0	-	0.1	7.8	0.3	0.0	0.3
5/2	277	277	-	-	-	0.2	0.0	-	0.2	3.1	0.8	0.0	0.8
5/3	7	7	-	-	-	0.0	0.0	-	0.0	2.9	0.0	0.0	0.0
6/1	428	428	-	-	-	0.1	0.0	-	0.1	0.6	0.2	0.0	0.2
6/2	656	656	-	-	-	0.2	0.0	-	0.2	1.2	1.0	0.0	1.0
6/3	327	327	-	-	-	0.1	0.0	-	0.1	0.6	0.5	0.0	0.5
6/4	321	321	-	-	-	0.0	0.0	-	0.0	0.5	0.1	0.0	0.1
7/1	243	243	-	-	-	0.9	0.3	-	1.2	17.5	2.9	0.3	3.2
7/2+7/3	531	531	-	-	-	2.1	0.6	-	2.6	17.8	4.0	0.6	4.5
8/1	460	460	-	-	-	1.7	0.0	-	1.7	13.1	5.4	0.0	5.4
8/2	535	535	-	-	-	1.7	0.0	-	1.7	11.2	5.4	0.0	5.4
8/3	317	317	-	-	-	0.0	0.0	-	0.0	0.1	0.1	0.0	0.1

C1	Stream: 1 PRC for Signalled Lanes (%):	-5.2	Total Delay for Signalled Lanes (pcuHr):	27.43	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-7.7	Total Delay for Signalled Lanes (pcuHr):	14.47	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	18.2	Total Delay for Signalled Lanes (pcuHr):	10.17	Cycle Time (s):	60
C2	Stream: 1 PRC for Signalled Lanes (%):	-5.9	Total Delay for Signalled Lanes (pcuHr):	23.76	Cycle Time (s):	60
C2	Stream: 2 PRC for Signalled Lanes (%):	-22.5	Total Delay for Signalled Lanes (pcuHr):	87.02	Cycle Time (s):	60
C2	Stream: 3 PRC for Signalled Lanes (%):	19.6	Total Delay for Signalled Lanes (pcuHr):	10.27	Cycle Time (s):	60
C2	Stream: 4 PRC for Signalled Lanes (%):	21.6	Total Delay for Signalled Lanes (pcuHr):	4.19	Cycle Time (s):	60
	PRC Over All Lanes (%):	-22.5	Total Delay Over All Lanes(pcuHr):	199.11		

Scenario 6: '2020 WD PM' (FG8: '2020 WD PM', Plan 1: '2017 Observed AM')

C1

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	19
Change Point	24	59

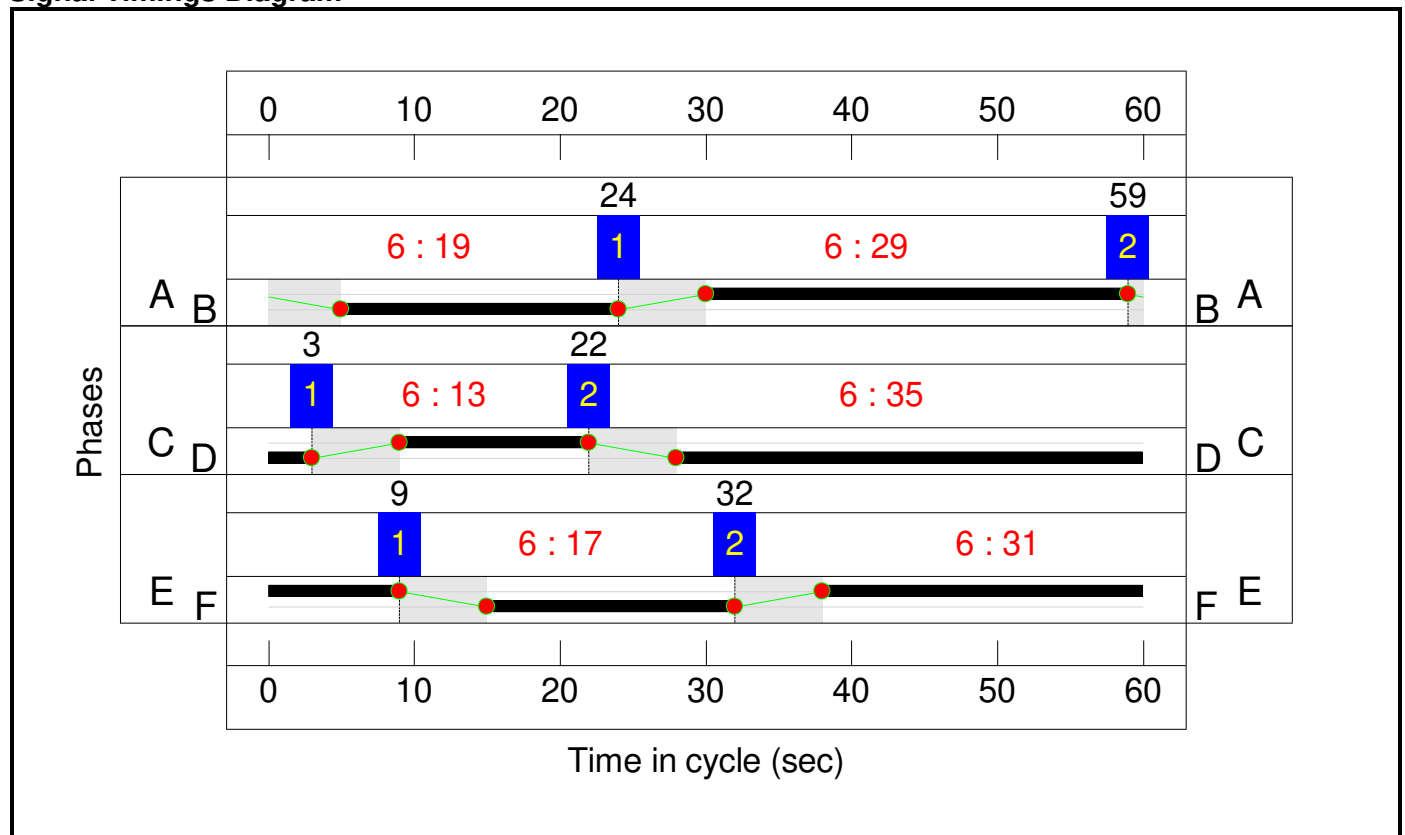
Stage Stream: 2

Stage	1	2
Duration	13	35
Change Point	3	22

Stage Stream: 3

Stage	1	2
Duration	17	31
Change Point	9	32

Signal Timings Diagram



C2

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	17	31
Change Point	5	28

Stage Stream: 2

Stage	1	2
Duration	17	31
Change Point	34	57

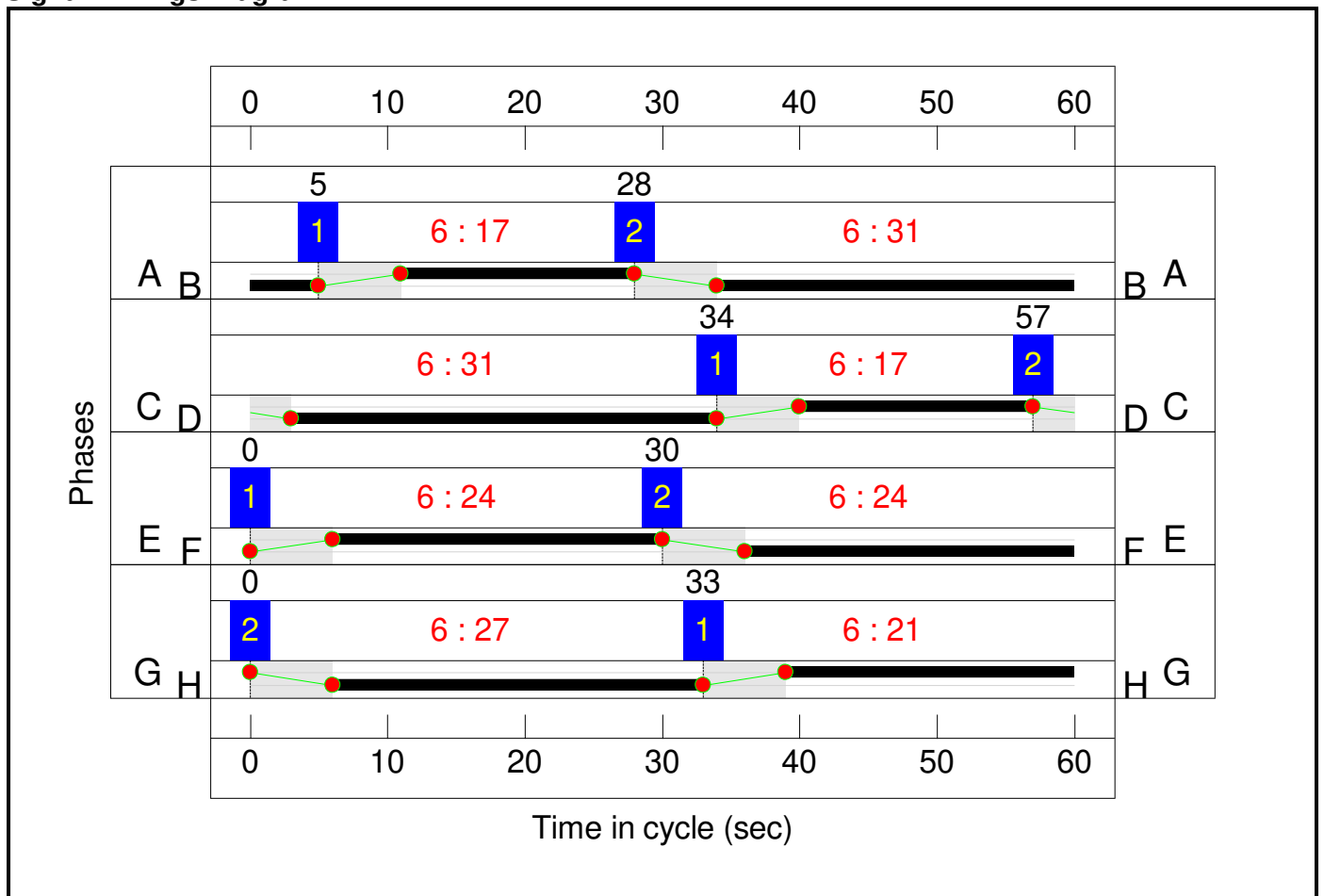
Stage Stream: 3

Stage	1	2
Duration	24	24
Change Point	0	30

Stage Stream: 4

Stage	1	2
Duration	21	27
Change Point	33	0

Signal Timings Diagram



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: M1 Junction 14 / Northfields Roundabout Model	-	-	N/A	-	-		-	-	-	-	-	-	112.6%
J1: M1 Junction 14	-	-	N/A	-	-		-	-	-	-	-	-	96.2%
1/2+1/1	A509 (S) Ahead Left	U	1:1	N/A	C1:A		1	29	-	2023	2105:1965	1050+982	94.4 : 94.6%
1/3	A509 (S) Ahead	U	1:1	N/A	C1:A		1	29	-	932	1965	982	89.7%
2/1	Right Ahead	U	1:2	N/A	C1:D		1	35	-	1091	1900	1140	93.0%
2/2	Right	U	1:2	N/A	C1:D		1	35	-	940	1900	1140	78.0%
3/2+3/1	M1 S/B Off-Slip Ahead Left	U	1:2	N/A	C1:C		1	13	-	743	2105:1828	491+427	95.3 : 64.5%
3/3	M1 S/B Off-Slip Ahead	U	1:2	N/A	C1:C		1	13	-	334	2105	491	68.0%
5/1	A509 London Road Left	O	N/A	N/A	-		-	-	-	386	1871	474	81.4%
5/2+5/3	A509 London Road Ahead	O	N/A	N/A	-		-	-	-	706	2105:2105	263+471	96.2 : 96.2%
6/2	M1 N/B Off-Slip Ahead	U	1:3	N/A	C1:F		1	17	-	405	1800	540	75.0%
7/1	Ahead	U	1:3	N/A	C1:E		1	31	-	721	1900	1013	71.2%
7/2+7/3	Right Ahead	U	1:3	N/A	C1:E		1	31	-	787	1900:1900	846+199	75.3 : 75.3%
8/1	Ahead	U	1:1	N/A	C1:B		1	19	-	117	1900	633	18.5%
8/2+8/3	Right Ahead	U	1:1	N/A	C1:B		1	19	-	555	1900:1854	633+9	86.4 : 86.4%
J2: Northfields Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	112.6%
1/1	A4145 Childs Way (S) Ahead Left	U	2:1	N/A	C2:A		1	17	-	560	1965	590	95.0%
1/2+1/3	A4145 Childs Way (S) Ahead	U	2:1	N/A	C2:A		1	17	-	659	2105:1965	632+61	95.2 : 95.2%
2/1	Ahead	U	2:2	N/A	C2:D		1	31	-	661	1900	1013	65.2%

2/2	Ahead	U	2:2	N/A	C2:D		1	31	-	920	1900	1013	90.8%
2/3	Right	U	2:2	N/A	C2:D		1	31	-	59	1900	1013	5.8%
3/1	A509 (W) Left	U	2:2	N/A	C2:C		1	17	-	663	1965	590	112.5%
3/2	A509 (W) Left	U	2:2	N/A	C2:C		1	17	-	711	2105	632	112.6%
3/3	A509 (W) Ahead	U	2:2	N/A	C2:C		1	17	-	256	1965	590	43.4%
4/1	A509 (N) Ahead Left	U	2:3	N/A	C2:E		1	24	-	617	1965	819	75.4%
4/2	A509 (N) Ahead	U	2:3	N/A	C2:E		1	24	-	654	2105	877	74.6%
4/3+4/4	A509 (N) Ahead	U	2:3	N/A	C2:E		1	24	-	667	2105:1965	582+577	57.6 : 57.6%
5/1	Ahead	U	2:3	N/A	C2:F		1	24	-	29	1900	792	3.7%
5/2	Right Ahead	U	2:3	N/A	C2:F		1	24	-	279	1900	792	35.2%
5/3	Right	U	2:3	N/A	C2:F		1	24	-	7	1900	792	0.9%
6/1	Ahead	U	2:4	N/A	C2:H		1	27	-	429	1900	887	48.4%
6/2	Ahead	U	2:4	N/A	C2:H		1	27	-	657	1900	887	74.1%
6/3	Right	U	2:4	N/A	C2:H		1	27	-	335	1900	887	37.8%
6/4	Right	U	2:4	N/A	C2:H		1	27	-	336	1900	887	37.9%
7/1	A5130 (E) Ahead Left	U	2:4	N/A	C2:G		1	21	-	276	1965	721	38.3%
7/2+7/3	A5130 (E) Ahead	U	2:4	N/A	C2:G		1	21	-	498	2105:1965	342+614	52.1 : 52.1%
8/1	Ahead	U	2:1	N/A	C2:B		1	31	-	501	1900	1013	49.4%
8/2	Right Ahead	U	2:1	N/A	C2:B		1	31	-	514	1900	1013	50.7%
8/3	Right	U	2:1	N/A	C2:B		1	31	-	320	1900	1013	31.6%

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: M1 Junction 14 / Northfields Roundabout Model	-	-	1798	0	0	71.5	129.3	0.0	200.8	-	-	-	-
J1: M1 Junction 14	-	-	1798	0	0	34.5	26.3	0.0	60.9	-	-	-	-
1/2+1/1	1921	1921	-	-	-	9.3	7.6	-	16.8	31.6	32.7	7.6	40.3
1/3	881	881	-	-	-	3.5	4.0	-	7.5	30.6	12.2	4.0	16.2
2/1	1060	1060	-	-	-	2.2	0.0	-	2.2	7.6	11.9	0.0	11.9
2/2	889	889	-	-	-	1.3	0.0	-	1.3	5.2	3.2	0.0	3.2
3/2+3/1	743	743	-	-	-	4.5	2.1	-	6.6	32.0	7.7	2.1	9.7
3/3	334	334	-	-	-	1.9	1.0	-	3.0	32.3	5.0	1.0	6.1
5/1	386	386	386	0	0	0.3	2.1	-	2.4	22.2	2.8	2.1	4.9
5/2+5/3	706	706	1412	0	0	0.7	8.1	-	8.7	44.6	7.3	8.1	15.4
6/2	405	405	-	-	-	2.1	1.5	-	3.6	32.0	6.1	1.5	7.5
7/1	721	721	-	-	-	2.8	0.0	-	2.8	13.8	11.2	0.0	11.2
7/2+7/3	787	787	-	-	-	2.7	0.0	-	2.7	12.2	11.3	0.0	11.3
8/1	117	117	-	-	-	0.4	0.0	-	0.4	11.0	1.8	0.0	1.8
8/2+8/3	555	555	-	-	-	2.9	0.0	-	2.9	18.6	5.7	0.0	5.7
J2: Northfields Roundabout	-	-	0	0	0	37.0	103.0	0.0	140.0	-	-	-	-
1/1	560	560	-	-	-	3.2	6.6	-	9.8	62.8	9.0	6.6	15.6
1/2+1/3	659	659	-	-	-	3.7	7.0	-	10.6	58.1	9.7	7.0	16.6
2/1	661	661	-	-	-	0.4	0.0	-	0.4	1.9	1.6	0.0	1.6
2/2	920	920	-	-	-	1.4	0.0	-	1.4	5.3	5.3	0.0	5.3
2/3	59	59	-	-	-	0.0	0.0	-	0.0	0.2	0.5	0.0	0.5
3/1	663	589	-	-	-	6.5	40.8	-	47.3	257.0	13.5	40.8	54.3
3/2	711	631	-	-	-	7.0	43.8	-	50.8	257.3	14.5	43.8	58.3
3/3	256	256	-	-	-	1.2	0.4	-	1.6	22.3	3.4	0.4	3.8
4/1	617	617	-	-	-	2.2	1.5	-	3.7	21.8	9.7	1.5	11.2

4/2	654	654	-	-	-	2.4	1.4	-	3.8	21.0	10.3	1.4	11.8
4/3+4/4	667	667	-	-	-	1.9	0.7	-	2.5	13.7	4.8	0.7	5.5
5/1	29	29	-	-	-	0.1	0.0	-	0.1	7.4	0.2	0.0	0.2
5/2	279	279	-	-	-	0.2	0.0	-	0.2	3.1	0.8	0.0	0.8
5/3	7	7	-	-	-	0.0	0.0	-	0.0	2.9	0.0	0.0	0.0
6/1	429	429	-	-	-	0.1	0.0	-	0.1	0.6	0.2	0.0	0.2
6/2	657	657	-	-	-	0.2	0.0	-	0.2	1.2	1.0	0.0	1.0
6/3	335	335	-	-	-	0.1	0.0	-	0.1	0.6	0.5	0.0	0.5
6/4	336	336	-	-	-	0.0	0.0	-	0.0	0.5	0.1	0.0	0.1
7/1	276	276	-	-	-	1.1	0.3	-	1.4	18.1	3.4	0.3	3.7
7/2+7/3	498	498	-	-	-	1.9	0.5	-	2.5	17.9	4.0	0.5	4.5
8/1	501	501	-	-	-	1.7	0.0	-	1.7	12.3	5.6	0.0	5.6
8/2	514	514	-	-	-	1.8	0.0	-	1.8	12.3	5.6	0.0	5.6
8/3	320	320	-	-	-	0.0	0.0	-	0.0	0.1	0.1	0.0	0.1

C1	Stream: 1 PRC for Signalled Lanes (%)	-5.2	Total Delay for Signalled Lanes (pcuHr)	27.56	Cycle Time (s)	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-5.9	Total Delay for Signalled Lanes (pcuHr)	13.14	Cycle Time (s)	60
C1	Stream: 3 PRC for Signalled Lanes (%)	19.6	Total Delay for Signalled Lanes (pcuHr)	9.05	Cycle Time (s)	60
C2	Stream: 1 PRC for Signalled Lanes (%)	-5.7	Total Delay for Signalled Lanes (pcuHr)	23.88	Cycle Time (s)	60
C2	Stream: 2 PRC for Signalled Lanes (%)	-25.1	Total Delay for Signalled Lanes (pcuHr)	101.44	Cycle Time (s)	60
C2	Stream: 3 PRC for Signalled Lanes (%)	19.4	Total Delay for Signalled Lanes (pcuHr)	10.41	Cycle Time (s)	60
C2	Stream: 4 PRC for Signalled Lanes (%)	21.5	Total Delay for Signalled Lanes (pcuHr)	4.25	Cycle Time (s)	60
	PRC Over All Lanes (%)	-25.1	Total Delay Over All Lanes(pcuHr)	200.84		

Scenario 7: '2031 Bkgd PM' (FG9: '2031 Bkgd PM', Plan 1: '2017 Observed AM')

C1

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	19
Change Point	25	0

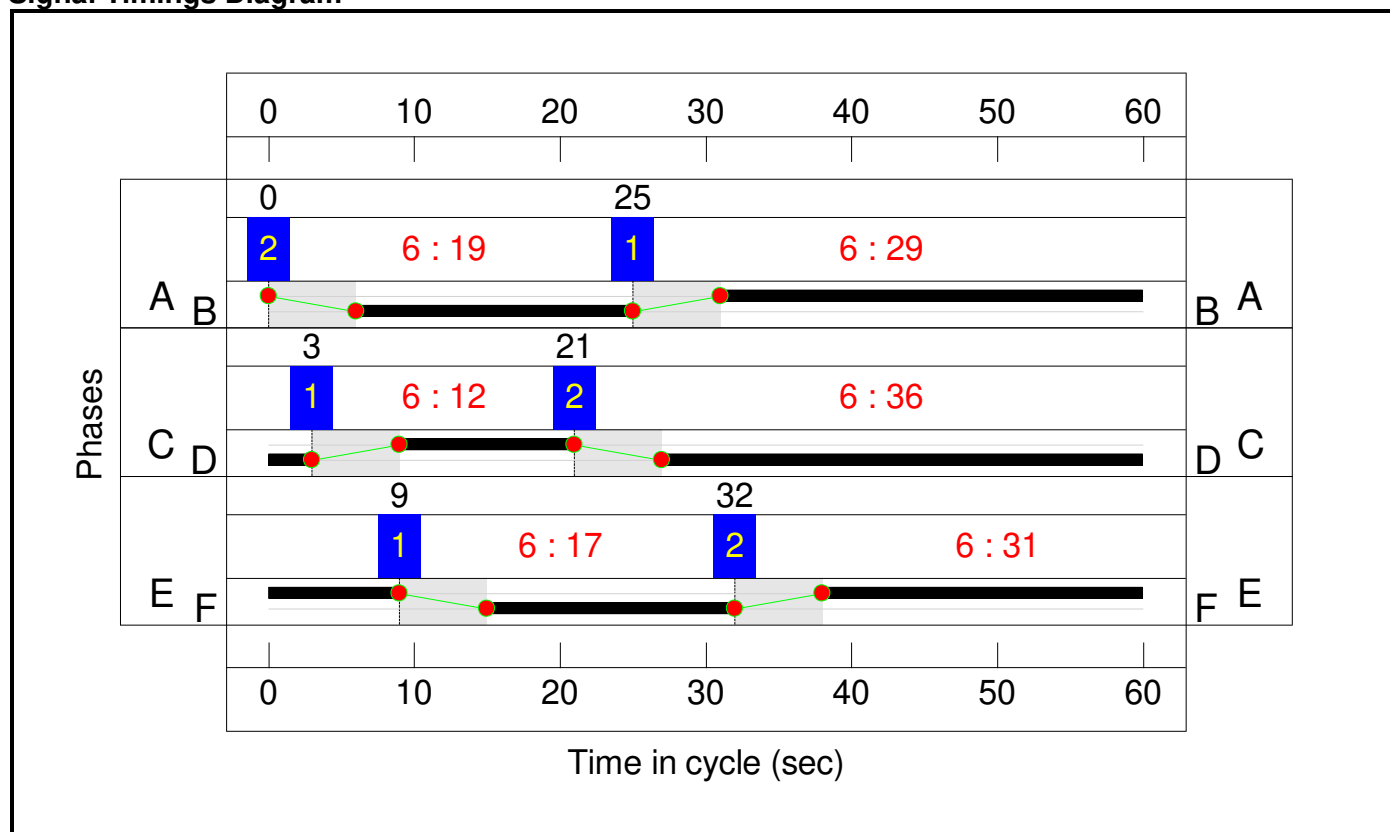
Stage Stream: 2

Stage	1	2
Duration	12	36
Change Point	3	21

Stage Stream: 3

Stage	1	2
Duration	17	31
Change Point	9	32

Signal Timings Diagram



C2

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	16	32
Change Point	5	27

Stage Stream: 2

Stage	1	2
Duration	17	31
Change Point	34	57

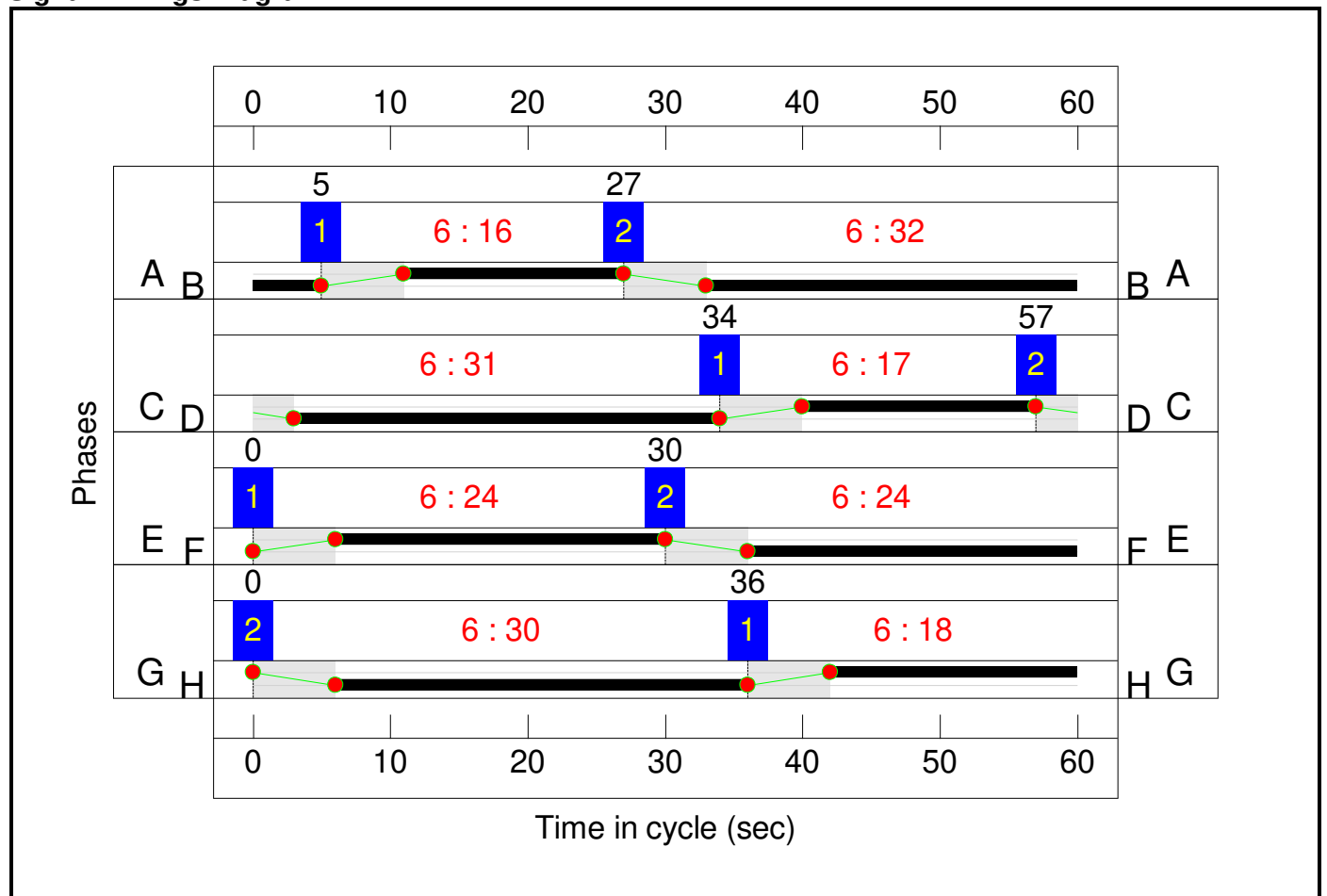
Stage Stream: 3

Stage	1	2
Duration	24	24
Change Point	0	30

Stage Stream: 4

Stage	1	2
Duration	18	30
Change Point	36	0

Signal Timings Diagram



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: M1 Junction 14 / Northfields Roundabout Model	-	-	N/A	-	-		-	-	-	-	-	-	131.6%
J1: M1 Junction 14	-	-	N/A	-	-		-	-	-	-	-	-	103.1%
1/2+1/1	A509 (S) Ahead Left	U	1:1	N/A	C1:A		1	29	-	2343	2105:1965	1052+978	96.3 : 97.2%
1/3	A509 (S) Ahead	U	1:1	N/A	C1:A		1	29	-	1059	1965	982	91.5%
2/1	Right Ahead	U	1:2	N/A	C1:D		1	36	-	1287	1900	1172	98.4%
2/2	Right	U	1:2	N/A	C1:D		1	36	-	1075	1900	1172	78.1%
3/2+3/1	M1 S/B Off-Slip Ahead Left	U	1:2	N/A	C1:C		1	12	-	766	2105:1828	456+396	103.1 : 74.7%
3/3	M1 S/B Off-Slip Ahead	U	1:2	N/A	C1:C		1	12	-	455	2105	456	99.8%
5/1	A509 London Road Left	O	N/A	N/A	-		-	-	-	415	1871	453	91.6%
5/2+5/3	A509 London Road Ahead	O	N/A	N/A	-		-	-	-	692	2105:2105	245+453	99.1 : 99.1%
6/2	M1 N/B Off-Slip Ahead	U	1:3	N/A	C1:F		1	17	-	471	1800	540	87.2%
7/1	Ahead	U	1:3	N/A	C1:E		1	31	-	713	1900	1013	69.0%
7/2+7/3	Right Ahead	U	1:3	N/A	C1:E		1	31	-	904	1900:1900	854+189	86.7 : 86.7%
8/1	Ahead	U	1:1	N/A	C1:B		1	19	-	147	1900	633	23.2%
8/2+8/3	Right Ahead	U	1:1	N/A	C1:B		1	19	-	635	1900:1854	631+16	98.1 : 98.1%
J2: Northfields Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	131.6%
1/1	A4145 Childs Way (S) Ahead Left	U	2:1	N/A	C2:A		1	16	-	731	1965	557	131.3%
1/2+1/3	A4145 Childs Way (S) Ahead	U	2:1	N/A	C2:A		1	16	-	852	2105:1965	596+51	131.6 : 131.6%
2/1	Ahead	U	2:2	N/A	C2:D		1	31	-	841	1900	1013	65.8%

2/2	Ahead	U	2:2	N/A	C2:D		1	31	-	1163	1900	1013	96.2%
2/3	Right	U	2:2	N/A	C2:D		1	31	-	68	1900	1013	5.1%
3/1	A509 (W) Left	U	2:2	N/A	C2:C		1	17	-	674	1965	590	114.3%
3/2	A509 (W) Left	U	2:2	N/A	C2:C		1	17	-	724	2105	632	114.6%
3/3	A509 (W) Ahead	U	2:2	N/A	C2:C		1	17	-	297	1965	590	50.4%
4/1	A509 (N) Ahead Left	U	2:3	N/A	C2:E		1	24	-	716	1965	819	86.3%
4/2	A509 (N) Ahead	U	2:3	N/A	C2:E		1	24	-	759	2105	877	86.0%
4/3+4/4	A509 (N) Ahead	U	2:3	N/A	C2:E		1	24	-	754	2105:1965	576+582	65.1 : 65.1%
5/1	Ahead	U	2:3	N/A	C2:F		1	24	-	27	1900	792	3.0%
5/2	Right Ahead	U	2:3	N/A	C2:F		1	24	-	328	1900	792	39.8%
5/3	Right	U	2:3	N/A	C2:F		1	24	-	10	1900	792	1.2%
6/1	Ahead	U	2:4	N/A	C2:H		1	30	-	497	1900	982	49.8%
6/2	Ahead	U	2:4	N/A	C2:H		1	30	-	764	1900	982	77.3%
6/3	Right	U	2:4	N/A	C2:H		1	30	-	375	1900	982	38.2%
6/4	Right	U	2:4	N/A	C2:H		1	30	-	384	1900	982	39.1%
7/1	A5130 (E) Ahead Left	U	2:4	N/A	C2:G		1	18	-	314	1965	622	50.5%
7/2+7/3	A5130 (E) Ahead	U	2:4	N/A	C2:G		1	18	-	585	2105:1965	299+550	68.9 : 68.9%
8/1	Ahead	U	2:1	N/A	C2:B		1	32	-	561	1900	1045	53.7%
8/2	Right Ahead	U	2:1	N/A	C2:B		1	32	-	590	1900	1045	56.5%
8/3	Right	U	2:1	N/A	C2:B		1	32	-	379	1900	1045	36.3%

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: M1 Junction 14 / Northfields Roundabout Model	-	-	1799	0	0	93.0	354.8	0.0	447.8	-	-	-	-
J1: M1 Junction 14	-	-	1799	0	0	39.2	56.5	0.0	95.7	-	-	-	-
1/2+1/1	1964	1964	-	-	-	9.5	11.1	-	20.5	37.6	32.5	11.1	43.5
1/3	899	899	-	-	-	3.6	4.8	-	8.4	33.5	12.2	4.8	17.0
2/1	1152	1152	-	-	-	2.8	0.0	-	2.8	8.8	15.6	0.0	15.6
2/2	915	915	-	-	-	1.6	0.0	-	1.6	6.2	4.1	0.0	4.1
3/2+3/1	766	752	-	-	-	5.3	11.0	-	16.3	76.6	8.1	11.0	19.1
3/3	455	455	-	-	-	3.0	10.4	-	13.4	105.8	7.5	10.4	17.9
5/1	415	415	415	0	0	0.5	4.4	-	4.9	42.6	3.6	4.4	8.0
5/2+5/3	692	692	1384	0	0	0.8	11.7	-	12.4	64.6	4.1	11.7	15.8
6/2	471	471	-	-	-	2.6	3.1	-	5.7	43.8	7.3	3.1	10.5
7/1	699	699	-	-	-	2.6	0.0	-	2.6	13.6	10.8	0.0	10.8
7/2+7/3	904	904	-	-	-	3.3	0.0	-	3.3	13.3	13.6	0.0	13.6
8/1	147	147	-	-	-	0.4	0.0	-	0.4	10.1	2.3	0.0	2.3
8/2+8/3	635	635	-	-	-	3.3	0.0	-	3.3	18.9	7.4	0.0	7.4
J2: Northfields Roundabout	-	-	0	0	0	53.8	298.3	0.0	352.1	-	-	-	-
1/1	731	557	-	-	-	9.2	89.2	-	98.3	484.3	15.1	89.2	104.3
1/2+1/3	852	647	-	-	-	10.4	104.4	-	114.8	485.0	18.7	104.4	123.1
2/1	667	667	-	-	-	0.3	0.0	-	0.3	1.8	1.7	0.0	1.7
2/2	974	974	-	-	-	1.4	0.0	-	1.4	5.0	6.3	0.0	6.3
2/3	52	52	-	-	-	0.0	0.0	-	0.0	0.1	0.5	0.0	0.5
3/1	674	589	-	-	-	7.0	45.9	-	52.9	282.5	14.0	45.9	60.0
3/2	724	631	-	-	-	7.6	49.9	-	57.4	285.6	15.1	49.9	65.0
3/3	297	297	-	-	-	1.4	0.5	-	1.9	23.5	4.0	0.5	4.5
4/1	707	707	-	-	-	2.9	3.0	-	5.9	30.0	11.4	3.0	14.4

4/2	755	755	-	-	-	3.0	2.9	-	6.0	28.6	12.1	2.9	15.0
4/3+4/4	754	754	-	-	-	2.1	0.9	-	3.0	14.4	6.7	0.9	7.6
5/1	24	24	-	-	-	0.0	0.0	-	0.0	6.6	0.2	0.0	0.2
5/2	315	315	-	-	-	0.3	0.0	-	0.3	3.2	0.9	0.0	0.9
5/3	10	10	-	-	-	0.0	0.0	-	0.0	2.3	0.0	0.0	0.0
6/1	489	489	-	-	-	0.0	0.0	-	0.0	0.3	0.1	0.0	0.1
6/2	759	759	-	-	-	0.3	0.0	-	0.3	1.2	3.4	0.0	3.4
6/3	375	375	-	-	-	0.0	0.0	-	0.0	0.4	0.5	0.0	0.5
6/4	384	384	-	-	-	0.0	0.0	-	0.0	0.3	0.1	0.0	0.1
7/1	314	314	-	-	-	1.5	0.5	-	2.0	22.5	4.2	0.5	4.7
7/2+7/3	585	585	-	-	-	2.7	1.1	-	3.8	23.5	5.3	1.1	6.4
8/1	561	561	-	-	-	1.8	0.0	-	1.8	11.7	6.3	0.0	6.3
8/2	590	590	-	-	-	1.8	0.0	-	1.8	11.2	6.4	0.0	6.4
8/3	379	379	-	-	-	0.0	0.0	-	0.0	0.1	0.2	0.0	0.2

C1	Stream: 1	PRC for Signalled Lanes (%)	-9.0	Total Delay for Signalled Lanes (pcuHr):	32.64	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%)	-14.5	Total Delay for Signalled Lanes (pcuHr):	34.05	Cycle Time (s):	60
C1	Stream: 3	PRC for Signalled Lanes (%)	3.2	Total Delay for Signalled Lanes (pcuHr):	11.72	Cycle Time (s):	60
C2	Stream: 1	PRC for Signalled Lanes (%)	-46.2	Total Delay for Signalled Lanes (pcuHr):	216.78	Cycle Time (s):	60
C2	Stream: 2	PRC for Signalled Lanes (%)	-27.4	Total Delay for Signalled Lanes (pcuHr):	113.94	Cycle Time (s):	60
C2	Stream: 3	PRC for Signalled Lanes (%)	4.3	Total Delay for Signalled Lanes (pcuHr):	15.22	Cycle Time (s):	60
C2	Stream: 4	PRC for Signalled Lanes (%)	16.4	Total Delay for Signalled Lanes (pcuHr):	6.15	Cycle Time (s):	60
		PRC Over All Lanes (%)	-46.2	Total Delay Over All Lanes(pcuHr):	447.83		

Scenario 8: '2031 WD PM' (FG10: '2031 WD PM', Plan 1: '2017 Observed AM')

C1

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	19
Change Point	25	0

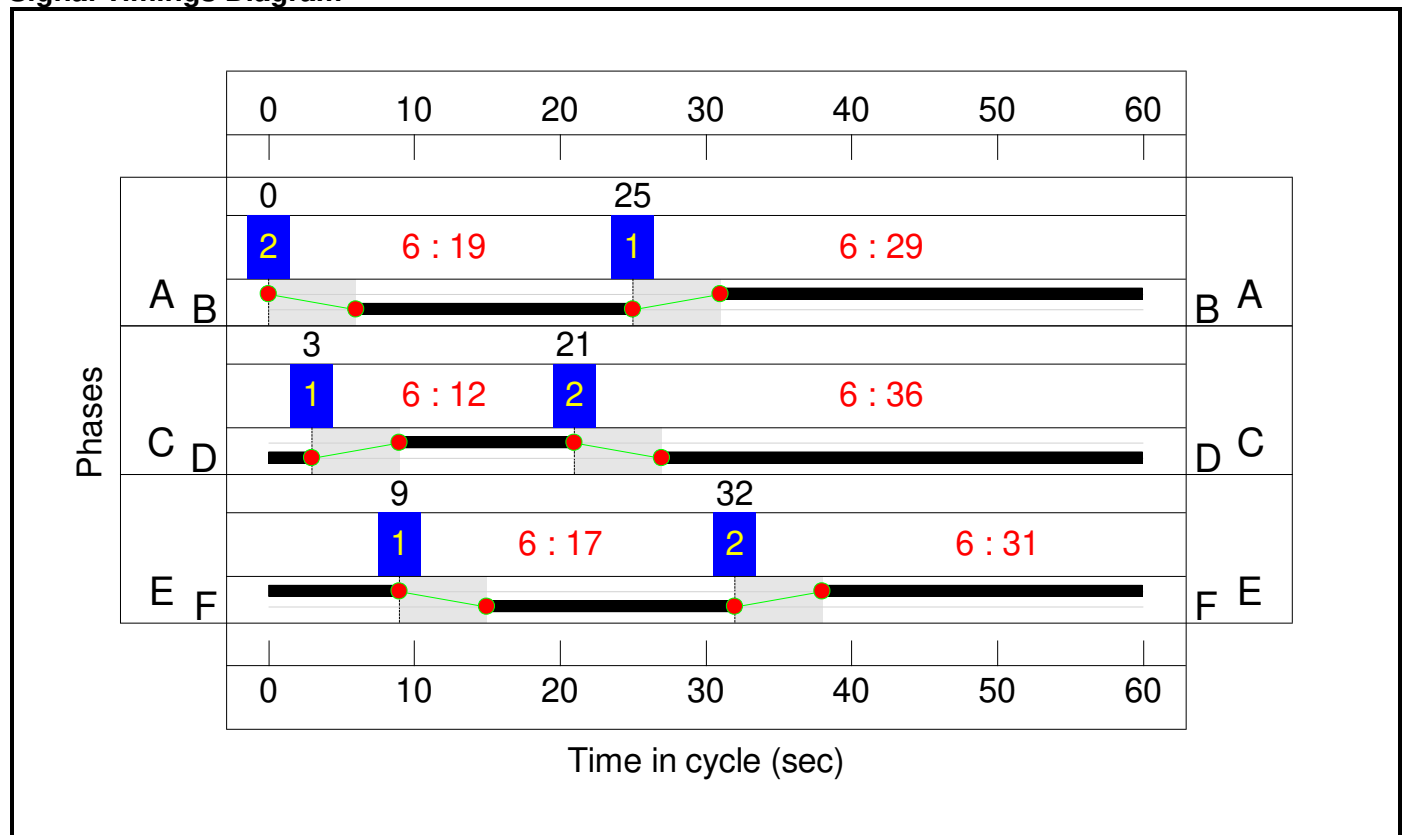
Stage Stream: 2

Stage	1	2
Duration	12	36
Change Point	3	21

Stage Stream: 3

Stage	1	2
Duration	17	31
Change Point	9	32

Signal Timings Diagram



C2

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	16	32
Change Point	5	27

Stage Stream: 2

Stage	1	2
Duration	17	31
Change Point	34	57

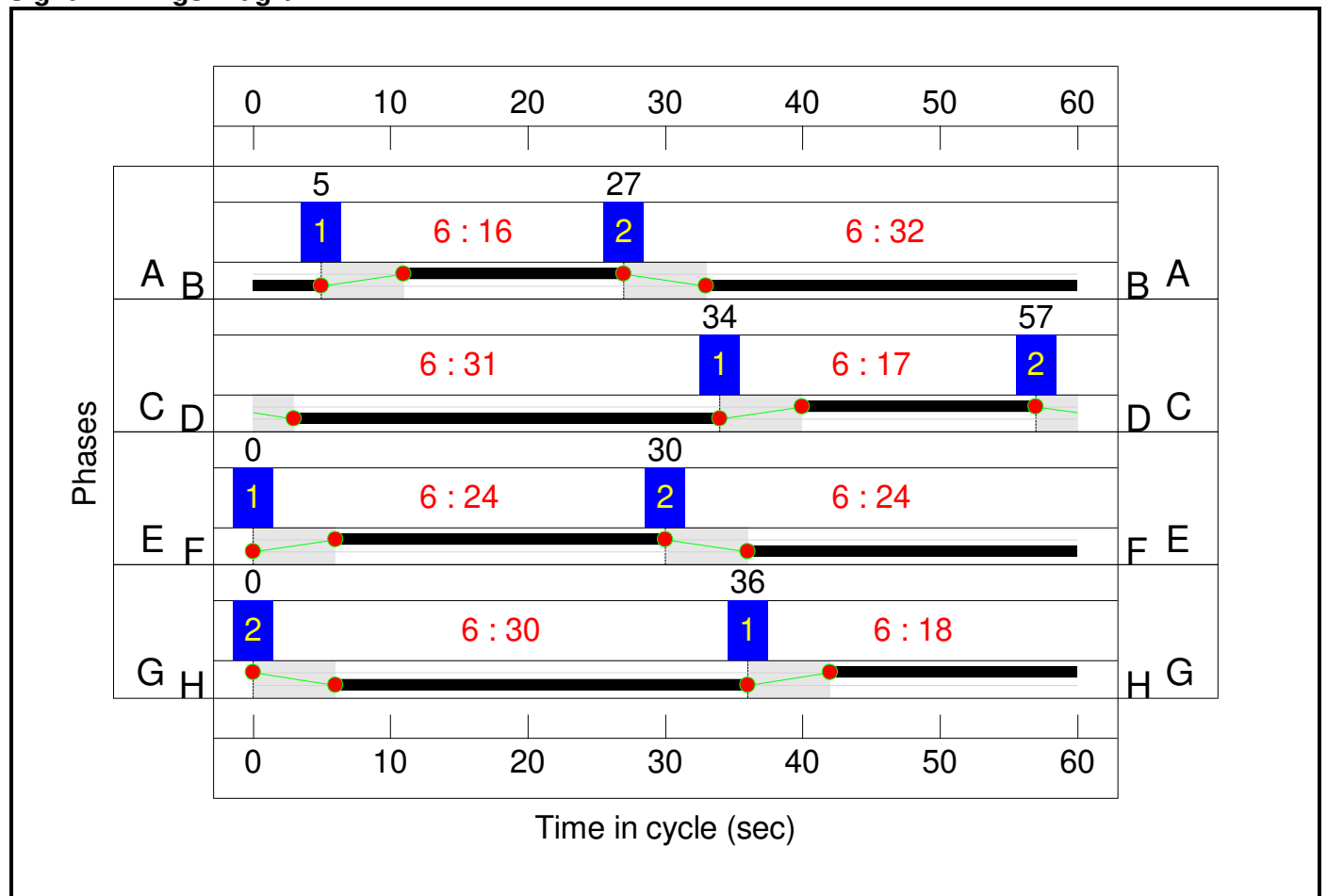
Stage Stream: 3

Stage	1	2
Duration	24	24
Change Point	0	30

Stage Stream: 4

Stage	1	2
Duration	18	30
Change Point	36	0

Signal Timings Diagram



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: M1 Junction 14 / Northfields Roundabout Model	-	-	N/A	-	-		-	-	-	-	-	-	132.7%
J1: M1 Junction 14	-	-	N/A	-	-		-	-	-	-	-	-	103.7%
1/2+1/1	A509 (S) Ahead Left	U	1:1	N/A	C1:A		1	29	-	2368	2105:1965	1052+978	96.5 : 97.5%
1/3	A509 (S) Ahead	U	1:1	N/A	C1:A		1	29	-	1063	1965	982	91.3%
2/1	Right Ahead	U	1:2	N/A	C1:D		1	36	-	1285	1900	1172	97.8%
2/2	Right	U	1:2	N/A	C1:D		1	36	-	1077	1900	1172	77.8%
3/2+3/1	M1 S/B Off-Slip Ahead Left	U	1:2	N/A	C1:C		1	12	-	788	2105:1828	456+396	103.7 : 79.5%
3/3	M1 S/B Off-Slip Ahead	U	1:2	N/A	C1:C		1	12	-	454	2105	456	99.5%
5/1	A509 London Road Left	O	N/A	N/A	-		-	-	-	444	1871	455	97.6%
5/2+5/3	A509 London Road Ahead	O	N/A	N/A	-		-	-	-	693	2105:2105	230+455	101.1 : 101.1%
6/2	M1 N/B Off-Slip Ahead	U	1:3	N/A	C1:F		1	17	-	471	1800	540	87.2%
7/1	Ahead	U	1:3	N/A	C1:E		1	31	-	706	1900	1013	68.0%
7/2+7/3	Right Ahead	U	1:3	N/A	C1:E		1	31	-	914	1900:1900	851+193	87.2 : 86.6%
8/1	Ahead	U	1:1	N/A	C1:B		1	19	-	142	1900	633	22.2%
8/2+8/3	Right Ahead	U	1:1	N/A	C1:B		1	19	-	640	1900:1854	633+14	98.6 : 98.9%
J2: Northfields Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	132.7%
1/1	A4145 Childs Way (S) Ahead Left	U	2:1	N/A	C2:A		1	16	-	739	1965	557	132.7%
1/2+1/3	A4145 Childs Way (S) Ahead	U	2:1	N/A	C2:A		1	16	-	857	2105:1965	596+51	132.5 : 132.5%
2/1	Ahead	U	2:2	N/A	C2:D		1	31	-	857	1900	1013	66.6%

2/2	Ahead	U	2:2	N/A	C2:D		1	31	-	1164	1900	1013	95.8%
2/3	Right	U	2:2	N/A	C2:D		1	31	-	68	1900	1013	5.1%
3/1	A509 (W) Left	U	2:2	N/A	C2:C		1	17	-	681	1965	590	115.5%
3/2	A509 (W) Left	U	2:2	N/A	C2:C		1	17	-	729	2105	632	115.4%
3/3	A509 (W) Ahead	U	2:2	N/A	C2:C		1	17	-	296	1965	590	50.2%
4/1	A509 (N) Ahead Left	U	2:3	N/A	C2:E		1	24	-	714	1965	819	85.9%
4/2	A509 (N) Ahead	U	2:3	N/A	C2:E		1	24	-	752	2105	877	85.0%
4/3+4/4	A509 (N) Ahead	U	2:3	N/A	C2:E		1	24	-	768	2105:1965	578+581	66.2 : 66.1%
5/1	Ahead	U	2:3	N/A	C2:F		1	24	-	45	1900	792	4.4%
5/2	Right Ahead	U	2:3	N/A	C2:F		1	24	-	313	1900	792	38.7%
5/3	Right	U	2:3	N/A	C2:F		1	24	-	6	1900	792	0.8%
6/1	Ahead	U	2:4	N/A	C2:H		1	30	-	499	1900	982	49.9%
6/2	Ahead	U	2:4	N/A	C2:H		1	30	-	753	1900	982	76.1%
6/3	Right	U	2:4	N/A	C2:H		1	30	-	383	1900	982	39.0%
6/4	Right	U	2:4	N/A	C2:H		1	30	-	390	1900	982	39.6%
7/1	A5130 (E) Ahead Left	U	2:4	N/A	C2:G		1	18	-	311	1965	622	50.0%
7/2+7/3	A5130 (E) Ahead	U	2:4	N/A	C2:G		1	18	-	591	2105:1965	316+548	68.5 : 68.5%
8/1	Ahead	U	2:1	N/A	C2:B		1	32	-	566	1900	1045	54.1%
8/2	Right Ahead	U	2:1	N/A	C2:B		1	32	-	606	1900	1045	57.9%
8/3	Right	U	2:1	N/A	C2:B		1	32	-	375	1900	1045	35.9%

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: M1 Junction 14 / Northfields Roundabout Model	-	-	1820	0	0	94.6	376.9	0.0	471.5	-	-	-	-
J1: M1 Junction 14	-	-	1820	0	0	39.8	66.7	0.0	106.5	-	-	-	-
1/2+1/1	1970	1970	-	-	-	9.6	11.7	-	21.2	38.8	32.5	11.7	44.2
1/3	897	897	-	-	-	3.5	4.7	-	8.3	33.2	12.2	4.7	16.9
2/1	1146	1146	-	-	-	2.8	0.0	-	2.8	8.7	15.6	0.0	15.6
2/2	911	911	-	-	-	1.6	0.0	-	1.6	6.2	4.0	0.0	4.0
3/2+3/1	788	771	-	-	-	5.5	13.7	-	19.3	87.9	8.2	13.7	21.9
3/3	454	454	-	-	-	3.0	10.1	-	13.1	103.9	7.4	10.1	17.6
5/1	444	444	444	0	0	0.6	8.1	-	8.7	70.8	4.1	8.1	12.2
5/2+5/3	693	688	1376	0	0	0.9	15.2	-	16.1	83.7	21.0	15.2	36.1
6/2	471	471	-	-	-	2.6	3.1	-	5.7	43.8	7.3	3.1	10.5
7/1	689	689	-	-	-	2.6	0.0	-	2.6	13.6	10.7	0.0	10.7
7/2+7/3	909	909	-	-	-	3.4	0.0	-	3.4	13.3	13.7	0.0	13.7
8/1	140	140	-	-	-	0.4	0.0	-	0.4	10.0	2.2	0.0	2.2
8/2+8/3	638	638	-	-	-	3.4	0.0	-	3.4	19.0	8.5	0.0	8.5
J2: Northfields Roundabout	-	-	0	0	0	54.8	310.2	0.0	365.0	-	-	-	-
1/1	739	557	-	-	-	9.4	93.1	-	102.5	499.5	15.4	93.1	108.5
1/2+1/3	857	647	-	-	-	10.6	107.0	-	117.6	493.9	18.9	107.0	125.9
2/1	675	675	-	-	-	0.3	0.0	-	0.3	1.9	1.9	0.0	1.9
2/2	970	970	-	-	-	1.3	0.0	-	1.3	5.0	6.2	0.0	6.2
2/3	52	52	-	-	-	0.0	0.0	-	0.0	0.1	0.5	0.0	0.5
3/1	681	589	-	-	-	7.3	49.2	-	56.5	298.5	14.4	49.2	63.6
3/2	729	631	-	-	-	7.8	52.2	-	60.0	296.3	15.4	52.2	67.6
3/3	296	296	-	-	-	1.4	0.5	-	1.9	23.4	4.0	0.5	4.5
4/1	703	703	-	-	-	2.9	2.9	-	5.8	29.7	11.3	2.9	14.2

4/2	746	746	-	-	-	3.0	2.7	-	5.7	27.6	12.0	2.7	14.7
4/3+4/4	767	767	-	-	-	2.1	1.0	-	3.1	14.6	7.1	1.0	8.1
5/1	35	35	-	-	-	0.1	0.0	-	0.1	14.0	0.5	0.0	0.5
5/2	307	307	-	-	-	0.2	0.0	-	0.2	2.2	0.5	0.0	0.5
5/3	6	6	-	-	-	0.0	0.0	-	0.0	1.2	0.0	0.0	0.0
6/1	490	490	-	-	-	0.1	0.0	-	0.1	0.5	0.2	0.0	0.2
6/2	747	747	-	-	-	0.2	0.0	-	0.2	1.1	3.2	0.0	3.2
6/3	383	383	-	-	-	0.0	0.0	-	0.0	0.4	0.5	0.0	0.5
6/4	389	389	-	-	-	0.0	0.0	-	0.0	0.3	0.1	0.0	0.1
7/1	311	311	-	-	-	1.4	0.5	-	1.9	22.4	4.1	0.5	4.6
7/2+7/3	591	591	-	-	-	2.7	1.1	-	3.8	23.3	5.2	1.1	6.3
8/1	566	566	-	-	-	1.9	0.0	-	1.9	11.8	6.4	0.0	6.4
8/2	605	605	-	-	-	1.9	0.0	-	1.9	11.1	6.5	0.0	6.5
8/3	375	375	-	-	-	0.0	0.0	-	0.0	0.1	0.2	0.0	0.2

C1	Stream: 1	PRC for Signalled Lanes (%)	-9.9	Total Delay for Signalled Lanes (pcuHr):	33.25	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%)	-15.2	Total Delay for Signalled Lanes (pcuHr):	36.70	Cycle Time (s):	60
C1	Stream: 3	PRC for Signalled Lanes (%)	3.2	Total Delay for Signalled Lanes (pcuHr):	11.70	Cycle Time (s):	60
C2	Stream: 1	PRC for Signalled Lanes (%)	-47.5	Total Delay for Signalled Lanes (pcuHr):	223.84	Cycle Time (s):	60
C2	Stream: 2	PRC for Signalled Lanes (%)	-28.4	Total Delay for Signalled Lanes (pcuHr):	120.09	Cycle Time (s):	60
C2	Stream: 3	PRC for Signalled Lanes (%)	4.8	Total Delay for Signalled Lanes (pcuHr):	14.95	Cycle Time (s):	60
C2	Stream: 4	PRC for Signalled Lanes (%)	18.3	Total Delay for Signalled Lanes (pcuHr):	6.12	Cycle Time (s):	60
		PRC Over All Lanes (%)	-47.5	Total Delay Over All Lanes(pcuHr):	471.51		