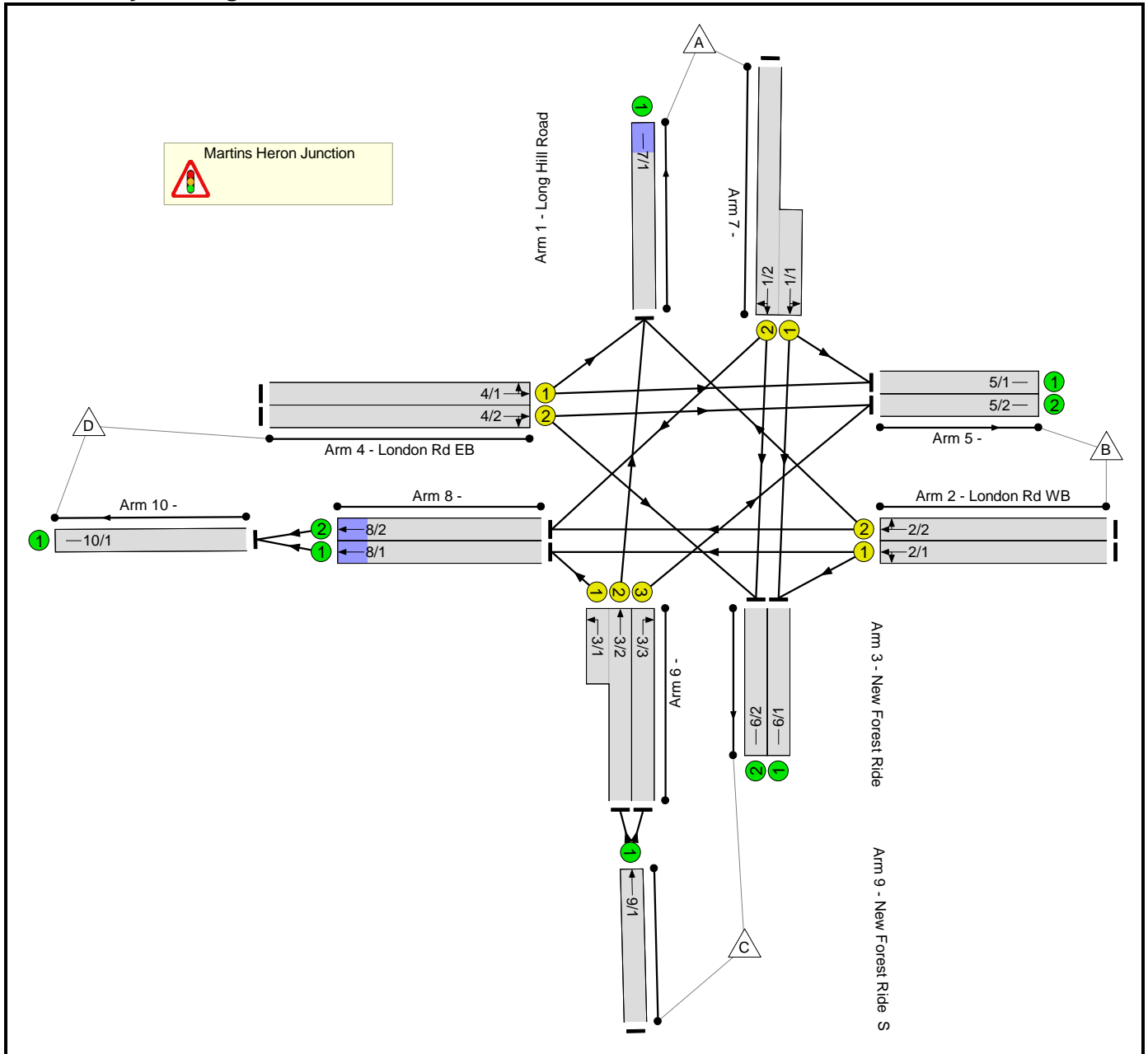


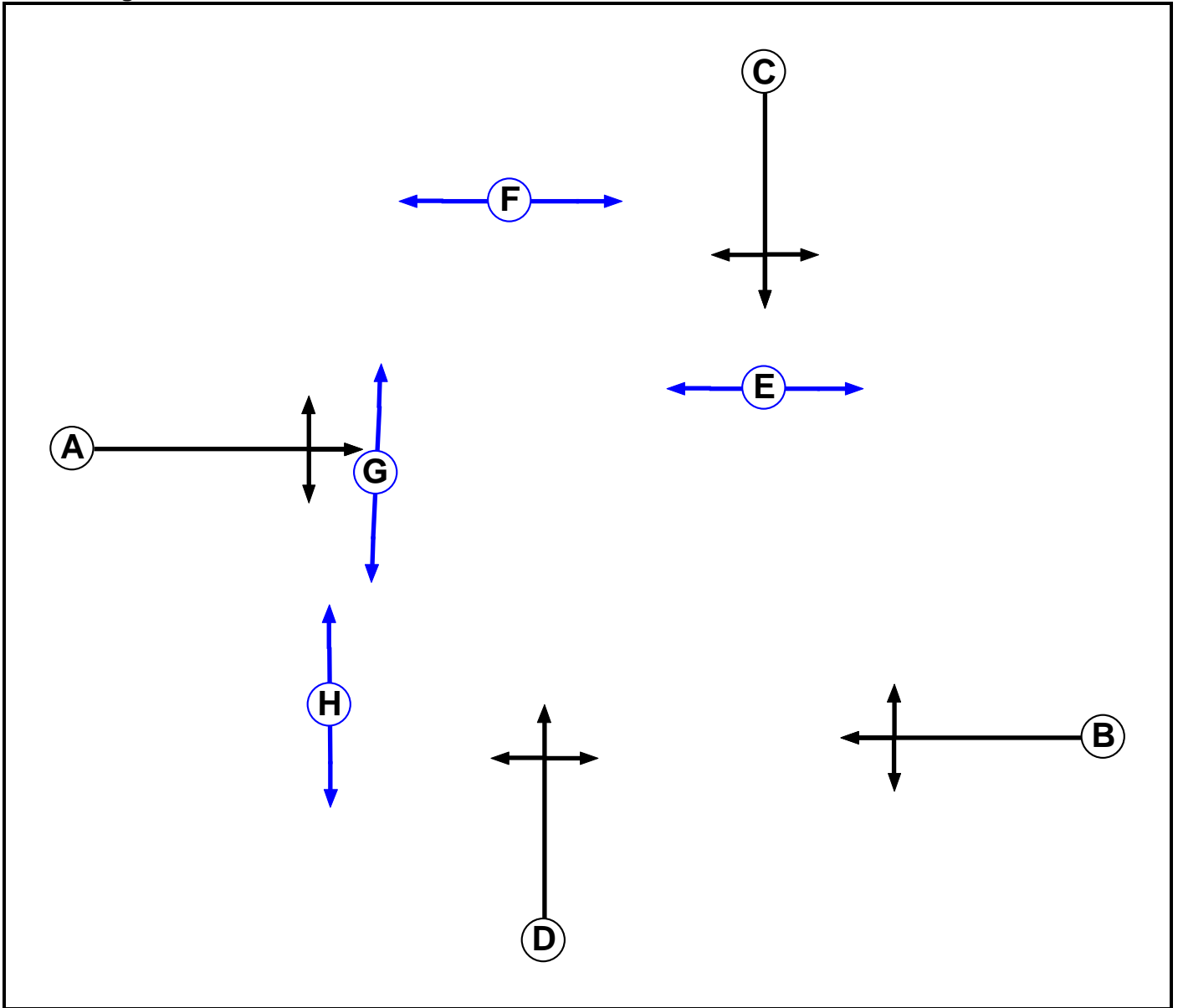
Full Input Data And Results**User and Project Details**

Project:	Martins Heron Roundabout
Title:	Concept Signalised Junction
Location:	Bracknell
Additional detail:	<p>LINSIG simulates junction performance based on fixed timings, meaning any real life fluctuations in traffic demand throughout the peak hour will have an impact on queue levels and therefore delay times at that junction.</p> <p>In reality, many signalised junctions use adaptive signal control systems such as MOVA, which continuously monitors traffic demand and queue build-up and optimises green times accordingly. This enhances the efficiency of the junction by balancing traffic demand and queues, increasing traffic throughput and reducing delays.</p> <p>As MOVA is being installed as part of these improvements to this junction, the actual operation of the junction is very likely to be significantly better than the future simulations indicate.</p>
File name:	Martins Heron Roundabout Concept.lsg3x
Author:	
Company:	Bracknell Forest Council
Address:	

Network Layout Diagram



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
D	Traffic		7	7
E	Pedestrian		7	7
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7

Full Input Data And Results

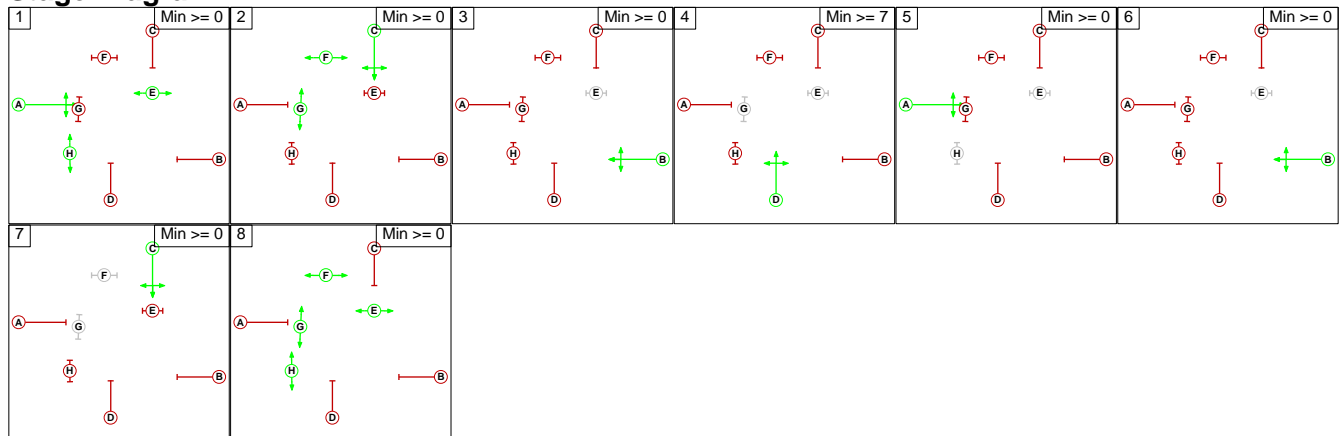
Phase Intergreens Matrix

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

Phases in Stage

Stage No.	Phases in Stage
1	A E H
2	C F G
3	B
4	D
5	A
6	B
7	C
8	E F G H

Stage Diagram



Full Input Data And Results

Give-Way Lane Input Data

Junction: Martins Heron Junction

There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Martins Heron Junction												
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 (Long Hill Road)	U	C	2	3	7.0	Geom	-	4.00	0.00	N	Arm 5 Left	30.00
											Arm 6 Ahead	Inf
1/2 (Long Hill Road)	U	C	2	3	7.0	Geom	-	4.20	0.00	N	Arm 6 Ahead	Inf
											Arm 8 Right	30.00
2/1 (London Rd WB)	U	B	2	3	12.7	Geom	-	4.00	0.00	Y	Arm 6 Left	Inf
											Arm 8 Ahead	Inf
2/2 (London Rd WB)	U	B	2	3	20.9	Geom	-	4.00	0.00	N	Arm 7 Right	30.00
											Arm 8 Ahead	Inf
3/1 (New Forest Ride)	U	D	2	3	5.0	Geom	-	3.65	0.00	Y	Arm 8 Left	30.00
											Arm 7 Ahead	Inf
3/2 (New Forest Ride)	U	D	2	3	8.0	Geom	-	3.65	0.00	N	Arm 7 Ahead	Inf
3/3 (New Forest Ride)	U	D	2	3	8.0	Geom	-	3.65	0.00	N	Arm 5 Right	30.00
4/1 (London Rd EB)	U	A	2	3	20.0	Geom	-	4.00	0.00	Y	Arm 5 Ahead	Inf
											Arm 7 Left	12.00
4/2 (London Rd EB)	U	A	2	3	9.0	Geom	-	4.00	0.00	N	Arm 5 Ahead	Inf
											Arm 6 Right	30.00
5/1	U		2	3	2.0	Inf	-	-	-	-	-	-
5/2	U		2	3	2.0	Inf	-	-	-	-	-	-
6/1	U		2	3	4.0	Inf	-	-	-	-	-	-
6/2	U		2	3	4.0	Inf	-	-	-	-	-	-
7/1	U		2	3	4.0	Geom	-	4.50	0.00	Y		
8/1	U		2	3	2.0	Geom	-	3.60	0.00	Y	Arm 10 Ahead	Inf
8/2	U		2	3	2.0	Geom	-	3.60	0.00	N	Arm 10 Ahead	Inf
9/1 (New Forest Ride S)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2013 AM'	08:00	09:00	01:00	
2: '2013 PM'	17:00	18:00	01:00	
3: '2026 AM FF'	08:00	09:00	01:00	
4: '2026 PM FF'	17:00	18:00	01:00	

Scenario 1: '2013 AM' (FG1: '2013 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	176	126	52	354
	B	69	0	111	700	880
	C	220	235	0	293	748
	D	21	429	63	0	513
	Tot.	310	840	300	1045	2495

Traffic Lane Flows

Lane	Scenario 1: 2013 AM
Junction: Martins Heron Junction	
1/1 (short)	177
1/2 (with short)	354(In) 177(Out)
2/1	440
2/2	440
3/1 (short)	293
3/2 (with short)	513(In) 220(Out)
3/3	235
4/1	257
4/2	256
5/1	412
5/2	428
6/1	112
6/2	188
7/1	310
8/1	622
8/2	423
9/1	748
10/1	1045

Full Input Data And Results

Lane Saturation Flows

Junction: Martins Heron Junction								
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 (Long Hill Road)	4.00	0.00	N	Arm 5 Left	30.00	99.4 %	2053	2053
				Arm 6 Ahead	Inf	0.6 %		
1/2 (Long Hill Road)	4.20	0.00	N	Arm 6 Ahead	Inf	70.6 %	2144	2144
				Arm 8 Right	30.00	29.4 %		
2/1 (London Rd WB)	4.00	0.00	Y	Arm 6 Left	Inf	25.2 %	2015	2015
				Arm 8 Ahead	Inf	74.8 %		
2/2 (London Rd WB)	4.00	0.00	N	Arm 7 Right	30.00	15.7 %	2138	2138
				Arm 8 Ahead	Inf	84.3 %		
3/1 (New Forest Ride)	3.65	0.00	Y	Arm 8 Left	30.00	100.0 %	1886	1886
3/2 (New Forest Ride)	3.65	0.00	N	Arm 7 Ahead	Inf	100.0 %	2120	2120
3/3 (New Forest Ride)	3.65	0.00	N	Arm 5 Right	30.00	100.0 %	2019	2019
4/1 (London Rd EB)	4.00	0.00	Y	Arm 5 Ahead	Inf	91.8 %	1995	1995
				Arm 7 Left	12.00	8.2 %		
4/2 (London Rd EB)	4.00	0.00	N	Arm 5 Ahead	Inf	75.4 %	2129	2129
				Arm 6 Right	30.00	24.6 %		
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	4.50	0.00	Y				2065	2065
8/1	3.60	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1975	1975
8/2	3.60	0.00	N	Arm 10 Ahead	Inf	100.0 %	2115	2115
9/1 (New Forest Ride S Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2013 PM' (FG2: '2013 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	101	333	106	540
	B	84	0	344	473	901
	C	195	184	0	175	554
	D	56	670	332	0	1058
	Tot.	335	955	1009	754	3053

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2013 PM
Junction: Martins Heron Junction	
1/1 (short)	270
1/2 (with short)	540(In) 270(Out)
2/1	451
2/2	450
3/1 (short)	175
3/2 (with short)	370(In) 195(Out)
3/3	184
4/1	529
4/2	529
5/1	574
5/2	381
6/1	513
6/2	496
7/1	335
8/1	282
8/2	472
9/1	554
10/1	754

Full Input Data And Results

Lane Saturation Flows

Junction: Martins Heron Junction								
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 (Long Hill Road)	4.00	0.00	N	Arm 5 Left	30.00	37.4 %	2115	2115
				Arm 6 Ahead	Inf	62.6 %		
1/2 (Long Hill Road)	4.20	0.00	N	Arm 6 Ahead	Inf	60.7 %	2133	2133
				Arm 8 Right	30.00	39.3 %		
2/1 (London Rd WB)	4.00	0.00	Y	Arm 6 Left	Inf	76.3 %	2015	2015
				Arm 8 Ahead	Inf	23.7 %		
2/2 (London Rd WB)	4.00	0.00	N	Arm 7 Right	30.00	18.7 %	2135	2135
				Arm 8 Ahead	Inf	81.3 %		
3/1 (New Forest Ride)	3.65	0.00	Y	Arm 8 Left	30.00	100.0 %	1886	1886
3/2 (New Forest Ride)	3.65	0.00	N	Arm 7 Ahead	Inf	100.0 %	2120	2120
3/3 (New Forest Ride)	3.65	0.00	N	Arm 5 Right	30.00	100.0 %	2019	2019
4/1 (London Rd EB)	4.00	0.00	Y	Arm 5 Ahead	Inf	89.4 %	1989	1989
				Arm 7 Left	12.00	10.6 %		
4/2 (London Rd EB)	4.00	0.00	N	Arm 5 Ahead	Inf	37.2 %	2089	2089
				Arm 6 Right	30.00	62.8 %		
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	4.50	0.00	Y				2065	2065
8/1	3.60	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1975	1975
8/2	3.60	0.00	N	Arm 10 Ahead	Inf	100.0 %	2115	2115
9/1 (New Forest Ride S Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2026 AM FF' (FG3: '2026 AM FF', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
	A	B	C	D	Tot.	
A	0	225	155	13	393	
B	206	0	40	785	1031	
C	208	233	0	368	809	
D	14	640	134	0	788	
Tot.	428	1098	329	1166	3021	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2026 AM FF
Junction: Martins Heron Junction	
1/1 (short)	225
1/2 (with short)	393(In) 168(Out)
2/1	515
2/2	516
3/1 (short)	368
3/2 (with short)	576(In) 208(Out)
3/3	233
4/1	394
4/2	394
5/1	605
5/2	493
6/1	40
6/2	289
7/1	428
8/1	843
8/2	323
9/1	809
10/1	1166

Full Input Data And Results

Lane Saturation Flows

Junction: Martins Heron Junction								
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 (Long Hill Road)	4.00	0.00	N	Arm 5 Left	30.00	100.0 %	2052	2052
				Arm 6 Ahead	Inf	0.0 %		
1/2 (Long Hill Road)	4.20	0.00	N	Arm 6 Ahead	Inf	92.3 %	2167	2167
				Arm 8 Right	30.00	7.7 %		
2/1 (London Rd WB)	4.00	0.00	Y	Arm 6 Left	Inf	7.8 %	2015	2015
				Arm 8 Ahead	Inf	92.2 %		
2/2 (London Rd WB)	4.00	0.00	N	Arm 7 Right	30.00	39.9 %	2113	2113
				Arm 8 Ahead	Inf	60.1 %		
3/1 (New Forest Ride)	3.65	0.00	Y	Arm 8 Left	30.00	100.0 %	1886	1886
3/2 (New Forest Ride)	3.65	0.00	N	Arm 7 Ahead	Inf	100.0 %	2120	2120
3/3 (New Forest Ride)	3.65	0.00	N	Arm 5 Right	30.00	100.0 %	2019	2019
4/1 (London Rd EB)	4.00	0.00	Y	Arm 5 Ahead	Inf	96.4 %	2006	2006
				Arm 7 Left	12.00	3.6 %		
4/2 (London Rd EB)	4.00	0.00	N	Arm 5 Ahead	Inf	66.0 %	2119	2119
				Arm 6 Right	30.00	34.0 %		
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	4.50	0.00	Y				2065	2065
8/1	3.60	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1975	1975
8/2	3.60	0.00	N	Arm 10 Ahead	Inf	100.0 %	2115	2115
9/1 (New Forest Ride S Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2026 PM FF' (FG4: '2026 PM FF', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	104	370	20	494
	B	141	0	133	626	900
	C	299	44	0	145	488
	D	4	836	211	0	1051
	Tot.	444	984	714	791	2933

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2026 PM FF
Junction: Martins Heron Junction	
1/1 (short)	247
1/2 (with short)	494(In) 247(Out)
2/1	450
2/2	450
3/1 (short)	145
3/2 (with short)	444(In) 299(Out)
3/3	44
4/1	525
4/2	526
5/1	625
5/2	359
6/1	276
6/2	438
7/1	444
8/1	462
8/2	329
9/1	488
10/1	791

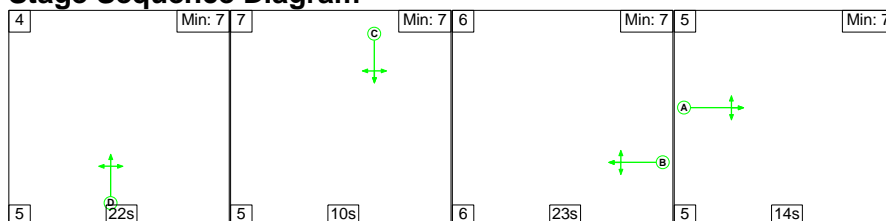
Full Input Data And Results

Lane Saturation Flows

Junction: Martins Heron Junction								
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 (Long Hill Road)	4.00	0.00	N	Arm 5 Left	30.00	42.1 %	2111	2111
				Arm 6 Ahead	Inf	57.9 %		
1/2 (Long Hill Road)	4.20	0.00	N	Arm 6 Ahead	Inf	91.9 %	2166	2166
				Arm 8 Right	30.00	8.1 %		
2/1 (London Rd WB)	4.00	0.00	Y	Arm 6 Left	Inf	29.6 %	2015	2015
				Arm 8 Ahead	Inf	70.4 %		
2/2 (London Rd WB)	4.00	0.00	N	Arm 7 Right	30.00	31.3 %	2122	2122
				Arm 8 Ahead	Inf	68.7 %		
3/1 (New Forest Ride)	3.65	0.00	Y	Arm 8 Left	30.00	100.0 %	1886	1886
3/2 (New Forest Ride)	3.65	0.00	N	Arm 7 Ahead	Inf	100.0 %	2120	2120
3/3 (New Forest Ride)	3.65	0.00	N	Arm 5 Right	30.00	100.0 %	2019	2019
4/1 (London Rd EB)	4.00	0.00	Y	Arm 5 Ahead	Inf	99.2 %	2013	2013
				Arm 7 Left	12.00	0.8 %		
4/2 (London Rd EB)	4.00	0.00	N	Arm 5 Ahead	Inf	59.9 %	2113	2113
				Arm 6 Right	30.00	40.1 %		
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	4.50	0.00	Y				2065	2065
8/1	3.60	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1975	1975
8/2	3.60	0.00	N	Arm 10 Ahead	Inf	100.0 %	2115	2115
9/1 (New Forest Ride S Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2013 AM' (FG1: '2013 AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

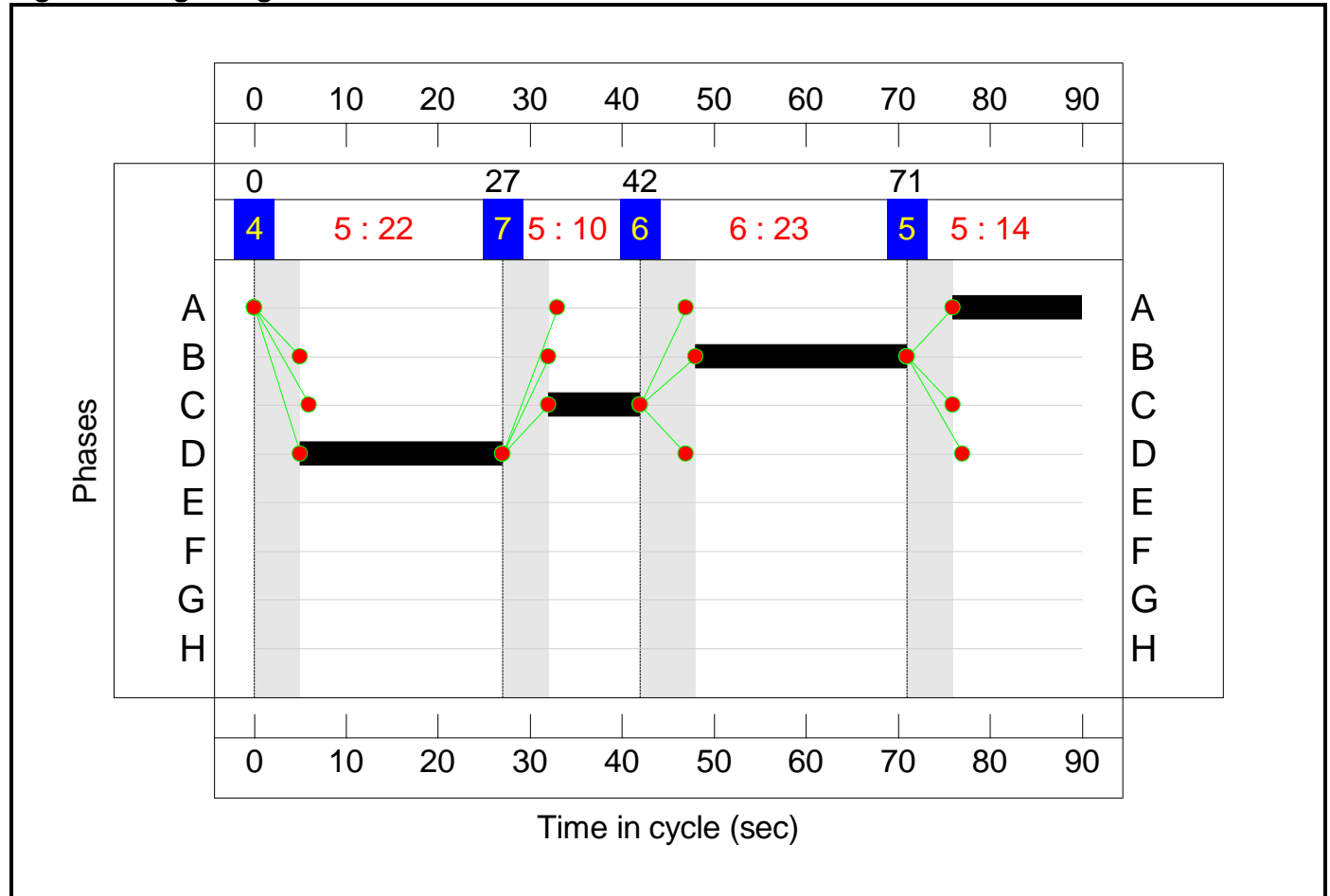


Full Input Data And Results

Stage Timings


Stage	4	7	6	5
Duration	22	10	23	14
Change Point	0	27	42	71

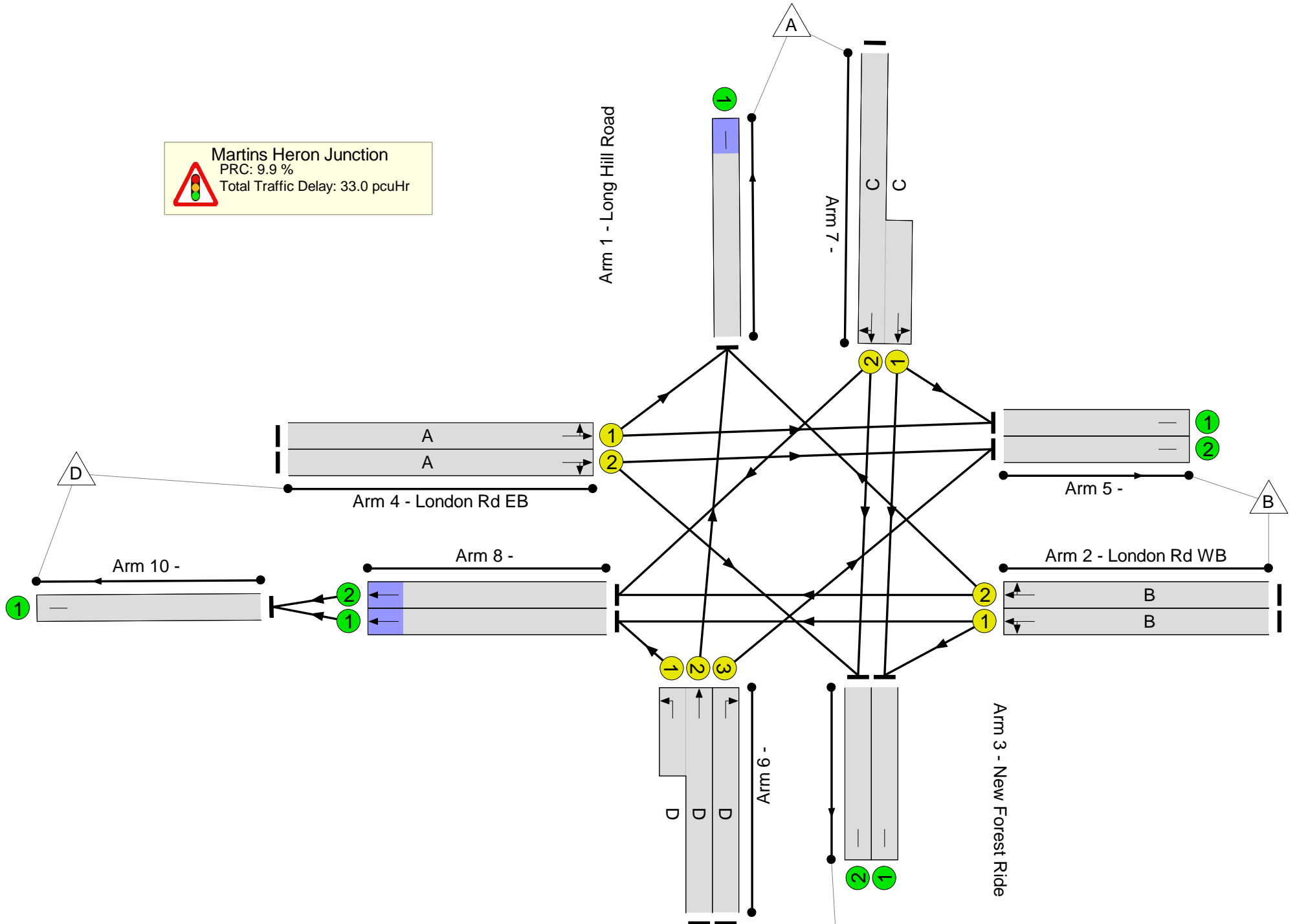
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results


Martins Heron Junction
 PRC: 9.9 %
 Total Traffic Delay: 33.0 pcuHr



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: Concept Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	81.9%
Martins Heron Junction	-	-	N/A	-	-		-	-	-	-	-	-	81.9%
1/2+1/1	Long Hill Road Left Ahead Right	U	N/A	N/A	C		1	10	-	354	2144:2053	258+251	68.7 : 70.5%
2/1	London Rd WB Left Ahead	U	N/A	N/A	B		1	23	-	440	2015	537	81.9%
2/2	London Rd WB Right Ahead	U	N/A	N/A	B		1	23	-	440	2138	570	77.2%
3/2+3/1	New Forest Ride Ahead Left	U	N/A	N/A	D		1	22	-	513	2120:1886	273+363	80.6 : 80.6%
3/3	New Forest Ride Right	U	N/A	N/A	D		1	22	-	235	2019	516	45.5%
4/1	London Rd EB Ahead Left	U	N/A	N/A	A		1	14	-	257	1995	332	77.3%
4/2	London Rd EB Ahead Right	U	N/A	N/A	A		1	14	-	256	2129	355	72.1%
5/1		U	N/A	N/A	-		-	-	-	412	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	188	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	310	2065	2065	15.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	622	1975	1975	31.5%
8/2	Ahead	U	N/A	N/A	-		-	-	-	423	2115	2115	20.0%
9/1	New Forest Ride S Ahead	U	N/A	N/A	-		-	-	-	748	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1045	Inf	Inf	0.0%

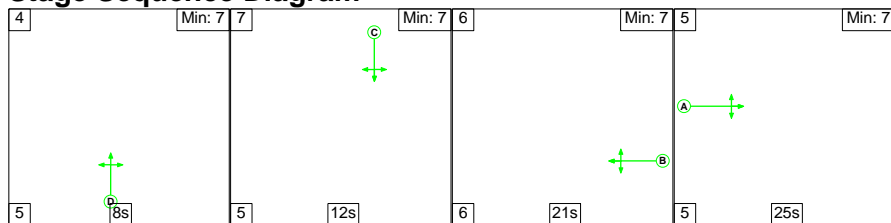
Full Input Data And Results

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: Concept Signalled Junction	-	-	0	0	0	22.3	10.7	0.0	33.0	-	-	-	-
Martins Heron Junction	-	-	0	0	0	22.3	10.7	0.0	33.0	-	-	-	-
1/2+1/1	354	354	-	-	-	3.7	1.1	-	4.9	49.3	4.2	1.1	5.4
2/1	440	440	-	-	-	3.8	2.2	-	5.9	48.7	10.3	2.2	12.4
2/2	440	440	-	-	-	3.7	1.6	-	5.4	44.0	10.1	1.6	11.8
3/2+3/1	513	513	-	-	-	4.2	2.0	-	6.2	43.4	7.9	2.0	9.9
3/3	235	235	-	-	-	1.8	0.4	-	2.3	34.6	4.9	0.4	5.3
4/1	257	257	-	-	-	2.6	1.6	-	4.2	58.7	6.1	1.6	7.8
4/2	256	256	-	-	-	2.5	1.3	-	3.8	53.3	6.0	1.3	7.3
5/1	412	412	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	188	188	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	310	310	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
8/1	622	622	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
8/2	423	423	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
9/1	748	748	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1045	1045	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 9.9 Total Delay for Signalled Lanes (pcuHr): 32.60 Cycle Time (s): 90 PRC Over All Lanes (%): 9.9 Total Delay Over All Lanes(pcuHr): 33.05													

Full Input Data And Results

Scenario 2: '2013 PM' (FG2: '2013 PM', Plan 1: 'Network Control Plan 1')

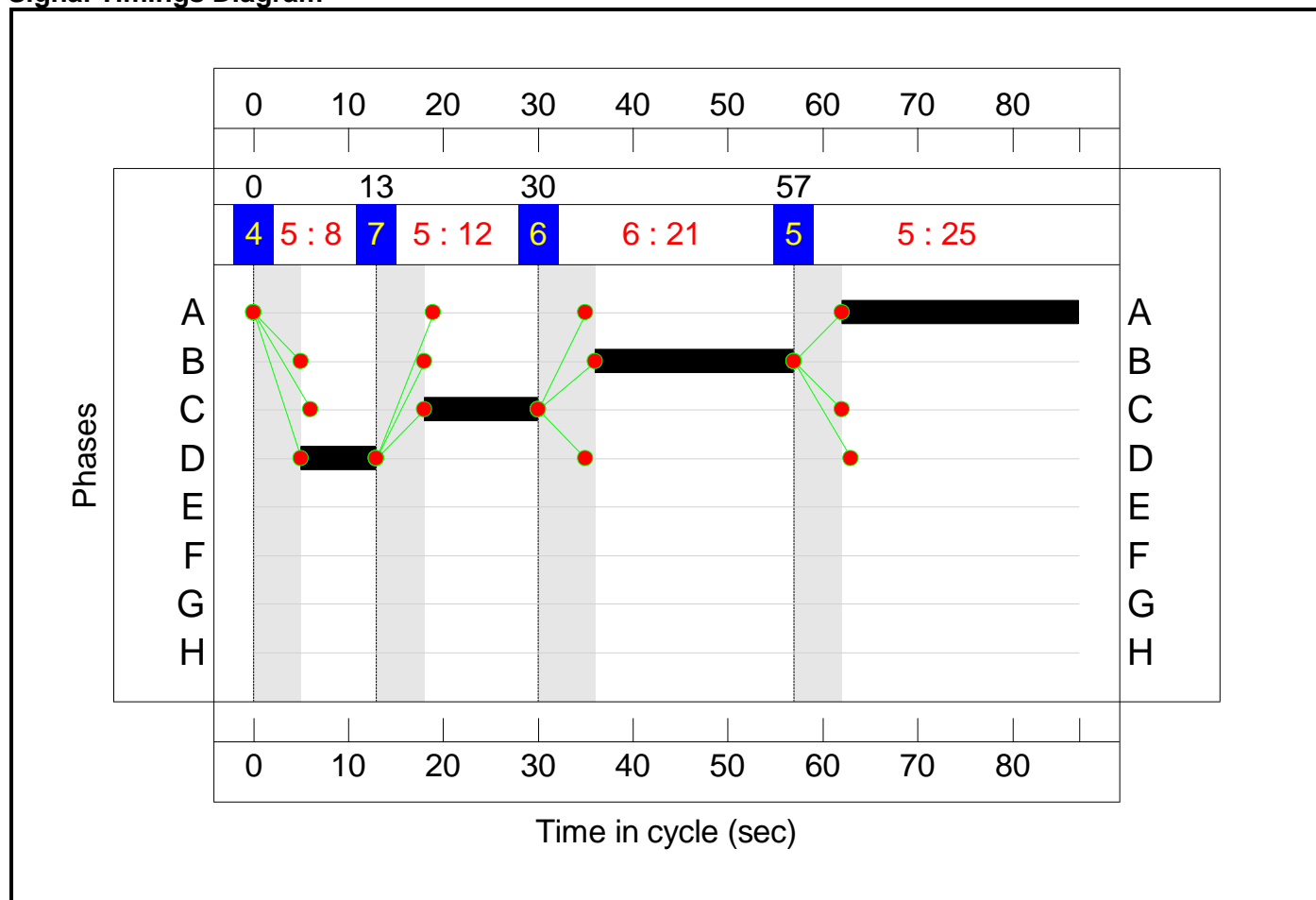
Stage Sequence Diagram



Stage Timings


Stage	4	7	6	5
Duration	8	12	21	25
Change Point	0	13	30	57

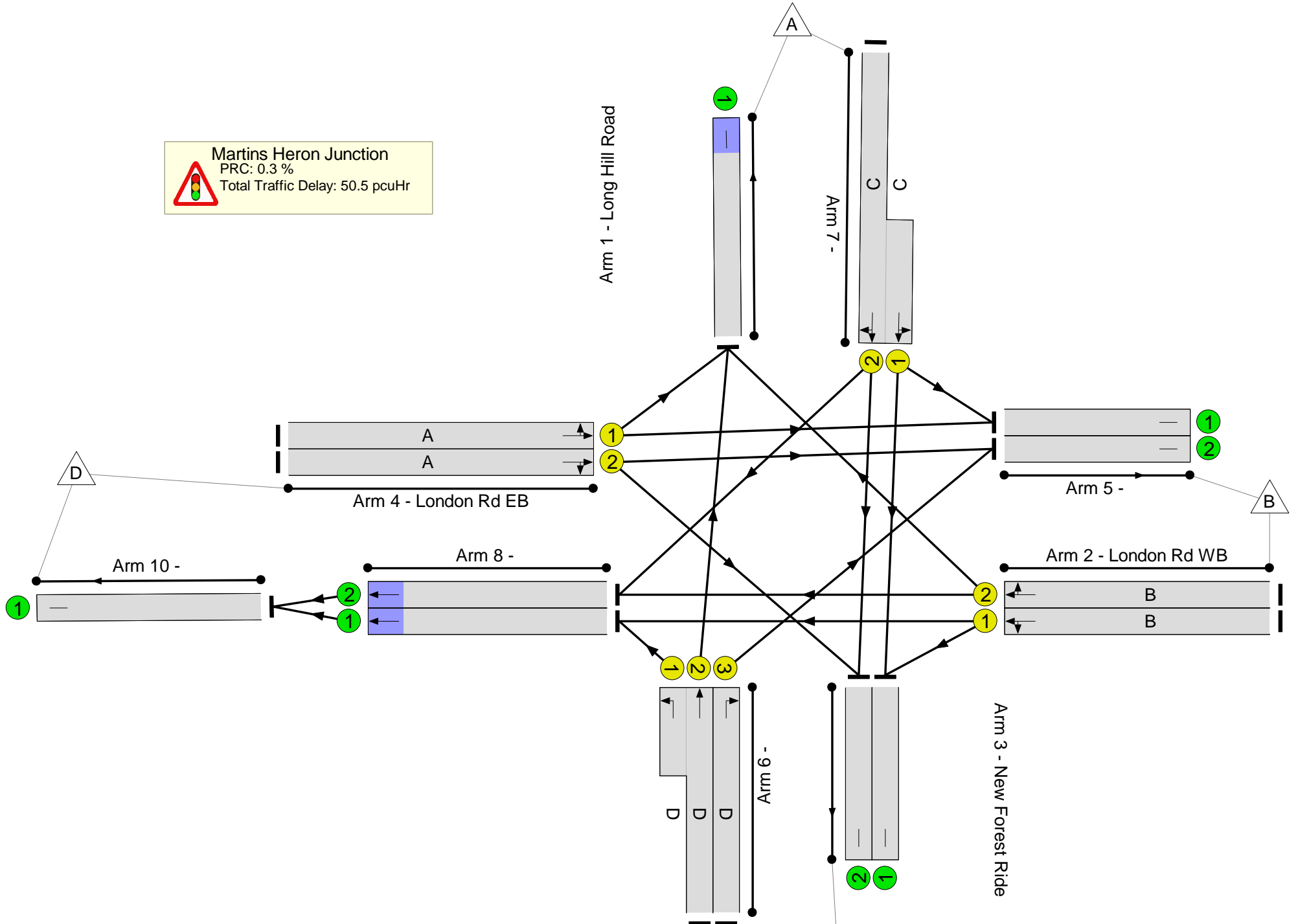
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

 **Martins Heron Junction**
PRC: 0.3 %
Total Traffic Delay: 50.5 pcuHr



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: Concept Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	89.7%
Martins Heron Junction	-	-	N/A	-	-		-	-	-	-	-	-	89.7%
1/2+1/1	Long Hill Road Left Ahead Right	U	N/A	N/A	C		1	12	-	540	2133:2115	302+302	89.4 : 89.4%
2/1	London Rd WB Left Ahead	U	N/A	N/A	B		1	21	-	451	2015	510	88.5%
2/2	London Rd WB Right Ahead	U	N/A	N/A	B		1	21	-	450	2135	540	83.4%
3/2+3/1	New Forest Ride Ahead Left	U	N/A	N/A	D		1	8	-	370	2120:1886	217+195	89.7 : 89.7%
3/3	New Forest Ride Right	U	N/A	N/A	D		1	8	-	184	2019	209	88.1%
4/1	London Rd EB Ahead Left	U	N/A	N/A	A		1	25	-	529	1989	594	89.0%
4/2	London Rd EB Ahead Right	U	N/A	N/A	A		1	25	-	529	2089	624	84.7%
5/1		U	N/A	N/A	-		-	-	-	574	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	513	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	335	2065	2065	16.2%
8/1	Ahead	U	N/A	N/A	-		-	-	-	282	1975	1975	14.3%
8/2	Ahead	U	N/A	N/A	-		-	-	-	472	2115	2115	22.3%
9/1	New Forest Ride S Ahead	U	N/A	N/A	-		-	-	-	554	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	754	Inf	Inf	0.0%

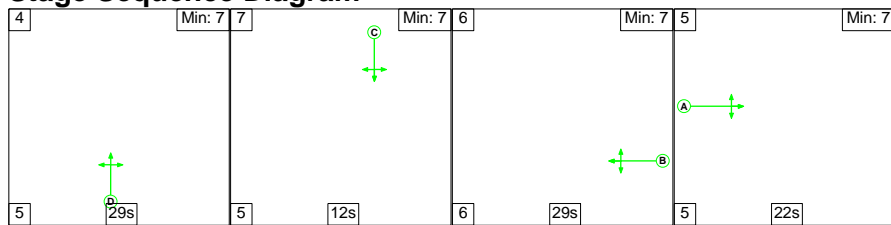
Full Input Data And Results

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: Concept Signalled Junction	-	-	0	0	0	27.6	22.9	0.0	50.5	-	-	-	-
Martins Heron Junction	-	-	0	0	0	27.6	22.9	0.0	50.5	-	-	-	-
1/2+1/1	540	540	-	-	-	5.4	3.8	-	9.2	61.3	6.3	3.8	10.1
2/1	451	451	-	-	-	3.9	3.4	-	7.4	58.8	10.4	3.4	13.8
2/2	450	450	-	-	-	3.8	2.4	-	6.2	49.8	10.3	2.4	12.6
3/2+3/1	370	370	-	-	-	4.0	3.7	-	7.7	74.6	4.6	3.7	8.3
3/3	184	184	-	-	-	2.0	3.0	-	5.0	96.9	4.3	3.0	7.3
4/1	529	529	-	-	-	4.3	3.6	-	7.9	53.9	12.2	3.6	15.8
4/2	529	529	-	-	-	4.2	2.6	-	6.8	46.5	11.9	2.6	14.5
5/1	574	574	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	381	381	-	-	-	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	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	335	335	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
8/1	282	282	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
8/2	472	472	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
9/1	554	554	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	754	754	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		0.3	Total Delay for Signalled Lanes (pcuHr):		50.16	Cycle Time (s):		87		
			PRC Over All Lanes (%):		0.3	Total Delay Over All Lanes(pcuHr):		50.49					

Full Input Data And Results

Scenario 3: '2026 AM FF' (FG3: '2026 AM FF', Plan 1: 'Network Control Plan 1')

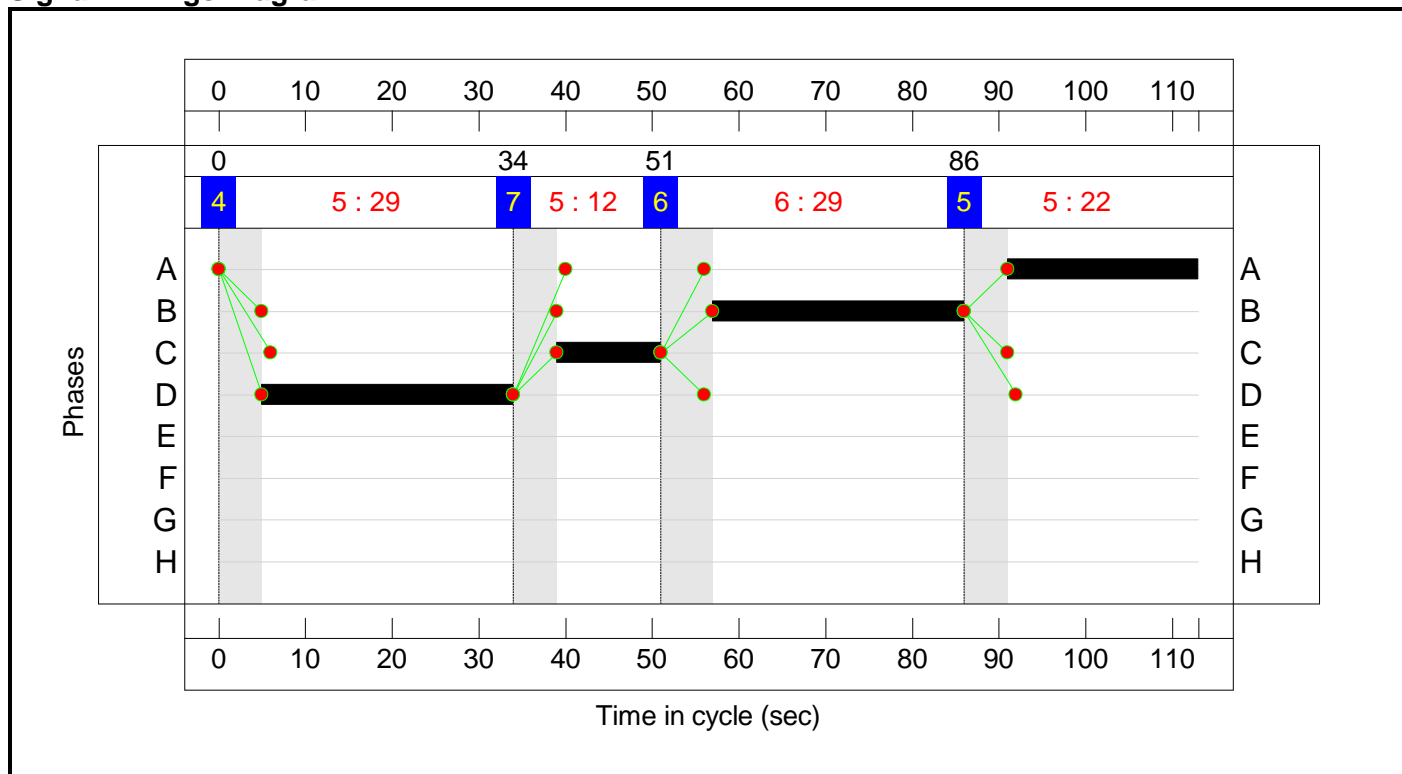
Stage Sequence Diagram



Stage Timings

Stage	4	7	6	5
Duration	29	12	29	22
Change Point	0	34	51	86

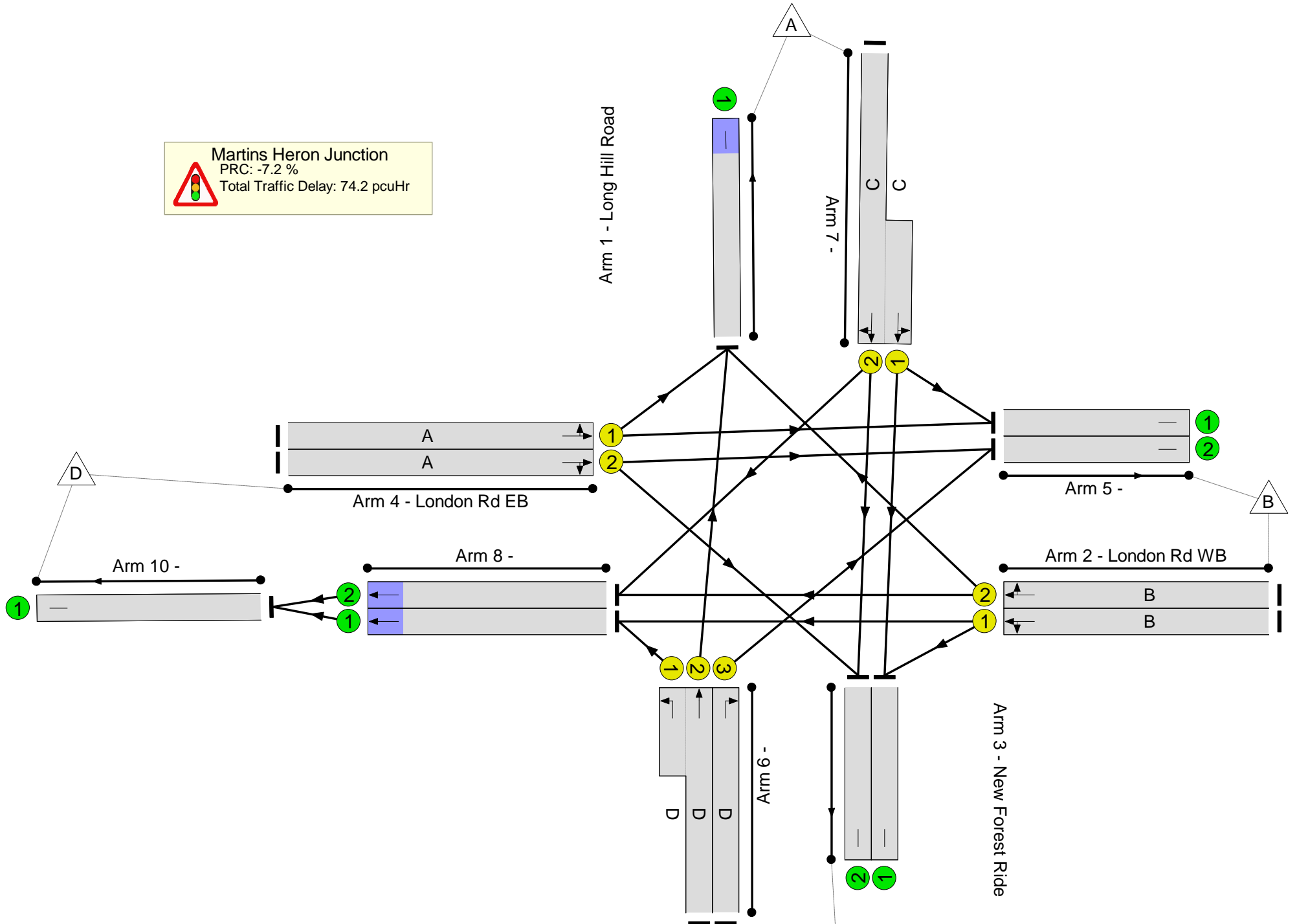

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Martins Heron Junction
PRC: -7.2 %
Total Traffic Delay: 74.2 pcuHr



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: Concept Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	96.5%
Martins Heron Junction	-	-	N/A	-	-		-	-	-	-	-	-	96.5%
1/2+1/1	Long Hill Road Left Ahead Right	U	N/A	N/A	C		1	12	-	393	2167:2052	174+234	96.3 : 96.3%
2/1	London Rd WB Left Ahead	U	N/A	N/A	B		1	29	-	515	2015	535	96.3%
2/2	London Rd WB Right Ahead	U	N/A	N/A	B		1	29	-	516	2113	561	92.0%
3/2+3/1	New Forest Ride Ahead Left	U	N/A	N/A	D		1	29	-	576	2120:1886	216+381	96.5 : 96.5%
3/3	New Forest Ride Right	U	N/A	N/A	D		1	29	-	233	2019	536	43.5%
4/1	London Rd EB Ahead Left	U	N/A	N/A	A		1	22	-	394	2006	408	96.5%
4/2	London Rd EB Ahead Right	U	N/A	N/A	A		1	22	-	394	2119	431	91.4%
5/1		U	N/A	N/A	-		-	-	-	605	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	493	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	40	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	428	2065	2065	20.7%
8/1	Ahead	U	N/A	N/A	-		-	-	-	843	1975	1975	42.7%
8/2	Ahead	U	N/A	N/A	-		-	-	-	323	2115	2115	15.3%
9/1	New Forest Ride S Ahead	U	N/A	N/A	-		-	-	-	809	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1166	Inf	Inf	0.0%

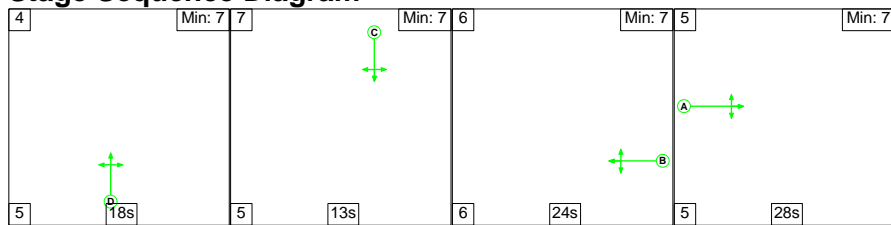
Full Input Data And Results

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: Concept Signalled Junction	-	-	0	0	0	35.1	39.1	0.0	74.2	-	-	-	-
Martins Heron Junction	-	-	0	0	0	35.1	39.1	0.0	74.2	-	-	-	-
1/2+1/1	393	393	-	-	-	5.3	6.8	-	12.2	111.5	7.0	6.8	13.8
2/1	515	515	-	-	-	5.9	7.4	-	13.3	92.7	15.9	7.4	23.3
2/2	516	516	-	-	-	5.8	4.7	-	10.5	73.4	15.6	4.7	20.4
3/2+3/1	576	576	-	-	-	6.2	7.8	-	14.1	88.0	14.9	7.8	22.8
3/3	233	233	-	-	-	2.2	0.4	-	2.6	40.4	6.0	0.4	6.4
4/1	394	394	-	-	-	4.9	7.0	-	11.9	108.3	12.1	7.0	19.1
4/2	394	394	-	-	-	4.8	4.3	-	9.1	83.3	12.0	4.3	16.3
5/1	605	605	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	40	40	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	428	428	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
8/1	843	843	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
8/2	323	323	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
9/1	809	809	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1166	1166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):	-7.2	Total Delay for Signalled Lanes (pcuHr):	73.63	Cycle Time (s):	113					
			PRC Over All Lanes (%):	-7.2	Total Delay Over All Lanes(pcuHr):	74.22							

Full Input Data And Results

Scenario 4: '2026 PM FF' (FG4: '2026 PM FF', Plan 1: 'Network Control Plan 1')

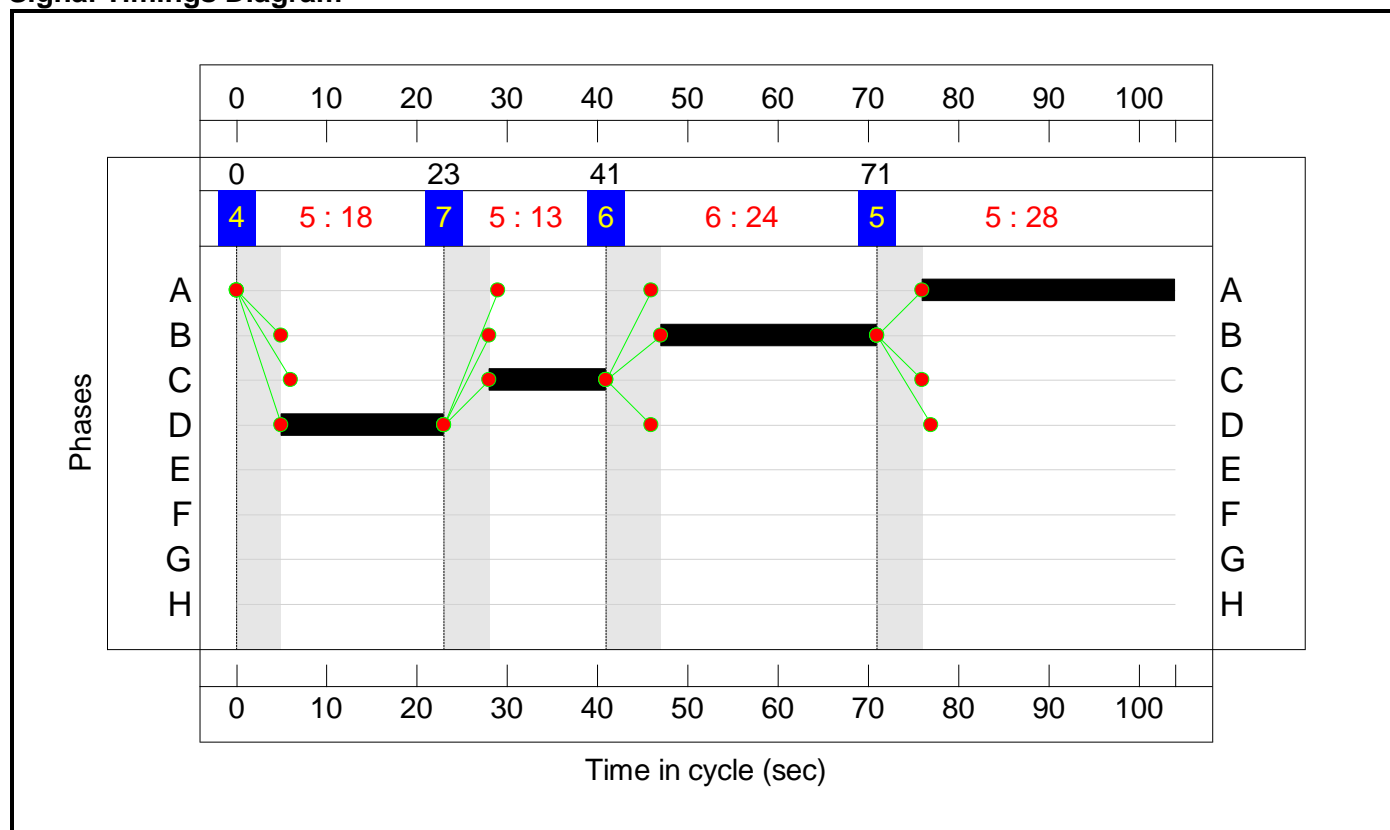
Stage Sequence Diagram



Stage Timings


Stage	4	7	6	5
Duration	18	13	24	28
Change Point	0	23	41	71

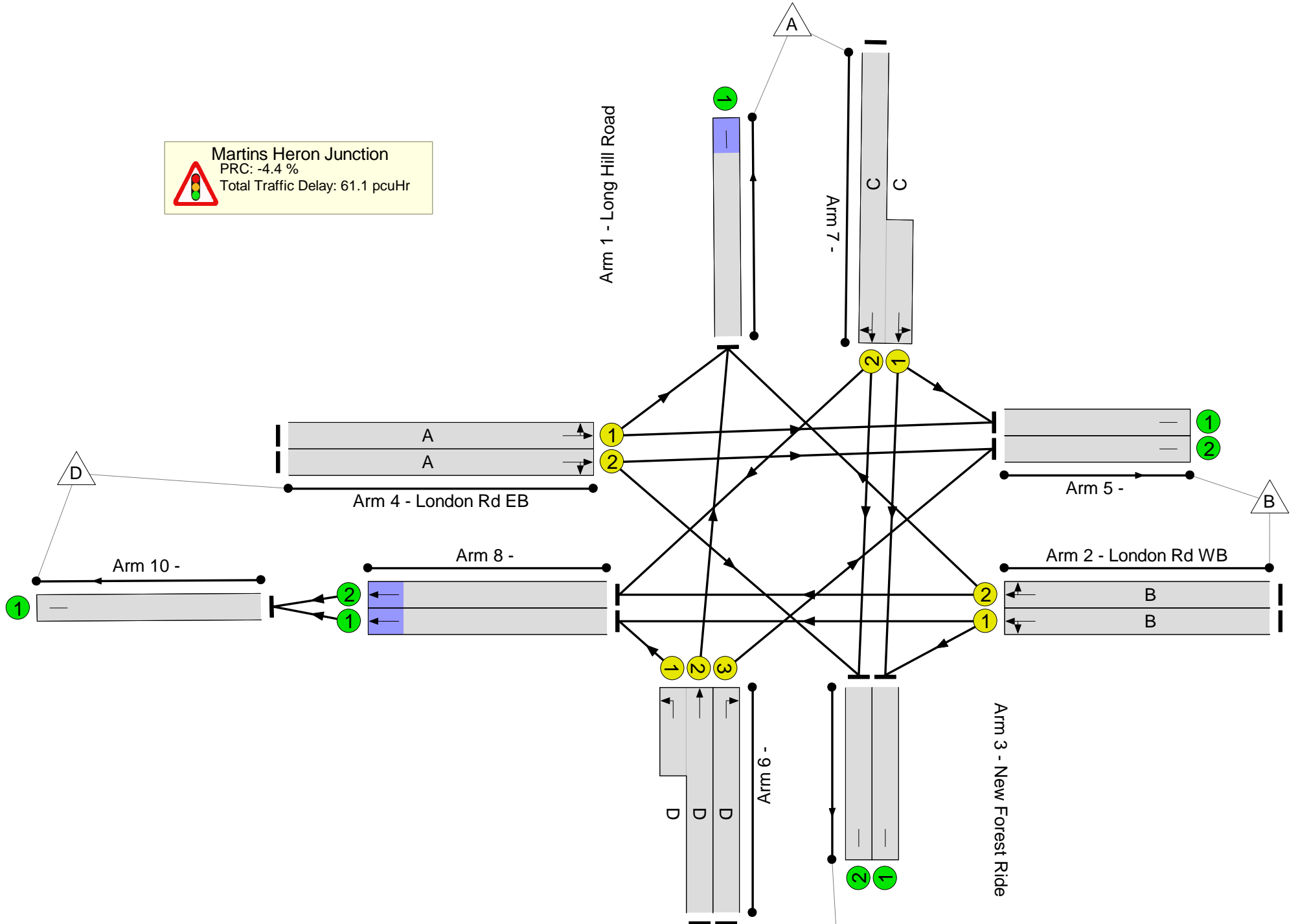
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results


Martins Heron Junction
 PRC: -4.4 %
 Total Traffic Delay: 61.1 pcuHr



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: Concept Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	94.0%
Martins Heron Junction	-	-	N/A	-	-		-	-	-	-	-	-	94.0%
1/2+1/1	Long Hill Road Left Ahead Right	U	N/A	N/A	C		1	13	-	494	2166:2111	263+263	94.0 : 94.0%
2/1	London Rd WB Left Ahead	U	N/A	N/A	B		1	24	-	450	2015	484	92.9%
2/2	London Rd WB Right Ahead	U	N/A	N/A	B		1	24	-	450	2122	510	88.2%
3/2+3/1	New Forest Ride Ahead Left	U	N/A	N/A	D		1	18	-	444	2120:1886	318+154	94.0 : 94.0%
3/3	New Forest Ride Right	U	N/A	N/A	D		1	18	-	44	2019	369	11.9%
4/1	London Rd EB Ahead Left	U	N/A	N/A	A		1	28	-	525	2013	561	93.5%
4/2	London Rd EB Ahead Right	U	N/A	N/A	A		1	28	-	526	2113	589	89.3%
5/1		U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	276	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	438	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	444	2065	2065	21.5%
8/1	Ahead	U	N/A	N/A	-		-	-	-	462	1975	1975	23.4%
8/2	Ahead	U	N/A	N/A	-		-	-	-	329	2115	2115	15.6%
9/1	New Forest Ride S Ahead	U	N/A	N/A	-		-	-	-	488	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	791	Inf	Inf	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: Concept Signalled Junction	-	-	0	0	0	31.7	29.4	0.0	61.1	-	-	-	-
Martins Heron Junction	-	-	0	0	0	31.7	29.4	0.0	61.1	-	-	-	-
1/2+1/1	494	494	-	-	-	6.0	5.7	-	11.8	85.7	7.1	5.7	12.9
2/1	450	450	-	-	-	4.8	5.1	-	9.9	79.1	12.6	5.1	17.7
2/2	450	450	-	-	-	4.8	3.4	-	8.1	65.0	12.5	3.4	15.9
3/2+3/1	444	444	-	-	-	5.0	5.6	-	10.6	86.2	10.2	5.6	15.7
3/3	44	44	-	-	-	0.4	0.1	-	0.5	41.1	1.1	0.1	1.1
4/1	525	525	-	-	-	5.3	5.5	-	10.9	74.6	14.7	5.5	20.3
4/2	526	526	-	-	-	5.3	3.7	-	9.0	61.5	14.5	3.7	18.2
5/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	359	359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	276	276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	438	438	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	444	444	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.2
8/1	462	462	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
8/2	329	329	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
9/1	488	488	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	791	791	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -4.4 Total Delay for Signalled Lanes (pcuHr): 60.77 Cycle Time (s): 104 PRC Over All Lanes (%): -4.4 Total Delay Over All Lanes(pcuHr): 61.15													