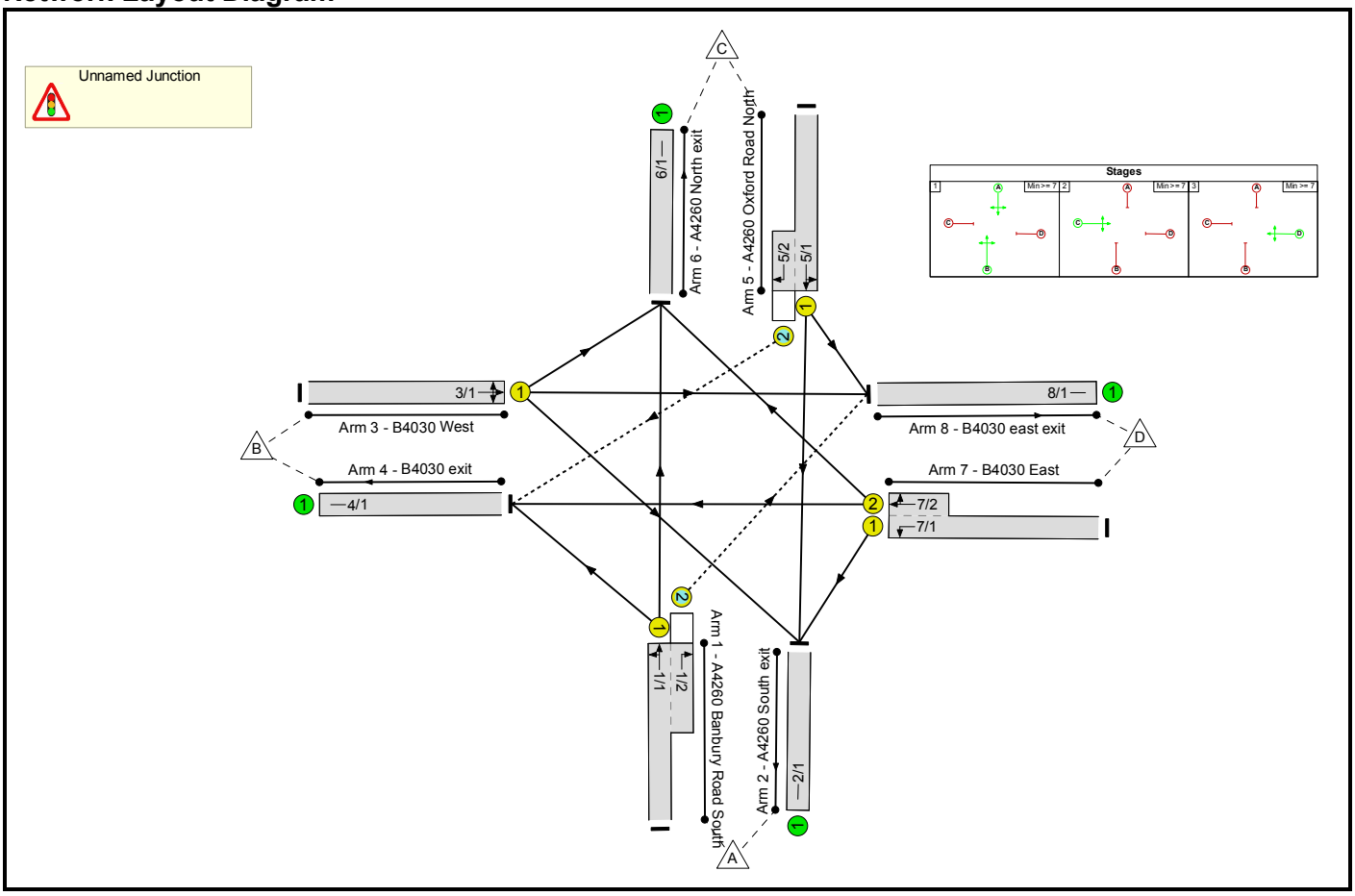
Full Input Data And Results

User and Project Details

Project:	**Heyford Park**
Title:	**Hopscroft Holt junction**
Location:	
Additional detail:	
File name:	Hopcroft Holt V8.lsg3x
Author:	ekeen
Company:	Peter Brett Associates
Address:	10 Queen Square

Network Layout Diagram



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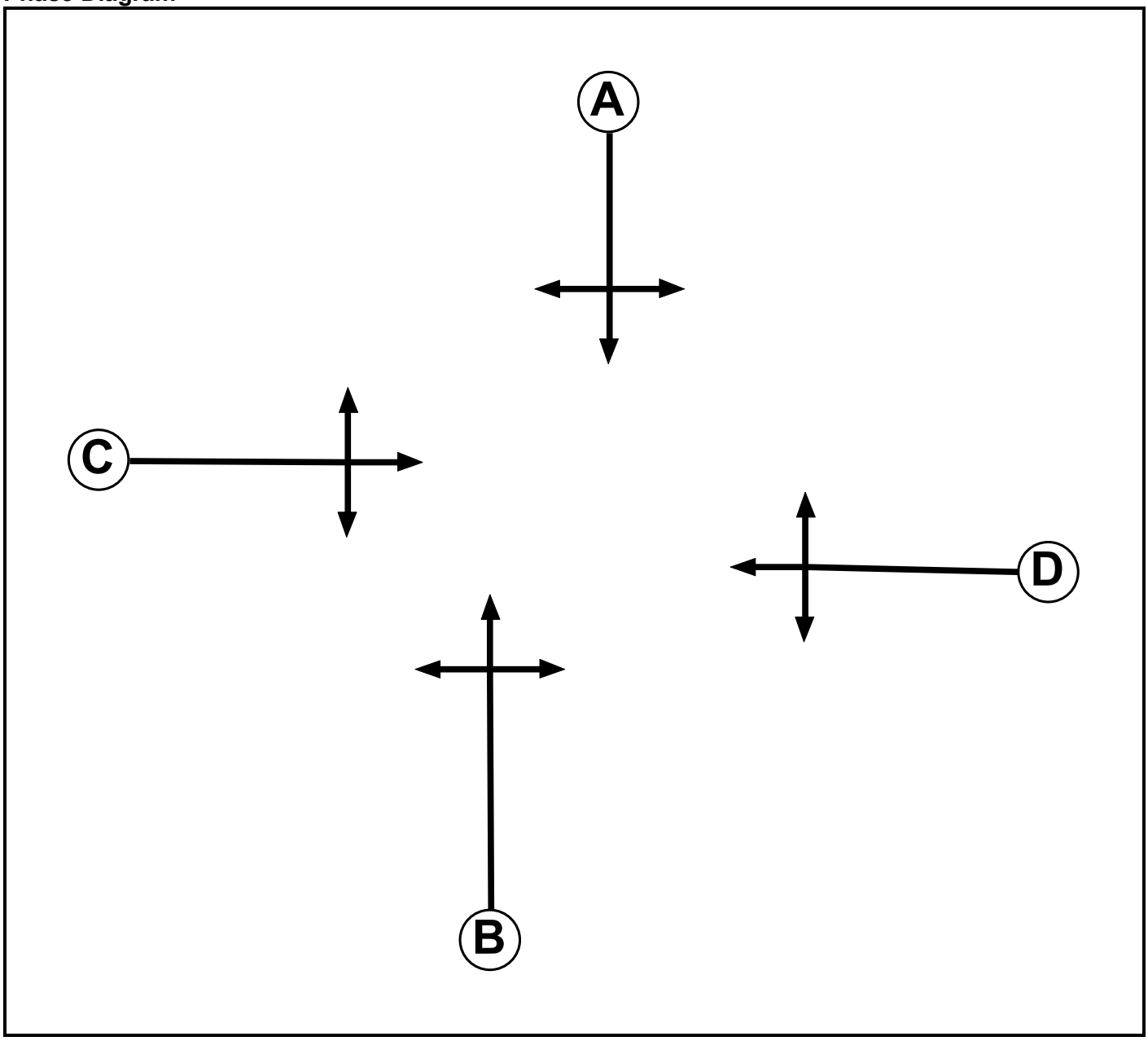
Phase Diagram



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

Full Input Data And Results

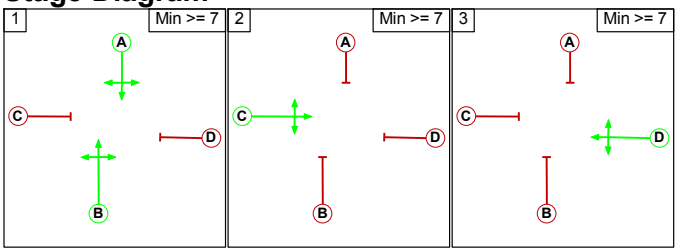
Phase Intergreens Matrix

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

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1		7	7
	2	7		7
	3	7	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (A4260 Banbury Road South)	8/1 (Right)	1439	0	5/1	1.09	All	2.00	-	0.50	2	2.00
5/2 (A4260 Oxford Road North)	4/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Unnamed 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 (A4260 Banbury Road South)	U	B	2	3	60.0	Geom	-	2.50	0.00	Y	Arm 4 Left	20.00
											Arm 6 Ahead	Inf
1/2 (A4260 Banbury Road South)	O	B	2	3	6.0	Geom	-	2.50	0.00	N	Arm 8 Right	10.00
2/1 (A4260 South exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (B4030 West)	U	C	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 2 Right	14.00
											Arm 6 Left	15.00
											Arm 8 Ahead	15.00
4/1 (B4030 exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (A4260 Oxford Road North)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 2 Ahead	Inf
											Arm 8 Left	20.00
5/2 (A4260 Oxford Road North)	O	A	2	3	4.0	Geom	-	3.00	0.00	N	Arm 4 Right	10.00
6/1 (A4260 North exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (B4030 East)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 2 Left	13.00
7/2 (B4030 East)	U	D	2	3	4.0	Geom	-	3.00	0.00	N	Arm 4 Ahead	15.00
											Arm 6 Right	15.00
8/1 (B4030 east exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
15: '2022 Ref (Sens) AM'	07:45	08:45	01:00	
16: '2022 Ref (Sens) PM'	17:00	18:00	01:00	

Scenario 15: '2022 Ref (Sens) AM' (FG15: '2022 Ref (Sens) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	20	332	35	387
	B	69	0	34	132	235
	C	757	24	0	74	855
	D	114	131	86	0	331
	Tot.	940	175	452	241	1808

Traffic Lane Flows

Lane	Scenario 15: 2022 Ref (Sens) AM
Junction: Unnamed Junction	
1/1 (with short)	387(In) 352(Out)
1/2 (short)	35
2/1	940
3/1	235
4/1	175
5/1 (with short)	855(In) 831(Out)
5/2 (short)	24
6/1	452
7/1 (with short)	331(In) 114(Out)
7/2 (short)	217
8/1	241

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed 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 (A4260 Banbury Road South)	2.50	0.00	Y	Arm 4 Left	20.00	5.7 %	1857	1857
				Arm 6 Ahead	Inf	94.3 %		
1/2 (A4260 Banbury Road South)	2.50	0.00	N	Arm 8 Right	10.00	100.0 %	1743	1743
2/1 (A4260 South exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (B4030 West)	3.30	0.00	Y	Arm 2 Right	14.00	29.4 %	1765	1765
				Arm 6 Left	15.00	14.5 %		
				Arm 8 Ahead	15.00	56.2 %		
4/1 (B4030 exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A4260 Oxford Road North)	3.00	0.00	Y	Arm 2 Ahead	Inf	91.1 %	1902	1902
				Arm 8 Left	20.00	8.9 %		
5/2 (A4260 Oxford Road North)	3.00	0.00	N	Arm 4 Right	10.00	100.0 %	1787	1787
6/1 (A4260 North exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B4030 East)	3.00	0.00	Y	Arm 2 Left	13.00	100.0 %	1717	1717
7/2 (B4030 East)	3.00	0.00	N	Arm 4 Ahead	15.00	60.4 %	1868	1868
				Arm 6 Right	15.00	39.6 %		
8/1 (B4030 east exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 16: '2022 Ref (Sens) PM' (FG16: '2022 Ref (Sens) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	58	679	63	800
	B	20	0	25	97	142
	C	302	29	0	61	392
	D	33	104	90	0	227
	Tot.	355	191	794	221	1561

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 16: 2022 Ref (Sens) PM
Junction: Unnamed Junction	
1/1 (with short)	800(In) 737(Out)
1/2 (short)	63
2/1	355
3/1	142
4/1	191
5/1 (with short)	392(In) 363(Out)
5/2 (short)	29
6/1	794
7/1 (with short)	227(In) 33(Out)
7/2 (short)	194
8/1	221

Full Input Data And Results

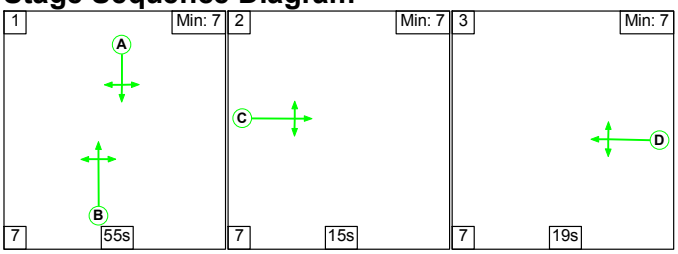
Lane Saturation Flows

Junction: Unnamed 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 (A4260 Banbury Road South)	2.50	0.00	Y	Arm 4 Left	20.00	7.9 %	1854	1854
				Arm 6 Ahead	Inf	92.1 %		
1/2 (A4260 Banbury Road South)	2.50	0.00	N	Arm 8 Right	10.00	100.0 %	1743	1743
2/1 (A4260 South exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (B4030 West)	3.30	0.00	Y	Arm 2 Right	14.00	14.1 %	1767	1767
				Arm 6 Left	15.00	17.6 %		
				Arm 8 Ahead	15.00	68.3 %		
4/1 (B4030 exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A4260 Oxford Road North)	3.00	0.00	Y	Arm 2 Ahead	Inf	83.2 %	1891	1891
				Arm 8 Left	20.00	16.8 %		
5/2 (A4260 Oxford Road North)	3.00	0.00	N	Arm 4 Right	10.00	100.0 %	1787	1787
6/1 (A4260 North exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B4030 East)	3.00	0.00	Y	Arm 2 Left	13.00	100.0 %	1717	1717
7/2 (B4030 East)	3.00	0.00	N	Arm 4 Ahead	15.00	53.6 %	1868	1868
				Arm 6 Right	15.00	46.4 %		
8/1 (B4030 east exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 15: '2022 Ref (Sens) AM' (FG15: '2022 Ref (Sens) AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

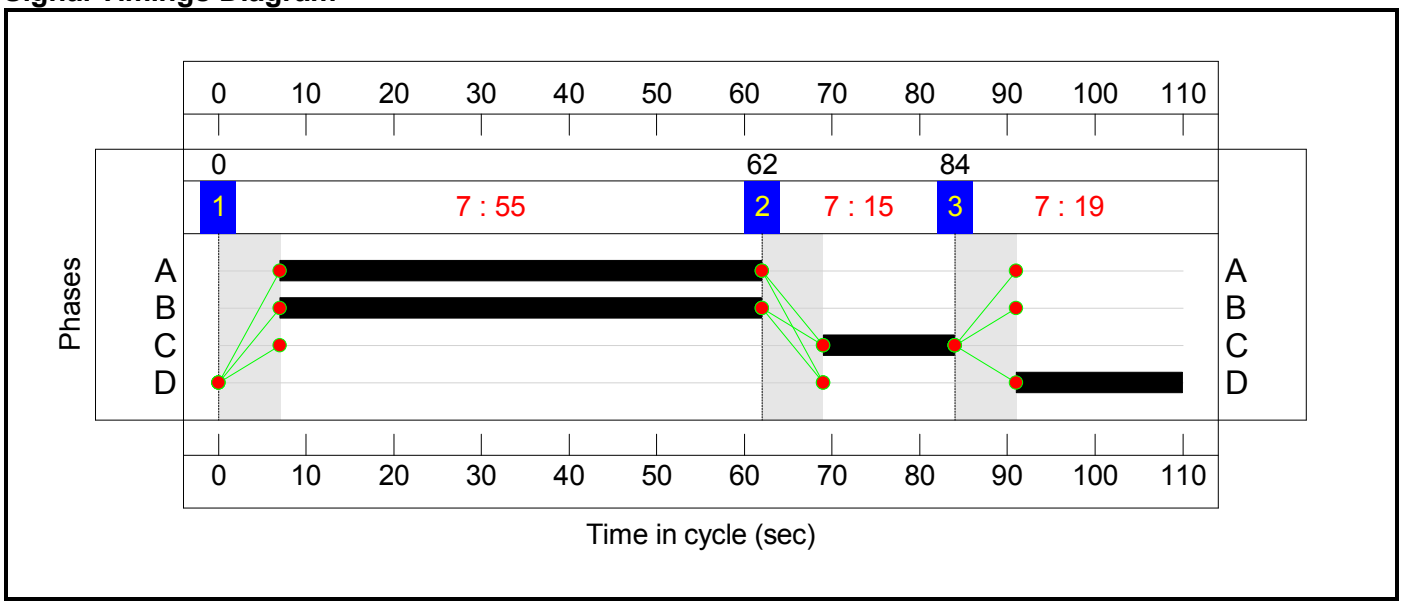


Stage Timings

Stage	1	2	3
Duration	55	15	19
Change Point	0	62	84

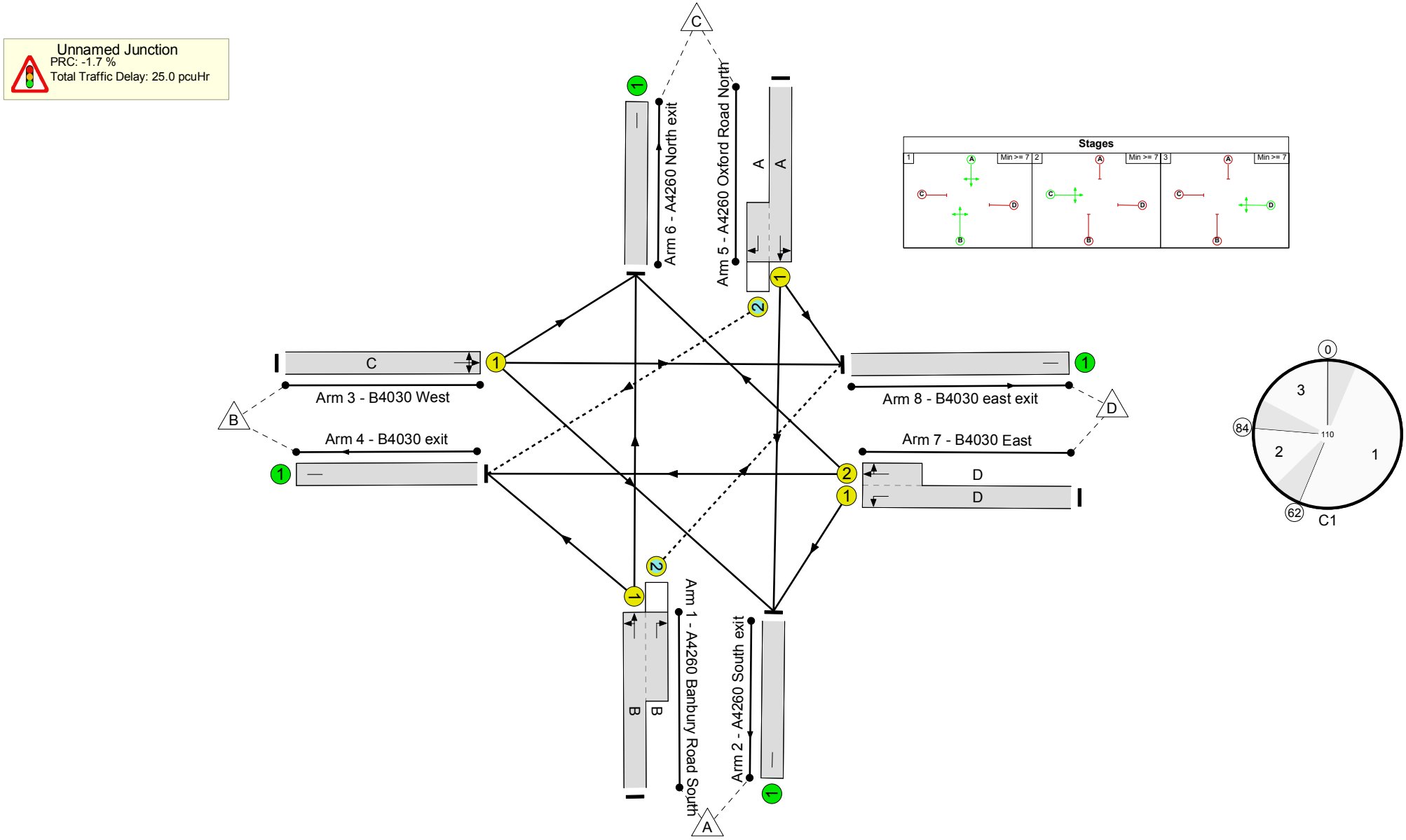
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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: Hopscroft Holt junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.5%**
1/1+1/2	A4260 Banbury Road South Left Ahead Right	U+O	N/A	N/A	B		1	55	-	387	1857:1743	868+86	40.6 : 40.6%
2/1	A4260 South exit	U	N/A	N/A	-		-	-	-	940	Inf	Inf	0.0%
3/1	B4030 West Right Left Ahead	U	N/A	N/A	C		1	15	-	235	1765	257	91.5%
4/1	B4030 exit	U	N/A	N/A	-		-	-	-	175	Inf	Inf	0.0%
5/1+5/2	A4260 Oxford Road North Ahead Right Left	U+O	N/A	N/A	A		1	55	-	855	1902:1787	936+27	88.8 : 88.8%
6/1	A4260 North exit	U	N/A	N/A	-		-	-	-	452	Inf	Inf	0.0%
7/1+7/2	B4030 East Left Ahead Right	U	N/A	N/A	D		1	19	-	331	1717:1868	137+261	83.3 : 83.3%
8/1	B4030 east exit	U	N/A	N/A	-		-	-	-	241	Inf	Inf	0.0%

Full Input Data And Results

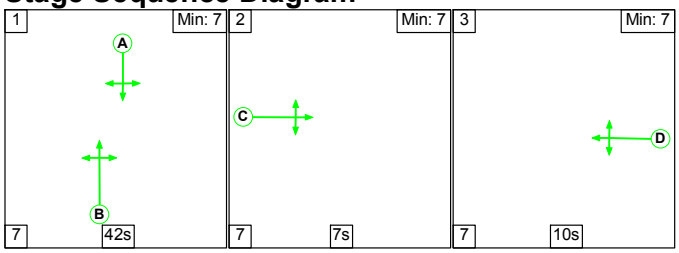
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Hopscroft Holt junction	**-**	**-**	**59**	**0**	**0**	**14.4**	**10.3**	**0.3**	**25.0**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**59**	**0**	**0**	**14.4**	**10.3**	**0.3**	**25.0**	**-**	**-**	**-**	**-**
1/1+1/2	387	387	35	0	0	1.7	0.3	0.3	2.4	22.1	6.6	0.3	7.0
2/1	940	940	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	235	235	-	-	-	3.0	4.0	-	7.0	107.0	7.1	4.0	11.0
4/1	175	175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	855	855	24	0	0	5.8	3.7	0.0	9.5	39.9	23.2	3.7	26.9
6/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	331	331	-	-	-	3.8	2.3	-	6.2	67.1	7.6	2.3	9.9
8/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -1.7 Total Delay for Signalled Lanes (pcuHr): 25.01 Cycle Time (s): 110
PRC Over All Lanes (%): -1.7 Total Delay Over All Lanes(pcuHr): 25.01

Full Input Data And Results

Scenario 16: '2022 Ref (Sens) PM' (FG16: '2022 Ref (Sens) PM', Plan 1: 'Network Control Plan 1')

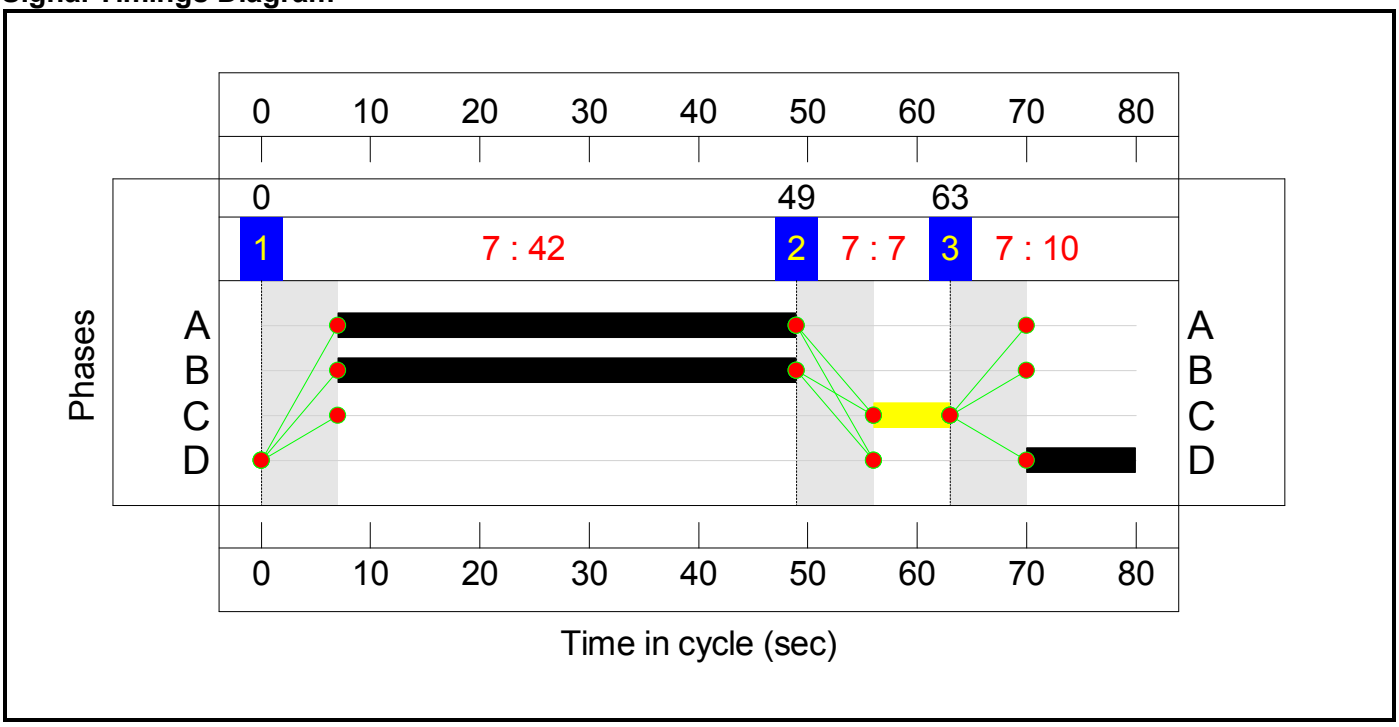
Stage Sequence Diagram



Stage Timings

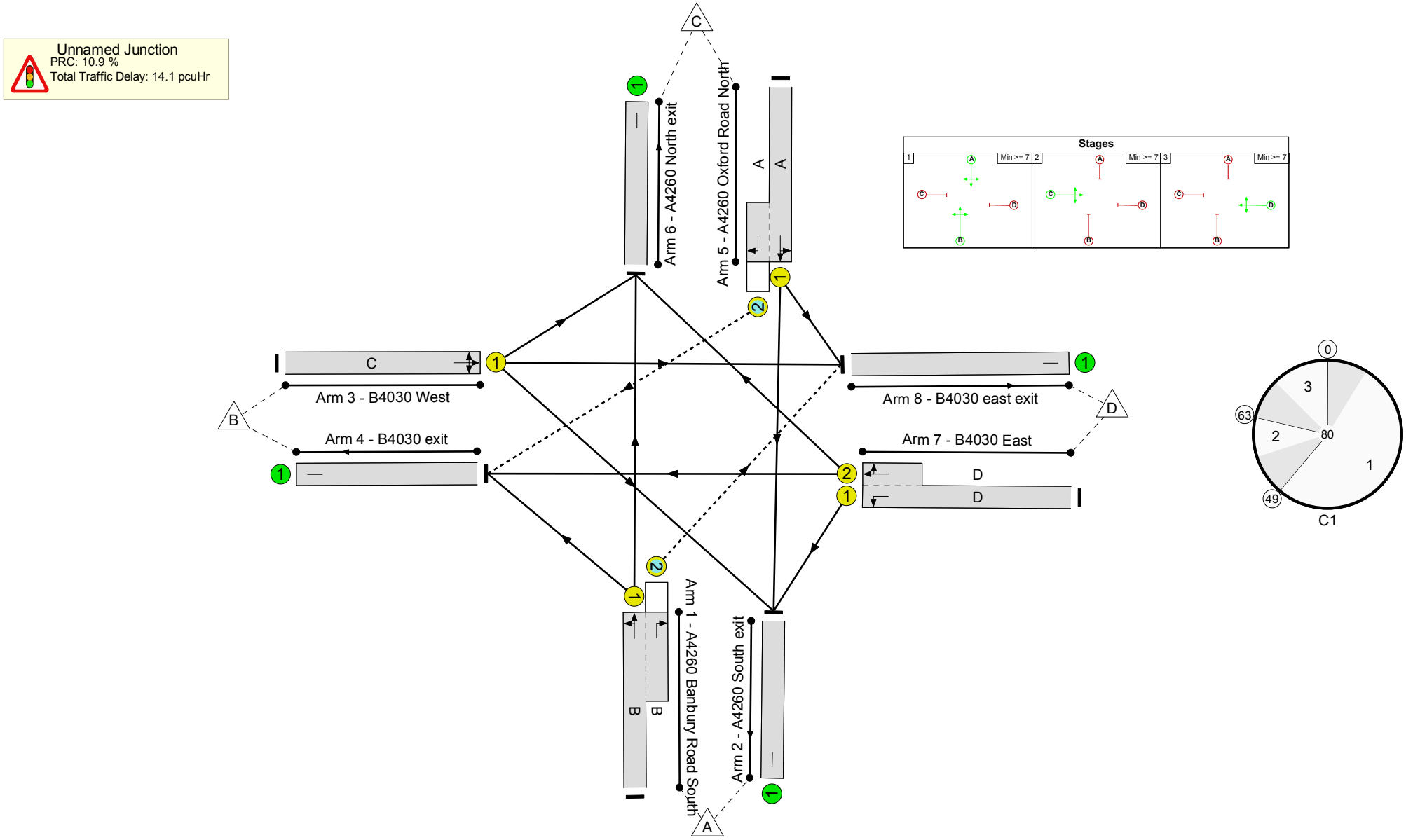
Stage	1	2	3
Duration	42	7	10
Change Point	0	49	63

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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: Hopscroft Holt junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.1%**
1/1+1/2	A4260 Banbury Road South Left Ahead Right	U+O	N/A	N/A	B		1	42	-	800	1854:1743	929+79	79.4 : 79.4%
2/1	A4260 South exit	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
3/1	B4030 West Right Left Ahead	U	N/A	N/A	C		1	7	-	142	1767	177	80.4%
4/1	B4030 exit	U	N/A	N/A	-		-	-	-	191	Inf	Inf	0.0%
5/1+5/2	A4260 Oxford Road North Ahead Right Left	U+O	N/A	N/A	A		1	42	-	392	1891:1787	943+75	38.5 : 38.5%
6/1	A4260 North exit	U	N/A	N/A	-		-	-	-	794	Inf	Inf	0.0%
7/1+7/2	B4030 East Left Ahead Right	U	N/A	N/A	D		1	10	-	227	1717:1868	41+239	81.1 : 81.1%
8/1	B4030 east exit	U	N/A	N/A	-		-	-	-	221	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: Hopscroft Holt junction	**-**	**-**	**92**	**0**	**0**	**7.8**	**6.1**	**0.2**	**14.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**92**	**0**	**0**	**7.8**	**6.1**	**0.2**	**14.1**	**-**	**-**	**-**	**-**
1/1+1/2	800	800	63	0	0	3.2	1.9	0.1	5.2	23.2	13.7	1.9	15.6
2/1	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	142	142	-	-	-	1.4	1.8	-	3.2	82.1	3.1	1.8	4.9
4/1	191	191	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	392	392	29	0	0	1.1	0.3	0.1	1.6	14.6	4.7	0.3	5.0
6/1	794	794	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	227	227	-	-	-	2.1	2.0	-	4.1	64.5	4.2	2.0	6.2
8/1	221	221	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 10.9 Total Delay for Signalled Lanes (pcuHr): 14.07 Cycle Time (s): 80
PRC Over All Lanes (%): 10.9 Total Delay Over All Lanes(pcuHr): 14.07