



# **Norwich Western Link**

## **Transport Assessment - Appendix 11 – Junction Model Results**

### **Sub Appendix 11q – Junction 20 A1067 Fakenham Road/ Costessey Lane/ School Road signalised junction**

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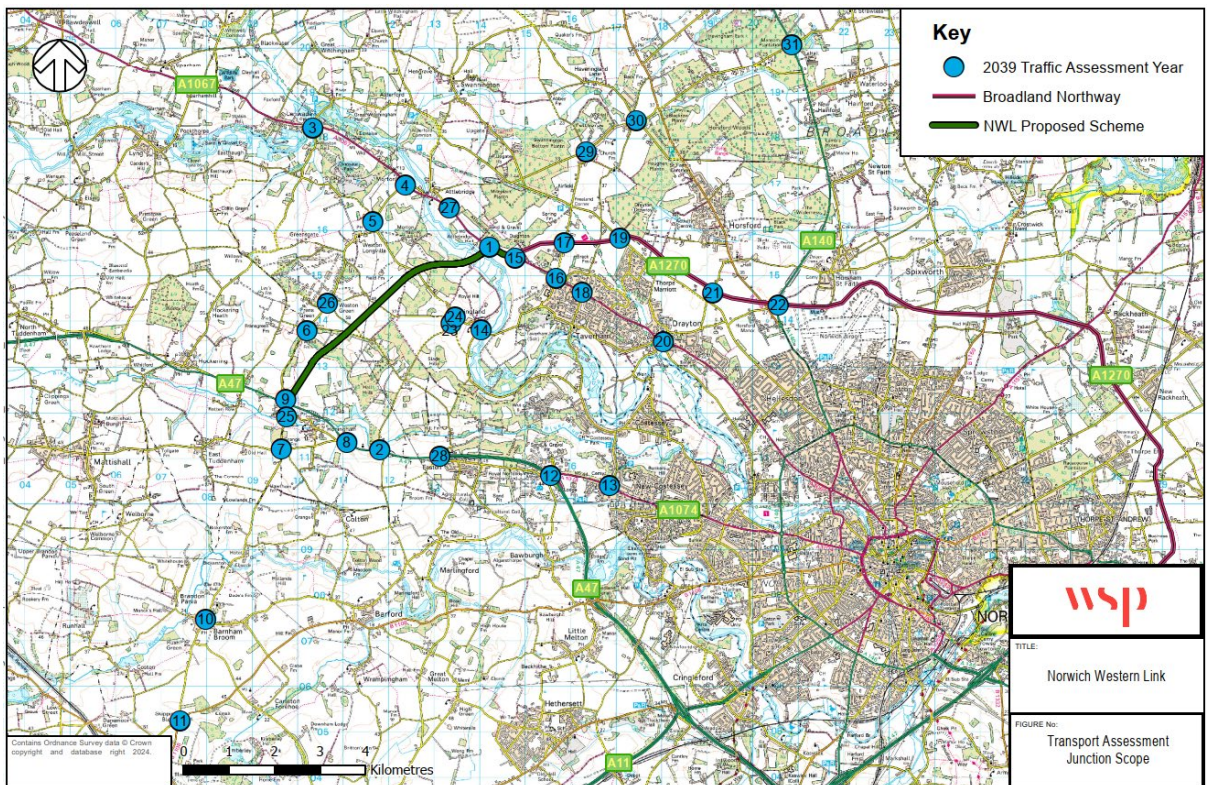
# 1 Junction Model Results

1.1.1 LinSig v3 modelling software output file that shows the junction capacity results for Junction 20 of the TA.

1.1.2 We have included a summary of key information shown in this document in an accessible format. However, some users may not be able to access all technical details. If you require this document in a more accessible format please contact [norwichwesternlink@norfolk.gov.uk](mailto:norwichwesternlink@norfolk.gov.uk)

1.1.3 The TA scope map is shown below as a location plan.

**Figure 1-1 Junction Assessment Scope**



1.1.4 The model results are presented for 2029 and 2039 future assessment years for AM and PM peak hours, taking 7.30-8.30am and AM peak and 5pm-6pm as PM peak.



1.1.5 The scenarios tested are as follows:

- Do Minimum – the baseline future situation with committed developments and planned highway improvements but without the Proposed Scheme.
- Do Something - the baseline future situation with the Proposed Scheme.
- Do Something + Mitigation - the baseline future situation with the Proposed Scheme added plus a package of traffic mitigation measures in the wider network (north of A1067 and south of A47 plus Honingham Lane closure).



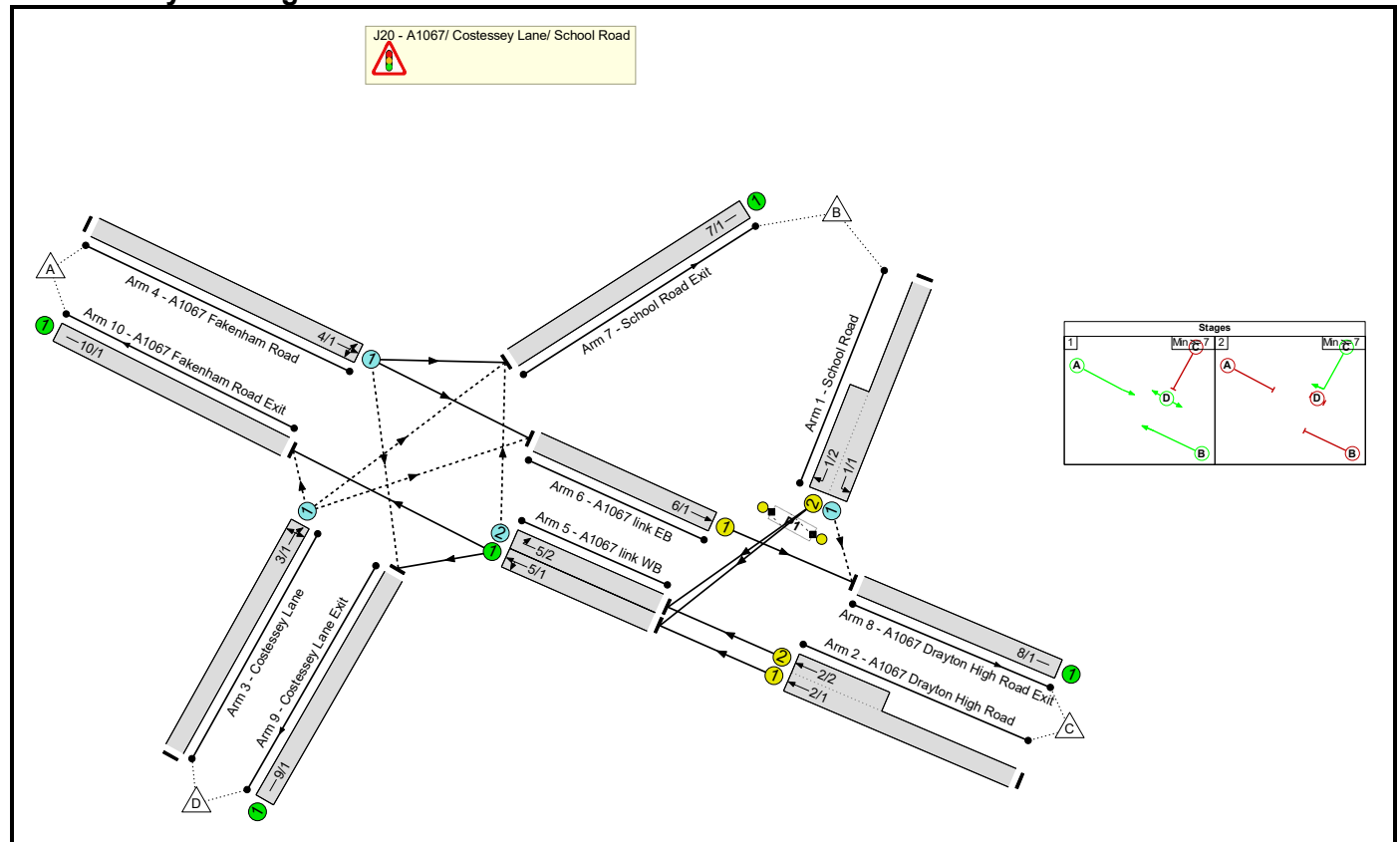
**J20 – A1067 Fakenham Road/ Costessey Lane/ School Road signalised  
junction Results**

Full Input Data And Results  
**Full Input Data And Results**

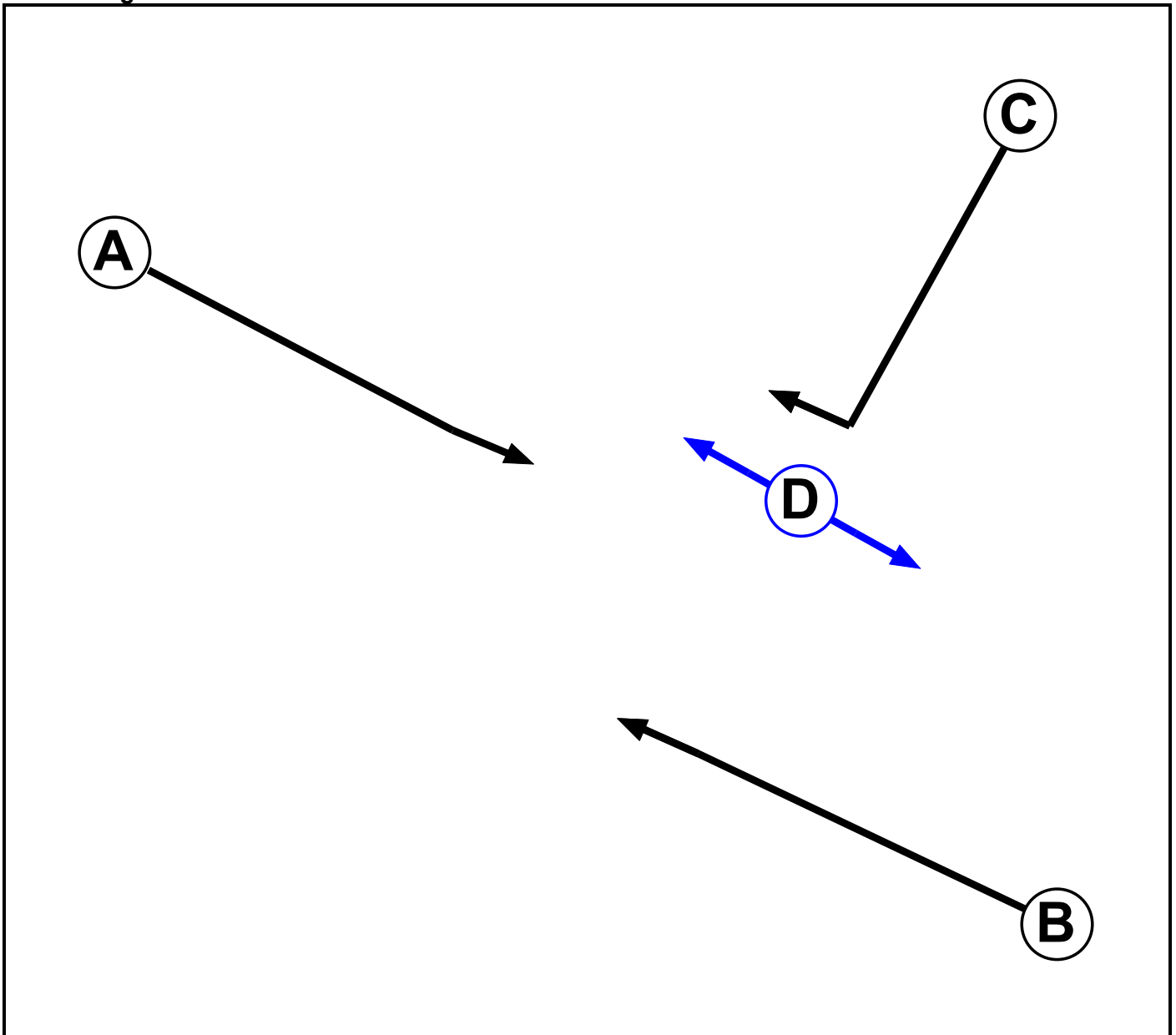
**User and Project Details**

<b>Project:</b>	
<b>Title:</b>	
<b>Location:</b>	
<b>Additional detail:</b>	
<b>File name:</b>	J20_updated.lsg3x
<b>Author:</b>	
<b>Company:</b>	
<b>Address:</b>	

**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	Pedestrian		7	7

Full Input Data And Results

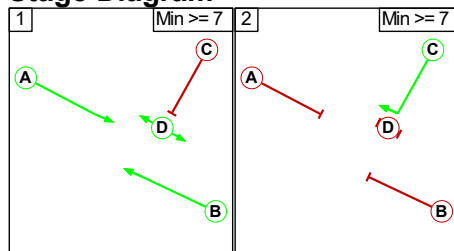
**Phase Intergrens Matrix**

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

**Phases in Stage**

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

**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
From Stage	1	6
	2	6



Full Input Data And Results

**Give-Way Lane Input Data**

Junction: J20 - A1067/ Costessey Lane/ School Road											
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)
1/1 (School Road)	8/1 (Left)	715	0	6/1	0.22	All	-	-	-	-	-
3/1 (Costessey Lane)	6/1 (Right)	1439	0	4/1	1.09	To 6/1 (Ahead) To 9/1 (Right)	-	-	-	-	-
				5/2	1.09	All					
				5/1	1.09	To 10/1 (Ahead)					
	7/1 (Ahead)	600	0	5/1	0.22	All					
				5/2	0.22	All					
				4/1	0.19	All					
10/1 (Left)	715	0	5/1	0.22	To 10/1 (Ahead)						
4/1 (A1067 Fakenham Road)	9/1 (Right)	850	0	5/1	0.35	All	-	-	-	-	-
5/2 (A1067 link WB)	7/1 (Right)	850	0	4/1	0.35	All	-	-	-	-	-

Full Input Data And Results

**Lane Input Data**

Junction: J20 - A1067/ Costessey Lane/ School Road												
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 (School Road)	O		2	3	60.0	Geom	-	5.00	0.00	Y	Arm 8 Left	20.00
1/2 (School Road)	U	C	2	3	8.2	Geom	-	4.00	0.00	Y	Arm 5 Right	15.17
2/1 (A1067 Drayton High Road)	U	B	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 5 Ahead	Inf
2/2 (A1067 Drayton High Road)	U	B	2	3	7.3	Geom	-	3.10	0.00	N	Arm 5 Ahead	Inf
3/1 (Costessey Lane)	O		2	3	60.0	Geom	-	5.00	0.00	Y	Arm 6 Right	Inf
											Arm 7 Ahead	Inf
											Arm 10 Left	7.40
4/1 (A1067 Fakenham Road)	O		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (A1067 link WB)	U		2	3	5.2	Inf	-	-	-	-	-	-
5/2 (A1067 link WB)	O		2	3	8.0	Inf	-	-	-	-	-	-
6/1 (A1067 link EB)	U	A	2	3	7.3	Geom	-	4.17	0.00	Y	Arm 8 Ahead	Inf
7/1 (School Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (A1067 Drayton High Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (Costessey Lane Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1 (A1067 Fakenham Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

**Traffic Flow Groups**

Flow Group	Start Time	End Time	Duration	Formula
1: '2029DM AM'	08:00	09:00	01:00	
2: '2029DM PM'	17:00	18:00	01:00	
3: '2029DS AM'	08:00	09:00	01:00	
4: '2029DS PM'	17:00	18:00	01:00	
5: '2029DS_Mitigation AM'	08:00	09:00	01:00	
6: '2029DS_Mitigation PM'	17:00	18:00	01:00	
7: '2039DM AM'	08:00	09:00	01:00	
8: '2039DM PM'	17:00	18:00	01:00	
9: '2039DS AM'	08:00	09:00	01:00	
10: '2039DS PM'	17:00	18:00	01:00	
11: '2039DS_Mitigation AM'	08:00	09:00	01:00	
12: '2039DS_Mitigation PM'	17:00	18:00	01:00	

**Scenario 1: '2029 DM AM'** (FG1: '2029DM AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	64	591	1	656
	B	32	0	478	339	849
	C	374	204	0	5	583
	D	18	392	3	0	413
	Tot.	424	660	1072	345	2501

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 1: 2029 DM AM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	849(In) 478(Out)
1/2 (short)	371
2/1 (with short)	583(In) 379(Out)
2/2 (short)	204
3/1	413
4/1	656
5/1	750
5/2	204
6/1	594
7/1	660
8/1	1072
9/1	345
10/1	424

Full Input Data And Results

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	0.7 %	2096	2096
				Arm 7 Ahead	Inf	94.9 %		
				Arm 10 Left	7.40	4.4 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 2: '2029 DM PM'** (FG2: '2029DM PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	31	398	2	431
	B	54	0	281	394	729
	C	516	407	0	9	932
	D	6	259	5	0	270
	Tot.	576	697	684	405	2362

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 2: 2029 DM PM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	729(In) 281(Out)
1/2 (short)	448
2/1 (with short)	932(In) 525(Out)
2/2 (short)	407
3/1	270
4/1	431
5/1	973
5/2	407
6/1	403
7/1	697
8/1	684
9/1	405
10/1	576

Full Input Data And Results

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	1.9 %	2106	2106
				Arm 7 Ahead	Inf	95.9 %		
				Arm 10 Left	7.40	2.2 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 3: '2029DS AM'** (FG3: '2029DS AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	75	643	1	719
	B	28	0	481	274	783
	C	397	192	0	14	603
	D	18	268	2	0	288
	Tot.	443	535	1126	289	2393

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 3: 2029DS AM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	783(In) 481(Out)
1/2 (short)	302
2/1 (with short)	603(In) 411(Out)
2/2 (short)	192
3/1	288
4/1	719
5/1	713
5/2	192
6/1	645
7/1	535
8/1	1126
9/1	289
10/1	443



Full Input Data And Results

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	0.7 %	2089	2089
				Arm 7 Ahead	Inf	93.1 %		
				Arm 10 Left	7.40	6.3 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 4: '2029DS PM'** (FG4: '2029DS PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	25	415	4	444
	B	60	0	298	332	690
	C	718	255	0	7	980
	D	2	221	4	0	227
	Tot.	780	501	717	343	2341

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 4: 2029DS PM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	690(In) 298(Out)
1/2 (short)	392
2/1 (with short)	980(In) 725(Out)
2/2 (short)	255
3/1	227
4/1	444
5/1	1117
5/2	255
6/1	419
7/1	501
8/1	717
9/1	343
10/1	780

Full Input Data And Results

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	1.8 %	2111	2111
				Arm 7 Ahead	Inf	97.4 %		
				Arm 10 Left	7.40	0.9 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 5: '2029DS\_Mitigation AM'** (FG5: '2029DS\_Mitigation AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	75	646	1	722
	B	35	0	476	281	792
	C	398	192	0	14	604
	D	18	302	2	0	322
	Tot.	451	569	1124	296	2440

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 5: 2029DS_Mitigation AM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	792(In) 476(Out)
1/2 (short)	316
2/1 (with short)	604(In) 412(Out)
2/2 (short)	192
3/1	322
4/1	722
5/1	728
5/2	192
6/1	648
7/1	569
8/1	1124
9/1	296
10/1	451

Full Input Data And Results

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	0.6 %	2091	2091
				Arm 7 Ahead	Inf	93.8 %		
				Arm 10 Left	7.40	5.6 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 6: '2029DS\_Mitigation PM'** (FG6: '2029DS\_Mitigation PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	25	415	3	443
	B	64	0	295	339	698
	C	719	262	0	7	988
	D	2	224	5	0	231
	Tot.	785	511	715	349	2360

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 6: 2029DS_Mitigation PM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	698(In) 295(Out)
1/2 (short)	403
2/1 (with short)	988(In) 726(Out)
2/2 (short)	262
3/1	231
4/1	443
5/1	1129
5/2	262
6/1	420
7/1	511
8/1	715
9/1	349
10/1	785

Full Input Data And Results

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	2.2 %	2111	2111
				Arm 7 Ahead	Inf	97.0 %		
				Arm 10 Left	7.40	0.9 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 7: '2039DM AM'** (FG7: '2039DM AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	55	662	2	719
	B	38	0	529	301	868
	C	367	270	0	29	666
	D	17	437	5	0	459
	Tot.	422	762	1196	332	2712

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 7: 2039DM AM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	868(In) 529(Out)
1/2 (short)	339
2/1 (with short)	666(In) 396(Out)
2/2 (short)	270
3/1	459
4/1	719
5/1	735
5/2	270
6/1	667
7/1	762
8/1	1196
9/1	332
10/1	422



Full Input Data And Results

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	1.1 %	2099	2099
				Arm 7 Ahead	Inf	95.2 %		
				Arm 10 Left	7.40	3.7 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 8: '2039DM PM'** (FG8: '2039DM PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	30	438	2	470
	B	58	0	321	436	815
	C	460	424	0	28	912
	D	6	289	17	0	312
	Tot.	524	743	776	466	2509

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 8: 2039DM PM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	815(In) 321(Out)
1/2 (short)	494
2/1 (with short)	912(In) 488(Out)
2/2 (short)	424
3/1	312
4/1	470
5/1	982
5/2	424
6/1	455
7/1	743
8/1	776
9/1	466
10/1	524

Full Input Data And Results

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	5.4 %	2107	2107
				Arm 7 Ahead	Inf	92.6 %		
				Arm 10 Left	7.40	1.9 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 9: '2039DS AM'** (FG9: '2039DS AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	69	664	1	734
	B	31	0	527	253	811
	C	391	278	0	17	686
	D	17	290	2	0	309
	Tot.	439	637	1193	271	2540

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 9: 2039DS AM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	811(In) 527(Out)
1/2 (short)	284
2/1 (with short)	686(In) 408(Out)
2/2 (short)	278
3/1	309
4/1	734
5/1	692
5/2	278
6/1	666
7/1	637
8/1	1193
9/1	271
10/1	439

Full Input Data And Results

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	0.6 %	2092	2092
				Arm 7 Ahead	Inf	93.9 %		
				Arm 10 Left	7.40	5.5 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 10: '2039DS PM'** (FG10: '2039DS PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	22	429	3	454
	B	55	0	365	358	778
	C	686	296	0	10	992
	D	9	231	5	0	245
	Tot.	750	549	799	371	2469

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 10: 2039DS PM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	778(In) 365(Out)
1/2 (short)	413
2/1 (with short)	992(In) 696(Out)
2/2 (short)	296
3/1	245
4/1	454
5/1	1109
5/2	296
6/1	434
7/1	549
8/1	799
9/1	371
10/1	750

Full Input Data And Results

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	2.0 %	2099	2099
				Arm 7 Ahead	Inf	94.3 %		
				Arm 10 Left	7.40	3.7 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 11: '2039DS\_Mitigation AM'** (FG11: '2039DS\_Mitigation AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	60	669	1	730
	B	32	0	528	266	826
	C	394	281	0	17	692
	D	17	305	2	0	324
	Tot.	443	646	1199	284	2572

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 11: 2039DS_Mitigation AM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	826(In) 528(Out)
1/2 (short)	298
2/1 (with short)	692(In) 411(Out)
2/2 (short)	281
3/1	324
4/1	730
5/1	709
5/2	281
6/1	671
7/1	646
8/1	1199
9/1	284
10/1	443



Full Input Data And Results

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	0.6 %	2093	2093
				Arm 7 Ahead	Inf	94.1 %		
				Arm 10 Left	7.40	5.2 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 12: '2039DS\_Mitigation PM'** (FG12: '2039DS\_Mitigation PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	22	430	2	454
	B	56	0	356	368	780
	C	686	301	0	9	996
	D	9	237	6	0	252
	Tot.	751	560	792	379	2482

Full Input Data And Results

**Traffic Lane Flows**

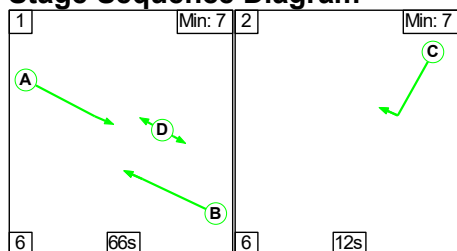
Lane	Scenario 12: 2039DS_Mitigation PM
<b>Junction: J20 - A1067/ Costessey Lane/ School Road</b>	
1/1 (with short)	780(In) 356(Out)
1/2 (short)	424
2/1 (with short)	996(In) 695(Out)
2/2 (short)	301
3/1	252
4/1	454
5/1	1119
5/2	301
6/1	436
7/1	560
8/1	792
9/1	379
10/1	751

**Lane Saturation Flows**

Junction: J20 - A1067/ Costessey Lane/ School Road								
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 (School Road)	5.00	0.00	Y	Arm 8 Left	20.00	100.0 %	1967	1967
1/2 (School Road)	4.00	0.00	Y	Arm 5 Right	15.17	100.0 %	1834	1834
2/1 (A1067 Drayton High Road)	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
2/2 (A1067 Drayton High Road)	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/1 (Costessey Lane)	5.00	0.00	Y	Arm 6 Right	Inf	2.4 %	2100	2100
				Arm 7 Ahead	Inf	94.0 %		
				Arm 10 Left	7.40	3.6 %		
4/1 (A1067 Fakenham Road Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A1067 link WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A1067 link WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A1067 link EB)	4.17	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2032	2032
7/1 (School Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A1067 Drayton High Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Costessey Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (A1067 Fakenham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

**Scenario 1: '2029 DM AM'** (FG1: '2029DM AM', Plan 1: 'Network Control Plan 1')

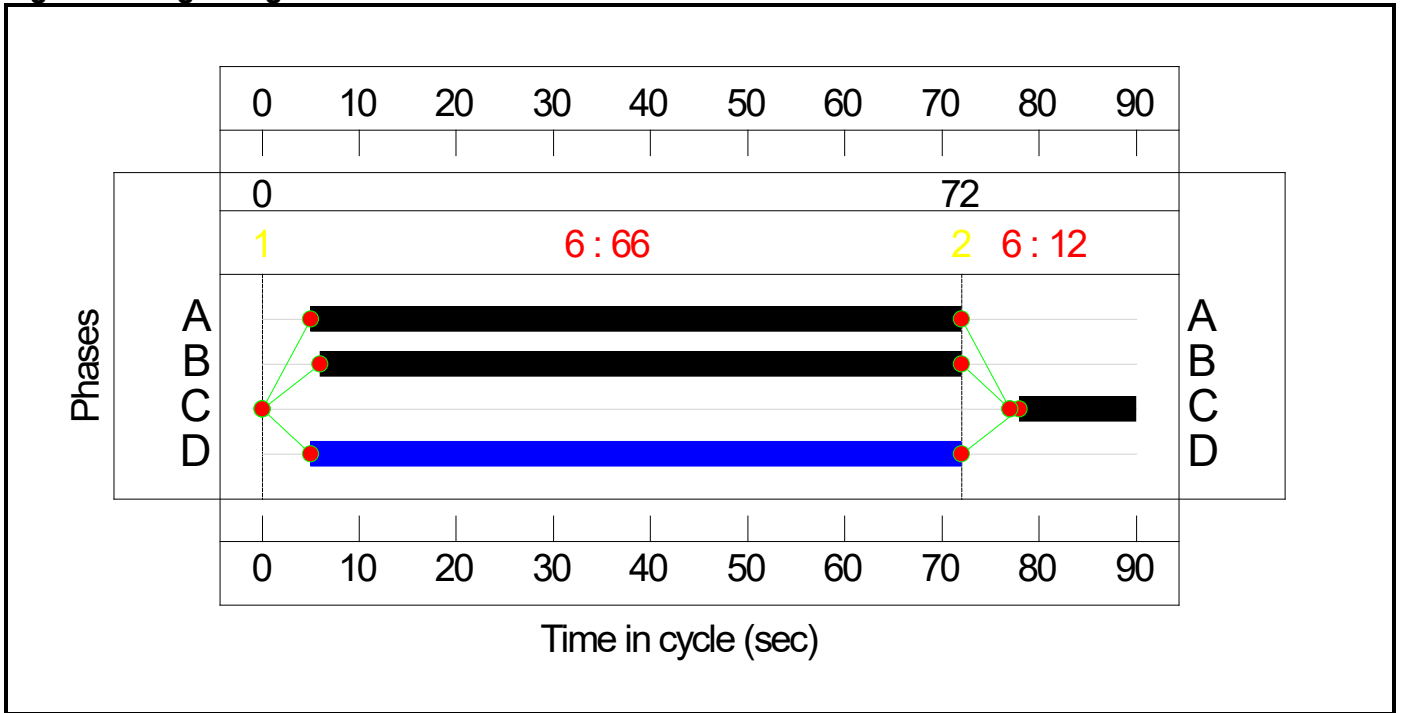
**Stage Sequence Diagram**



**Stage Timings**

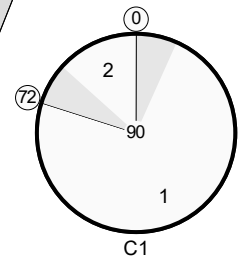
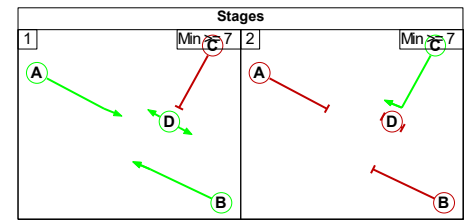
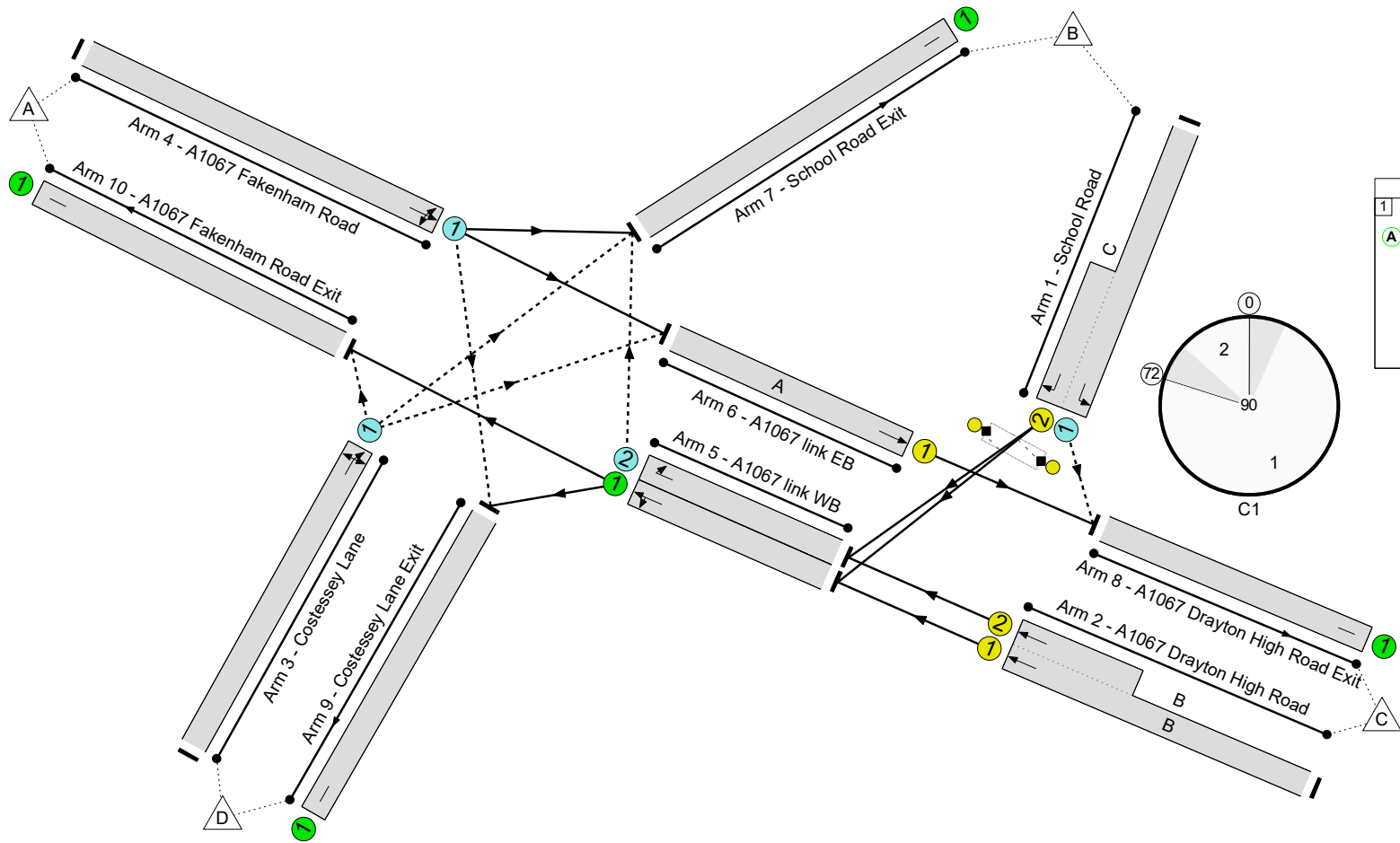
Stage	1	2
Duration	66	12
Change Point	0	72

Signal Timings Diagram



Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: 65.4 %  
 Total Traffic Delay: 216.9 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	148.8%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	148.8%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	849	1967:1834	341+265	140.0 : 140.0%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	66	-	583	1925:2065	1058+569	35.8 : 35.8%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	413	2096	277	148.8%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	656	Inf	36000	1.8%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	750	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	204	Inf	620	32.9%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	67	-	594	2032	1535	38.6%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	660	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	1072	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	345	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	424	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	67	-	0	-	0	0.0%

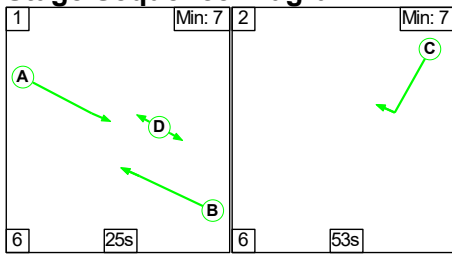
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	792	32	0	23.7	193.2	0.0	216.9	-	-	-	-
J20 - A1067/ Costessey Lane/ School Road	-	-	792	32	0	23.7	193.2	0.0	216.9	-	-	-	-
1/1+1/2	849	606	310	32	0	13.5	123.1	-	136.6	579.3	22.8	123.1	145.9
2/1+2/2	583	583	-	-	-	0.6	0.3	-	0.9	5.3	2.9	0.3	3.2
3/1	413	277	277	0	0	8.9	69.3	-	78.2	681.5	31.0	69.3	100.2
4/1	656	656	1	0	0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
5/1	644	644	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	204	204	204	0	0	0.0	0.2	-	0.3	5.0	1.8	0.2	2.1
6/1	593	593	-	-	-	0.6	0.3	-	0.9	5.7	5.1	0.3	5.4
7/1	531	531	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	934	934	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	248	248	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	409	409	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1			PRC for Signalled Lanes (%):	133.0	Total Delay for Signalled Lanes (pcuHr):		1.79	Cycle Time (s):		90			
			PRC Over All Lanes (%):	-65.4	Total Delay Over All Lanes(pcuHr):		216.88						

Full Input Data And Results

Scenario 2: '2029 DM PM' (FG2: '2029DM PM', Plan 1: 'Network Control Plan 1')

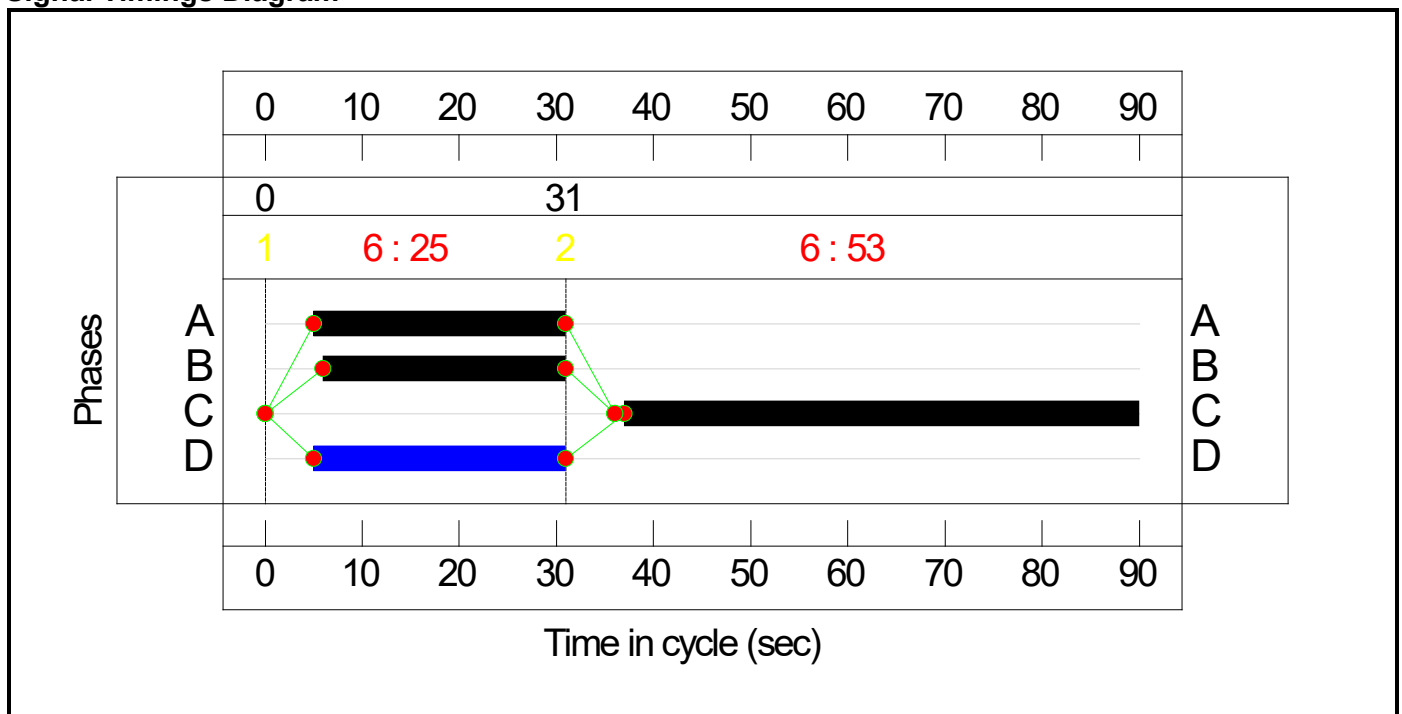
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	25	53
Change Point	0	31

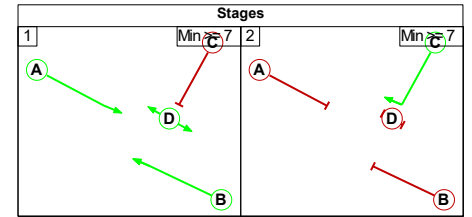
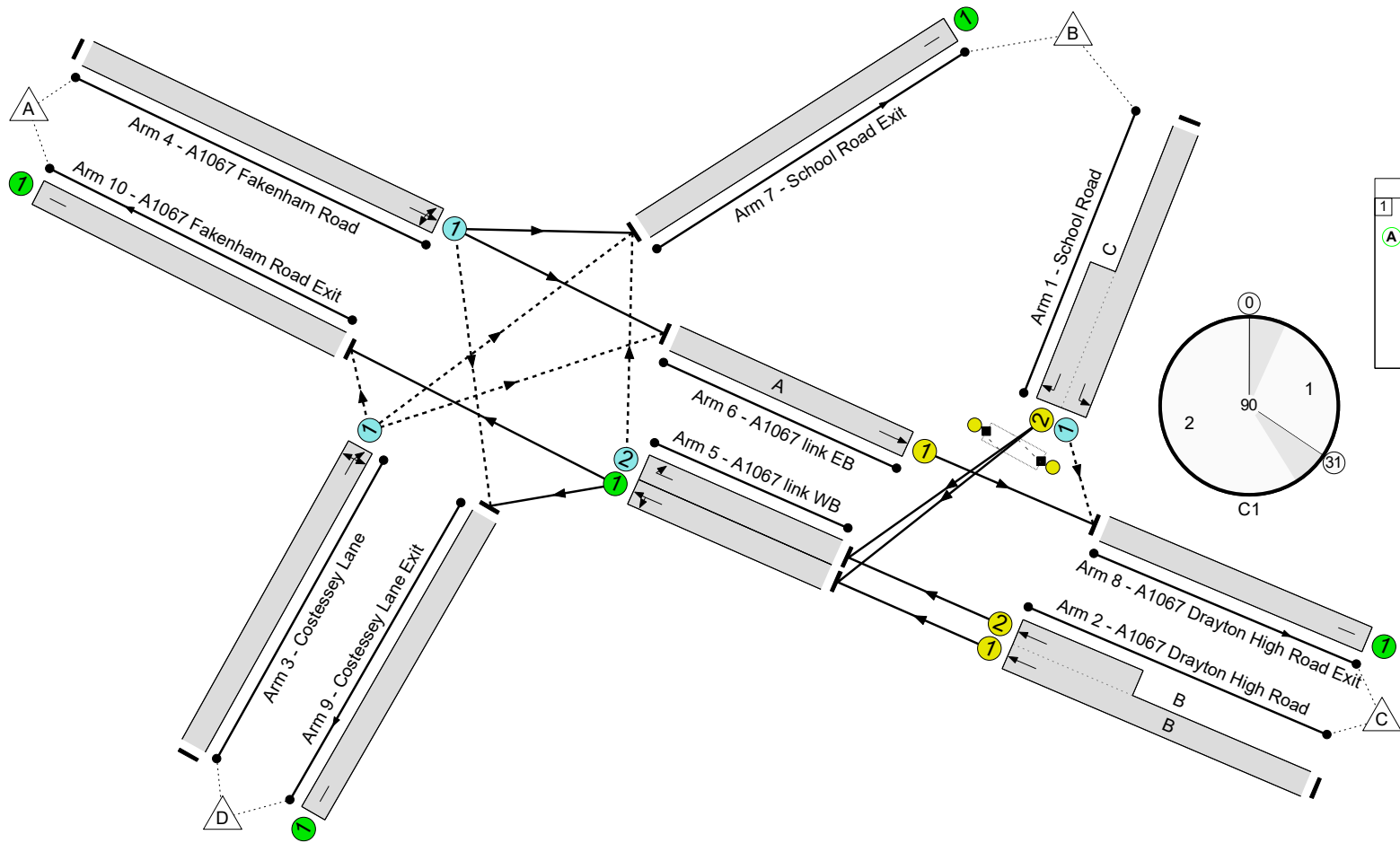
Signal Timings Diagram





Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: -29.4 %  
 Total Traffic Delay: 112.8 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	116.4%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	116.4%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	729	1967:1834	511+815	55.0 : 55.0%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	25	-	932	1925:2065	451+350	116.4 : 116.4%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	270	2106	238	113.6%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	431	Inf	36000	1.2%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	973	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	407	Inf	699	50.0%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	26	-	403	2032	610	66.0%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	697	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	684	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	405	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	576	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	26	-	0	-	0	0.0%

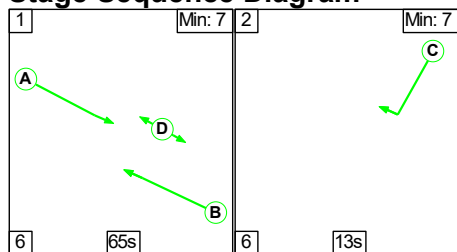
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	674	197	0	22.1	90.8	0.0	112.8	-	-	-	-
J20 - A1067/ Costessey Lane/ School Road	-	-	674	197	0	22.1	90.8	0.0	112.8	-	-	-	-
1/1+1/2	729	729	84	197	0	1.2	0.6	-	1.8	8.9	5.8	0.6	6.5
2/1+2/2	932	801	-	-	-	13.5	69.1	-	82.6	319.1	22.5	69.1	91.6
3/1	270	238	238	0	0	3.2	19.6	-	22.8	304.0	19.3	19.6	38.9
4/1	431	431	2	0	0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
5/1	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	350	350	350	0	0	1.1	0.5	-	1.6	16.4	8.7	0.5	9.2
6/1	402	402	-	-	-	3.1	1.0	-	4.0	36.1	8.7	1.0	9.7
7/1	609	609	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	683	683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	404	404	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	502	502	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1			PRC for Signalled Lanes (%):	-29.4	Total Delay for Signalled Lanes (pcuHr):		86.64	Cycle Time (s):		90			
			PRC Over All Lanes (%):	-29.4	Total Delay Over All Lanes(pcuHr):		112.85						

Full Input Data And Results

Scenario 3: '2029DS AM' (FG3: '2029DS AM', Plan 1: 'Network Control Plan 1')

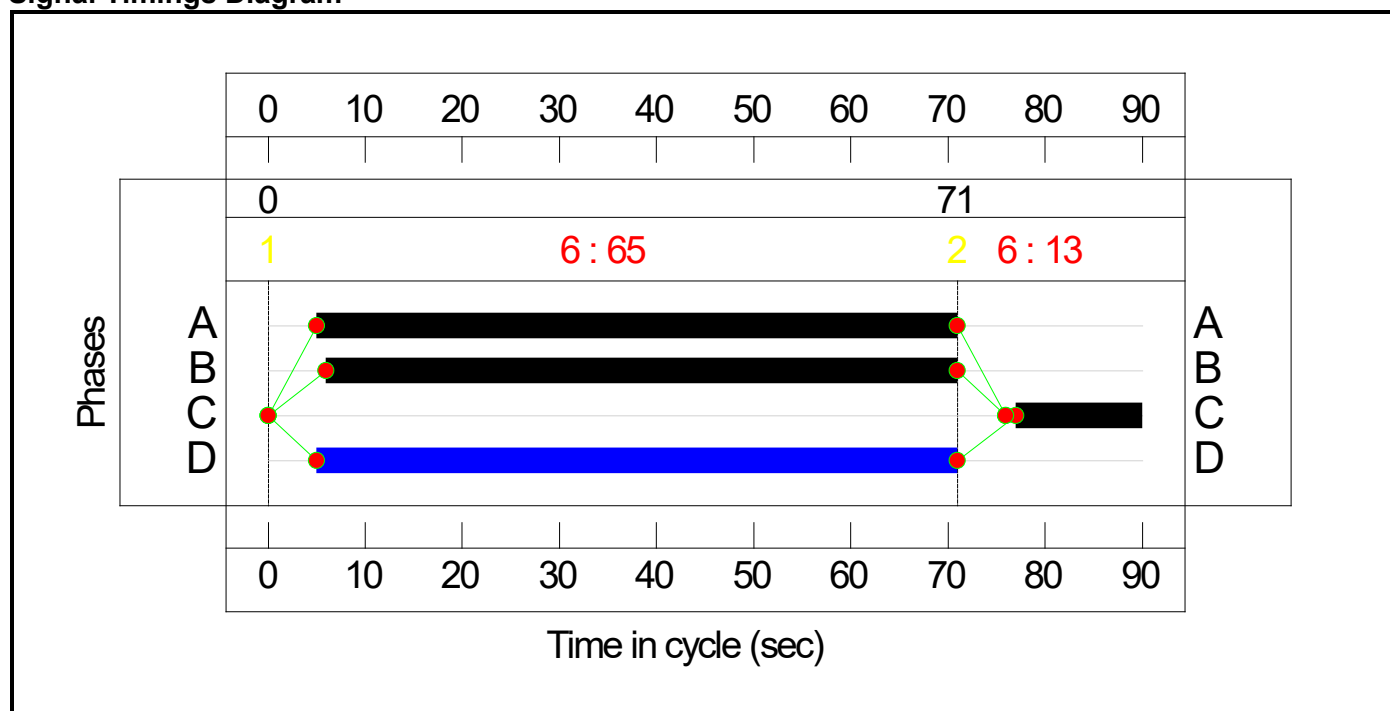
Stage Sequence Diagram



Stage Timings

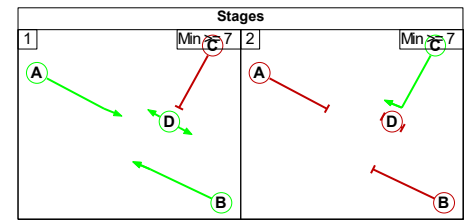
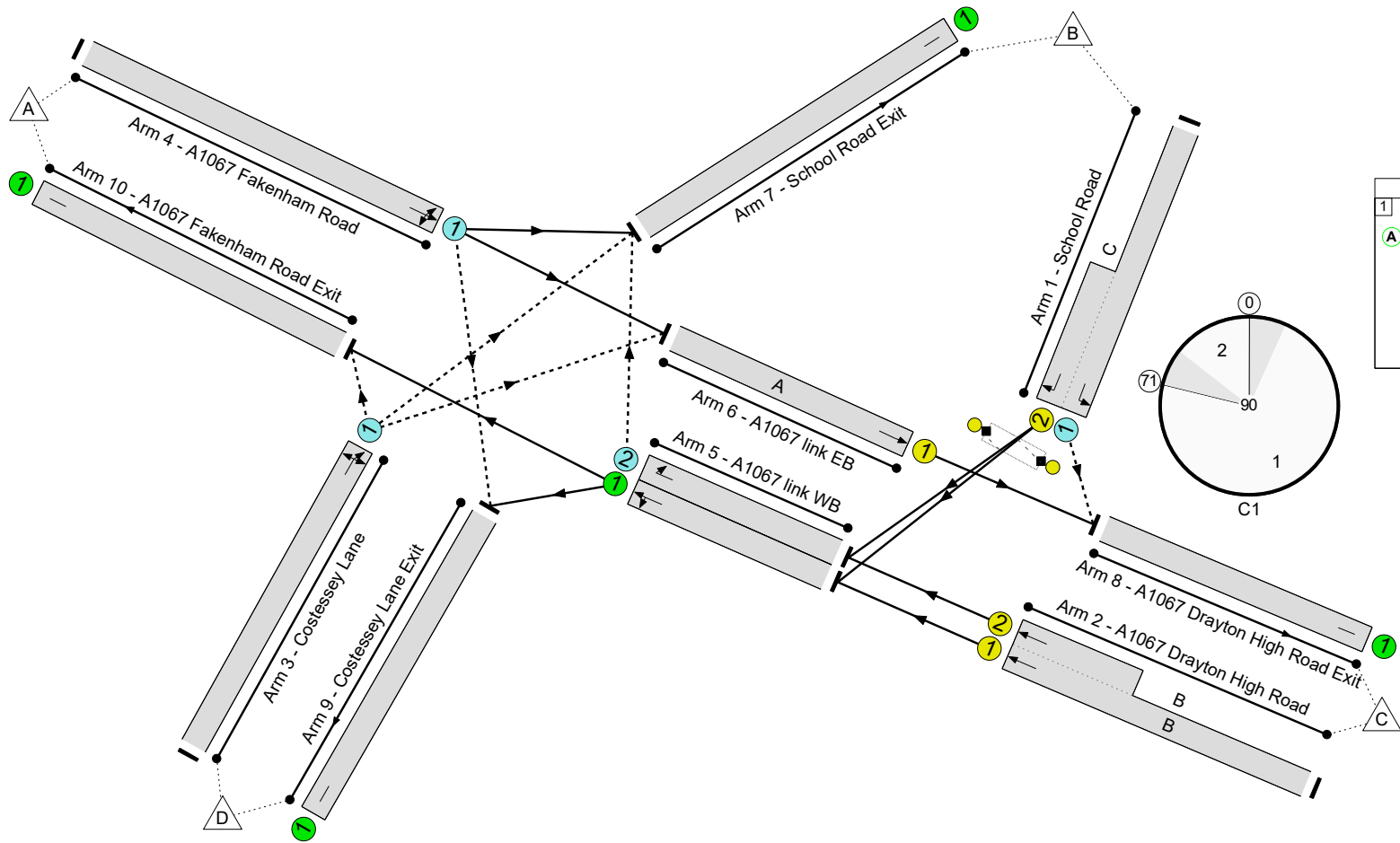
Stage	1	2
Duration	65	13
Change Point	0	71

Signal Timings Diagram



Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: -22.2 %  
 Total Traffic Delay: 53.9 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	110.0%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	110.0%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	783	1967:1834	454+285	105.9 : 105.9%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	65	-	603	1925:2065	1078+504	38.1 : 38.1%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	288	2089	262	110.0%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	719	Inf	36000	2.0%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	713	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	192	Inf	598	32.1%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	66	-	645	2032	1513	42.6%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	535	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	1126	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	443	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	66	-	0	-	0	0.0%

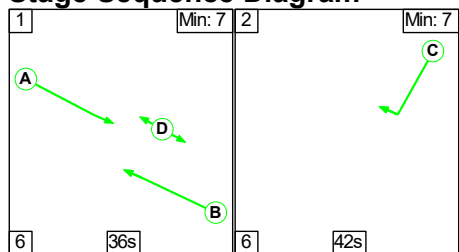
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	813	123	0	7.2	46.7	0.0	53.9	-	-	-	-
J20 - A1067/ Costessey Lane/ School Road	-	-	813	123	0	7.2	46.7	0.0	53.9	-	-	-	-
1/1+1/2	783	766	358	123	0	3.8	28.5	-	32.3	148.4	7.7	28.5	36.2
2/1+2/2	603	603	-	-	-	0.7	0.3	-	1.0	5.7	3.4	0.3	3.7
3/1	288	262	262	0	0	2.0	17.2	-	19.2	240.5	21.6	17.2	38.8
4/1	719	719	1	0	0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
5/1	696	696	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	192	192	192	0	0	0.0	0.2	-	0.3	5.2	1.8	0.2	2.0
6/1	645	645	-	-	-	0.8	0.4	-	1.1	6.4	5.9	0.4	6.3
7/1	511	511	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1126	1126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	274	274	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	440	440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
<p>C1                      PRC for Signalled Lanes (%): 111.1                      Total Delay for Signalled Lanes (pcuHr): 2.10                      Cycle Time (s): 90                      PRC Over All Lanes (%): -22.2                      Total Delay Over All Lanes(pcuHr): 53.91</p>													

Full Input Data And Results

Scenario 4: '2029DS PM' (FG4: '2029DS PM', Plan 1: 'Network Control Plan 1')

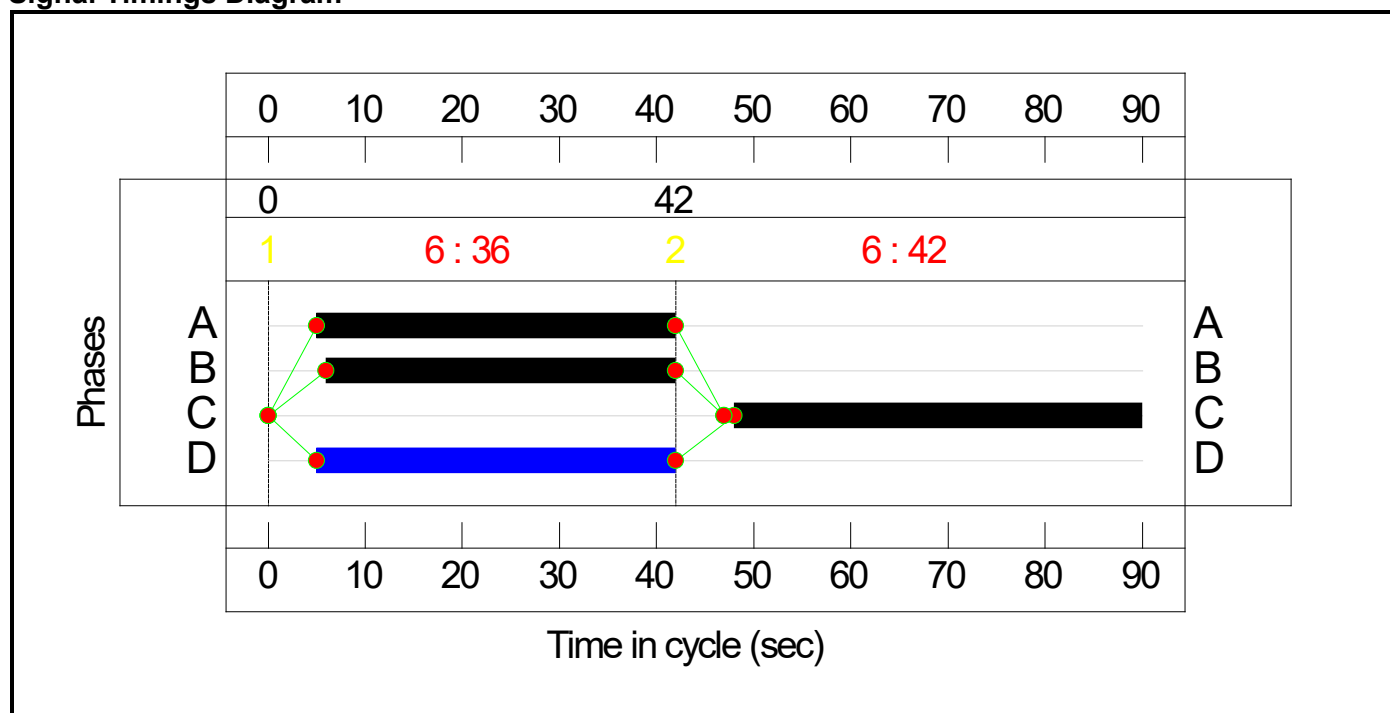
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	36	42
Change Point	0	42

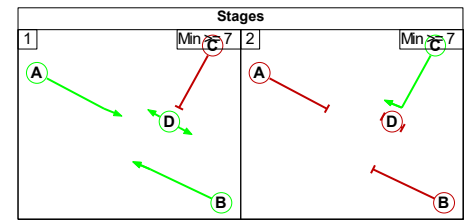
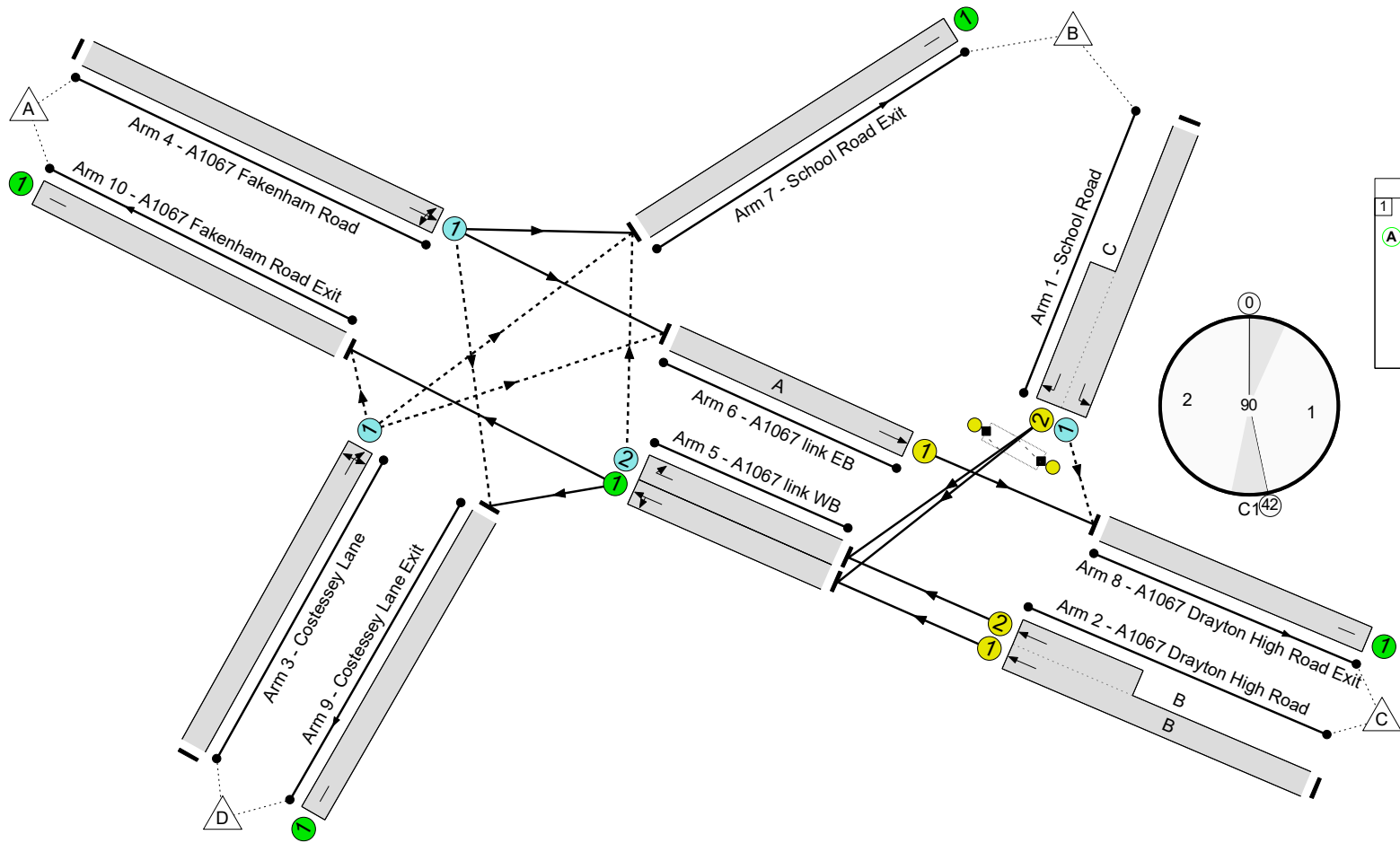
Signal Timings Diagram





Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: -19.4 %  
 Total Traffic Delay: 69.6 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	107.5%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	107.5%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	690	1967:1834	493+648	60.5 : 60.5%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	36	-	980	1925:2065	675+237	107.5 : 107.5%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	227	2111	212	107.1%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	444	Inf	36000	1.2%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	1117	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	255	Inf	695	34.2%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	37	-	419	2032	858	48.8%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	501	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	717	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	343	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	37	-	0	-	0	0.0%

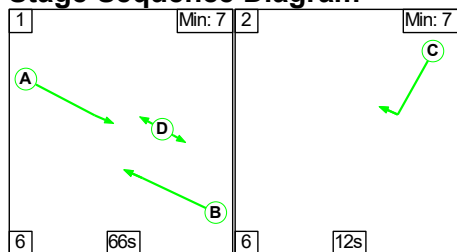
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>579</b>	<b>172</b>	<b>0</b>	<b>15.8</b>	<b>53.8</b>	<b>0.0</b>	<b>69.6</b>	-	-	-	-
<b>J20 - A1067/ Costessey Lane/ School Road</b>	-	-	<b>579</b>	<b>172</b>	<b>0</b>	<b>15.8</b>	<b>53.8</b>	<b>0.0</b>	<b>69.6</b>	-	-	-	-
1/1+1/2	690	690	126	172	0	1.7	0.8	-	2.5	12.9	6.4	0.8	7.2
2/1+2/2	980	912	-	-	-	9.6	40.1	-	49.7	182.7	25.3	40.1	65.4
3/1	227	212	212	0	0	2.2	12.2	-	14.4	228.1	16.3	12.2	28.4
4/1	444	444	4	0	0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
5/1	1067	1067	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	237	237	237	0	0	0.1	0.3	-	0.3	5.2	2.4	0.3	2.7
6/1	419	419	-	-	-	2.2	0.5	-	2.7	23.0	7.6	0.5	8.1
7/1	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	717	717	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	343	343	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	730	730	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1			PRC for Signalled Lanes (%):		-19.4	Total Delay for Signalled Lanes (pcuHr):		52.42	Cycle Time (s):		90		
			PRC Over All Lanes (%):		-19.4	Total Delay Over All Lanes(pcuHr):		69.63					

Full Input Data And Results

Scenario 5: '2029DS\_Mitigation AM' (FG5: '2029DS\_Mitigation AM', Plan 1: 'Network Control Plan 1')

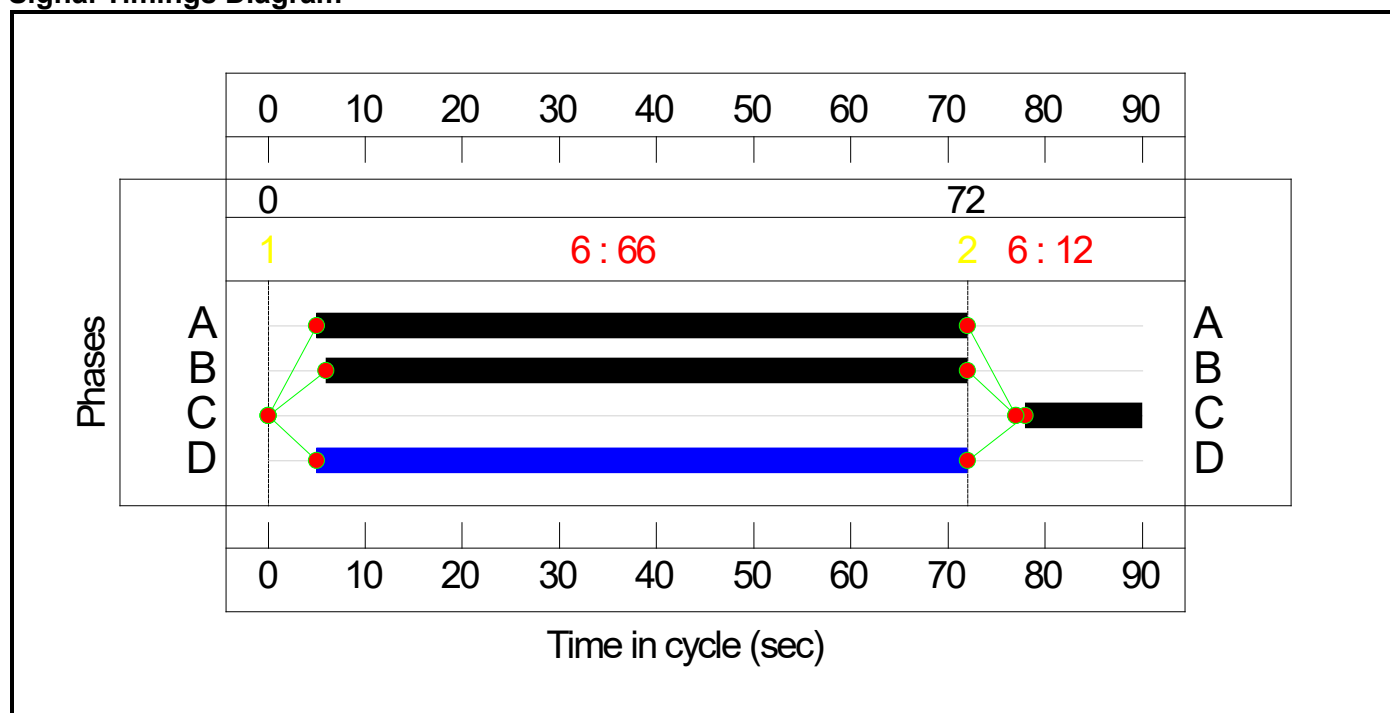
Stage Sequence Diagram



Stage Timings

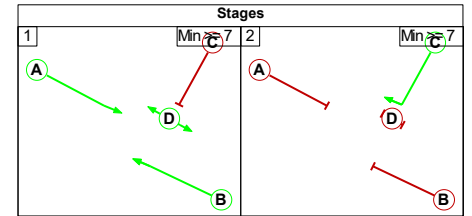
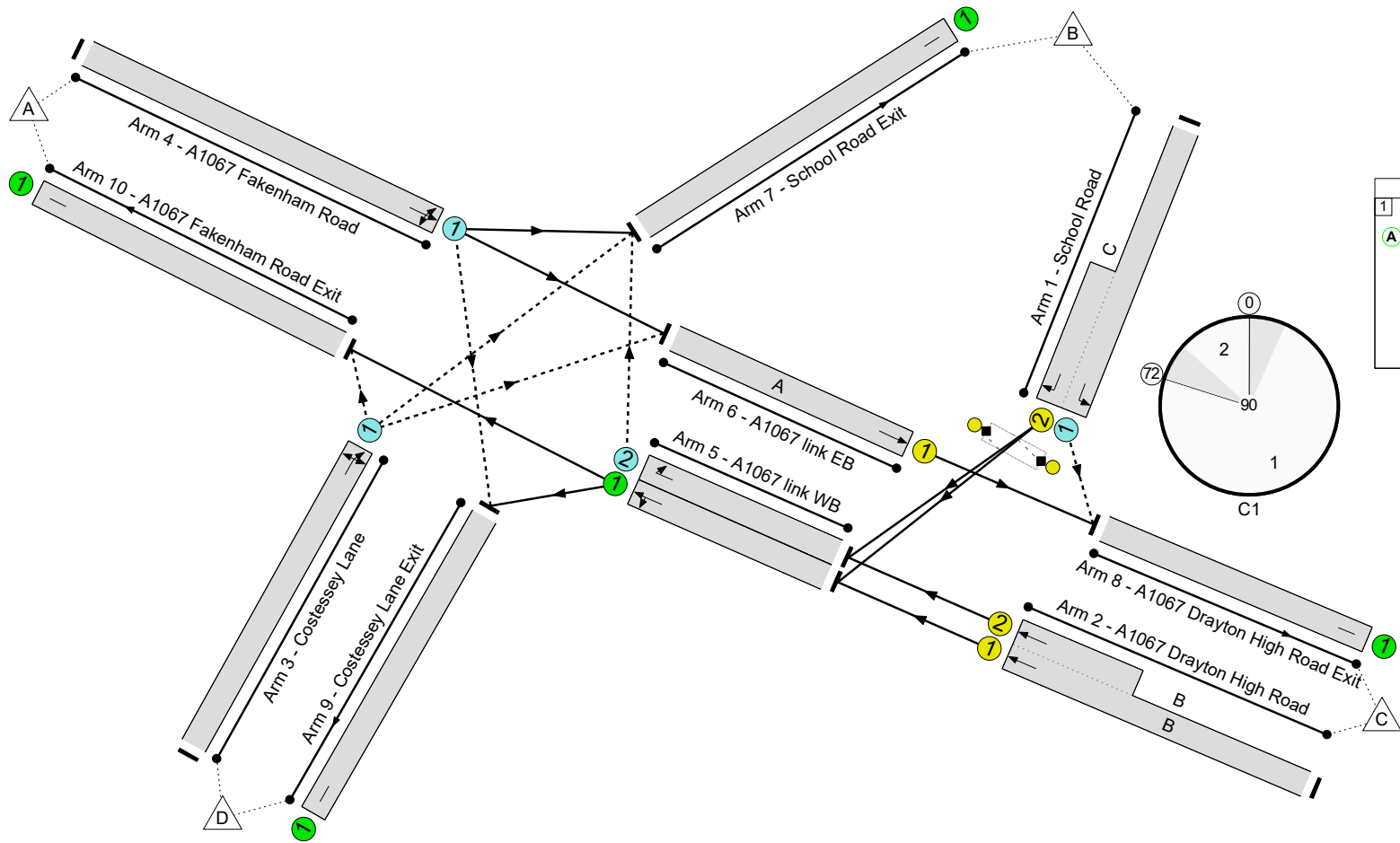
Stage	1	2
Duration	66	12
Change Point	0	72

Signal Timings Diagram



Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: -35.7 %  
 Total Traffic Delay: 111.6 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	122.1%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	122.1%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	792	1967:1834	399+265	119.3 : 119.3%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	66	-	604	1925:2065	1094+510	37.7 : 37.7%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	322	2091	264	122.1%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	722	Inf	36000	2.0%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	728	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	192	Inf	597	32.1%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	67	-	648	2032	1535	42.2%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	569	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	1124	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	296	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	451	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	67	-	0	-	0	0.0%

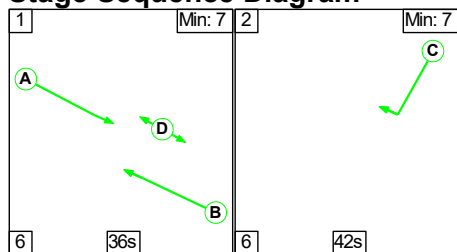
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	824	32	0	12.0	99.6	0.0	111.6	-	-	-	-
J20 - A1067/ Costessey Lane/ School Road	-	-	824	32	0	12.0	99.6	0.0	111.6	-	-	-	-
1/1+1/2	792	664	367	32	0	6.5	67.0	-	73.5	334.2	12.6	67.0	79.6
2/1+2/2	604	604	-	-	-	0.6	0.3	-	0.9	5.4	3.3	0.3	3.6
3/1	322	264	264	0	0	4.1	31.7	-	35.8	400.3	24.2	31.7	55.9
4/1	722	722	1	0	0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
5/1	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	192	192	192	0	0	0.0	0.2	-	0.3	5.1	1.7	0.2	1.9
6/1	648	648	-	-	-	0.7	0.4	-	1.1	6.0	5.8	0.4	6.1
7/1	514	514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1047	1047	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	251	251	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	442	442	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1      PRC for Signalled Lanes (%): 113.4      Total Delay for Signalled Lanes (pcuHr): 1.98      Cycle Time (s): 90 PRC Over All Lanes (%): -35.7      Total Delay Over All Lanes(pcuHr): 111.59													

Full Input Data And Results

Scenario 6: '2029DS\_Mitigation PM' (FG6: '2029DS\_Mitigation PM', Plan 1: 'Network Control Plan 1')

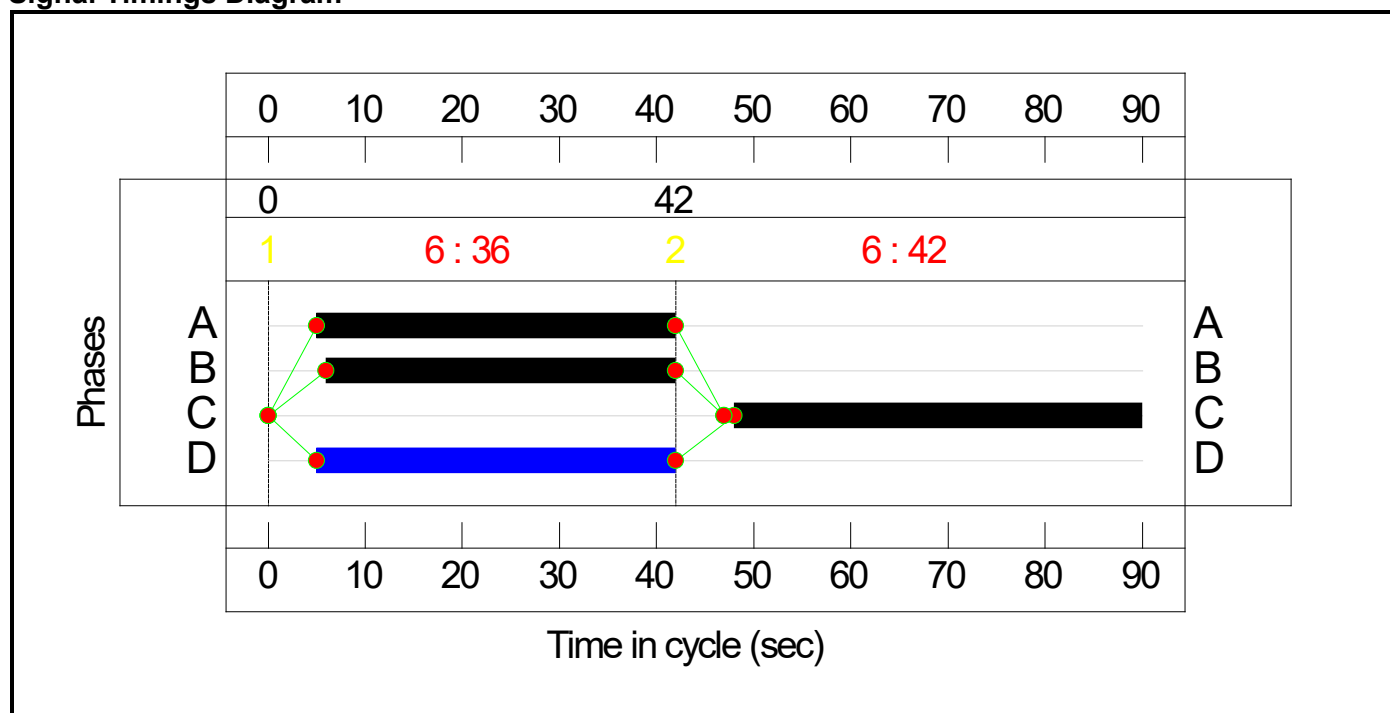
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	36	42
Change Point	0	42

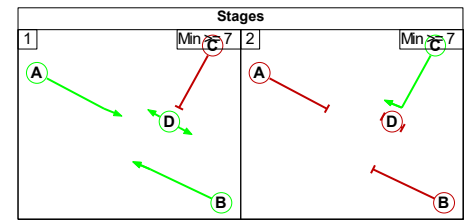
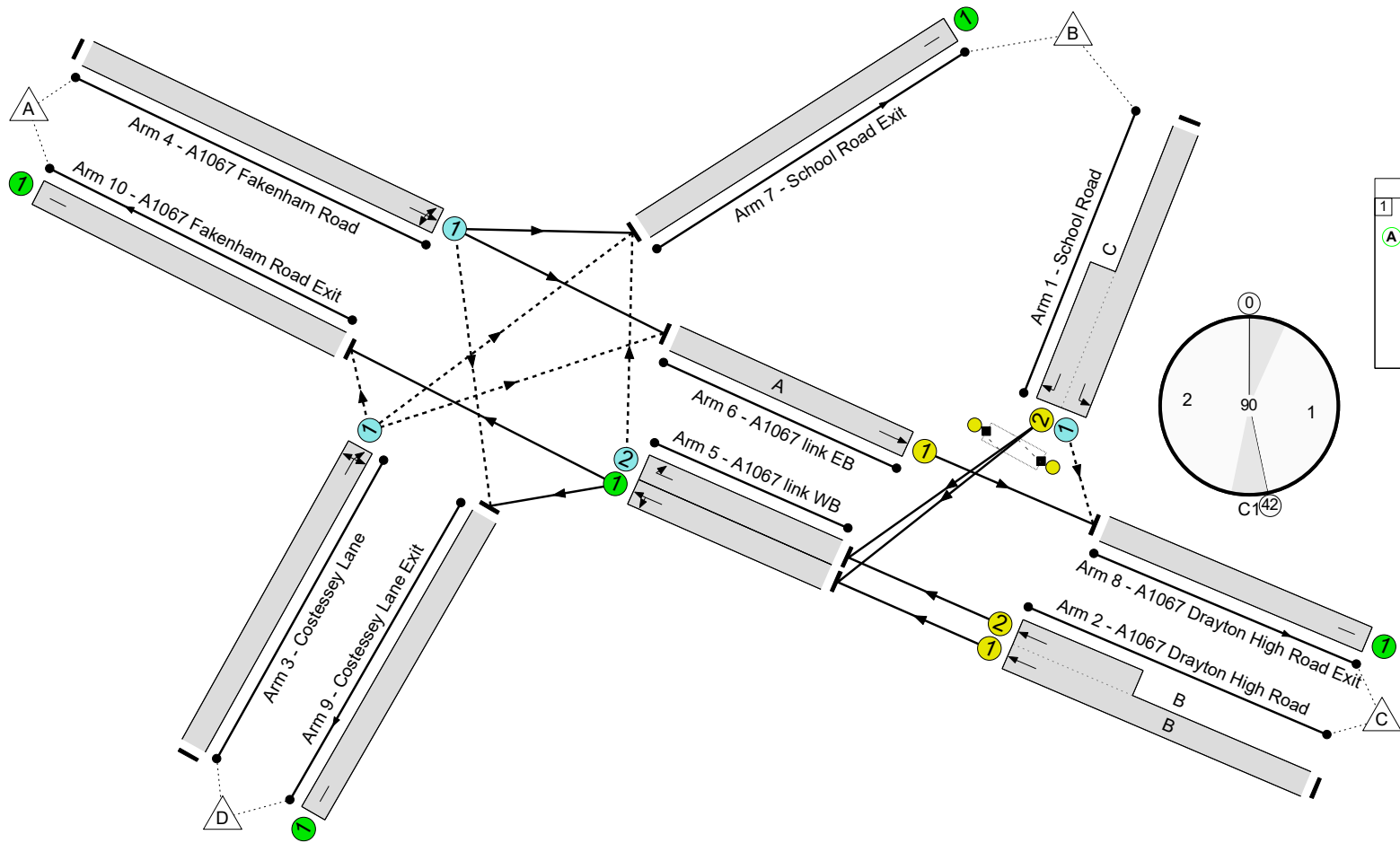
Signal Timings Diagram





Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: -22.2 %  
 Total Traffic Delay: 74.9 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	110.0%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	110.0%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	698	1967:1834	478+653	61.7 : 61.7%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	36	-	988	1925:2065	672+243	108.0 : 108.0%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	231	2111	210	110.0%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	443	Inf	36000	1.2%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	1129	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	262	Inf	695	34.9%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	37	-	420	2032	858	48.9%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	511	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	715	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	349	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	785	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	37	-	0	-	0	0.0%

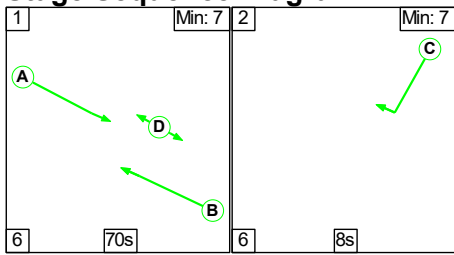
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>580</b>	<b>170</b>	<b>0</b>	<b>16.5</b>	<b>58.4</b>	<b>0.0</b>	<b>74.9</b>	-	-	-	-
<b>J20 - A1067/ Costessey Lane/ School Road</b>	-	-	<b>580</b>	<b>170</b>	<b>0</b>	<b>16.5</b>	<b>58.4</b>	<b>0.0</b>	<b>74.9</b>	-	-	-	-
1/1+1/2	698	698	125	170	0	1.8	0.8	-	2.6	13.3	6.7	0.8	7.5
2/1+2/2	988	915	-	-	-	9.9	42.4	-	52.3	190.5	25.5	42.4	68.0
3/1	231	210	210	0	0	2.6	14.5	-	17.0	265.1	16.6	14.5	31.0
4/1	443	443	3	0	0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
5/1	1075	1075	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	243	243	243	0	0	0.1	0.3	-	0.4	5.3	2.5	0.3	2.8
6/1	420	420	-	-	-	2.2	0.5	-	2.7	23.1	7.6	0.5	8.1
7/1	471	471	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	715	715	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	348	348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	732	732	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1			PRC for Signalled Lanes (%):	-20.0	Total Delay for Signalled Lanes (pcuHr):			54.98	Cycle Time (s):		90		
			PRC Over All Lanes (%):	-22.2	Total Delay Over All Lanes(pcuHr):			74.92					

Full Input Data And Results

Scenario 7: '2039DM AM' (FG7: '2039DM AM', Plan 1: 'Network Control Plan 1')

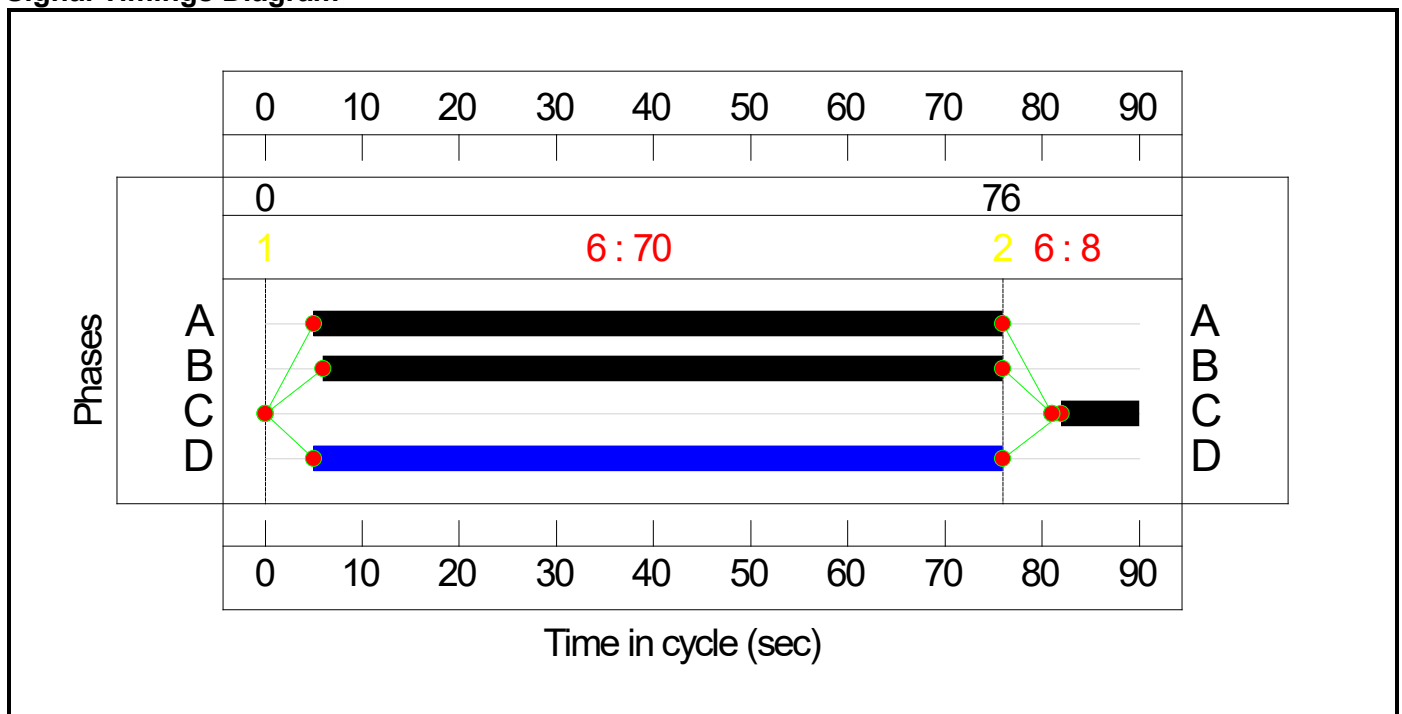
Stage Sequence Diagram



Stage Timings

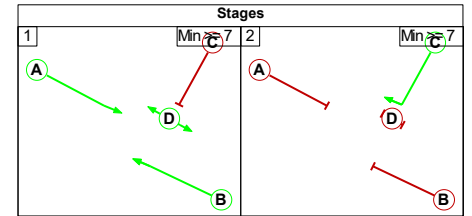
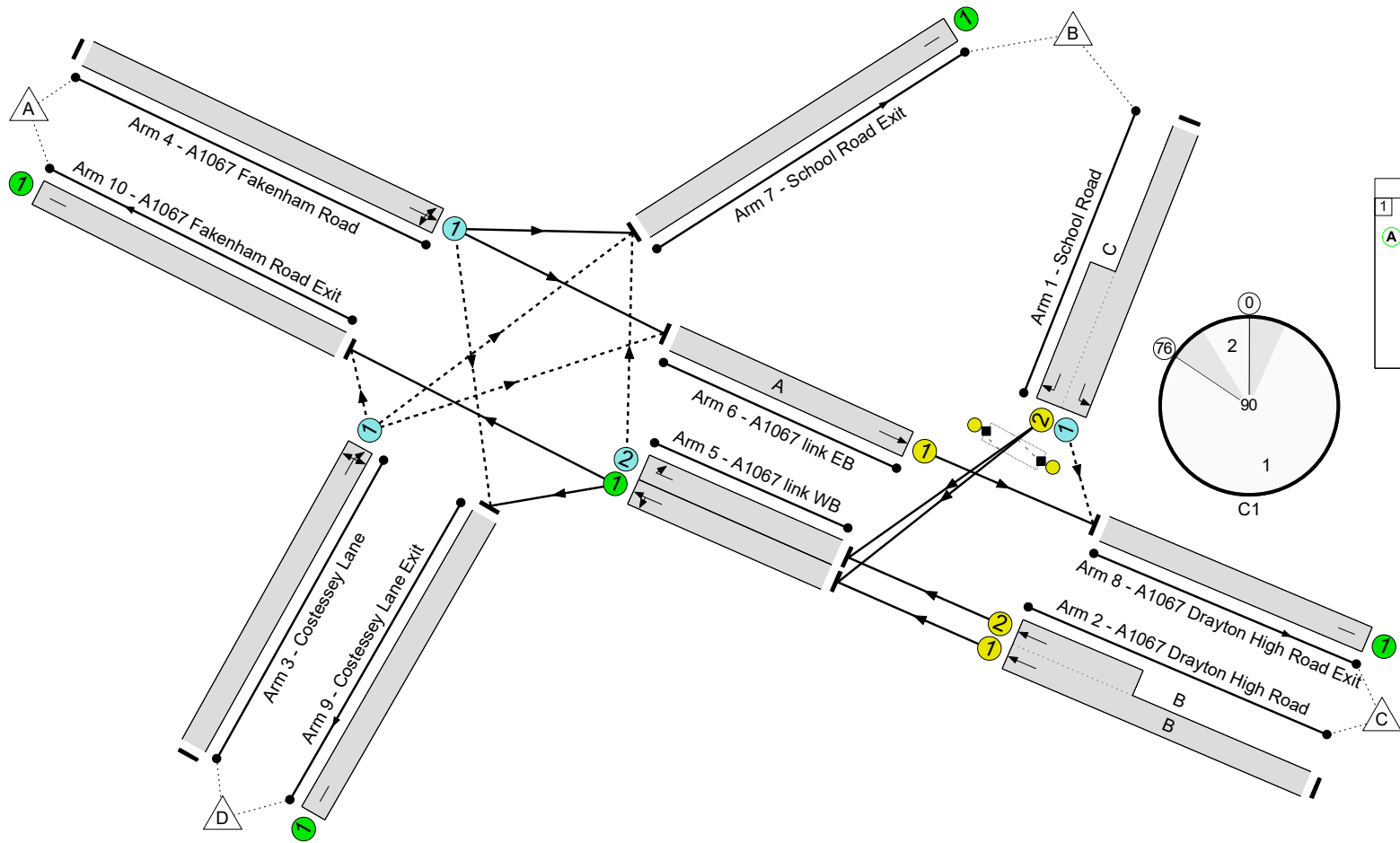
Stage	1	2
Duration	70	8
Change Point	0	76

Signal Timings Diagram



Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: -124.7 %  
 Total Traffic Delay: 353.5 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	202.3%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	202.3%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	868	1967:1834	286+183	184.8 : 184.8%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	70	-	666	1925:2065	1048+714	37.8 : 37.8%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	459	2099	227	202.3%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	719	Inf	36000	2.0%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	735	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	270	Inf	598	45.1%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	71	-	667	2032	1626	40.9%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	762	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	1196	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	332	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	422	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	71	-	0	-	0	0.0%

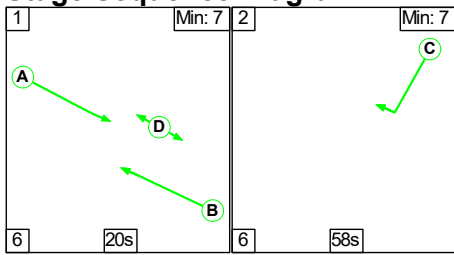
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	785	0	0	35.1	318.4	0.0	353.5	-	-	-	-
J20 - A1067/ Costessey Lane/ School Road	-	-	785	0	0	35.1	318.4	0.0	353.5	-	-	-	-
1/1+1/2	868	470	286	0	0	19.0	200.3	-	219.3	909.6	39.1	200.3	239.4
2/1+2/2	666	666	-	-	-	0.5	0.3	-	0.8	4.1	2.5	0.3	2.8
3/1	459	227	227	0	0	15.1	117.0	-	132.1	1035.9	34.4	117.0	151.4
4/1	719	719	2	0	0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
5/1	579	579	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	270	270	270	0	0	0.1	0.4	-	0.5	6.4	2.4	0.4	2.8
6/1	664	664	-	-	-	0.5	0.3	-	0.8	4.6	4.8	0.3	5.1
7/1	541	541	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	951	951	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	194	194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	396	396	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1			PRC for Signalled Lanes (%):	120.2	Total Delay for Signalled Lanes (pcuHr):			1.60	Cycle Time (s): 90				
			PRC Over All Lanes (%):	-124.7	Total Delay Over All Lanes(pcuHr):			353.49					

Full Input Data And Results

Scenario 8: '2039DM PM' (FG8: '2039DM PM', Plan 1: 'Network Control Plan 1')

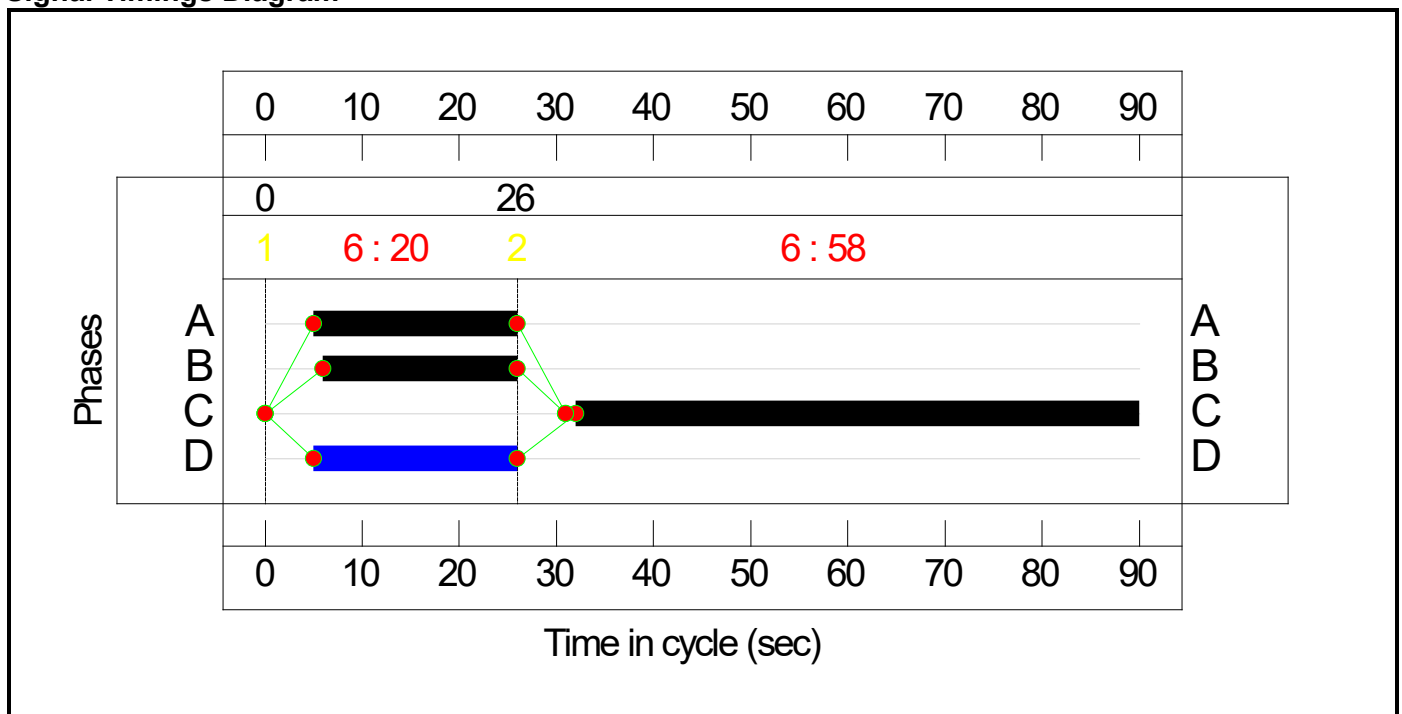
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	20	58
Change Point	0	26

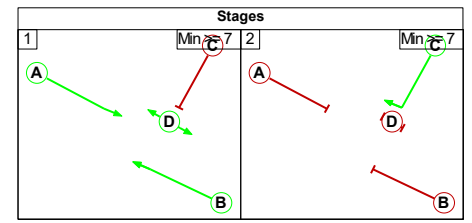
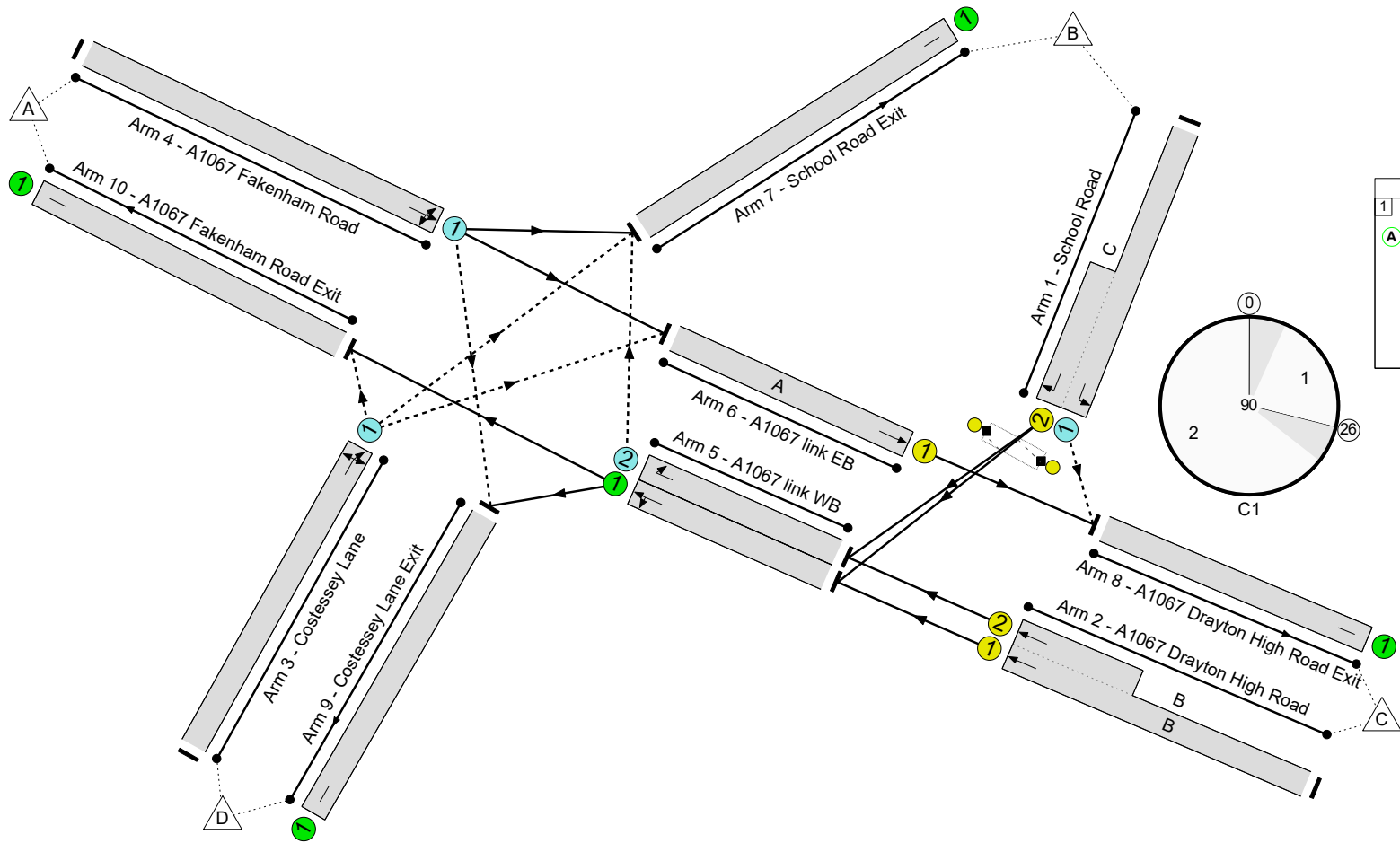
Signal Timings Diagram





Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: -41.1 %  
 Total Traffic Delay: 167.4 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	127.0%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	127.0%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	815	1967:1834	567+872	56.7 : 56.7%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	20	-	912	1925:2065	384+334	127.0 : 127.0%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	312	2107	248	126.0%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	470	Inf	36000	1.3%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	982	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	424	Inf	685	48.7%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	21	-	455	2032	497	90.9%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	743	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	776	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	524	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	21	-	0	-	0	0.0%

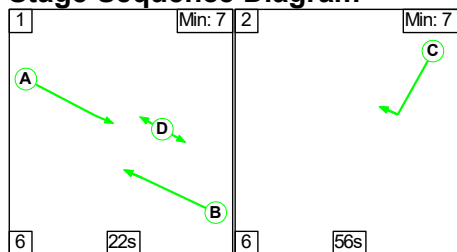
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	659	246	0	28.4	139.0	0.0	167.4	-	-	-	-
J20 - A1067/ Costessey Lane/ School Road	-	-	659	246	0	28.4	139.0	0.0	167.4	-	-	-	-
1/1+1/2	815	815	75	246	0	1.0	0.7	-	1.7	7.5	5.8	0.7	6.4
2/1+2/2	912	718	-	-	-	17.0	99.2	-	116.2	458.8	22.8	99.2	122.0
3/1	312	248	248	0	0	5.1	34.5	-	39.5	456.2	22.4	34.5	56.8
4/1	470	470	2	0	0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
5/1	878	878	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	334	334	334	0	0	1.2	0.5	-	1.6	17.6	8.3	0.5	8.8
6/1	451	451	-	-	-	4.1	4.2	-	8.3	66.4	10.9	4.2	15.1
7/1	593	593	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	772	772	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	425	425	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1			PRC for Signalled Lanes (%):		-41.1	Total Delay for Signalled Lanes (pcuHr):		124.54	Cycle Time (s):		90		
			PRC Over All Lanes (%):		-41.1	Total Delay Over All Lanes(pcuHr):		167.41					

Full Input Data And Results

Scenario 9: '2039DS AM' (FG9: '2039DS AM', Plan 1: 'Network Control Plan 1')

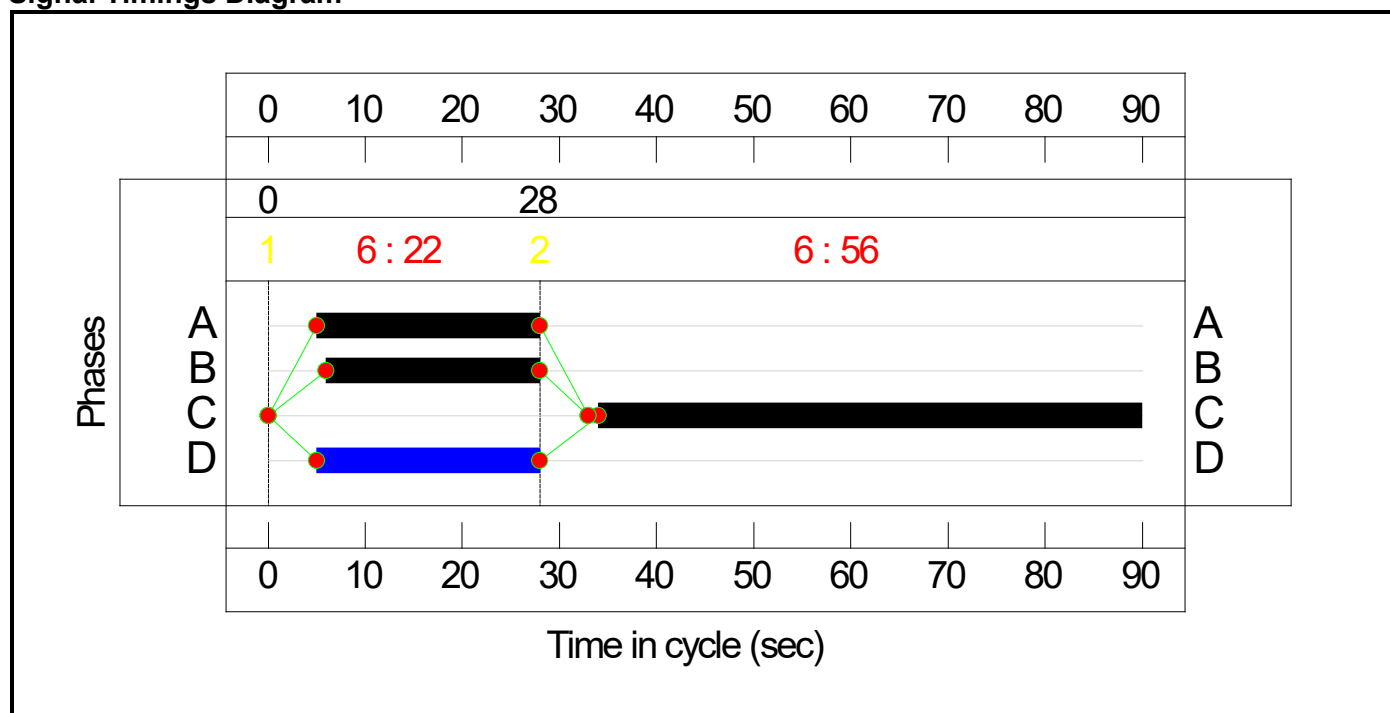
Stage Sequence Diagram



Stage Timings

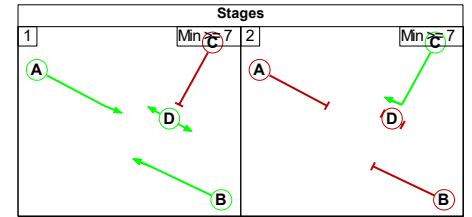
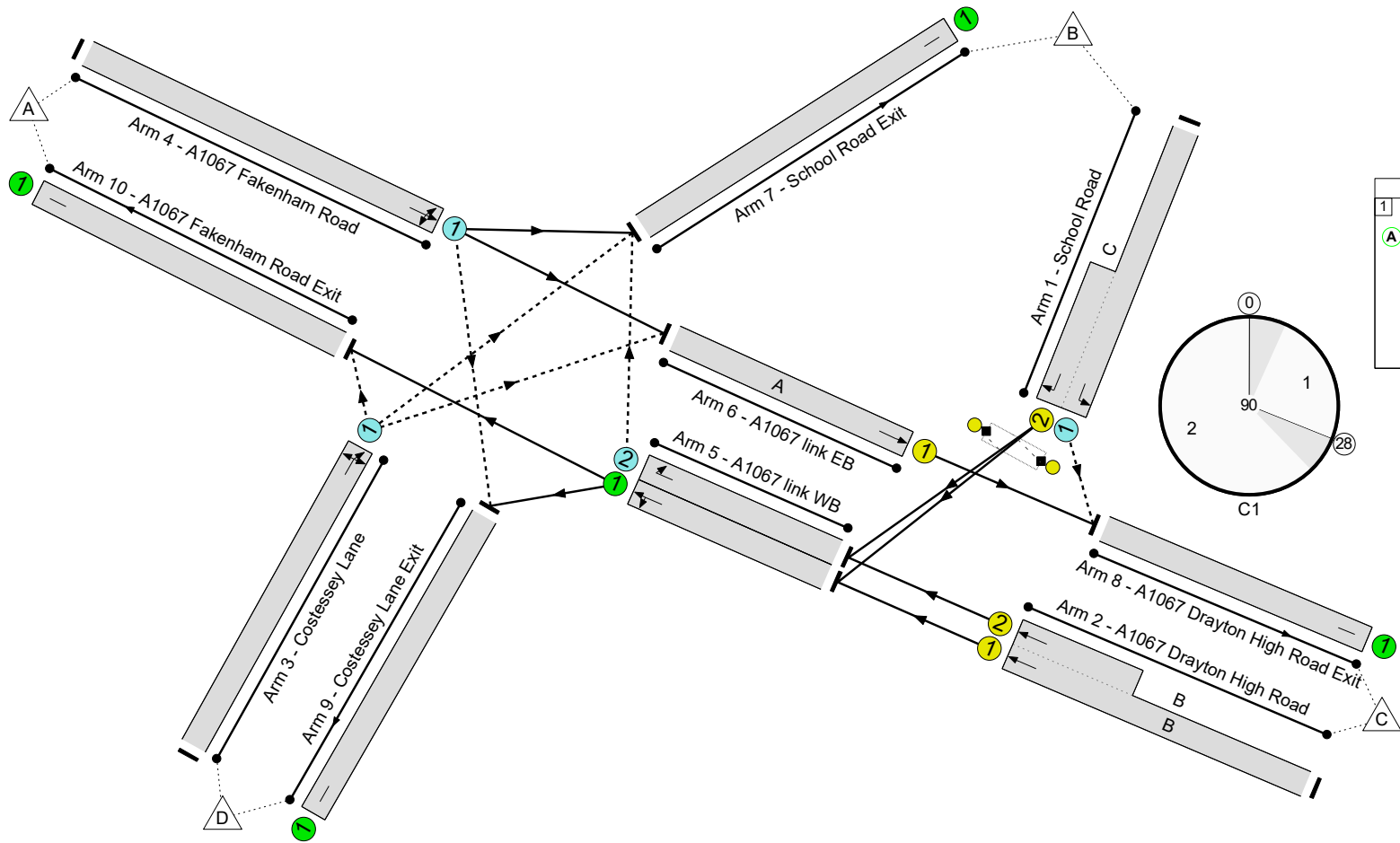
Stage	1	2
Duration	22	56
Change Point	0	28

Signal Timings Diagram



Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: -38.7 %  
 Total Traffic Delay: 135.0 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

**Network Results**

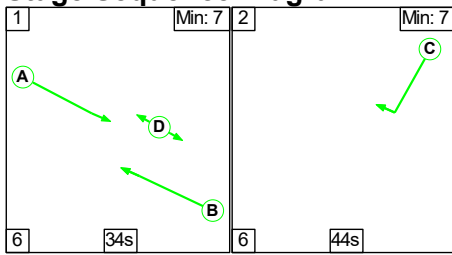
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	124.8%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	124.8%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	811	1967:1834	596+321	88.5 : 88.5%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	22	-	686	1925:2065	420+286	97.1 : 97.1%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	309	2092	248	124.8%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	734	Inf	36000	2.0%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	692	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	278	Inf	593	46.9%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	23	-	666	2032	542	122.8%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	637	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	1193	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	271	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	439	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	23	-	0	-	0	0.0%



Full Input Data And Results

Scenario 10: '2039DS PM' (FG10: '2039DS PM', Plan 1: 'Network Control Plan 1')

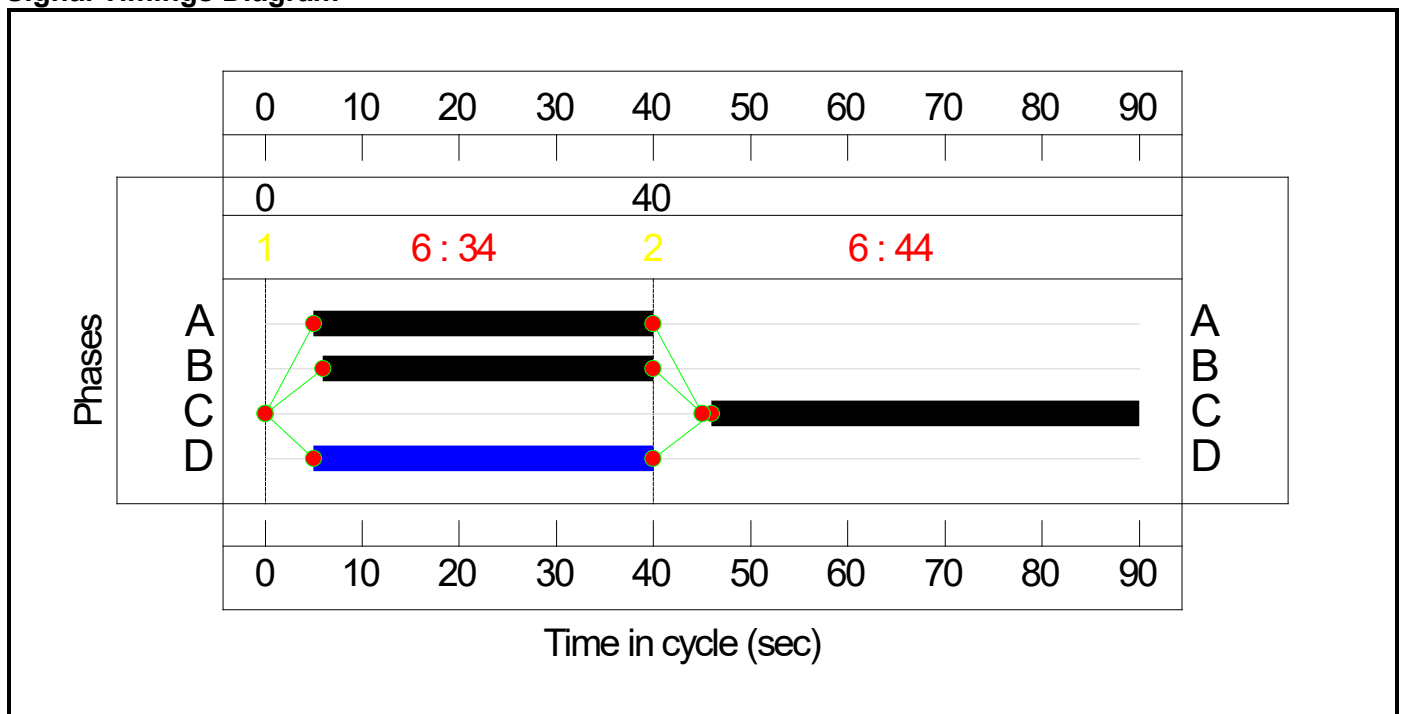
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	34	44
Change Point	0	40

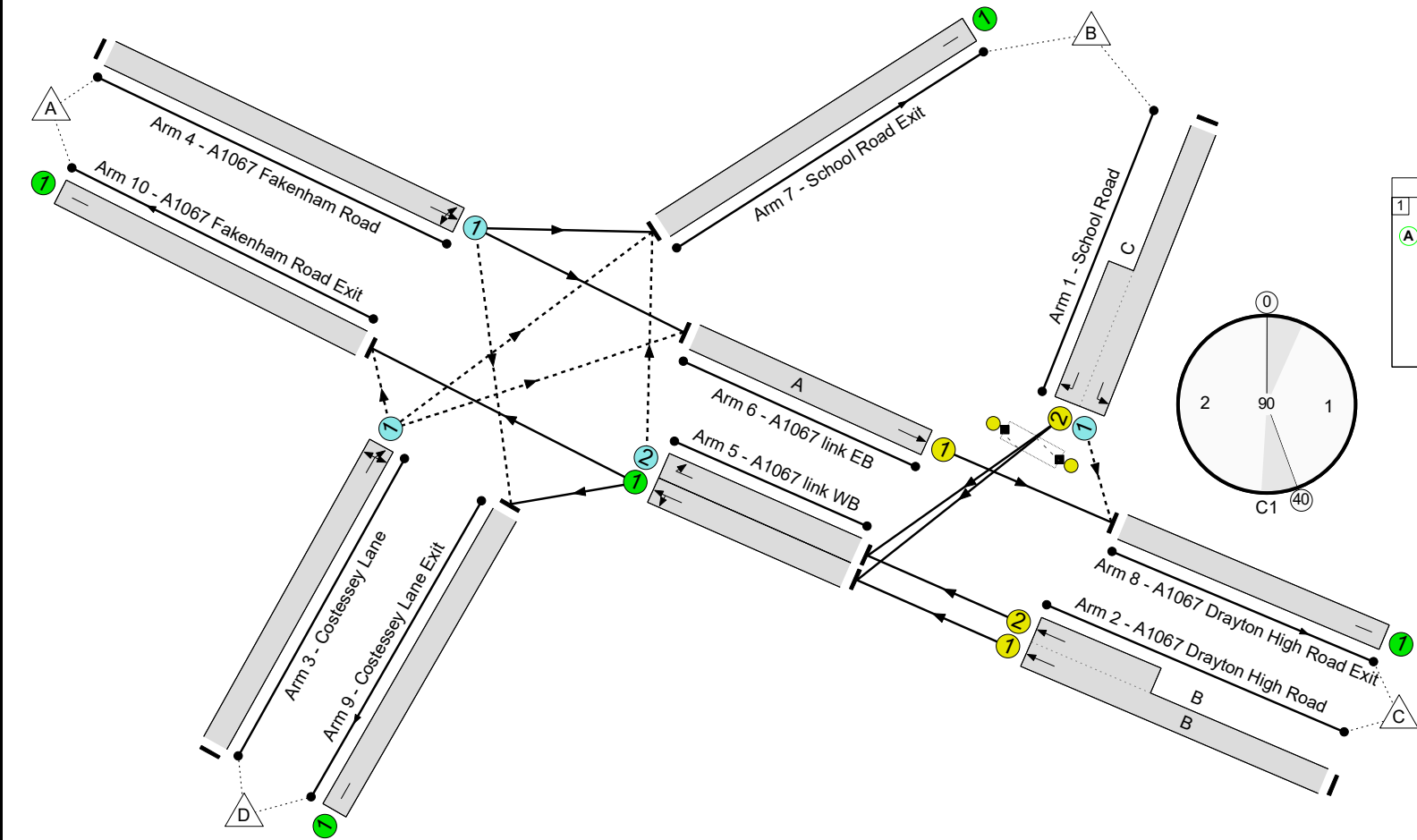
Signal Timings Diagram





Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: -23.7 %  
 Total Traffic Delay: 91.1 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Stages	
1	2
Min 7	Min 7
A → D	A → D
B → D	B → D
C → D	C → D

Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	111.3%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	111.3%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	778	1967:1834	575+651	63.5 : 63.5%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	34	-	992	1925:2065	625+266	111.3 : 111.3%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	245	2099	221	111.1%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	454	Inf	36000	1.3%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	1109	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	296	Inf	691	38.5%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	35	-	434	2032	813	53.3%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	549	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	799	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	371	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	750	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	35	-	0	-	0	0.0%

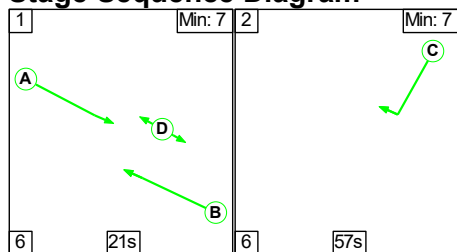
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	636	219	0	18.5	72.6	0.0	91.1	-	-	-	-
J20 - A1067/ Costessey Lane/ School Road	-	-	636	219	0	18.5	72.6	0.0	91.1	-	-	-	-
1/1+1/2	778	778	146	219	0	1.7	0.9	-	2.6	11.9	6.7	0.9	7.5
2/1+2/2	992	891	-	-	-	11.3	54.9	-	66.2	240.2	25.9	54.9	80.7
3/1	245	221	221	0	0	2.8	16.0	-	18.8	276.3	17.6	16.0	33.6
4/1	454	454	3	0	0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
5/1	1038	1038	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	266	266	266	0	0	0.2	0.3	-	0.5	6.4	5.0	0.3	5.3
6/1	434	434	-	-	-	2.5	0.6	-	3.1	25.3	8.2	0.6	8.8
7/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	799	799	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	370	370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	679	679	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1			PRC for Signalled Lanes (%):		-23.7	Total Delay for Signalled Lanes (pcuHr):		69.25	Cycle Time (s):		90		
			PRC Over All Lanes (%):		-23.7	Total Delay Over All Lanes(pcuHr):		91.11					

Full Input Data And Results

Scenario 11: '2039DS\_Mitigation AM' (FG11: '2039DS\_Mitigation AM', Plan 1: 'Network Control Plan 1')

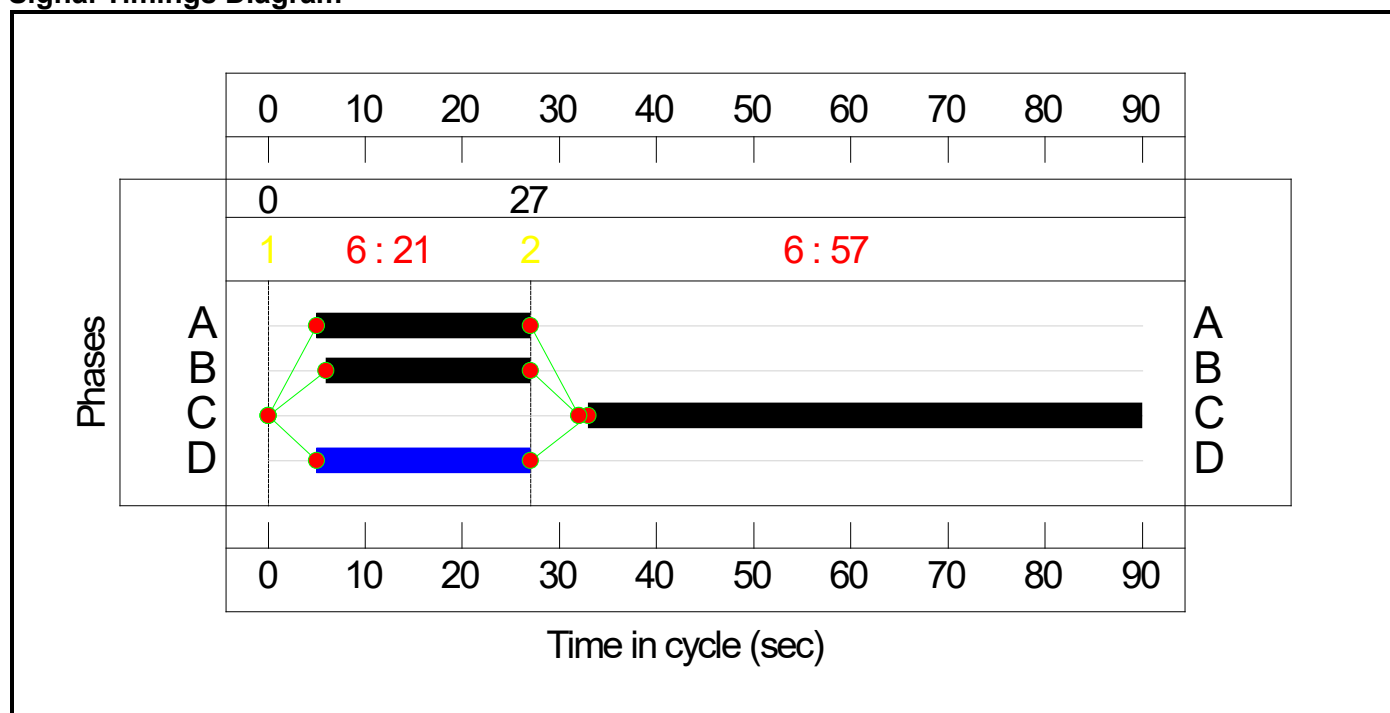
Stage Sequence Diagram



Stage Timings

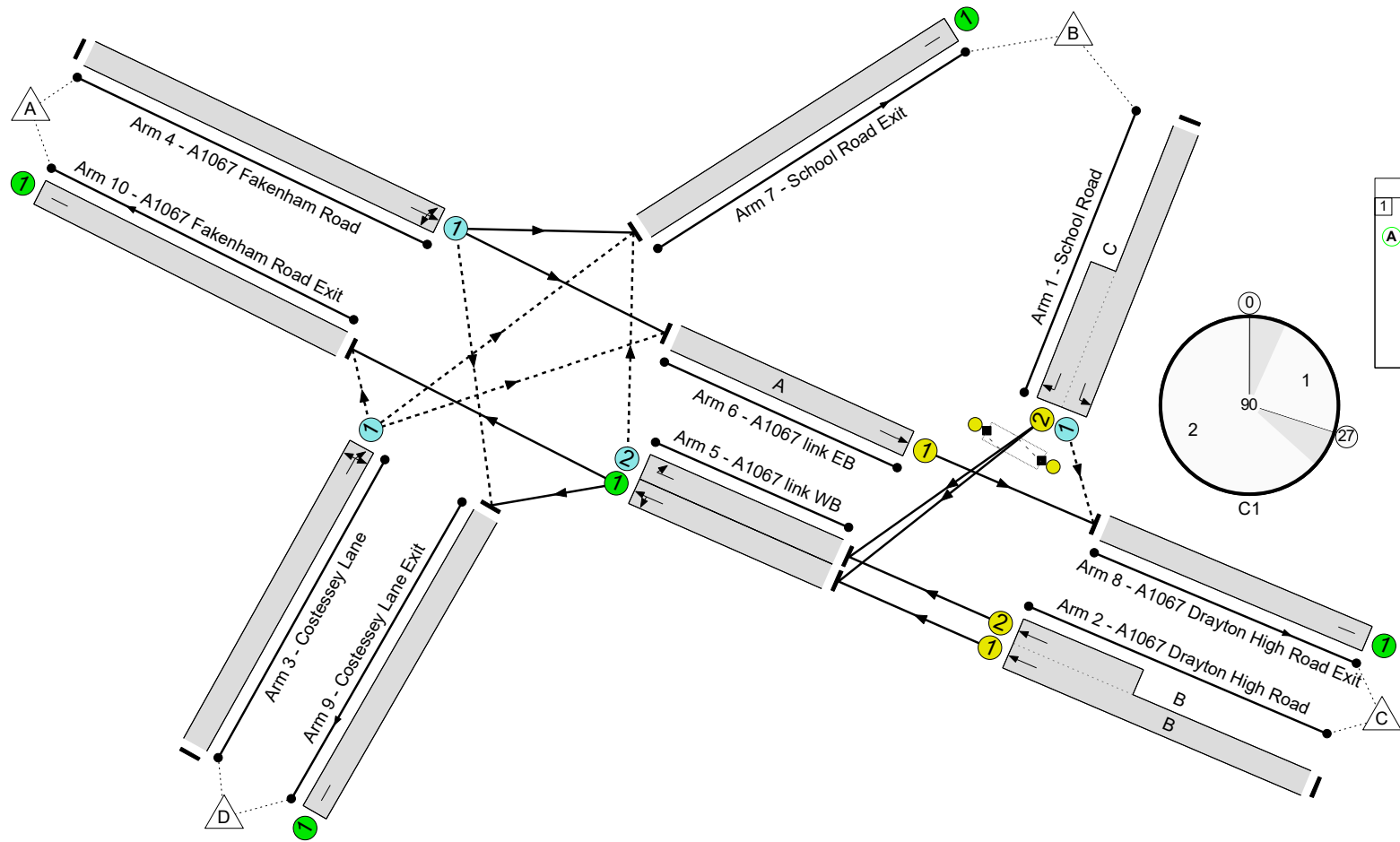
Stage	1	2
Duration	21	57
Change Point	0	27

Signal Timings Diagram



Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: -47.9 %  
 Total Traffic Delay: 166.3 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Stages	
1	2
Min 7	Min 7
A → D	A → D
B → D	B → D
C → D	C → D

Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	133.1%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	133.1%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	826	1967:1834	601+339	87.9 : 87.9%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	21	-	692	1925:2065	407+278	101.0 : 101.0%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	324	2093	243	133.1%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	730	Inf	36000	2.0%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	709	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	281	Inf	594	47.3%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	22	-	671	2032	519	129.1%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	1199	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	284	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	443	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	22	-	0	-	0	0.0%

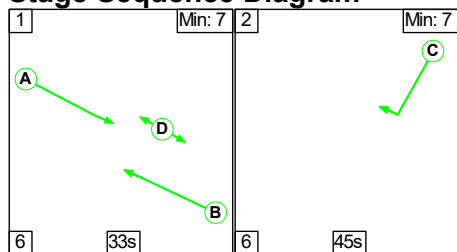
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>594</b>	<b>460</b>	<b>0</b>	<b>27.4</b>	<b>138.8</b>	<b>0.0</b>	<b>166.3</b>	-	-	-	-
<b>J20 - A1067/ Costessey Lane/ School Road</b>	-	-	<b>594</b>	<b>460</b>	<b>0</b>	<b>27.4</b>	<b>138.8</b>	<b>0.0</b>	<b>166.3</b>	-	-	-	-
1/1+1/2	826	826	68	460	0	1.1	3.4	-	4.5	19.6	7.9	3.4	11.3
2/1+2/2	692	688	-	-	-	6.4	15.0	-	21.4	111.3	12.5	15.0	27.5
3/1	324	243	243	0	0	6.0	42.2	-	48.2	535.4	23.2	42.2	65.4
4/1	730	730	1	0	0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
5/1	705	705	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	281	281	281	0	0	0.9	0.4	-	1.4	17.7	7.0	0.4	7.5
6/1	671	519	-	-	-	13.0	77.8	-	90.8	487.5	20.5	77.8	98.3
7/1	570	570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1047	1047	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	284	284	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1			PRC for Signalled Lanes (%):	-43.5	Total Delay for Signalled Lanes (pcuHr):		112.19	Cycle Time (s):		90			
			PRC Over All Lanes (%):	-47.9	Total Delay Over All Lanes(pcuHr):		166.27						

Full Input Data And Results

Scenario 12: '2039DS\_Mitigation PM' (FG12: '2039DS\_Mitigation PM', Plan 1: 'Network Control Plan 1')

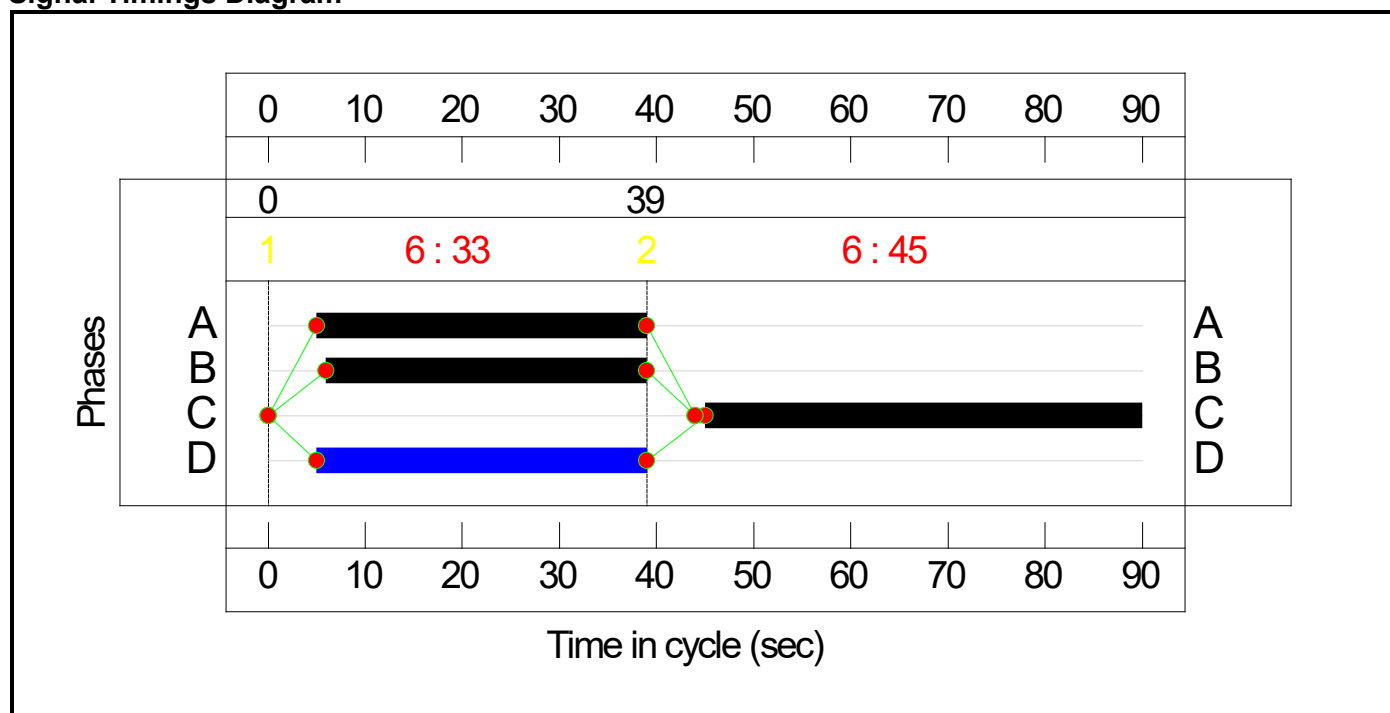
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	33	45
Change Point	0	39

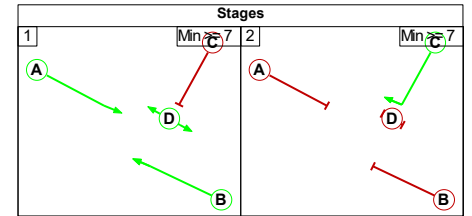
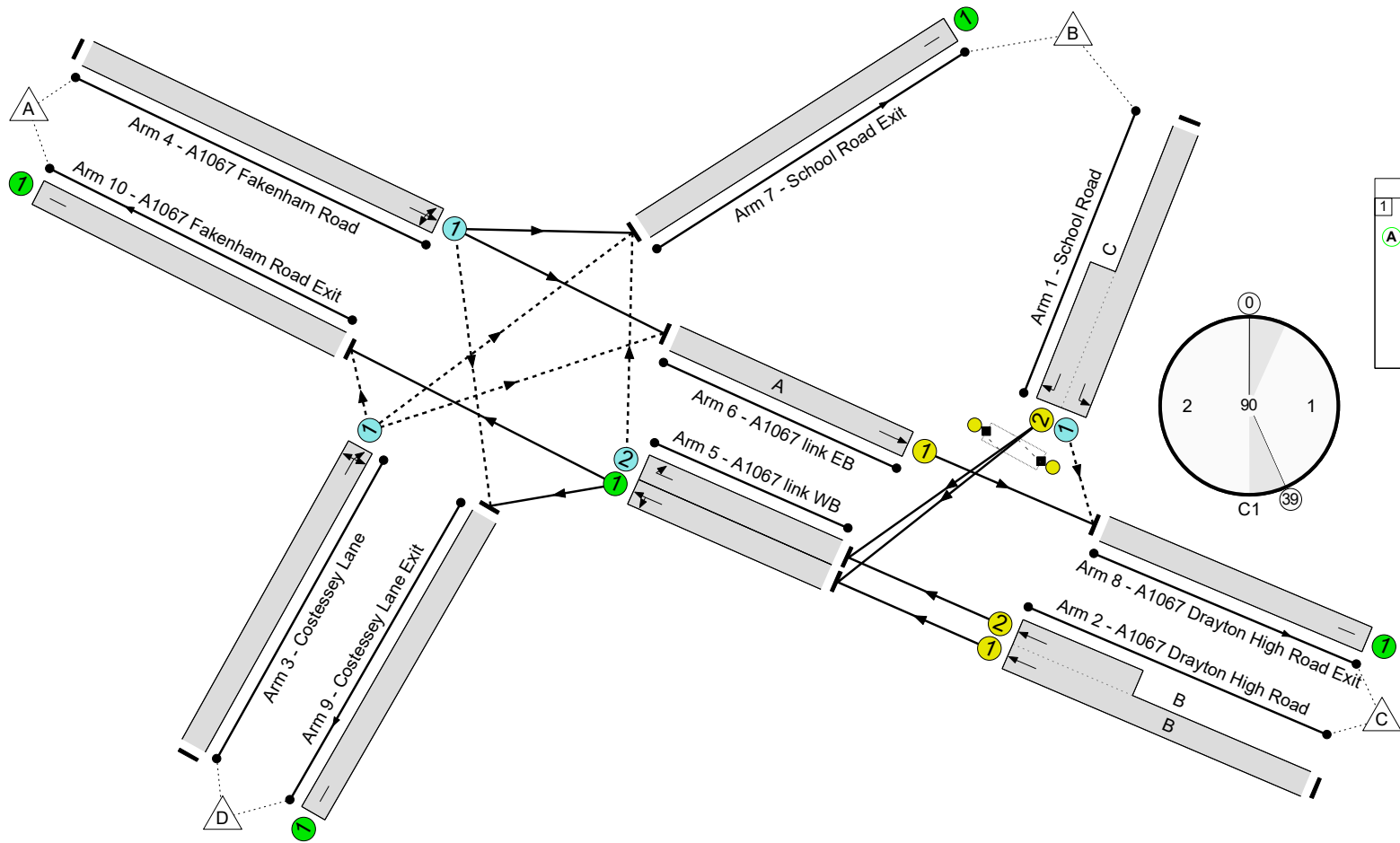
Signal Timings Diagram





Full Input Data And Results  
**Network Layout Diagram**

J20 - A1067/ Costessey Lane/ School Road  
 PRC: -26.9 %  
 Total Traffic Delay: 105.0 pcuHr  
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	114.2%
J20 - A1067/ Costessey Lane/ School Road	-	-	N/A	-	-		-	-	-	-	-	-	114.2%
1/1+1/2	School Road Right Left	O+U	N/A	N/A	- C		-	-	-	780	1967:1834	562+669	63.3 : 63.3%
2/1+2/2	A1067 Drayton High Road Ahead	U	N/A	N/A	B		1	33	-	996	1925:2065	608+264	114.2 : 114.2%
3/1	Costessey Lane Right Ahead Left	O	N/A	N/A	-		-	-	-	252	2100	224	112.4%
4/1	A1067 Fakenham Road Ahead Left Right	O	N/A	N/A	-		-	-	-	454	Inf	36000	1.3%
5/1	A1067 link WB Left Ahead	U	N/A	N/A	-		-	-	-	1119	Inf	Inf	0.0%
5/2	A1067 link WB Right	O	N/A	N/A	-		-	-	-	301	Inf	691	38.1%
6/1	A1067 link EB Ahead	U	N/A	N/A	A		1	34	-	436	2032	790	55.1%
7/1	School Road Exit	U	N/A	N/A	-		-	-	-	560	Inf	Inf	0.0%
8/1	A1067 Drayton High Road Exit	U	N/A	N/A	-		-	-	-	792	Inf	Inf	0.0%
9/1	Costessey Lane Exit	U	N/A	N/A	-		-	-	-	379	Inf	Inf	0.0%
10/1	A1067 Fakenham Road Exit	U	N/A	N/A	-		-	-	-	751	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	34	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	628	218	0	20.0	85.1	0.0	105.0	-	-	-	-
J20 - A1067/ Costessey Lane/ School Road	-	-	628	218	0	20.0	85.1	0.0	105.0	-	-	-	-
1/1+1/2	780	780	138	218	0	1.7	0.9	-	2.5	11.8	6.7	0.9	7.6
2/1+2/2	996	872	-	-	-	12.5	65.8	-	78.4	283.3	26.5	65.8	92.3
3/1	252	224	224	0	0	3.0	17.5	-	20.4	291.8	18.1	17.5	35.5
4/1	454	454	2	0	0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
5/1	1032	1032	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	264	264	264	0	0	0.2	0.3	-	0.5	6.6	5.6	0.3	5.9
6/1	435	435	-	-	-	2.6	0.6	-	3.2	26.5	8.5	0.6	9.1
7/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	791	791	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	665	665	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1			PRC for Signalled Lanes (%):	-26.9	Total Delay for Signalled Lanes (pcuHr):		81.57	Cycle Time (s):		90			
			PRC Over All Lanes (%):	-26.9	Total Delay Over All Lanes(pcuHr):		105.03						