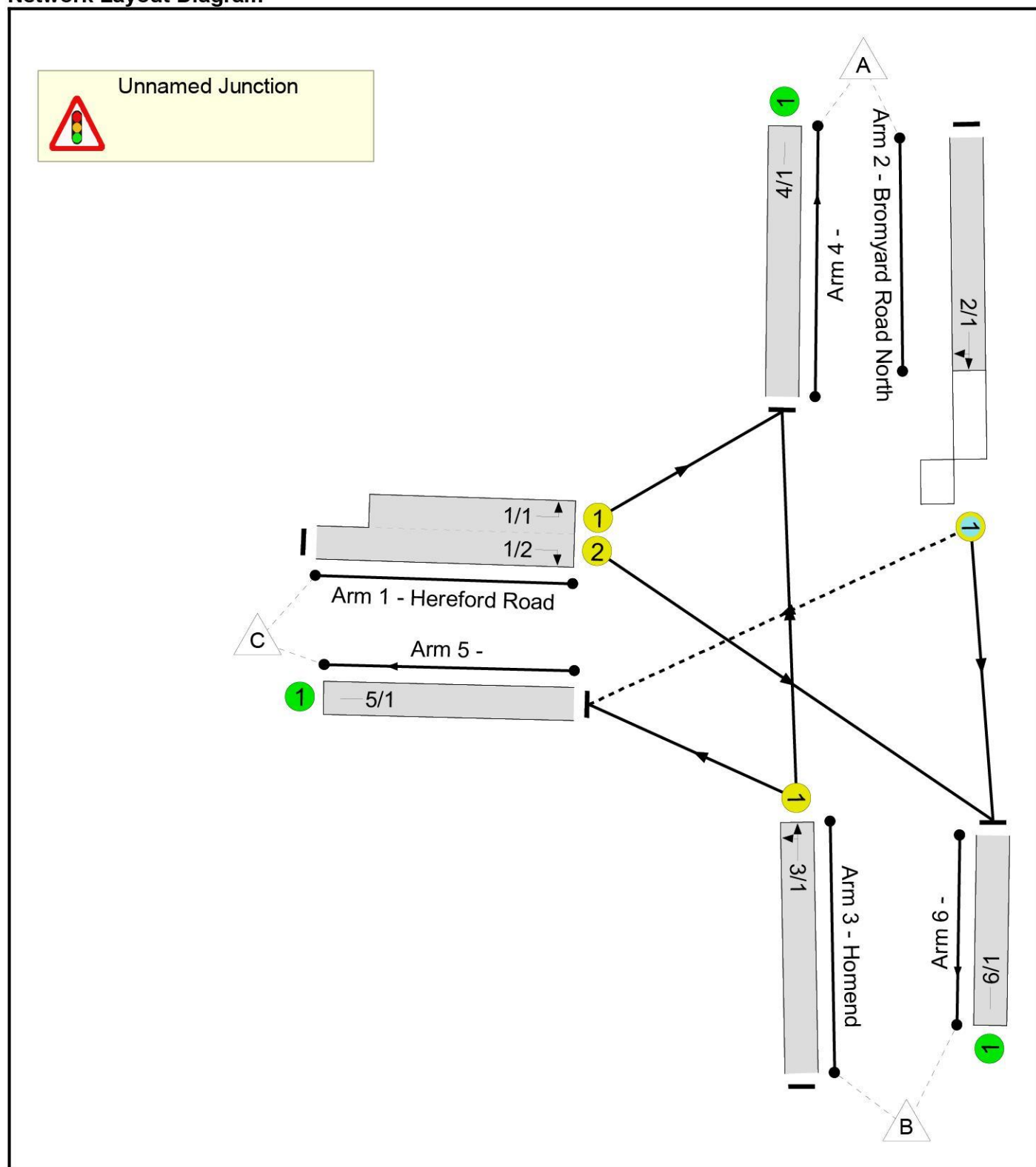


Full Input Data And Results

User and Project Details

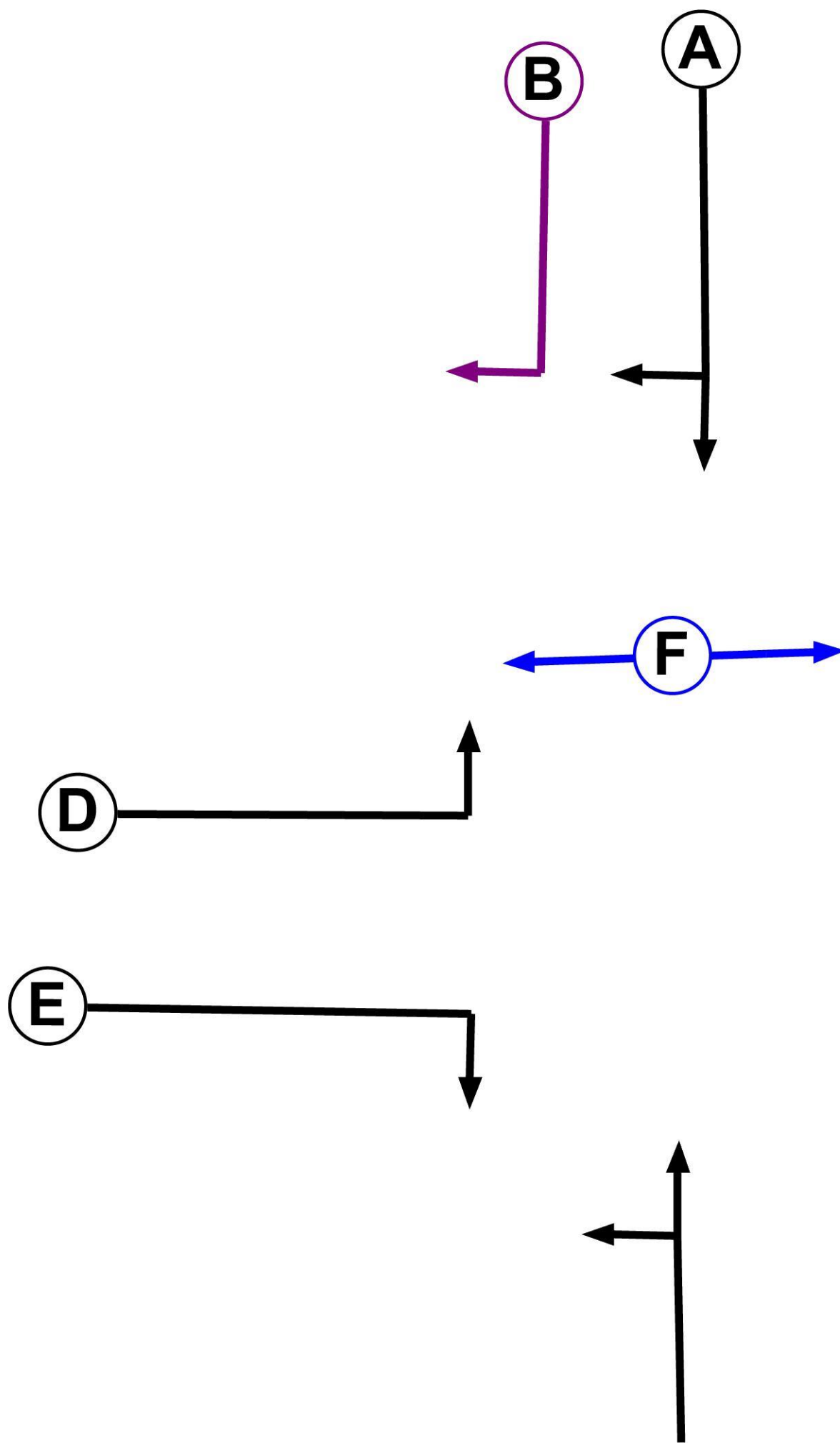
Project:	Ledbury, Herefordshire
Title:	PJA Signal Mitigation Scheme
Location:	
Client:	Bloor Homes
Additional detail:	
File name:	Bromyard Road Junction Issue PJA 130219.lsg3x
Author:	
Company:	Phil Jones Associates
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

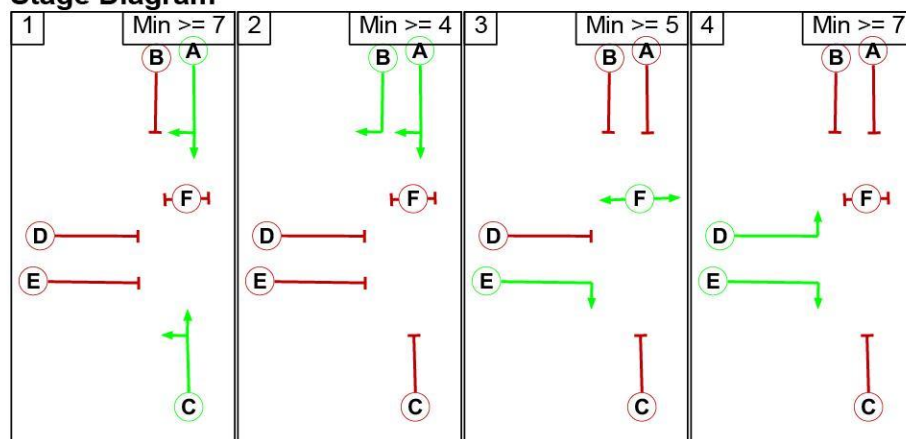
Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Ind. Arrow	A	4	4
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Pedestrian		5	5

Phase Intergreens Matrix

	Starting Phase						
Terminating Phase		A	B	C	D	E	F
	A		-	-	8	8	9
	B	-		8	8	8	9
	C	-	5		8	7	9
	D	5	5	5		-	6
	E	5	5	5	-		-
	F	12	12	12	12	-	

Phases in Stage

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

Stage Diagram**Phase Delays**

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	E	Losing	7	7
3	2	E	Losing	7	7

Prohibited Stage Change

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

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)
2/1 (Bromyard Road North)	5/1 (Right)	1439	0	3/1	1.09	All	6.00	2.00	0.50	6	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 (Hereford Road)	U	D	2	3	10.3	Geom	-	3.30	0.00	Y	Arm 4 Left	10.00
1/2 (Hereford Road)	U	E	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 6 Right	12.00
2/1 (Bromyard Road North)	O	A B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Right	5.00
											Arm 6 Ahead	Inf
3/1 (Homend)	U	C	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Left	16.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2031 + Committed + Development AM'	07:45	08:45	01:00	
2: '2031 + Committed + Development PM'	16:45	17:45	01:00	

Scenario 1: '2031 AM Peds Every 3' (FG1: '2031 + Committed + Development AM', Plan 3: 'Peds Every 3')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	285	270	555
	B	243	0	284	527
	C	355	288	0	643
	Tot.	598	573	554	1725

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2031 AM Peds Every 3
Junction: Unnamed Junction	
1/1 (short)	355
1/2 (with short)	643(In) 288(Out)
2/1	555
3/1	527
4/1	598
5/1	554
6/1	573

Lane Saturation Flows

Lane Calculation Notes

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 (Hereford Road)	3.30	0.00	Y	Arm 4 Left	10.00	100.0 %	1691	1691		
1/2 (Hereford Road)	3.30	0.00	Y	Arm 6 Right	12.00	100.0 %	1729	1729		
2/1 (Bromyard Road North)	3.50	0.00	Y	Arm 5 Right	5.00	48.6 %	1715	1715		
				Arm 6 Ahead	Inf	51.4 %				
3/1 (Homend)	3.90	0.00	Y	Arm 4 Ahead	Inf	46.1 %	1909	1909		
				Arm 5 Left	16.00	53.9 %				
4/1	Infinite Saturation Flow						Inf	Inf		
5/1	Infinite Saturation Flow						Inf	Inf		
6/1	Infinite Saturation Flow						Inf	Inf		

Scenario 2: '2031 PM Peds Every 3 ' (FG2: '2031 + Committed + Development PM', Plan 3: 'Peds Every 3')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	246	338	584
	B	272	0	325	597
	C	301	244	0	545
	Tot.	573	490	663	1726

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2031 PM Peds Every 3
Junction: Unnamed Junction	
1/1 (short)	301
1/2 (with short)	545(In) 244(Out)
2/1	584
3/1	597
4/1	573
5/1	663
6/1	490

Lane Saturation Flows

Lane Calculation Notes

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 (Hereford Road)	3.30	0.00	Y	Arm 4 Left	10.00	100.0 %	1691	1691		
1/2 (Hereford Road)	3.30	0.00	Y	Arm 6 Right	12.00	100.0 %	1729	1729		
2/1 (Bromyard Road North)	3.50	0.00	Y	Arm 5 Right	5.00	57.9 %	1674	1674		
				Arm 6 Ahead	Inf	42.1 %				
3/1 (Homend)	3.90	0.00	Y	Arm 4 Ahead	Inf	45.6 %	1908	1908		
				Arm 5 Left	16.00	54.4 %				
4/1	Infinite Saturation Flow						Inf	Inf		
5/1	Infinite Saturation Flow						Inf	Inf		
6/1	Infinite Saturation Flow						Inf	Inf		

Scenario 3: '2031 AM Peds Every 2' (FG1: '2031 + Committed + Development AM', Plan 2: 'Peds Every 2')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	285	270	555
	B	243	0	284	527
	C	355	288	0	643
	Tot.	598	573	554	1725

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2031 AM Peds Every 2
Junction: Unnamed Junction	
1/1 (short)	355
1/2 (with short)	643(In) 288(Out)
2/1	555
3/1	527
4/1	598
5/1	554
6/1	573

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 (Hereford Road)	3.30	0.00	Y	Arm 4 Left	10.00	100.0 %	1691	1691
1/2 (Hereford Road)	3.30	0.00	Y	Arm 6 Right	12.00	100.0 %	1729	1729
2/1 (Bromyard Road North)	3.50	0.00	Y	Arm 5 Right	5.00	48.6 %	1715	1715
				Arm 6 Ahead	Inf	51.4 %		
3/1 (Homend)	3.90	0.00	Y	Arm 4 Ahead	Inf	46.1 %	1909	1909
				Arm 5 Left	16.00	53.9 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2031 PM Peds Every 2' (FG2: '2031 + Committed + Development PM', Plan 2: 'Peds Every 2')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	246	338	584
	B	272	0	325	597
	C	301	244	0	545
	Tot.	573	490	663	1726

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2031 PM Peds Every 2
Junction: Unnamed Junction	
1/1 (short)	301
1/2 (with short)	545(In) 244(Out)
2/1	584
3/1	597
4/1	573
5/1	663
6/1	490

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 (Hereford Road)	3.30	0.00	Y	Arm 4 Left	10.00	100.0 %	1691	1691
1/2 (Hereford Road)	3.30	0.00	Y	Arm 6 Right	12.00	100.0 %	1729	1729
2/1 (Bromyard Road North)	3.50	0.00	Y	Arm 5 Right	5.00	57.9 %	1674	1674
				Arm 6 Ahead	Inf	42.1 %		
3/1 (Homend)	3.90	0.00	Y	Arm 4 Ahead	Inf	45.6 %	1908	1908
				Arm 5 Left	16.00	54.4 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2031 AM Peds Every 1' (FG1: '2031 + Committed + Development AM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired

Desired Flow :

Desired Flow:					
	Destination				
Origin		A	B	C	Tot.
	A	0	285	270	555
	B	243	0	284	527
	C	355	288	0	643
	Tot.	598	573	554	1725

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2031 AM Peds Every 1
Junction: Unnamed Junction	
1/1 (short)	355
1/2 (with short)	643(In) 288(Out)
2/1	555
3/1	527
4/1	598
5/1	554
6/1	573

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 (Hereford Road)	3.30	0.00	Y	Arm 4 Left	10.00	100.0 %	1691	1691
1/2 (Hereford Road)	3.30	0.00	Y	Arm 6 Right	12.00	100.0 %	1729	1729
2/1 (Bromyard Road North)	3.50	0.00	Y	Arm 5 Right	5.00	48.6 %	1715	1715
				Arm 6 Ahead	Inf	51.4 %		
3/1 (Homend)	3.90	0.00	Y	Arm 4 Ahead	Inf	46.1 %	1909	1909
				Arm 5 Left	16.00	53.9 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2031 PM Peds Every 1' (FG2: '2031 + Committed + Development PM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination			
Origin		A	B	C	Tot.
	A	0	246	338	584
	B	272	0	325	597
	C	301	244	0	545
	Tot.	573	490	663	1726

Traffic Lane Flows

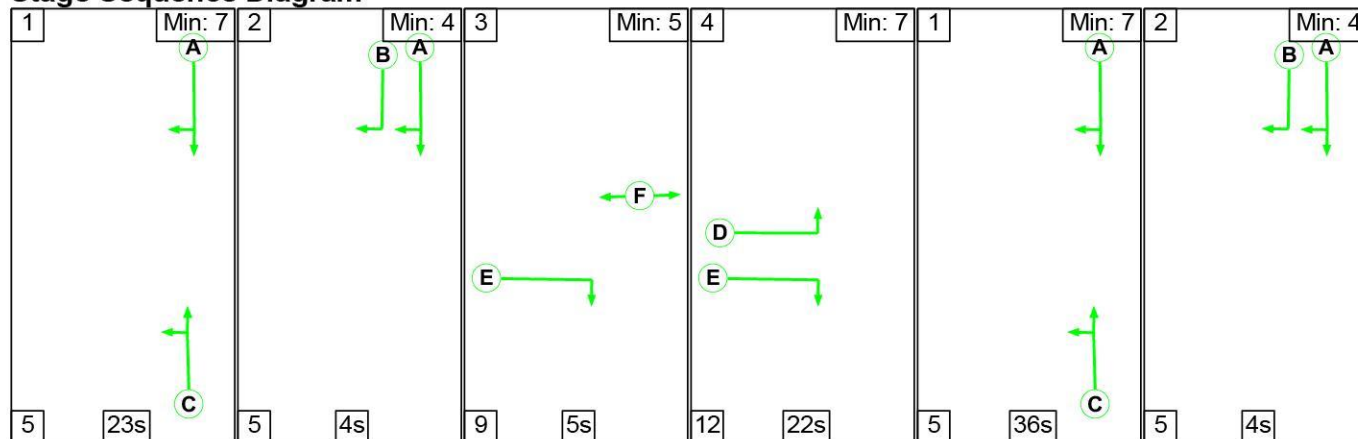
Lane	Scenario 6: 2031 PM Peds Every 1
Junction: Unnamed Junction	
1/1 (short)	301
1/2 (with short)	545(In) 244(Out)
2/1	584
3/1	597
4/1	573
5/1	663
6/1	490

Lane Saturation Flows

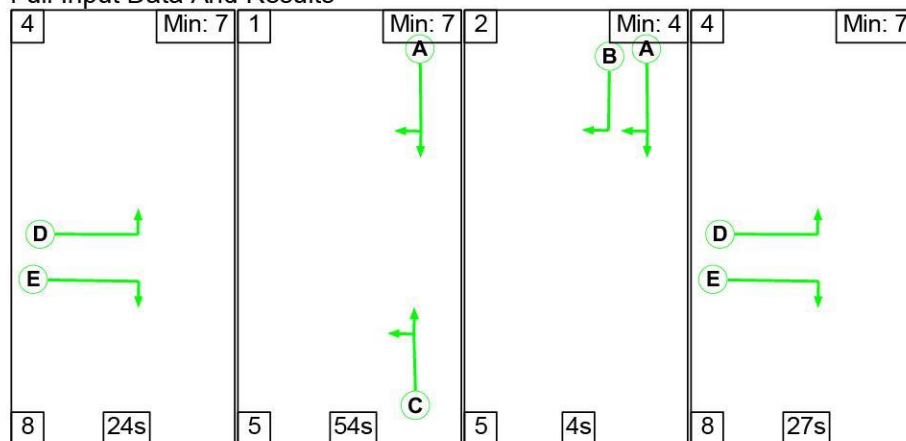
Lane Calculation Notes

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 (Hereford Road)	3.30	0.00	Y	Arm 4 Left	10.00	100.0 %	1691	1691		
1/2 (Hereford Road)	3.30	0.00	Y	Arm 6 Right	12.00	100.0 %	1729	1729		
2/1 (Bromyard Road North)	3.50	0.00	Y	Arm 5 Right	5.00	57.9 %	1674	1674		
				Arm 6 Ahead	Inf	42.1 %				
3/1 (Homend)	3.90	0.00	Y	Arm 4 Ahead	Inf	45.6 %	1908	1908		
				Arm 5 Left	16.00	54.4 %				
4/1	Infinite Saturation Flow						Inf	Inf		
5/1	Infinite Saturation Flow						Inf	Inf		
6/1	Infinite Saturation Flow						Inf	Inf		

Scenario 1: '2031 AM Peds Every 3' (FG1: '2031 + Committed + Development AM', Plan 3: 'Peds Every 3')

Stage Sequence Diagram

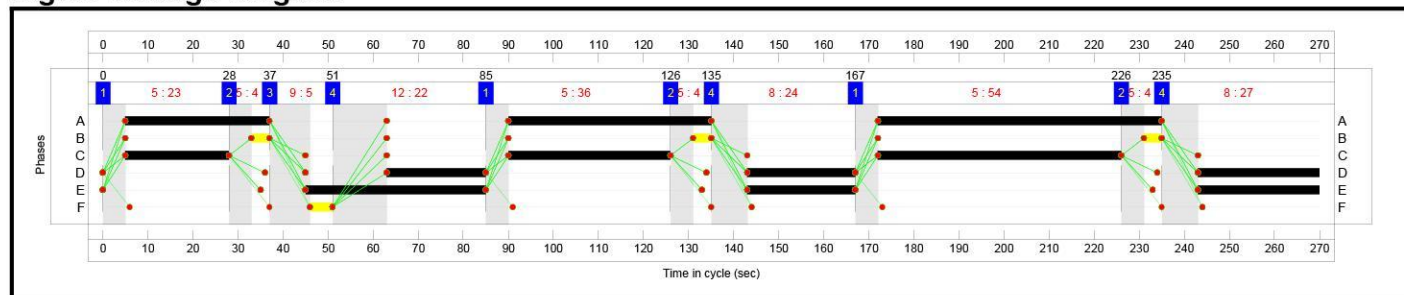
Full Input Data And Results



Stage Timings

Stage	1	2	3	4	1	2	4	1	2	4
Duration	23	4	5	22	36	4	24	54	4	27
Change Point	0	28	37	51	85	126	135	167	226	235

Signal Timings Diagram



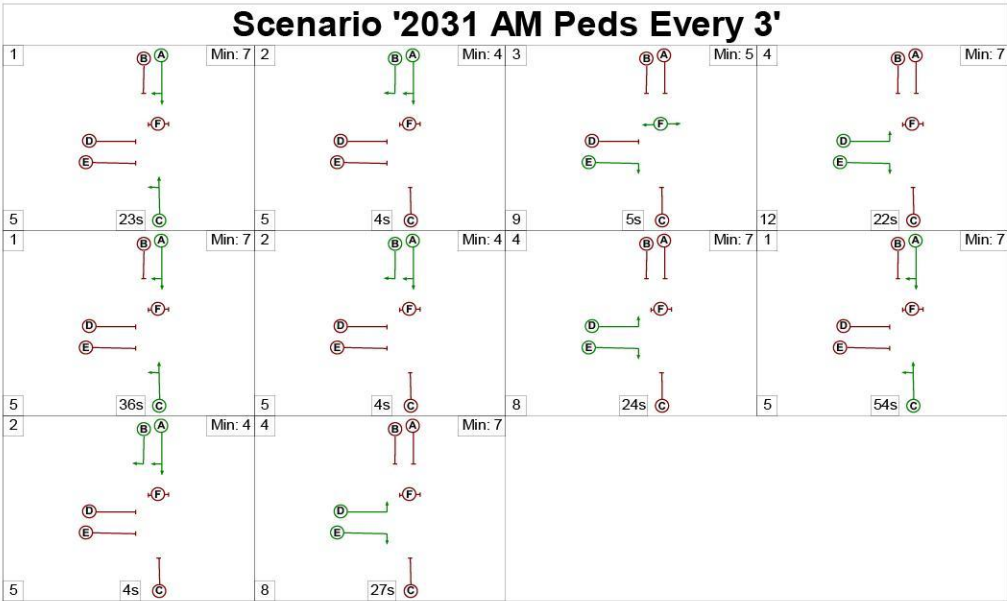
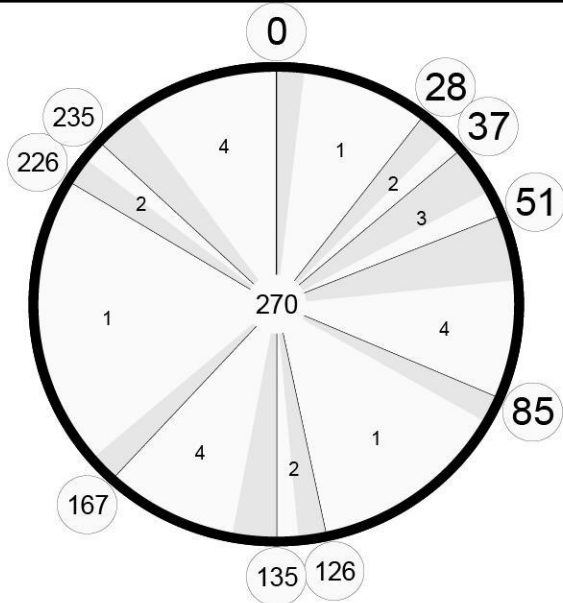
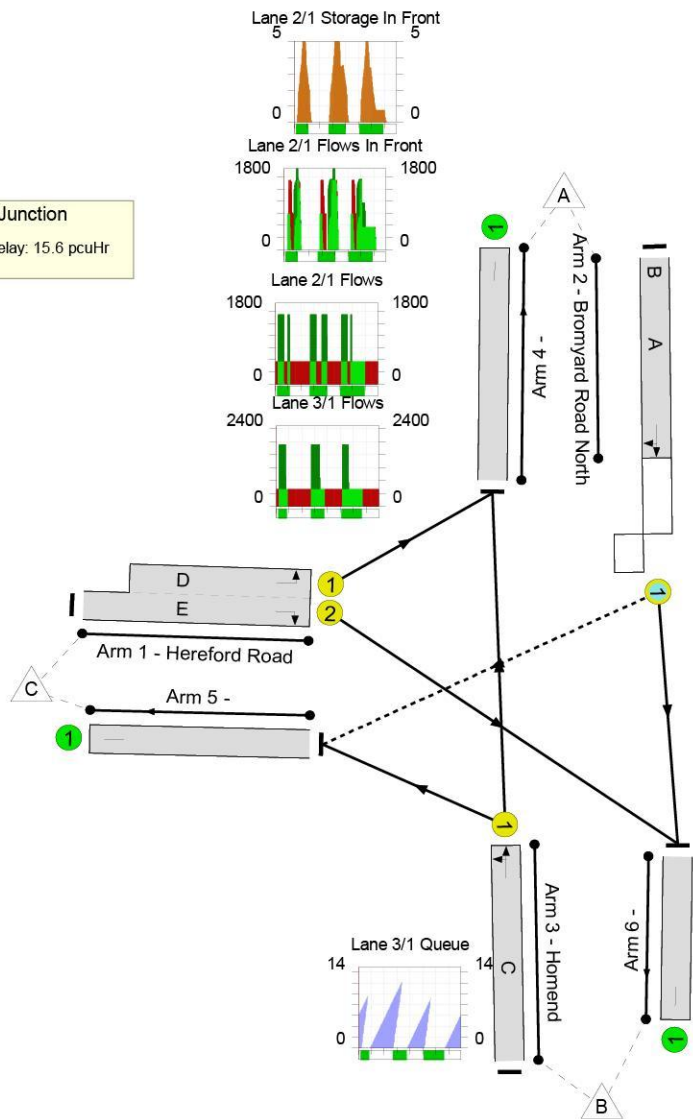
Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Unnamed Junction
PRC: 15.4 %
Total Traffic Delay: 15.6 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: PJA Signal Mitigation Scheme	-	-	N/A	-	-		-	-	-	-	-	-	78.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	78.0%
1/2+1/1	Hereford Road Left Right	U	N/A	N/A	E D		3	91:73	-	643	1729:1691	369+455	78.0 : 78.0%
2/1	Bromyard Road North Right Ahead	O	N/A	N/A	A	B	3	140	12	555	1715	712	78.0%
3/1	Homend Ahead Left	U	N/A	N/A	C		3	113	-	527	1909	820	64.3%
4/1		U	N/A	N/A	-		-	-	-	598	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	554	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: PJA Signal Mitigation Scheme	-	-	148	82	40	10.6	4.4	0.7	15.6	-	-	-	-
Unnamed Junction	-	-	148	82	40	10.6	4.4	0.7	15.6	-	-	-	-
1/2+1/1	643	643	-	-	-	4.9	1.7	-	6.6	36.9	9.3	1.7	11.0
2/1	555	555	148	82	40	2.7	1.7	0.7	5.1	33.1	15.0	1.7	16.7
3/1	527	527	-	-	-	3.0	0.9	-	3.9	26.7	12.3	0.9	13.2
4/1	598	598	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	554	554	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

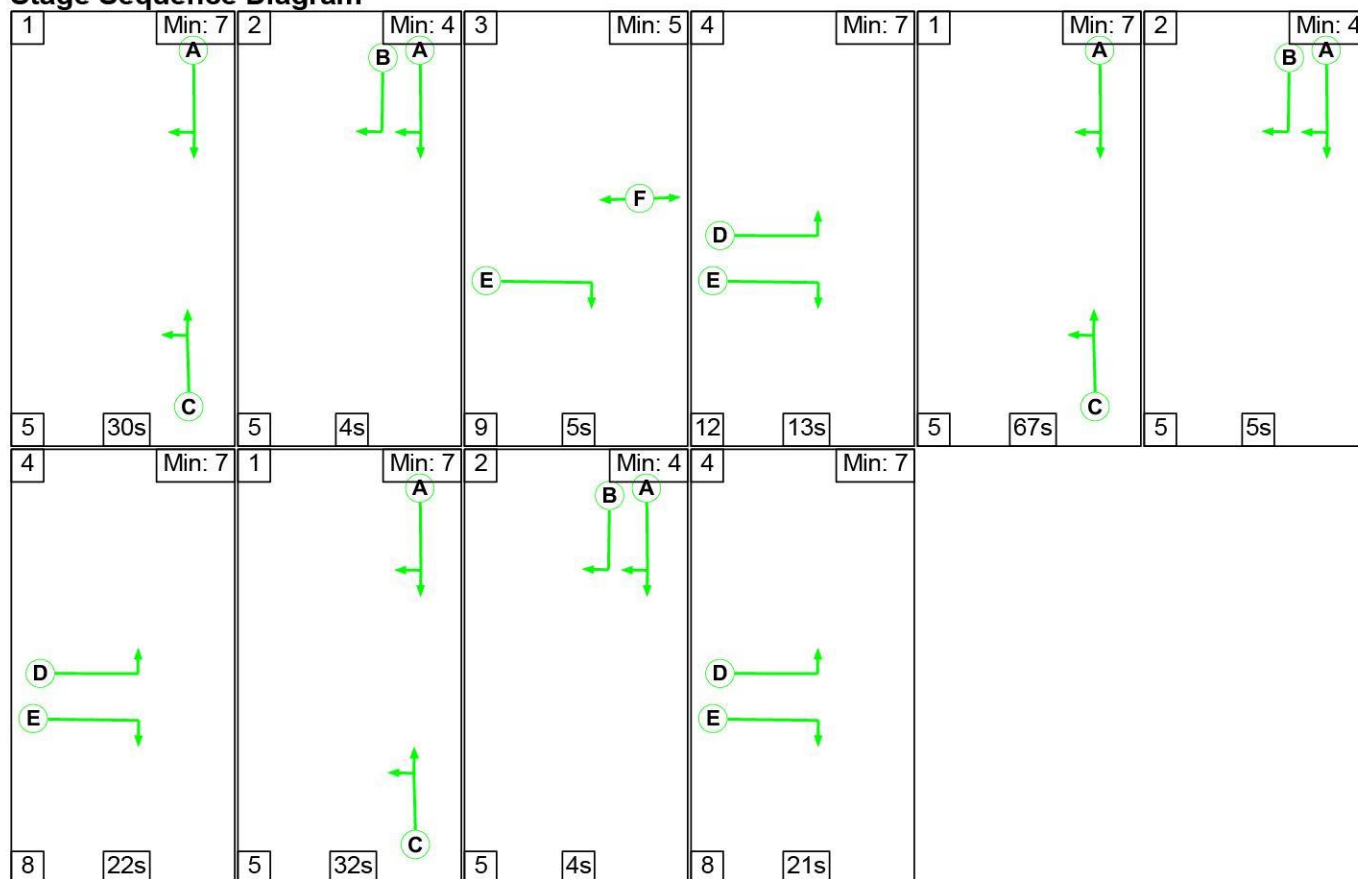
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	15.4	Total Delay for Signalled Lanes (pcuHr):	15.61	Cycle Time (s):	270
	PRC Over All Lanes (%):	15.4	Total Delay Over All Lanes(pcuHr):	15.61		

Full Input Data And Results

Scenario 2: '2031 PM Peds Every 3' (FG2: '2031 + Committed + Development PM', Plan 3: 'Peds Every 3')

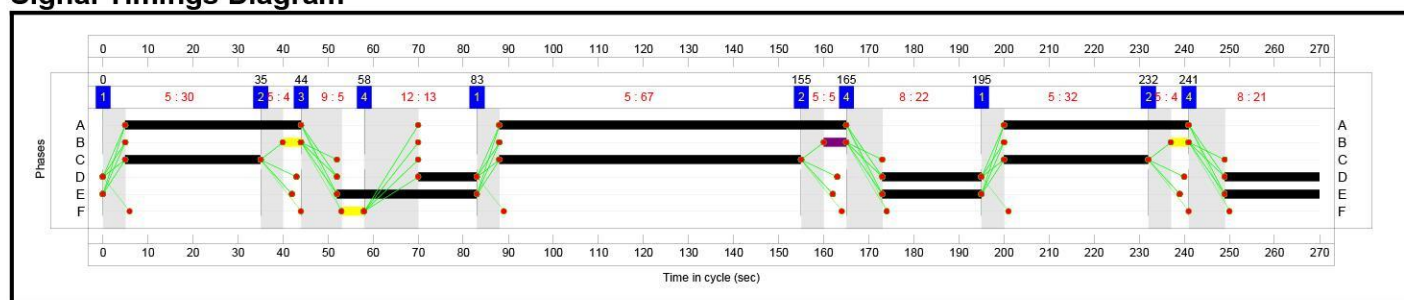
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	4	1	2	4
Duration	30	4	5	13	67	5	22	32	4	21
Change Point	0	35	44	58	83	155	165	195	232	241

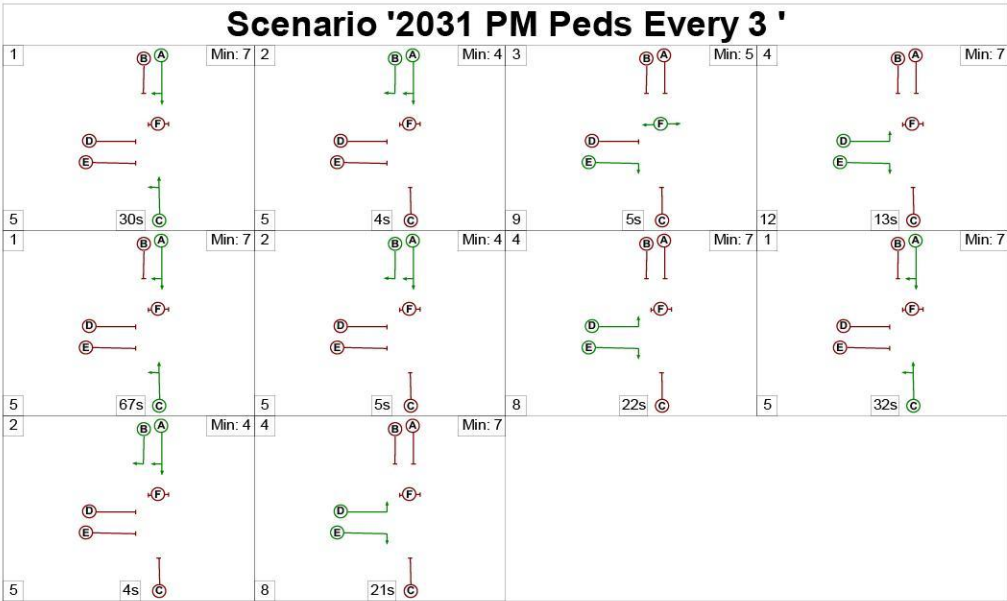
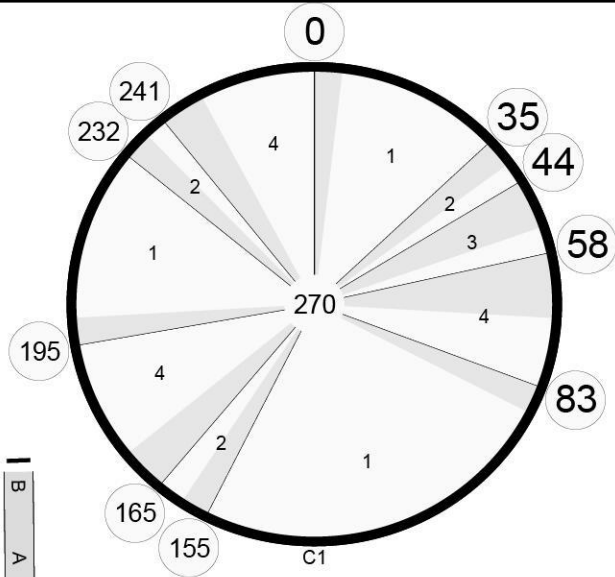
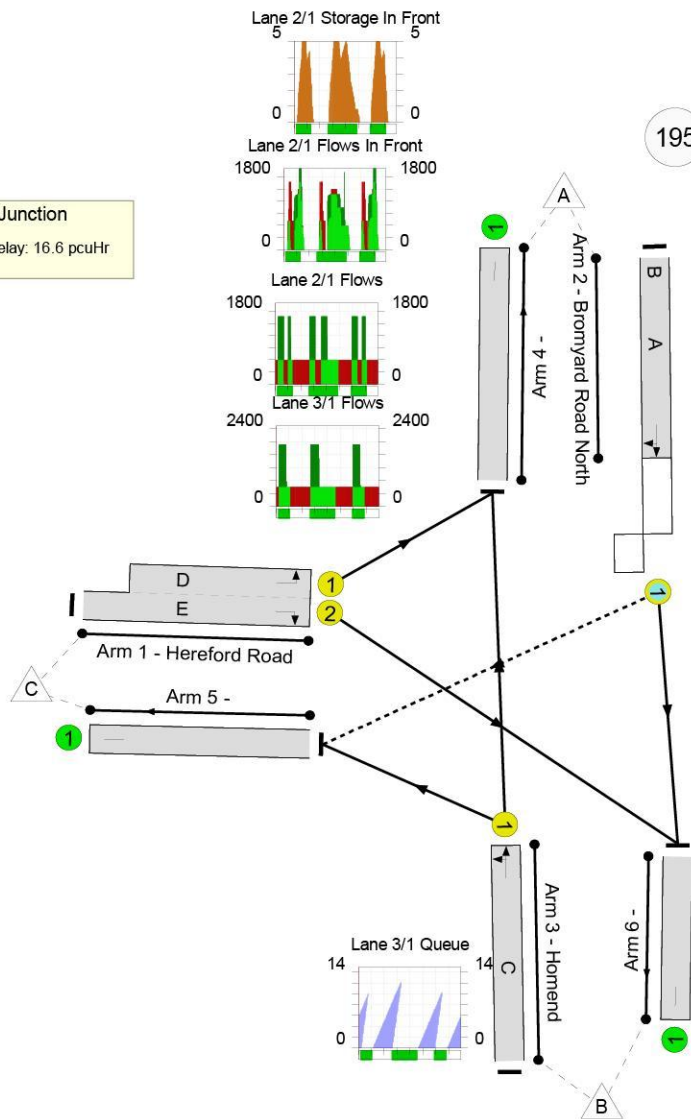
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 10.1 %
Total Traffic Delay: 16.6 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: PJA Signal Mitigation Scheme	-	-	N/A	-	-		-	-	-	-	-	-	81.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	81.8%
1/2+1/1	Hereford Road Left Right	U	N/A	N/A	E D		3	74:56	-	545	1729:1691	299+369	81.5 : 81.5%
2/1	Bromyard Road North Right Ahead	O	N/A	N/A	A	B	3	157	13	584	1674	714	81.8%
3/1	Homend Ahead Left	U	N/A	N/A	C		3	129	-	597	1908	933	64.0%
4/1		U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	663	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	490	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: PJA Signal Mitigation Scheme	-	-	201	102	36	10.3	5.2	1.1	16.6	-	-	-	-
Unnamed Junction	-	-	201	102	36	10.3	5.2	1.1	16.6	-	-	-	-
1/2+1/1	545	545	-	-	-	5.0	2.1	-	7.1	47.2	9.5	2.1	11.6
2/1	584	584	201	102	36	2.4	2.2	1.1	5.7	35.0	14.6	2.2	16.8
3/1	597	597	-	-	-	2.9	0.9	-	3.7	22.6	12.4	0.9	13.3
4/1	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	663	663	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	490	490	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

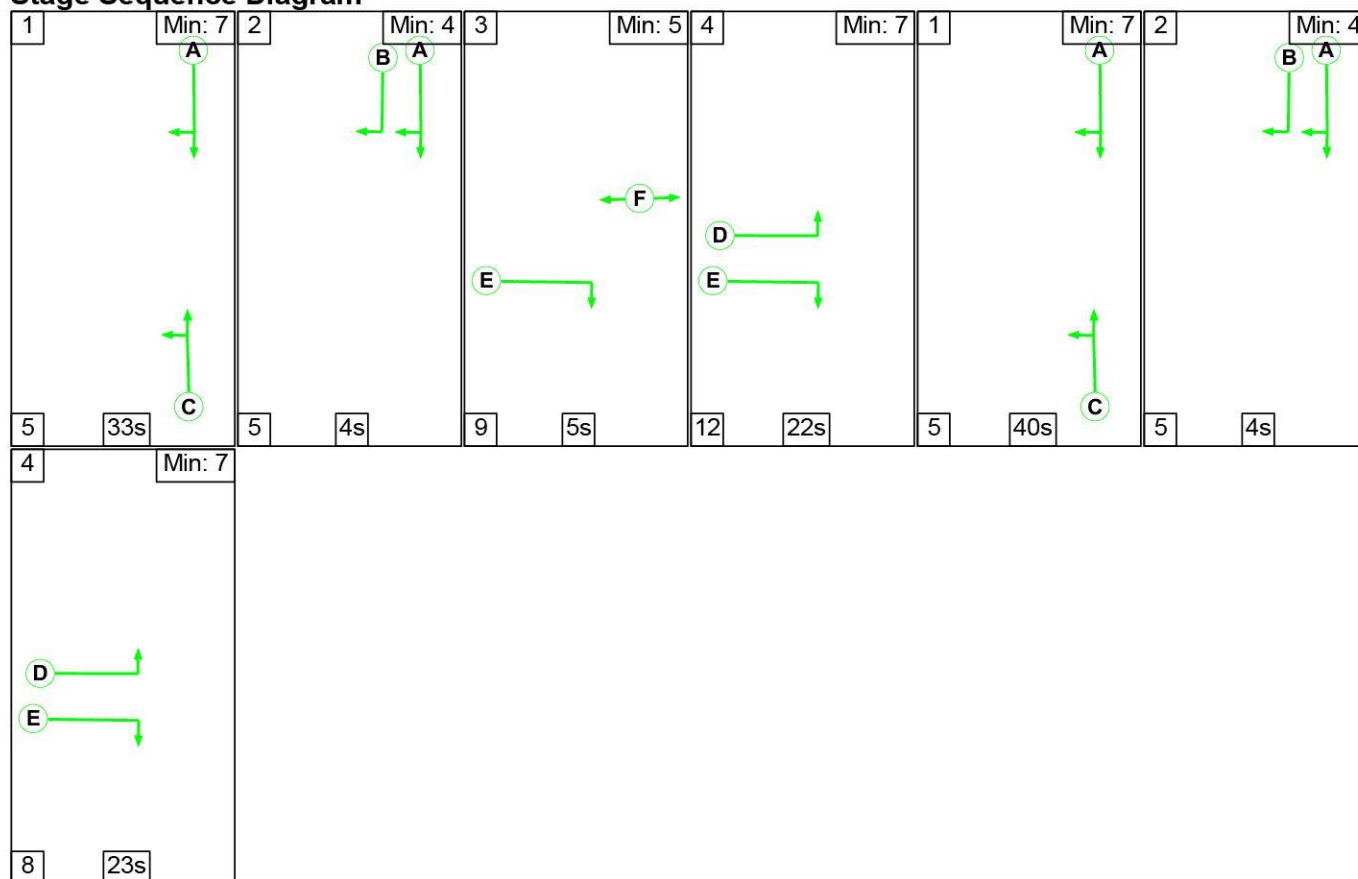
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	10.1	Total Delay for Signalled Lanes (pcuHr):	16.57	Cycle Time (s):	270
	PRC Over All Lanes (%):	10.1	Total Delay Over All Lanes(pcuHr):	16.57		

Full Input Data And Results

Scenario 3: '2031 AM Peds Every 2' (FG1: '2031 + Committed + Development AM', Plan 2: 'Peds Every 2')

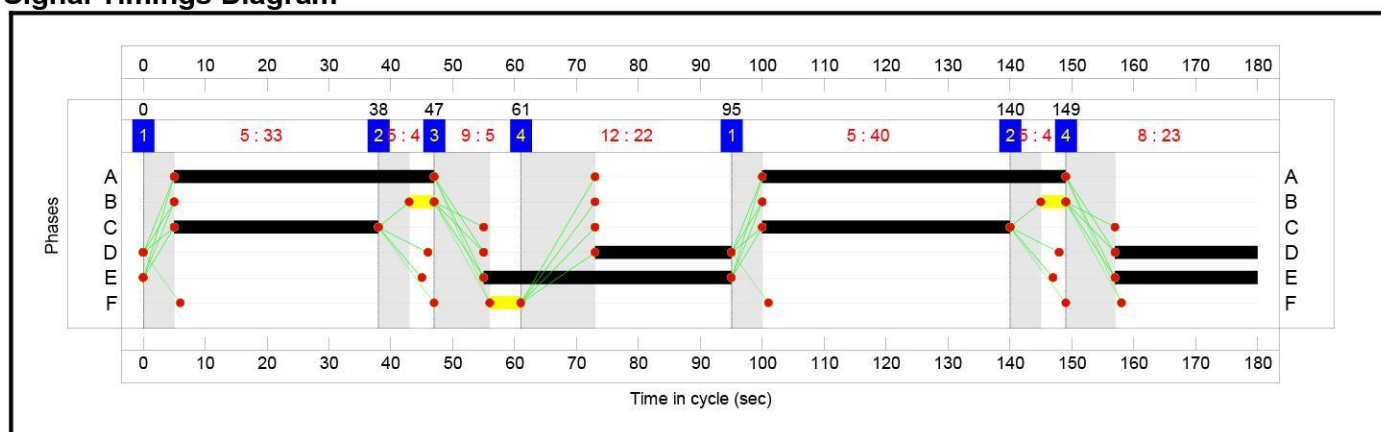
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	4
Duration	33	4	5	22	40	4	23
Change Point	0	38	47	61	95	140	149

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

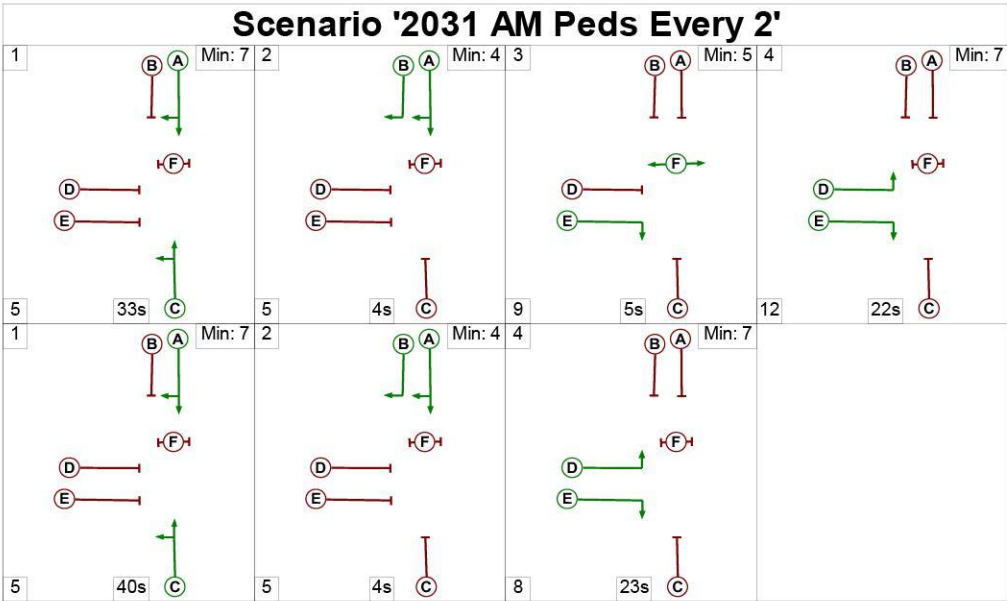
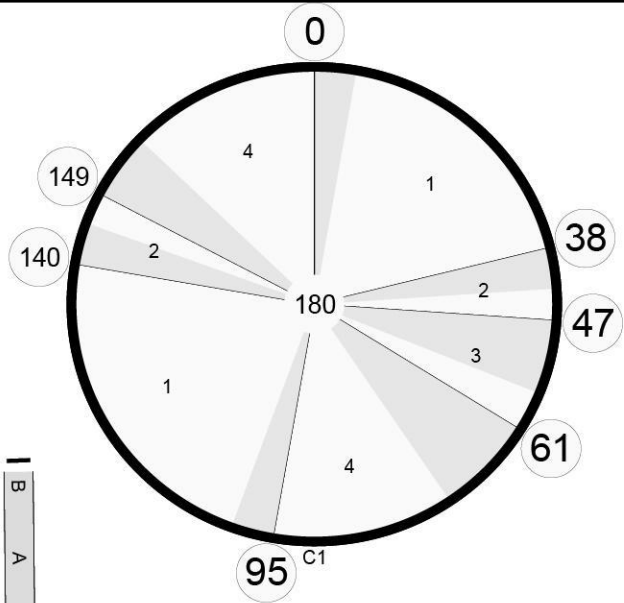
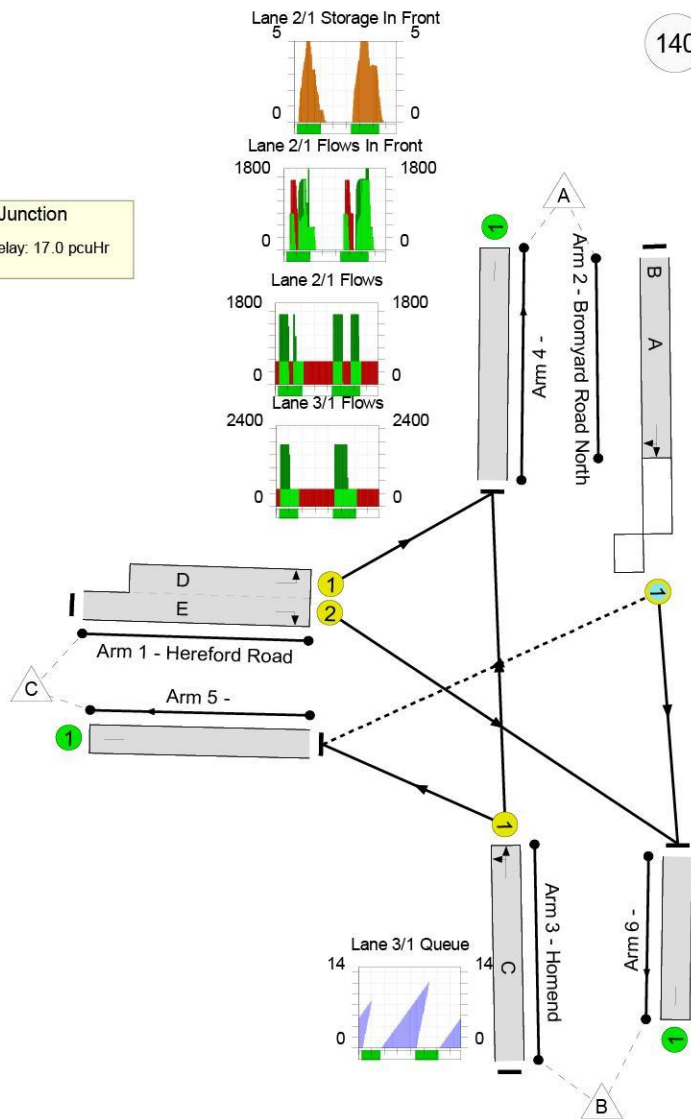
Full Input Data And Results



Unnamed Junction

PRC: 9.8 %

Total Traffic Delay: 17.0 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: PJA Signal Mitigation Scheme	-	-	N/A	-	-		-	-	-	-	-	-	82.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	82.0%
1/2+1/1	Hereford Road Left Right	U	N/A	N/A	E D		2	63:45	-	643	1729:1691	354+436	81.4 : 81.4%
2/1	Bromyard Road North Right Ahead	O	N/A	N/A	A	B	2	91	8	555	1715	677	82.0%
3/1	Homend Ahead Left	U	N/A	N/A	C		2	73	-	527	1909	795	66.3%
4/1		U	N/A	N/A	-		-	-	-	598	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	554	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: PJA Signal Mitigation Scheme	-	-	166	81	23	11.0	5.3	0.8	17.0	-	-	-	-
Unnamed Junction	-	-	166	81	23	11.0	5.3	0.8	17.0	-	-	-	-
1/2+1/1	643	643	-	-	-	4.9	2.1	-	7.0	39.1	9.0	2.1	11.1
2/1	555	555	166	81	23	2.9	2.2	0.8	5.9	38.2	15.0	2.2	17.2
3/1	527	527	-	-	-	3.2	1.0	-	4.2	28.4	12.3	1.0	13.3
4/1	598	598	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	554	554	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

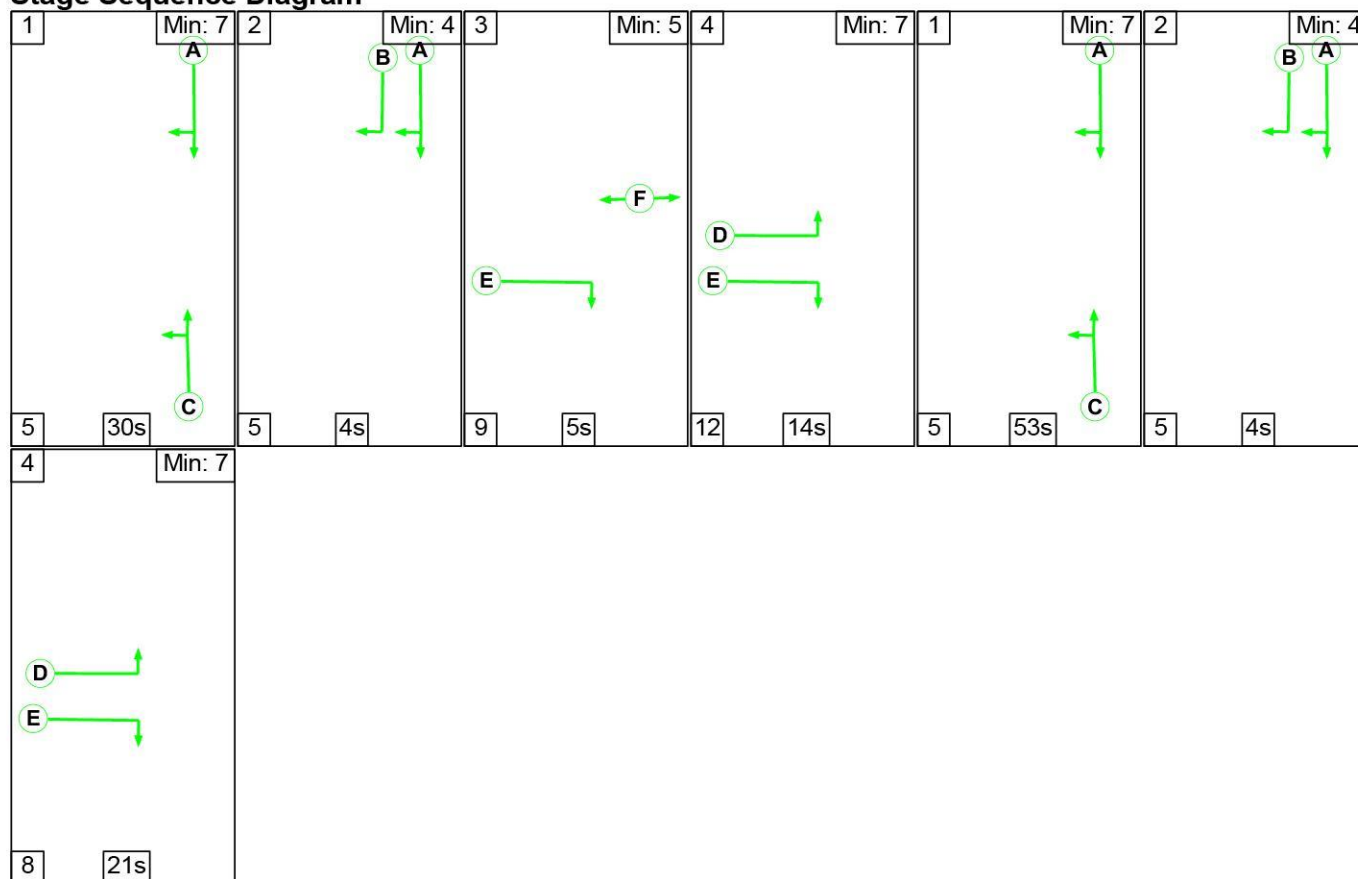
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	9.8	Total Delay for Signalled Lanes (pcuHr):	17.02	Cycle Time (s):	180
	PRC Over All Lanes (%):	9.8	Total Delay Over All Lanes(pcuHr):	17.02		

Full Input Data And Results

Scenario 4: '2031 PM Peds Every 2' (FG2: '2031 + Committed + Development PM', Plan 2: 'Peds Every 2')

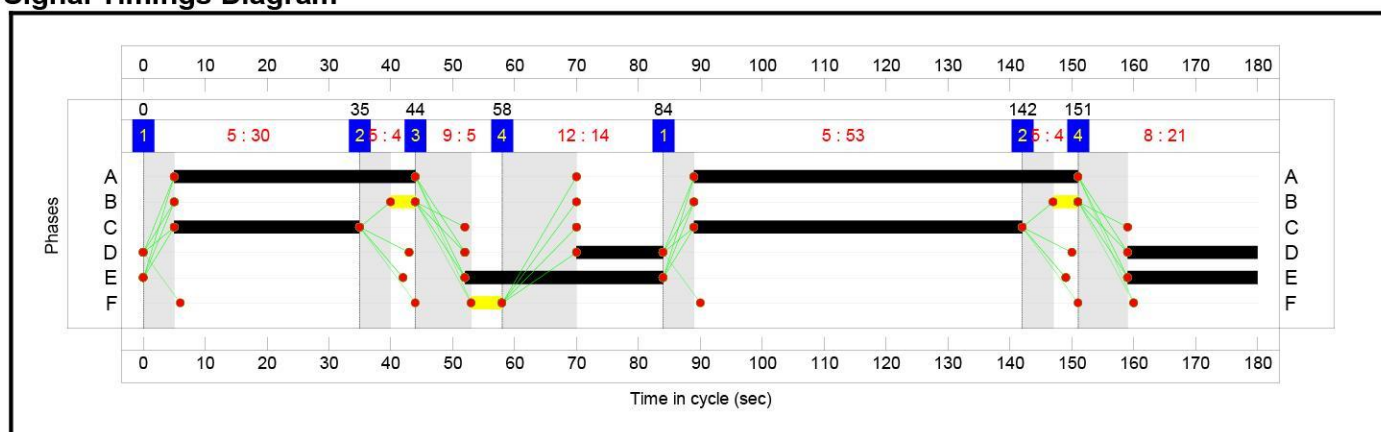
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	4
Duration	30	4	5	14	53	4	21
Change Point	0	35	44	58	84	142	151

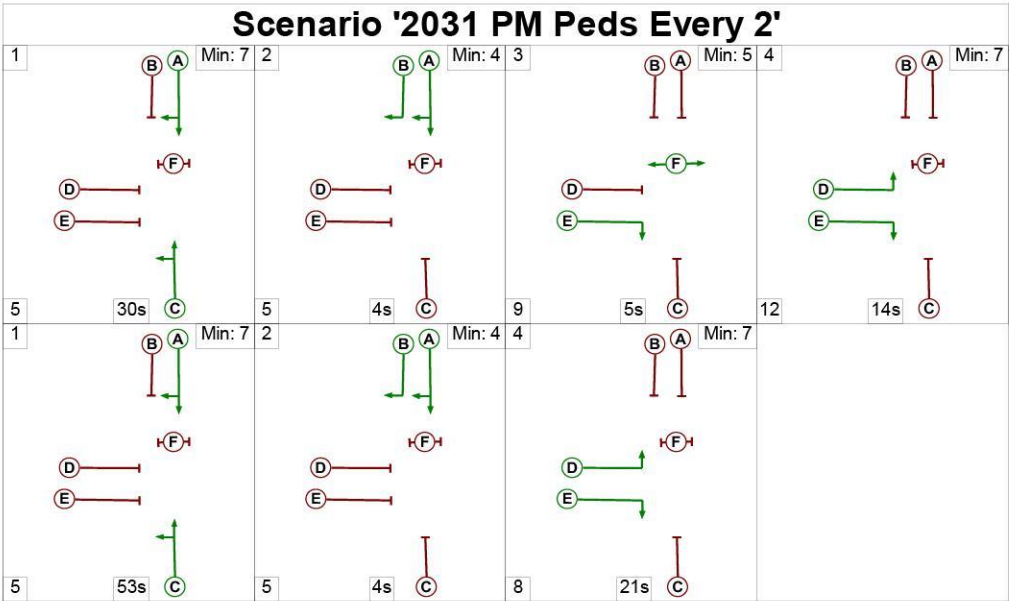
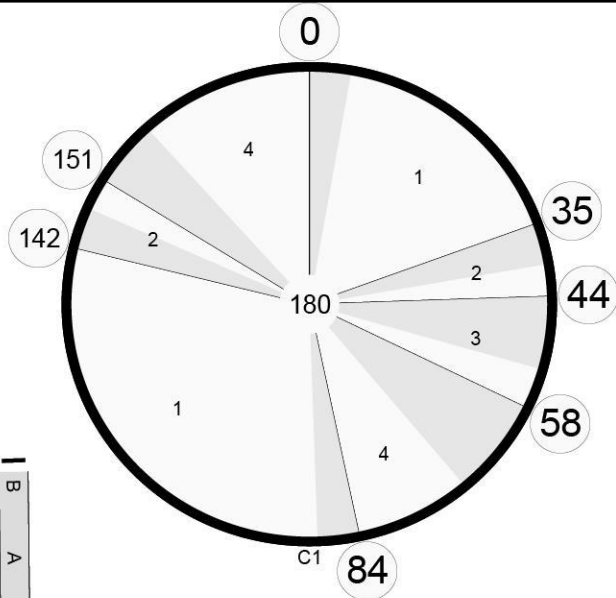
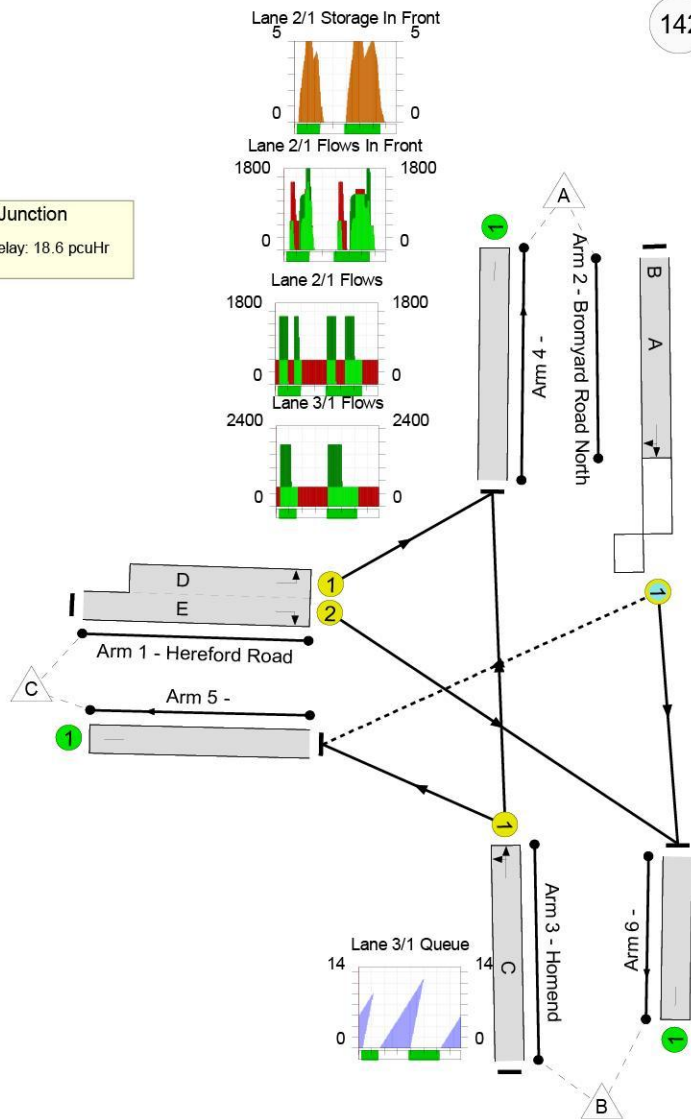
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 3.9 %
Total Traffic Delay: 18.6 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: PJA Signal Mitigation Scheme	-	-	N/A	-	-		-	-	-	-	-	-	86.6%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	86.6%
1/2+1/1	Hereford Road Left Right	U	N/A	N/A	E D		2	53:35	-	545	1729:1691	282+348	86.6 : 86.6%
2/1	Bromyard Road North Right Ahead	O	N/A	N/A	A	B	2	101	8	584	1674	676	86.4%
3/1	Homend Ahead Left	U	N/A	N/A	C		2	83	-	597	1908	901	66.3%
4/1		U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	663	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	490	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: PJA Signal Mitigation Scheme	-	-	182	124	32	10.4	7.0	1.2	18.6	-	-	-	-
Unnamed Junction	-	-	182	124	32	10.4	7.0	1.2	18.6	-	-	-	-
1/2+1/1	545	545	-	-	-	4.7	3.0	-	7.7	50.7	7.5	3.0	10.5
2/1	584	584	182	124	32	2.7	3.0	1.2	6.9	42.3	14.9	3.0	17.9
3/1	597	597	-	-	-	3.1	1.0	-	4.0	24.4	12.8	1.0	13.7
4/1	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	663	663	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	490	490	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

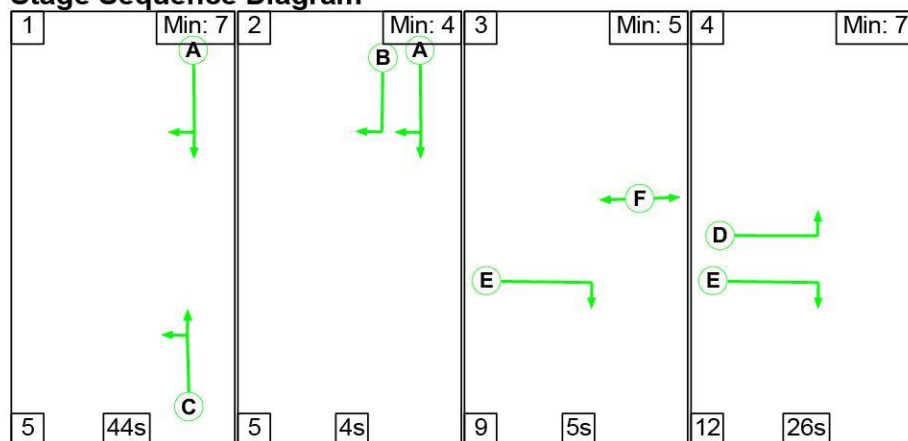
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	3.9	Total Delay for Signalled Lanes (pcuHr):	18.58	Cycle Time (s):	180
	PRC Over All Lanes (%):	3.9	Total Delay Over All Lanes(pcuHr):	18.58		

Full Input Data And Results

Scenario 5: '2031 AM Peds Every 1' (FG1: '2031 + Committed + Development AM', Plan 1: 'Peds Every Cycle')

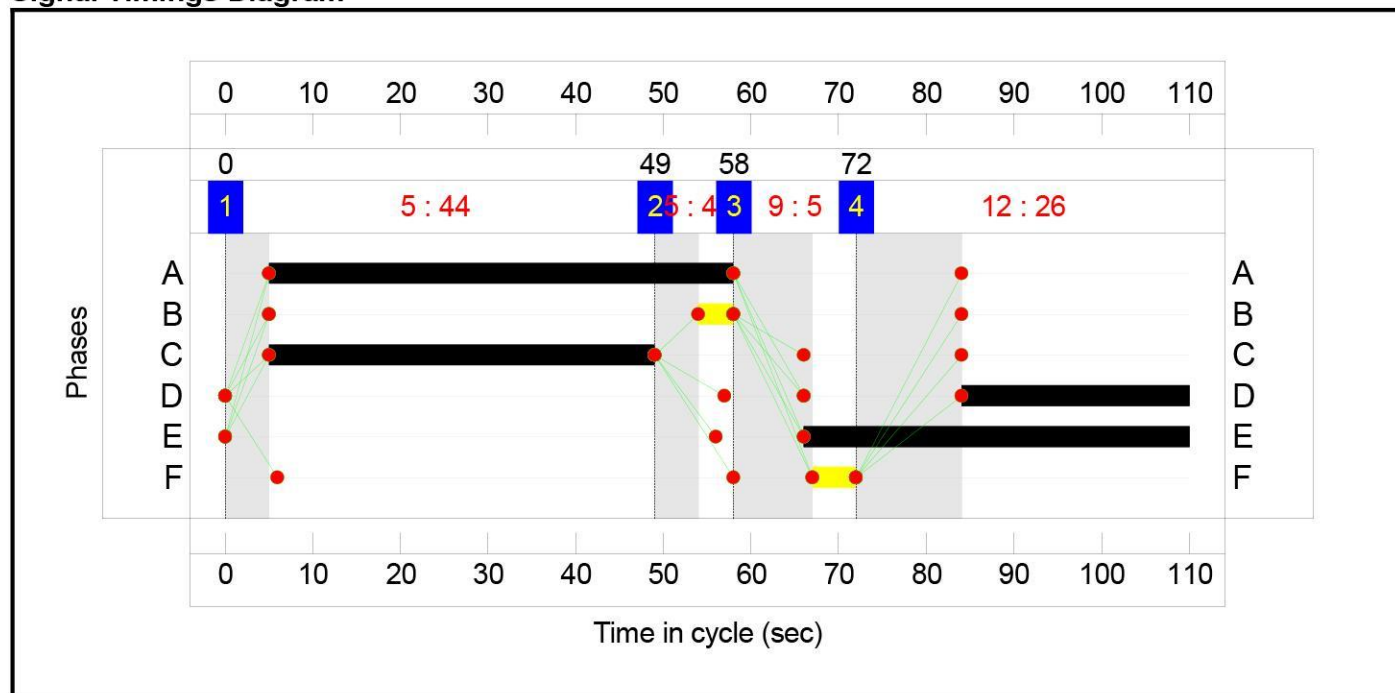
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	44	4	5	26
Change Point	0	49	58	72

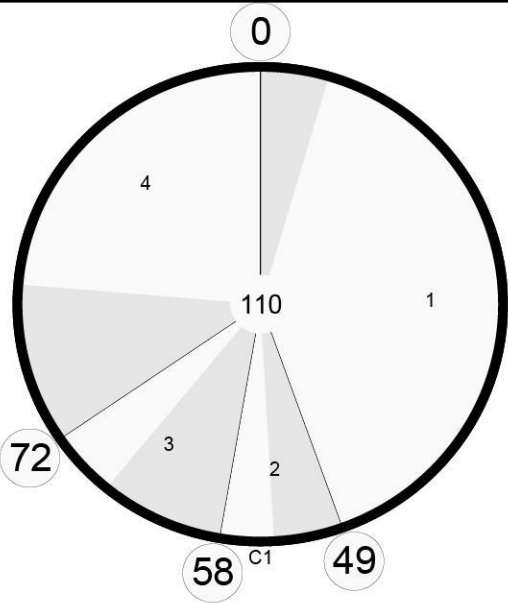
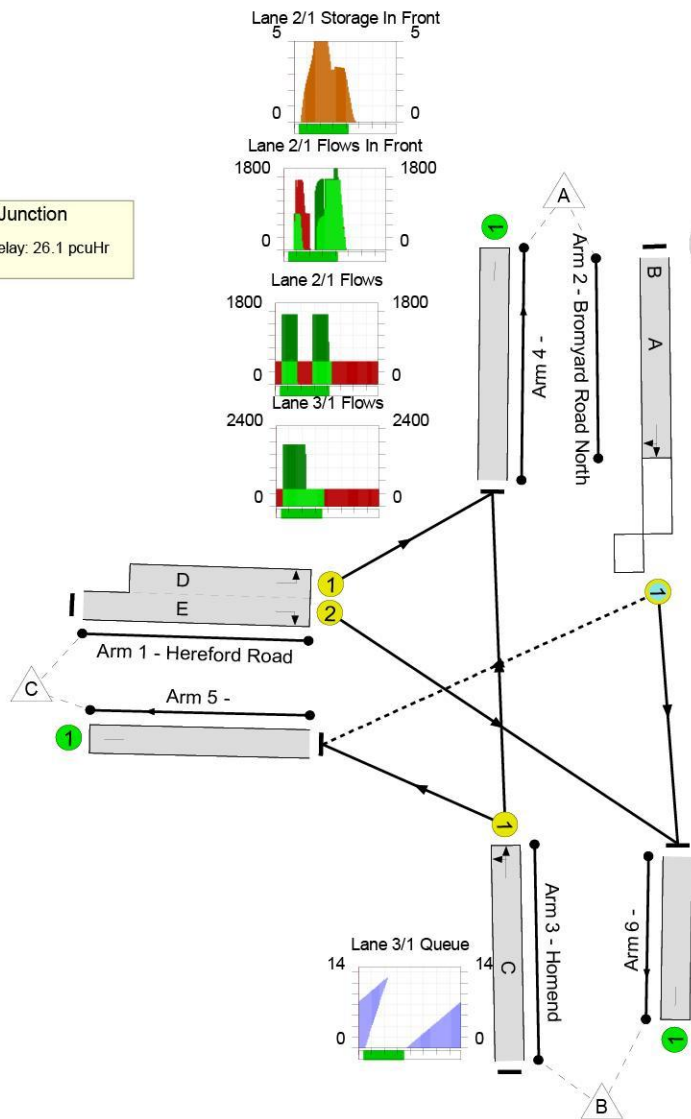
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: -4.0 %
Total Traffic Delay: 26.1 pcuHr



Scenario '2031 AM Peds Every 1'							
1	Min: 7	2	Min: 4	3	Min: 5	4	Min: 7
5	44s	5	4s	9	5s	12	26s

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: PJA Signal Mitigation Scheme	-	-	N/A	-	-		-	-	-	-	-	-	93.6%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	93.6%
1/2+1/1	Hereford Road Left Right	U	N/A	N/A	E D		1	44:26	-	643	1729:1691	314+387	91.8 : 91.8%
2/1	Bromyard Road North Right Ahead	O	N/A	N/A	A	B	1	53	4	555	1715	593	93.6%
3/1	Homend Ahead Left	U	N/A	N/A	C		1	44	-	527	1909	781	67.5%
4/1		U	N/A	N/A	-		-	-	-	598	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	554	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: PJA Signal Mitigation Scheme	-	-	157	86	27	13.8	11.5	0.8	26.1	-	-	-	-
Unnamed Junction	-	-	157	86	27	13.8	11.5	0.8	26.1	-	-	-	-
1/2+1/1	643	643	-	-	-	5.8	4.8	-	10.5	59.0	10.4	4.8	15.1
2/1	555	555	157	86	27	4.2	5.6	0.8	10.6	69.1	16.3	5.6	22.0
3/1	527	527	-	-	-	3.9	1.0	-	4.9	33.6	13.0	1.0	14.1
4/1	598	598	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	554	554	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

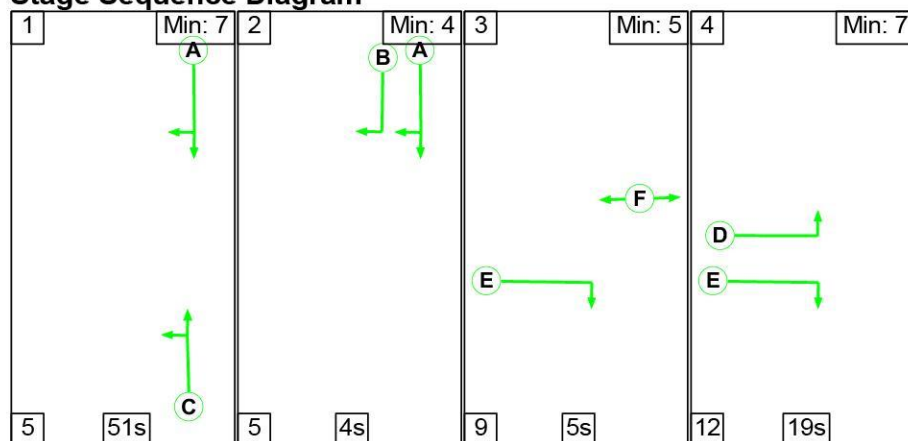
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	-4.0	Total Delay for Signalled Lanes (pcuHr):	26.09	Cycle Time (s):	110
	PRC Over All Lanes (%):	-4.0	Total Delay Over All Lanes(pcuHr):	26.09		

Full Input Data And Results

Scenario 6: '2031 PM Peds Every 1' (FG2: '2031 + Committed + Development PM', Plan 1: 'Peds Every Cycle')

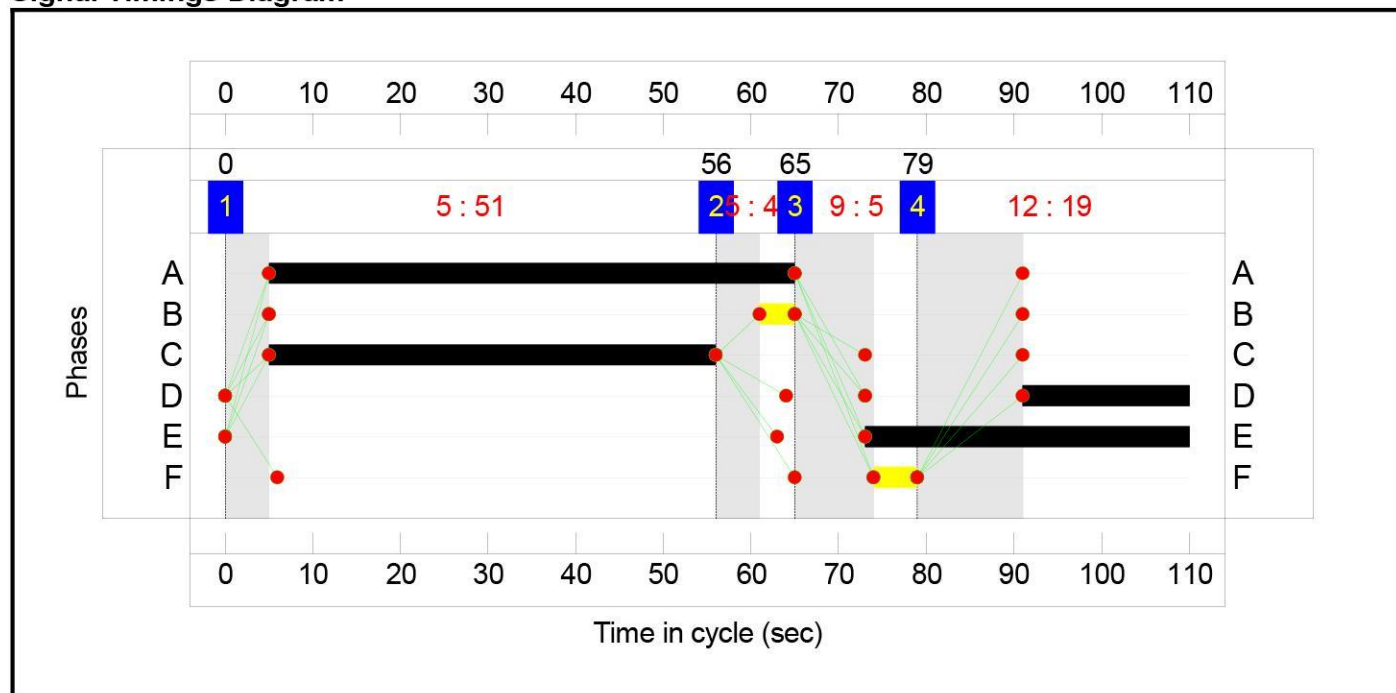
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	51	4	5	19
Change Point	0	56	65	79

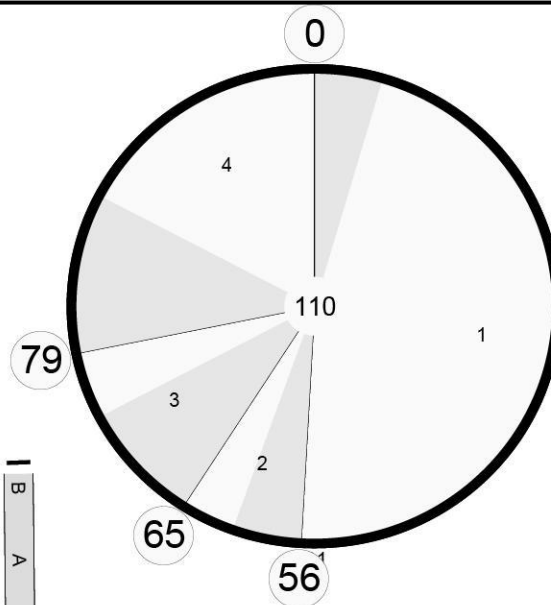
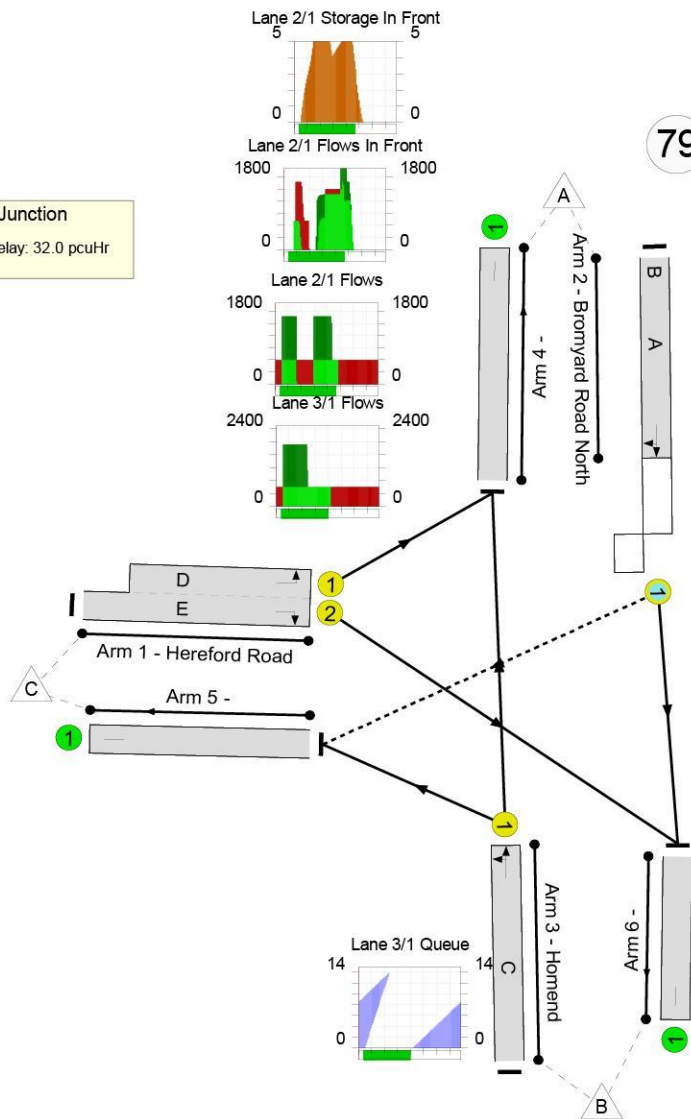
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: -8.8 %
Total Traffic Delay: 32.0 pcuHr



Scenario '2031 PM Peds Every 1'											
1	Min: 7	2	Min: 4	3	Min: 5	4	Min: 7	5	Min: 5	6	Min: 7
5	51s	5	4s	9	5s	12	19s	5	5s	6	19s

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: PJA Signal Mitigation Scheme	-	-	N/A	-	-		-	-	-	-	-	-	97.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	97.9%
1/2+1/1	Hereford Road Left Right	U	N/A	N/A	E D		1	37:19	-	545	1729:1691	249+307	97.9 : 97.9%
2/1	Bromyard Road North Right Ahead	O	N/A	N/A	A	B	1	60	4	584	1674	608	96.0%
3/1	Homend Ahead Left	U	N/A	N/A	C		1	51	-	597	1908	902	66.2%
4/1		U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	663	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	490	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: PJA Signal Mitigation Scheme	-	-	181	106	51	13.2	17.5	1.3	32.0	-	-	-	-
Unnamed Junction	-	-	181	106	51	13.2	17.5	1.3	32.0	-	-	-	-
1/2+1/1	545	545	-	-	-	5.6	9.1	-	14.7	97.2	9.1	9.1	18.2
2/1	584	584	181	106	51	3.9	7.4	1.3	12.6	77.7	16.5	7.4	24.0
3/1	597	597	-	-	-	3.7	1.0	-	4.7	28.1	13.9	1.0	14.9
4/1	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	663	663	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	490	490	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1	PRC for Signalled Lanes (%):	-8.8	Total Delay for Signalled Lanes (pcuHr):	31.98	Cycle Time (s):	110
	PRC Over All Lanes (%):	-8.8	Total Delay Over All Lanes(pcuHr):	31.98		