

Appendix 13.A

Rogers, Victoria SL

From: Murray, Vincent <vincent.murray@limerick.ie>
Sent: 27 November 2018 17:59
To: Foley, Peter
Cc: O'Mahony, Eoin; Kennedy, Brian; Delaney, Joe
Subject: RE: Project Opera - EIAR Scoping Opinion

Hi Peter,

As discussed today on the phone the most recent traffic information that we have for Limerick City Centre is that completed by ARUP/Systra for the O'Connell Street Project and I understand that you already have this information.

We are commencing a new Limerick Transport Strategy in conjunction with the NTA that will be carried out by Jacobs but this won't have outputs until late 2019 and this will be too late for your project.

In relation to carpark data my colleague Rory McDermott will be able to provide this for you.

In relation to cumulative impact, I am not aware of any other major projects in the City Centre that will be submitted for planning around the time of your submission for Project Opera other than O'Connell Street as we discussed. You will be aware that Planning was recently granted in the City Centre on O'Connell Street for a Rugby Entertainment/Museum type venue.

If you have any further queries on the above or other matters please do not hesitate to contact me.

Kind Regards,

***Vincent Murray, CEng MIEI,
Senior Engineer,
Physical Development Directorate,
Limerick City & County Council.
061 407100
087 8536491***

From: Foley, Peter [mailto:Peter.Foley2@aecom.com]
Sent: Monday, November 26, 2018 2:25 PM
To: Murray, Vincent <vincent.murray@limerick.ie>
Cc: O'Mahony, Eoin <eoin.o'mahony@aecom.com>
Subject: FW: Project Opera - EIAR Scoping Opinion

Vincent,

As discussed with you earlier on the phone, I am working on producing the Traffic and Transport chapter of the Environmental Impact Assessment Report (EIAR) for Project Opera in Limerick.

AECOM sent an enquiry to Stephane Duclot on the 22nd November requesting some additional information and or clarification on a number of points as per the emails below.

Stephane suggested that it might be useful to set up a meeting to discuss these points.

Can you review the request below and clarify whether you think it would be useful to arrange a meeting and if so, when you have availability to meet.

Alternatively if it is easier you may be in a position to provide us with the information via email.

I look forward to hearing back from you on this matter.

Regards,

Peter Foley

Principal Consultant, Transportation

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From: Duclot, Stephane [<mailto:stephane.duclot@limerick.ie>]

Sent: 22 November 2018 18:15

To: Hogge, Barry

Cc: Gavin Lawlor; Laura Finn; Griffin, Stuart (Ireland); O'Regan, John; O'Mahony, Eoin; Foley, Peter

Subject: Re: Project Opera - EIAR Scoping Opinion

Barry,

To have a proper and comprehensive response in relation to the questions raised in our email below, I am of the view that a meeting should be organised with LCCC engineers asap. A first meeting was already organised during the summer.

Our EIAR and Transport team should contact Vincent Murray, Senior Engineer, Physical Development, LCCC and Joe Delaney, Director of Services, Design and Delivery, LCCC.

Vincent Murray:

Tel 087 8536491

Email: vincent.murray@limerick.ie

Joe Delaney:

Tel: 0878153724

joe.delaney@limerick.ie

If possible Gavin, TPA should attend this meeting. I am happy to attend as well.

As part of the cumulative impact, It might be prudent to consider for example the O'Connell street revitalisation project as previously discussed. This should also be determined following this meeting with LCCC engineers.

Thank you

Stephane

On 22 Nov 2018, at 15:26, Hogge, Barry <Barry.Hogge@aecom.com> wrote:

Request for Scoping Opinion on Transport elements to the Environmental Impact Assessment Report (EIAR) for Project Opera in Limerick City.

Hi Stephane

Our Transport Section would like your scoping opinion on the following issues:

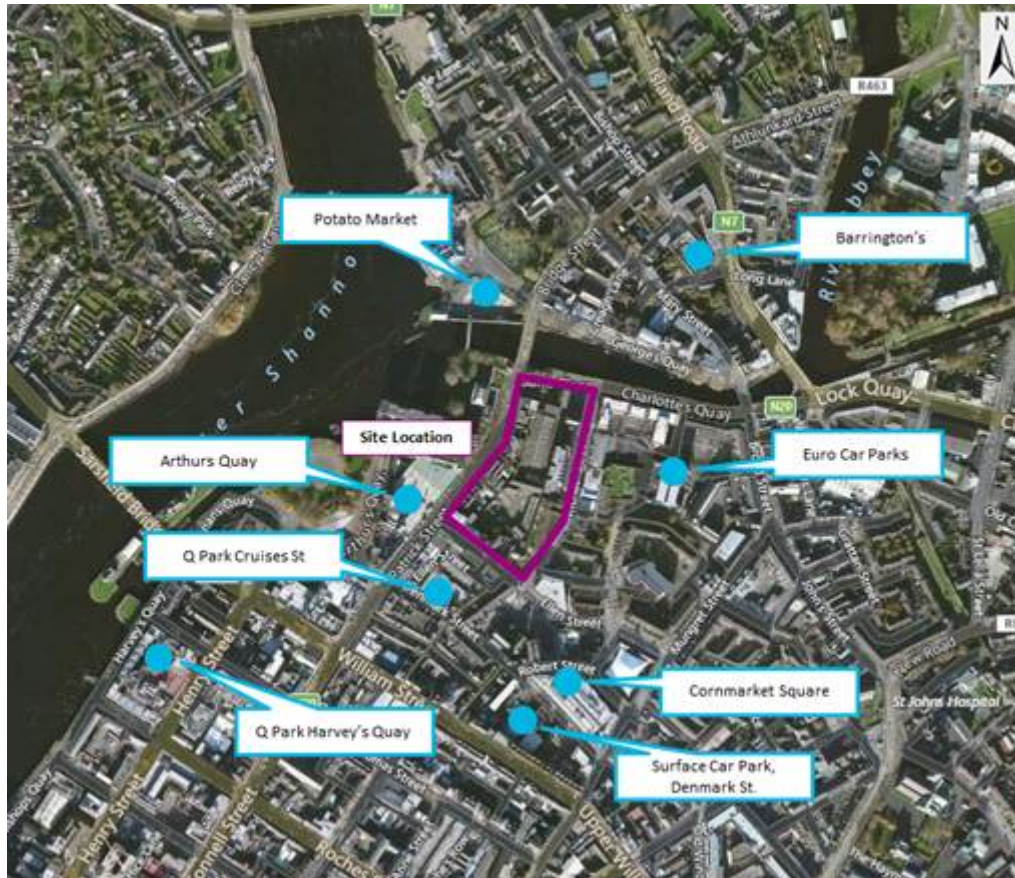
1. Traffic Flow data

Do you have any 2018 traffic survey data at the following junctions and links adjoining the site?

- Patrick Street / Ellen Street Priority Junction;
- Patrick Street / Francis Street Signalised Junction;
- Bridge Street / Rutland Street / R445 Signalised Junction;
- R445 / Michael Street Priority Junction;
- Michael Street / Ellen Street Priority Junction; and
- Michael Street / Car Park Access Priority Junction.

2. Car Parking Data

An important element of the EIAR will be to define the number and availability of car parking in the vicinity of the site. The TTA highlighted a number of sites of public available car parking, see image below.



Does LC&CC have any up to date information on the number of spaces available at each of these car parking locations. Also is there any recent utilisation information for a typical day across these car parks that could be made available for input into the EIAR.

3. Cumulative Impact

The EIAR requires that we assess future scenarios to include any committed developments in the vicinity of the site that may have a significant material impact. While Limerick 2030 has identified a number of strategic development sites it is our understanding that these schemes do not have consent and are likely to be delivered after Project Opera and therefore will not be included in the cumulative impact assessment. Do you agree?

Regards,

Barry

Barry Hogge, BSc, Dip PM, MRICS, SCSi, MAPM
 Senior Project Manager, Project Management, ROI
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seo freisin nár aimseodh víreas sa phost seo tar éis a scanadh.

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seo freisin nár aimseodh víreas sa phost seo tar éis a scanadh.

Appendix 13.B

Project Management Initials: Designer: CL Checked: MC Approved: EOM ISO A1 594mm x 841mm



0	CONSTRUCTION TRAFFIC
SK-001	



PROJECT
Project Opera
Limerick

CLIENT
LIMERICK 2030
Strategic Developments
DAC

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NOTES

ISSUE/REVISION

NO	DATE	FOR DISCUSSION	DESCRIPTION
0	NOV 2018	FOR DISCUSSION	
1/R			

PROJECT NUMBER
60582900

SHEET TITLE
PROJECT OPERA
CONSTRUCTION TRAFFIC ROUTE
SHEET 1 OF 2

SHEET NUMBER
SK-001

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Filename: C:\Users\LUTRELL\DESK\TOP\PROJECT OPERA\25-SHET\CHESK 001.DWG
Last saved by: LUTRELLC Last Pdate: 2018-11-30



PROJECT

Project Opera
Limerick

CLIENT

LIMERICK 2030
Strategic Developments
DAC

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NOTES

ISSUE/REVISION

IR	DATE	DESCRIPTION
0	NOV 2018	FOR DISCUSSION

PROJECT NUMBER

60582900

SHEET TITLE

PROJECT OPERA
CONSTRUCTION TRAFFIC ROUTE
SHEET 2 OF 2

SHEET NUMBER

SK-002

0	CONSTRUCTION TRAFFIC
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Appendix 13.C

TRICS 7.4.1

Trip Rate Parameter: Gross floor area

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

Calculation Factor: 100 sqm

Count Type: VEHICLES

Time Range	ARRIVALS			DEPARTURES			TOTALS			
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	
00:00-00:30										
00:30-01:00										
01:00-01:30										
01:30-02:00										
02:00-02:30										
02:30-03:00										
03:00-03:30										
03:30-04:00										
04:00-04:30										
04:30-05:00										
05:00-05:30										
05:30-06:00										
06:00-06:30										
06:30-07:00										
07:00-07:30		14	9108	0.227	14	9108	0.016	14	9108	0.243
07:30-08:00		14	9108	0.658	14	9108	0.085	14	9108	0.743
08:00-08:30		14	9108	1.003	14	9108	0.082	14	9108	1.085
08:30-09:00		14	9108	1.122	14	9108	0.151	14	9108	1.273
09:00-09:30		14	9108	0.728	14	9108	0.153	14	9108	0.881
09:30-10:00		14	9108	0.455	14	9108	0.156	14	9108	0.611
10:00-10:30		14	9108	0.299	14	9108	0.169	14	9108	0.468
10:30-11:00		14	9108	0.232	14	9108	0.148	14	9108	0.38
11:00-11:30		14	9108	0.216	14	9108	0.19	14	9108	0.406
11:30-12:00		14	9108	0.218	14	9108	0.162	14	9108	0.38
12:00-12:30		14	9108	0.184	14	9108	0.181	14	9108	0.365
12:30-13:00		14	9108	0.164	14	9108	0.185	14	9108	0.349
13:00-13:30		14	9108	0.212	14	9108	0.184	14	9108	0.396
13:30-14:00		14	9108	0.197	14	9108	0.155	14	9108	0.352
14:00-14:30		14	9108	0.173	14	9108	0.148	14	9108	0.321
14:30-15:00		14	9108	0.171	14	9108	0.216	14	9108	0.387
15:00-15:30		14	9108	0.128	14	9108	0.23	14	9108	0.358
15:30-16:00		14	9108	0.125	14	9108	0.274	14	9108	0.399
16:00-16:30		14	9108	0.119	14	9108	0.572	14	9108	0.691
16:30-17:00		14	9108	0.119	14	9108	0.697	14	9108	0.816
17:00-17:30		14	9108	0.082	14	9108	1.179	14	9108	1.261
17:30-18:00		14	9108	0.057	14	9108	0.667	14	9108	0.724
18:00-18:30		14	9108	0.043	14	9108	0.489	14	9108	0.532
18:30-19:00		14	9108	0.013	14	9108	0.198	14	9108	0.211
19:00-19:30										
19:30-20:00										
20:00-20:30										
20:30-21:00										
21:00-21:30										
21:30-22:00										
22:00-22:30										
22:30-23:00										
23:00-23:30										
23:30-24:00										
Daily Trip Rates:			6.945			6.687			13.632	

Total			Arrival			Departures		
0.986	4.836	20%	0.885	4.193	21%	0.101	0.643	16%
2.358		49%	2.125		51%	0.233		36%
1.492		31%	1.183		28%	0.309		48%

Total			Arrival			Departures		
1.507	4.235	36%	0.238	0.433	55%	1.269	3.802	33%
1.985		47%	0.139		32%	1.846		49%
0.743		18%	0.056		13%	0.687		18%

TRICS 7.4.1

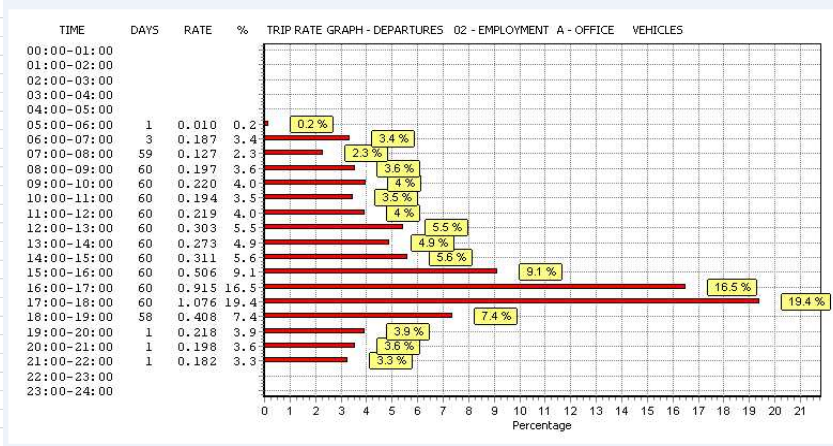
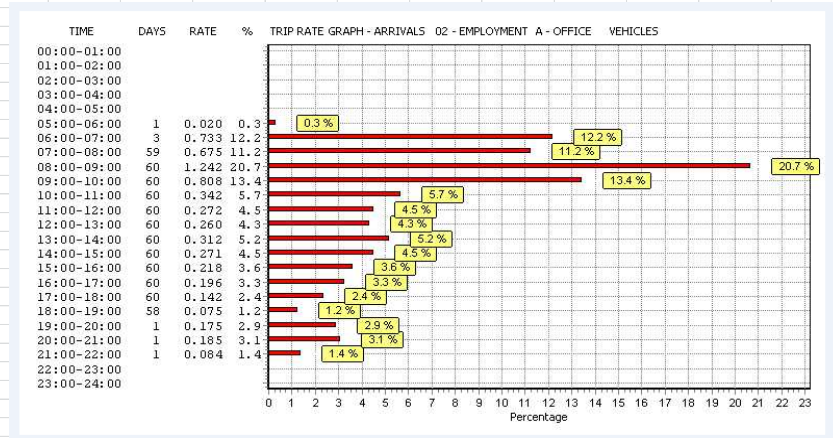
Trip Rate Parameter: Gross floor area

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

Calculation Factor: 100 sqm 100

Count Type: VEHICLES

Time Range	ARRIVALS		DEPARTURES		TOTALS								
	No. Days	Ave. Trip Rate	No. Days	Ave. Trip Rate	No. Days	Ave. Trip Rate							
00:00-00:30													
00:30-01:00													
01:00-01:30													
01:30-02:00													
02:00-02:30													
02:30-03:00													
03:00-03:30													
03:30-04:00													
04:00-04:30													
04:30-05:00													
05:00-05:30	1	19974	0		1	19974	0.005	1	19974	0.005	1	19974	0.005
05:30-06:00	1	19974	0.02		1	19974	0.005	1	19974	0.025			
06:00-06:30	2	15037	0.183		2	15037	0.183	2	15037	0.196			
06:30-07:00	3	33455	0.679		3	33455	0.183	3	33455	0.862			
07:00-07:30	59	8183	0.246		59	8183	0.042	59	8183	0.288			
07:30-08:00	59	8183	0.43		59	8183	0.085	59	8183	0.515			
08:00-08:30	60	8054	0.58		60	8054	0.096	60	8054	0.676			
08:30-09:00	60	8054	0.662		60	8054	0.101	60	8054	0.763			
09:00-09:30	60	8054	0.504		60	8054	0.112	60	8054	0.616			
09:30-10:00	60	8054	0.304		60	8054	0.107	60	8054	0.411			
10:00-10:30	60	8054	0.188		60	8054	0.101	60	8054	0.289			
10:30-11:00	60	8054	0.154		60	8054	0.093	60	8054	0.247			
11:00-11:30	60	8054	0.141		60	8054	0.109	60	8054	0.25			
11:30-12:00	60	8054	0.131		60	8054	0.109	60	8054	0.24			
12:00-12:30	60	8054	0.128		60	8054	0.142	60	8054	0.27			
12:30-13:00	60	8054	0.132		60	8054	0.161	60	8054	0.293			
13:00-13:30	60	8054	0.156		60	8054	0.147	60	8054	0.303			
13:30-14:00	60	8054	0.156		60	8054	0.126	60	8054	0.282			
14:00-14:30	60	8054	0.144		60	8054	0.125	60	8054	0.269			
14:30-15:00	60	8054	0.127		60	8054	0.186	60	8054	0.313			
15:00-15:30	60	8054	0.107		60	8054	0.225	60	8054	0.332			
15:30-16:00	60	8054	0.111		60	8054	0.281	60	8054	0.392			
16:00-16:30	60	8054	0.101		60	8054	0.425	60	8054	0.526			
16:30-17:00	60	8054	0.095		60	8054	0.49	60	8054	0.585			
17:00-17:30	60	8054	0.08		60	8054	0.675	60	8054	0.755			
17:30-18:00	60	8054	0.062		60	8054	0.401	60	8054	0.463			
18:00-18:30	59	8183	0.044		59	8183	0.264	59	8183	0.308			
18:30-19:00	58	8317	0.031		58	8317	0.143	58	8317	0.174			
19:00-19:30	1	70291	0.095		1	70291	0.128	1	70291	0.223			
19:30-20:00	1	70291	0.08		1	70291	0.09	1	70291	0.17			
20:00-20:30	1	70291	0.088		1	70291	0.115	1	70291	0.203			
20:30-21:00	1	70291	0.097		1	70291	0.083	1	70291	0.18			
21:00-21:30	1	70291	0.085		1	70291	0.184	1	70291	0.269			
21:30-22:00													
22:00-22:30													
22:30-23:00													
23:00-23:30													
23:30-24:00													
Daily Trip Rates:			6.141				5.552					11.693	



TRICS 7.4.1

Trip Rate P Gross floor area

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

Calculation 100

Count Type: VEHICLES

Time Rang	No. Days	Ave. GFA	ARRIVALS		DEPARTURES			TOTALS	
			Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-00:30									
00:30-01:00									
01:00-01:30									
01:30-02:00									
02:00-02:30									
02:30-03:00									
03:00-03:30									
03:30-04:00									
04:00-04:30									
04:30-05:00									
05:00-05:30	1	19974	0	1	19974	0.005	1	19974	0.005
05:30-06:00	1	19974	0.02	1	19974	0.005	1	19974	0.025
06:00-06:30	2	15037	0.183	2	15037	0.013	2	15037	0.196
06:30-07:00	3	33455	0.679	3	33455	0.183	3	33455	0.862
07:00-07:30	59	8183	0.246	59	8183	0.042	59	8183	0.288
07:30-08:00	59	8183	0.43	59	8183	0.085	59	8183	0.515
08:00-08:30	60	8054	0.58	60	8054	0.096	60	8054	0.676
08:30-09:00	60	8054	0.662	60	8054	0.101	60	8054	0.763
09:00-09:30	60	8054	0.504	60	8054	0.112	60	8054	0.616
09:30-10:00	60	8054	0.304	60	8054	0.107	60	8054	0.411
10:00-10:30	60	8054	0.188	60	8054	0.101	60	8054	0.289
10:30-11:00	60	8054	0.154	60	8054	0.093	60	8054	0.247
11:00-11:30	60	8054	0.141	60	8054	0.109	60	8054	0.25
11:30-12:00	60	8054	0.131	60	8054	0.109	60	8054	0.24
12:00-12:30	60	8054	0.128	60	8054	0.142	60	8054	0.27
12:30-13:00	60	8054	0.132	60	8054	0.161	60	8054	0.293
13:00-13:30	60	8054	0.156	60	8054	0.147	60	8054	0.303
13:30-14:00	60	8054	0.156	60	8054	0.126	60	8054	0.282
14:00-14:30	60	8054	0.144	60	8054	0.125	60	8054	0.269
14:30-15:00	60	8054	0.127	60	8054	0.186	60	8054	0.313
15:00-15:30	60	8054	0.107	60	8054	0.225	60	8054	0.332
15:30-16:00	60	8054	0.111	60	8054	0.281	60	8054	0.392
16:00-16:30	60	8054	0.101	60	8054	0.425	60	8054	0.526
16:30-17:00	60	8054	0.095	60	8054	0.49	60	8054	0.585
17:00-17:30	60	8054	0.08	60	8054	0.675	60	8054	0.755
17:30-18:00	60	8054	0.062	60	8054	0.401	60	8054	0.463
18:00-18:30	59	8183	0.044	59	8183	0.264	59	8183	0.308
18:30-19:00	58	8317	0.031	58	8317	0.143	58	8317	0.174
19:00-19:30	1	70291	0.095	1	70291	0.128	1	70291	0.223
19:30-20:00	1	70291	0.08	1	70291	0.09	1	70291	0.17
20:00-20:30	1	70291	0.088	1	70291	0.115	1	70291	0.203
20:30-21:00	1	70291	0.097	1	70291	0.083	1	70291	0.18
21:00-21:30	1	70291	0.085	1	70291	0.184	1	70291	0.269
21:30-22:00									
22:00-22:30									
22:30-23:00									
23:00-23:30									
23:30-24:00									
Daily Trip Rates:			6.141			5.552			11.693

Appendix 13.E

Figure 1
 AM 2017 Base Flows (pcu)
 08:00 - 09:00

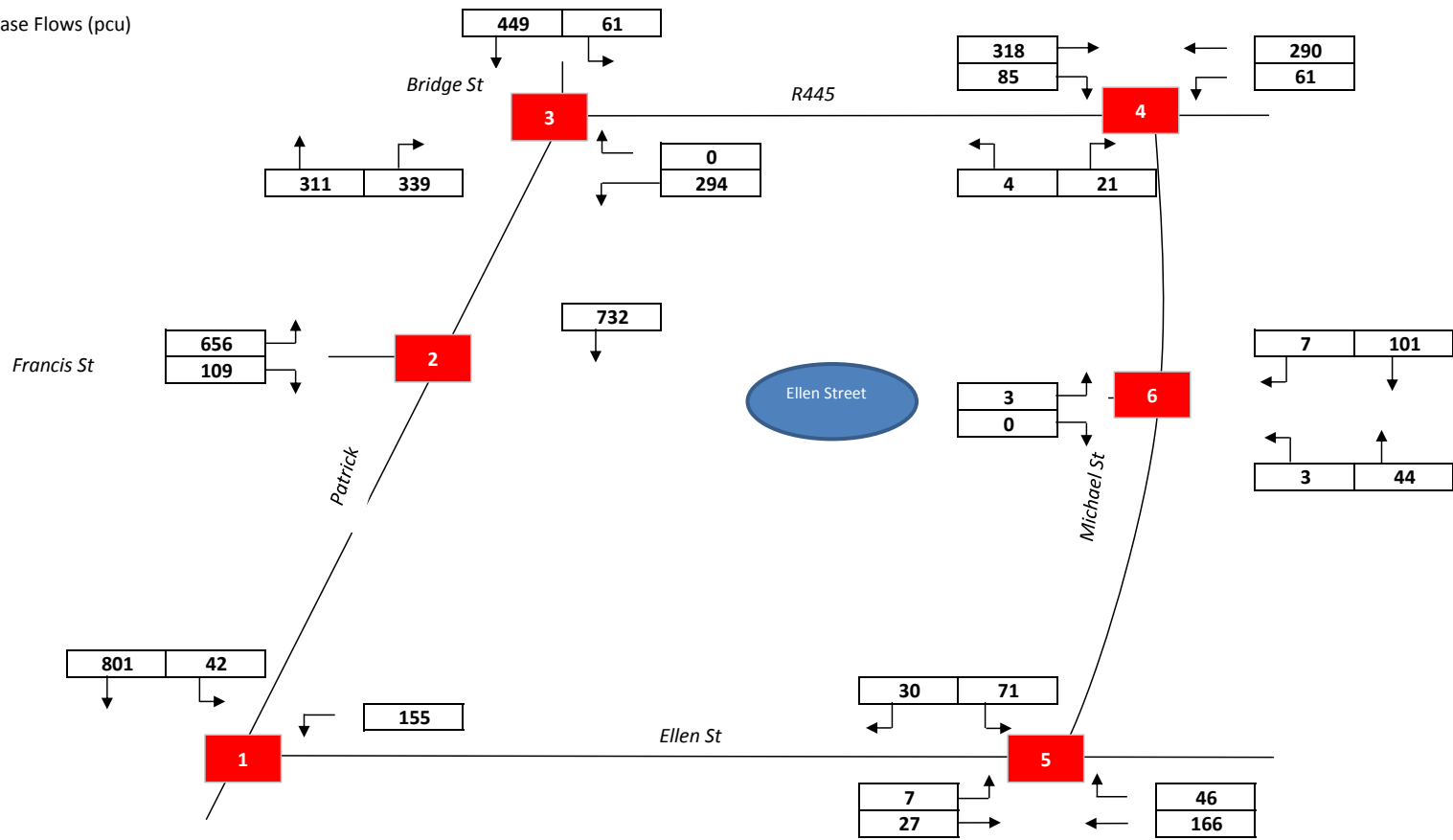


Figure 2

AM 2022 Base Flows without development (pcu)

08:00 - 09:00

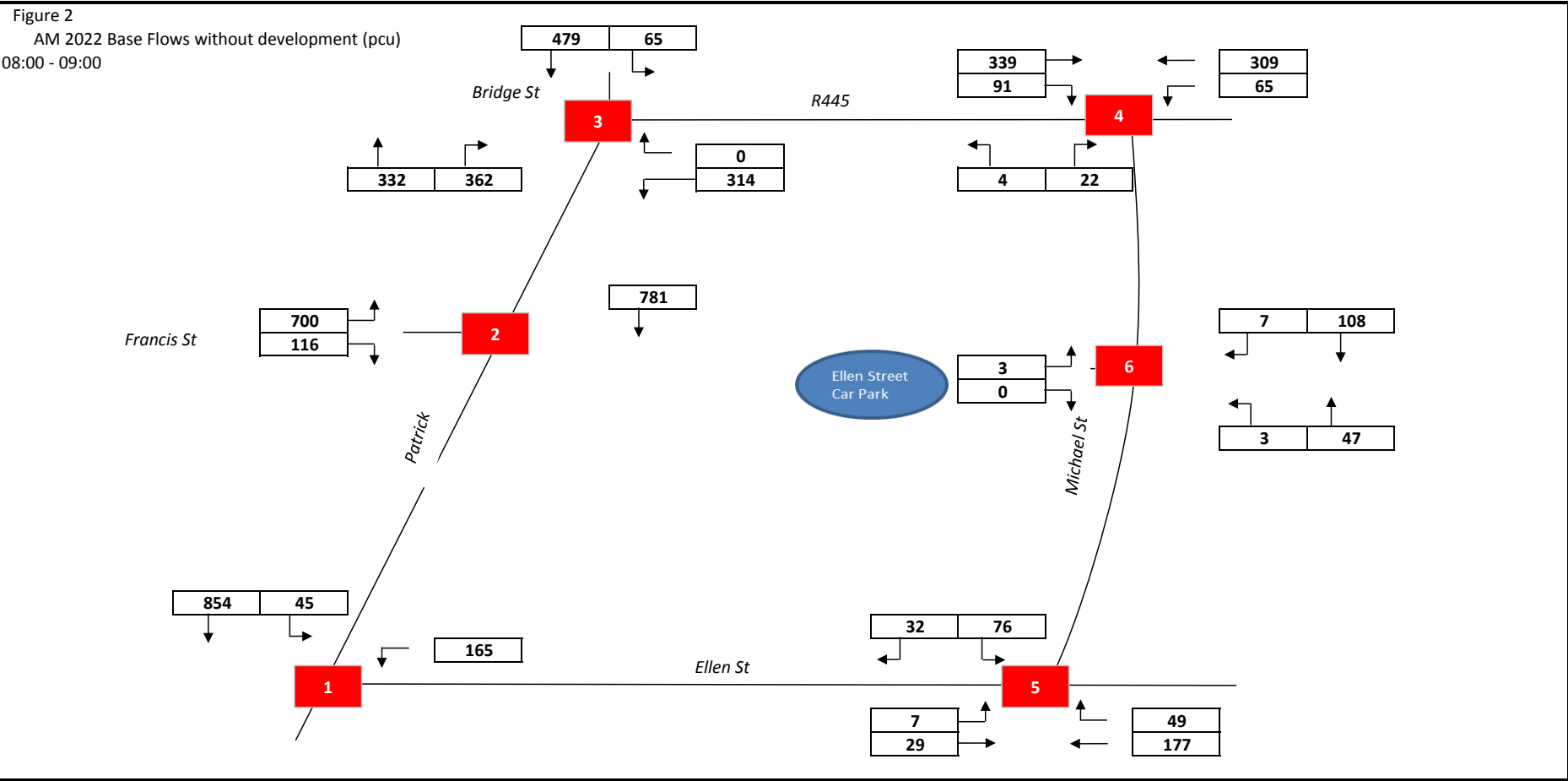


Figure 3
 AM 2027 Base Flows without Development (pcu)
 08:00 - 09:00

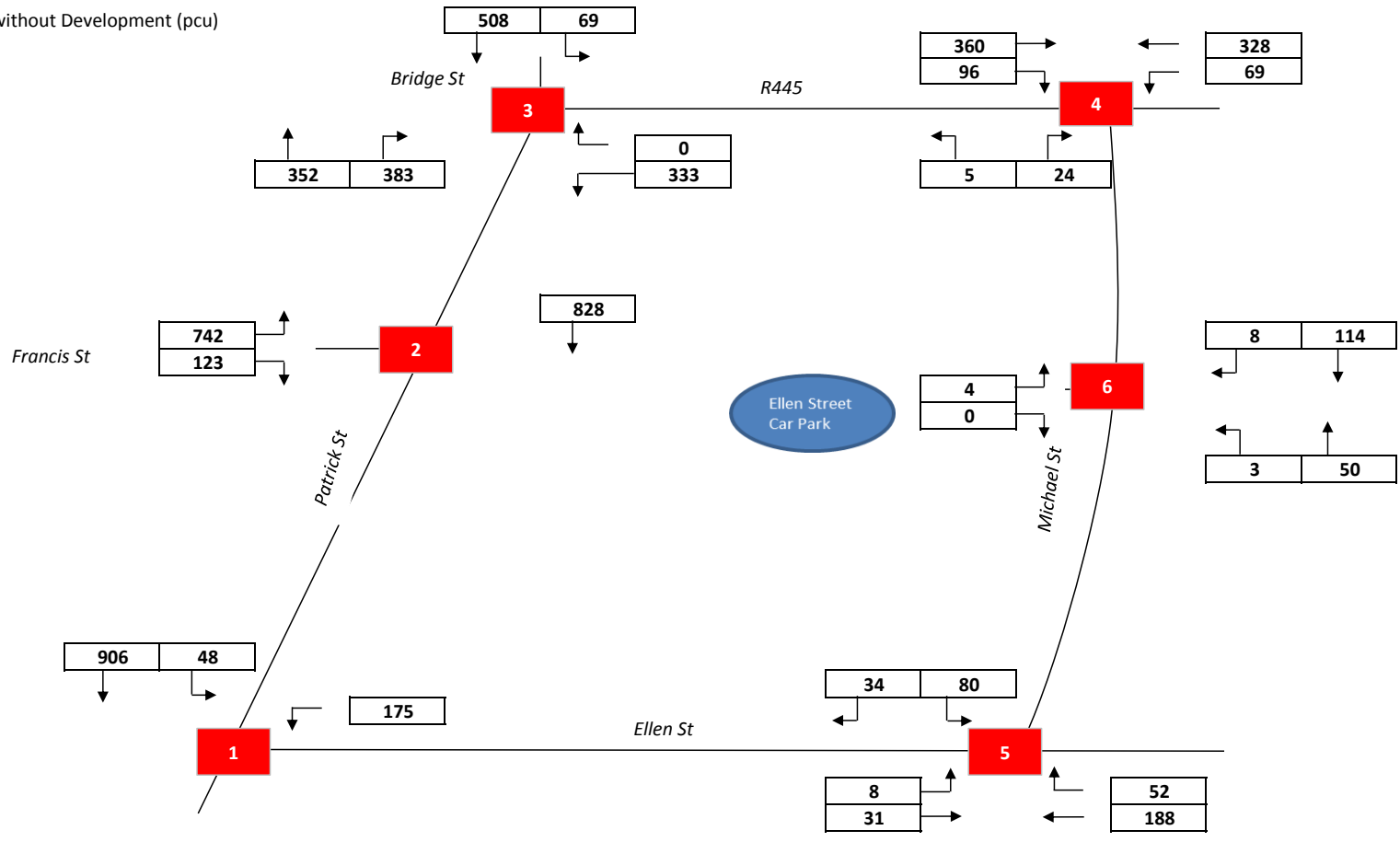


Figure 4

AM 2037 Base Flows without Development (pcu)

08:00 - 09:00

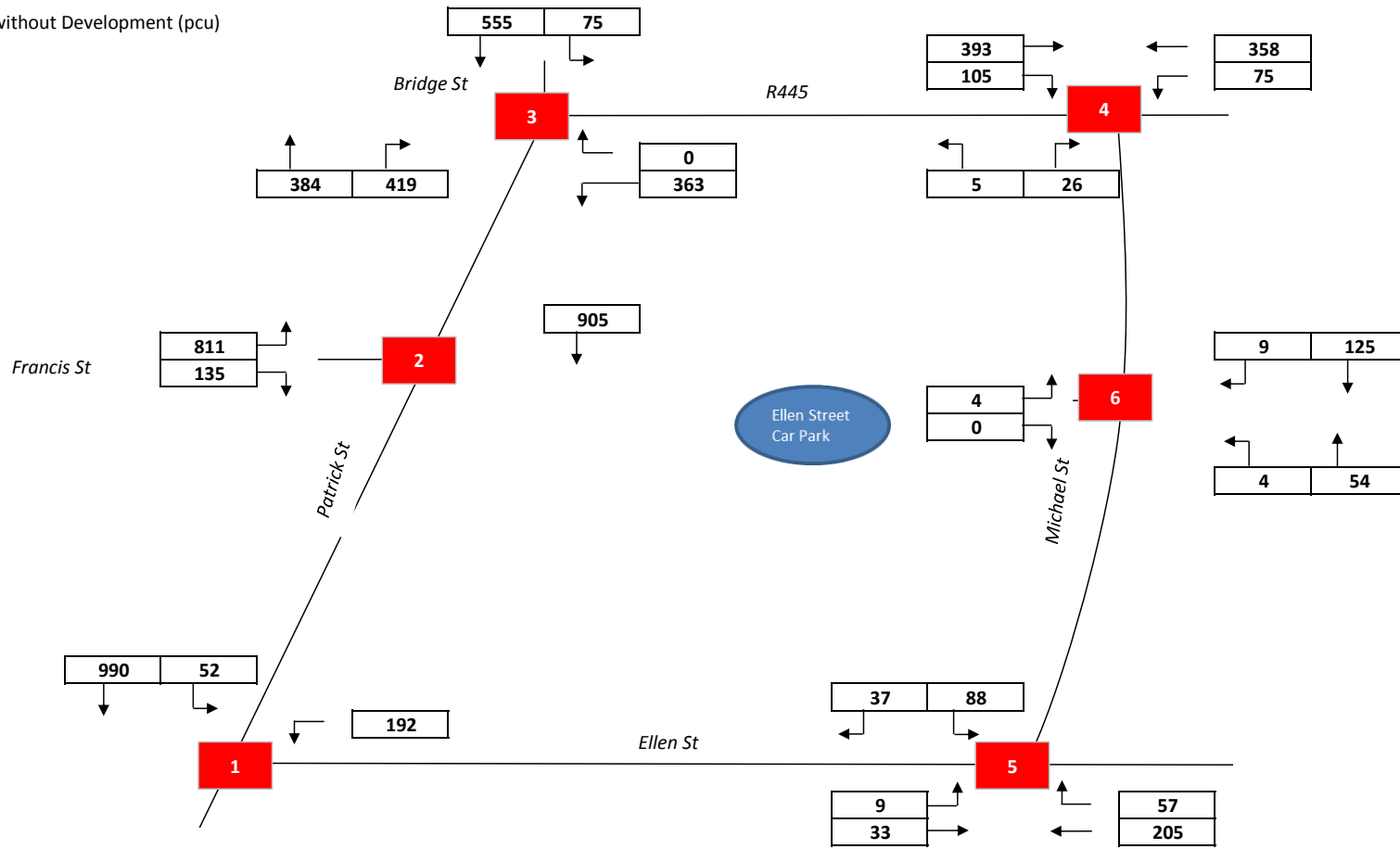


Figure 5

AM 2022 Base Flows + Development (pcu)
08:00 - 09:00

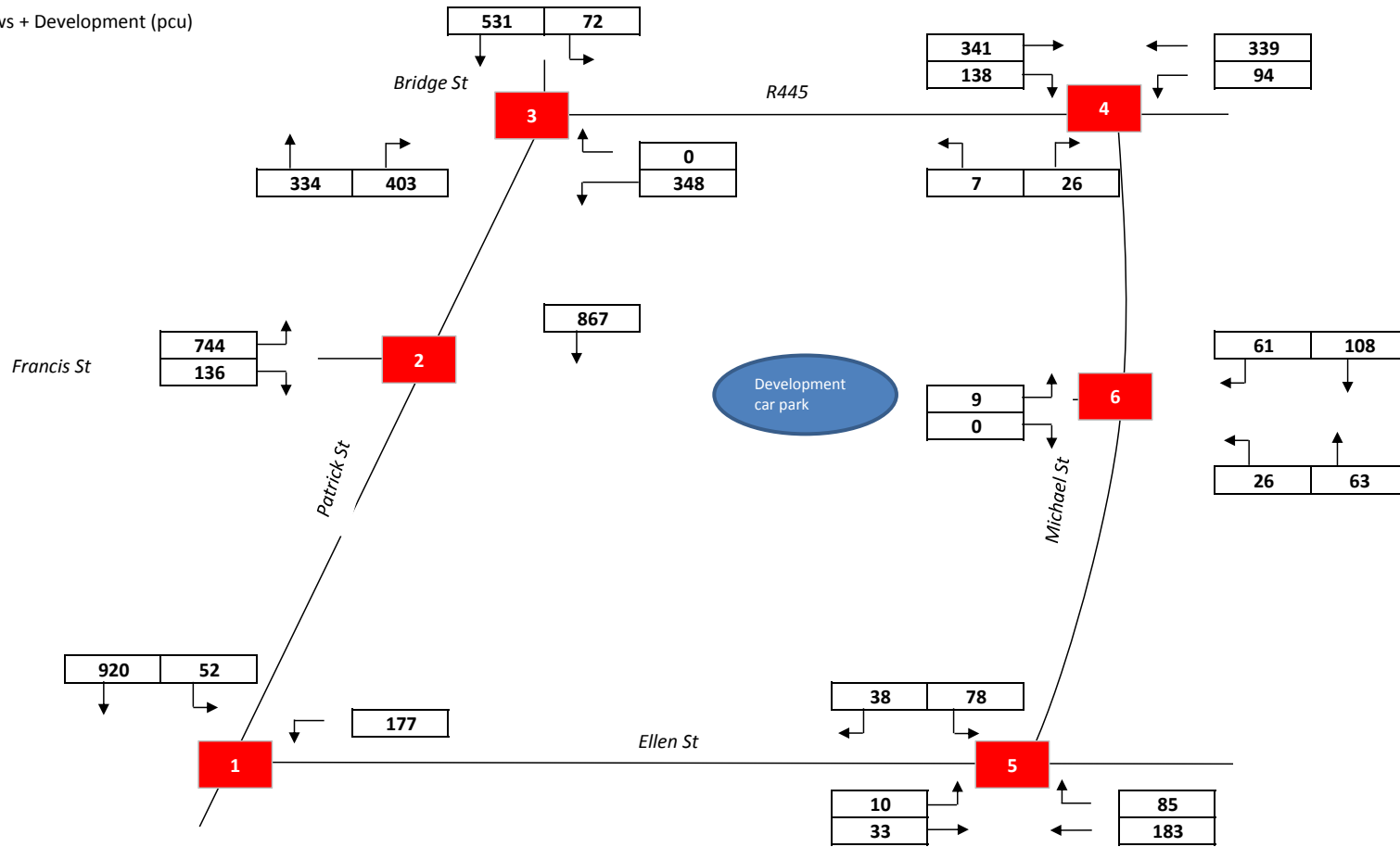


Figure 6
 AM 2027 Base Flows + Development (pcu)
 08:00 - 09:00

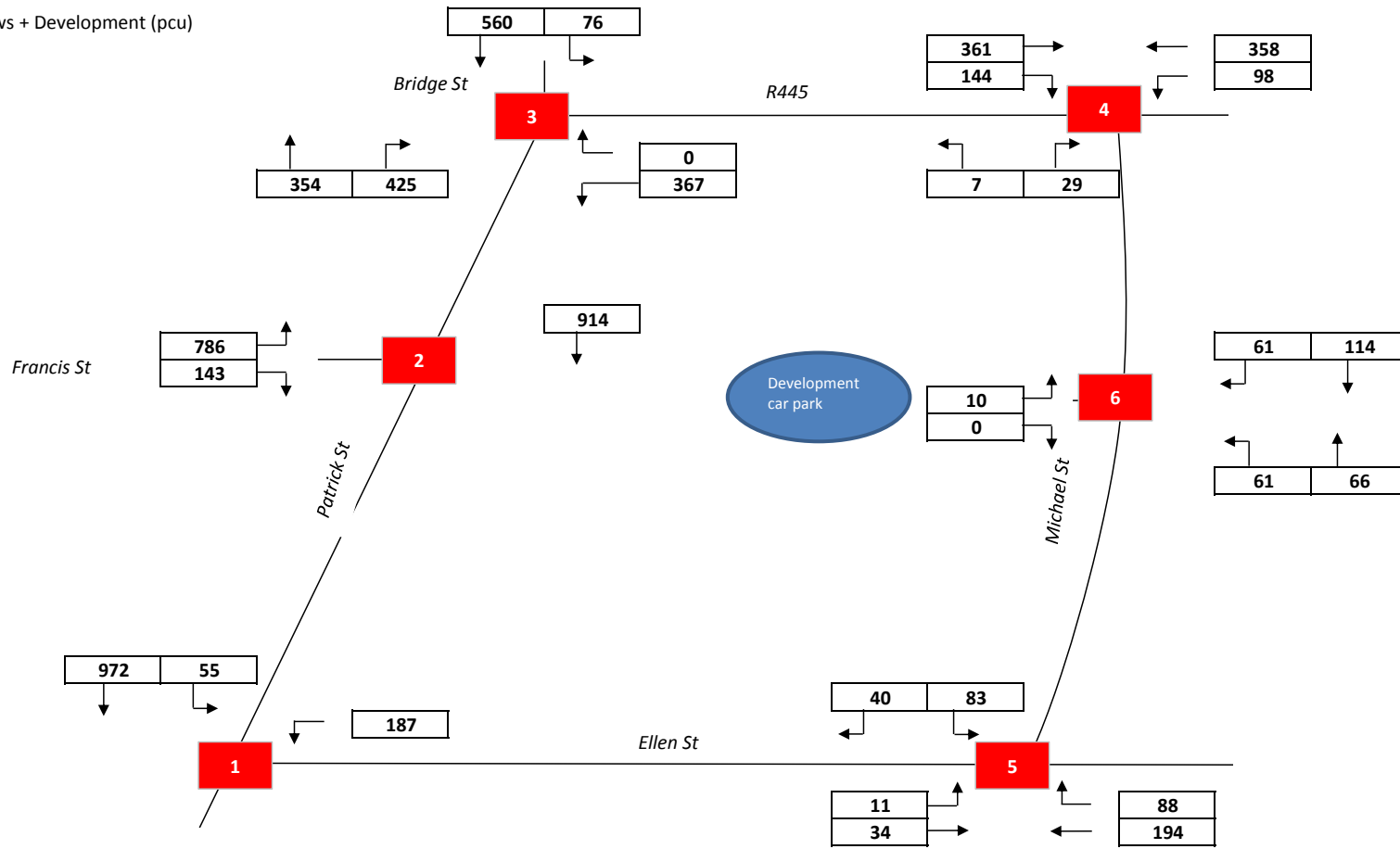


Figure 7
 AM 2037 Base Flows + Development (pcu)
 08:00 - 09:00

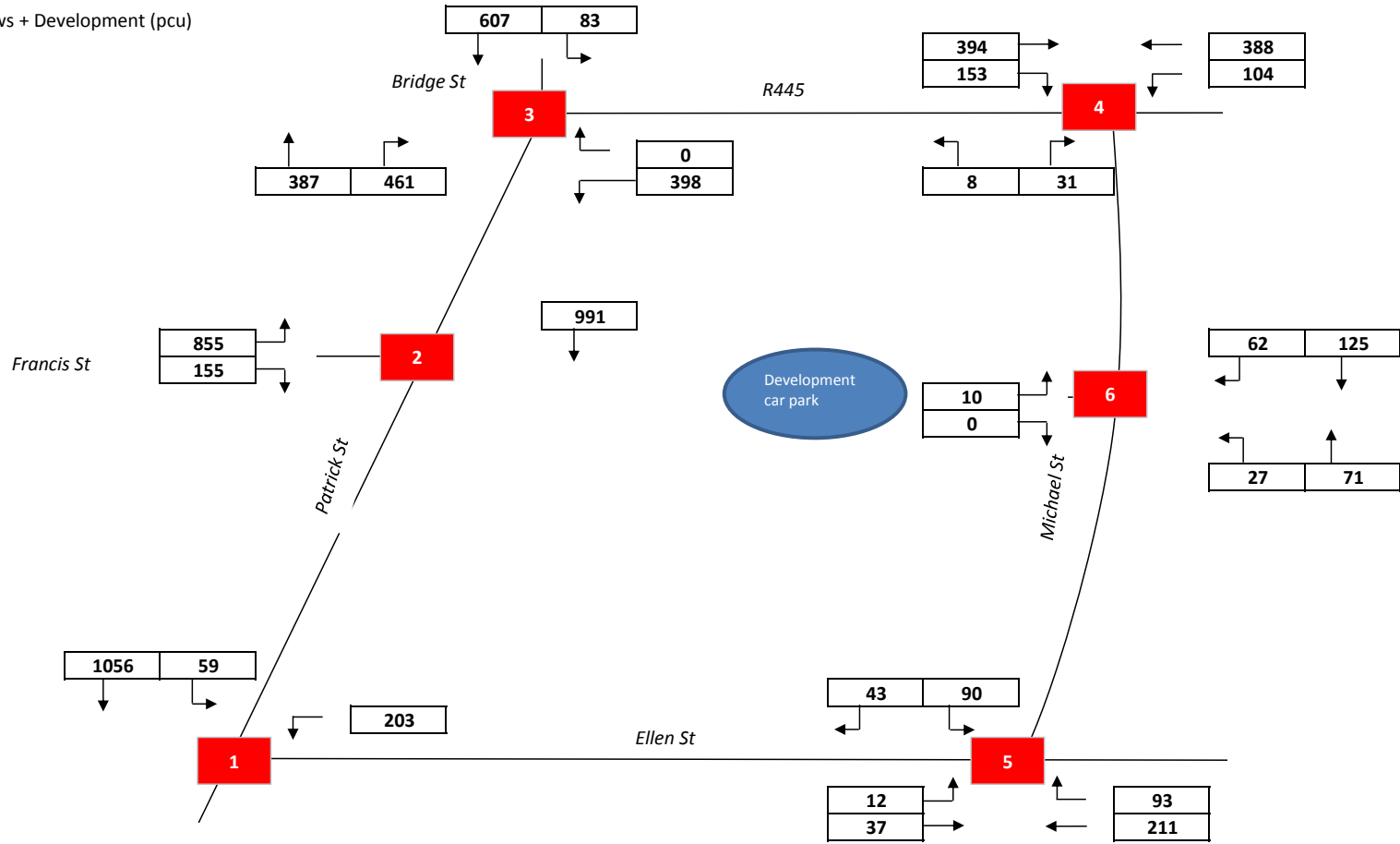


Figure 9
 PM 2022 Base Flows No Development (pcu)
 17:00 - 18:00

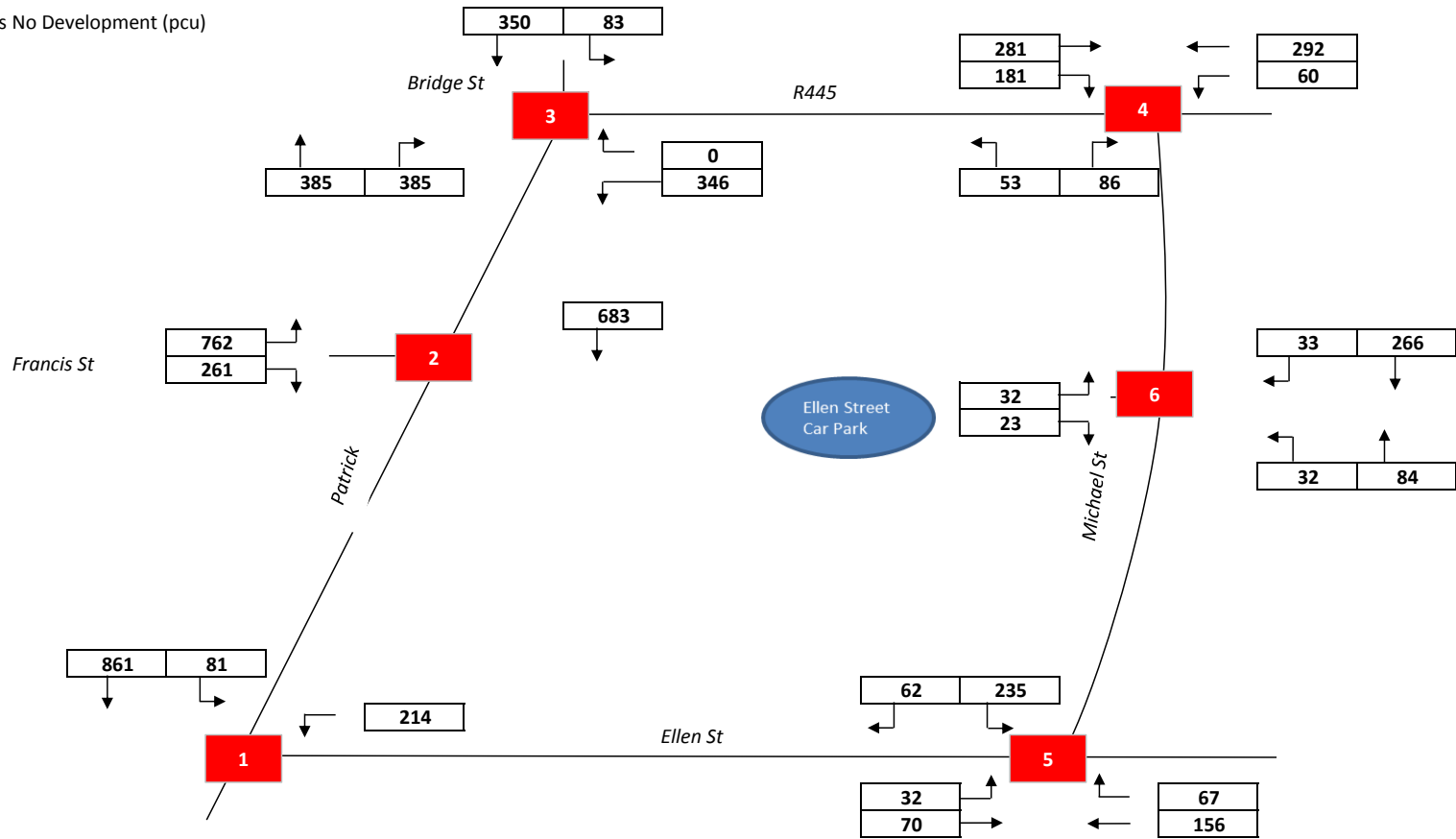


Figure 10
 PM 2027 Base Flows No Development (pcu)
 17:00 - 18:00

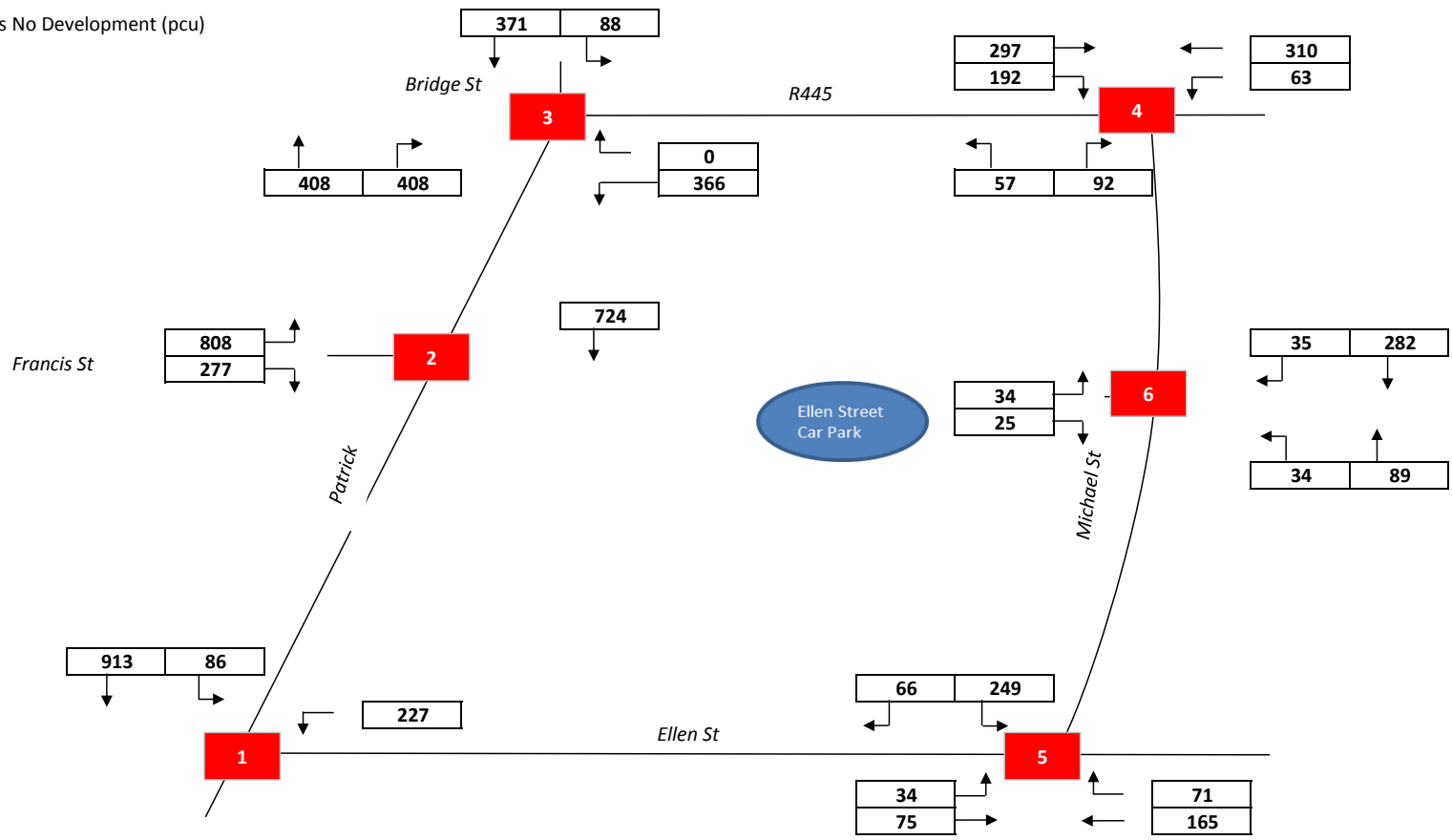


Figure 11
 PM 2037 Base Flows No Development (pcu)
 17:00 - 18:00

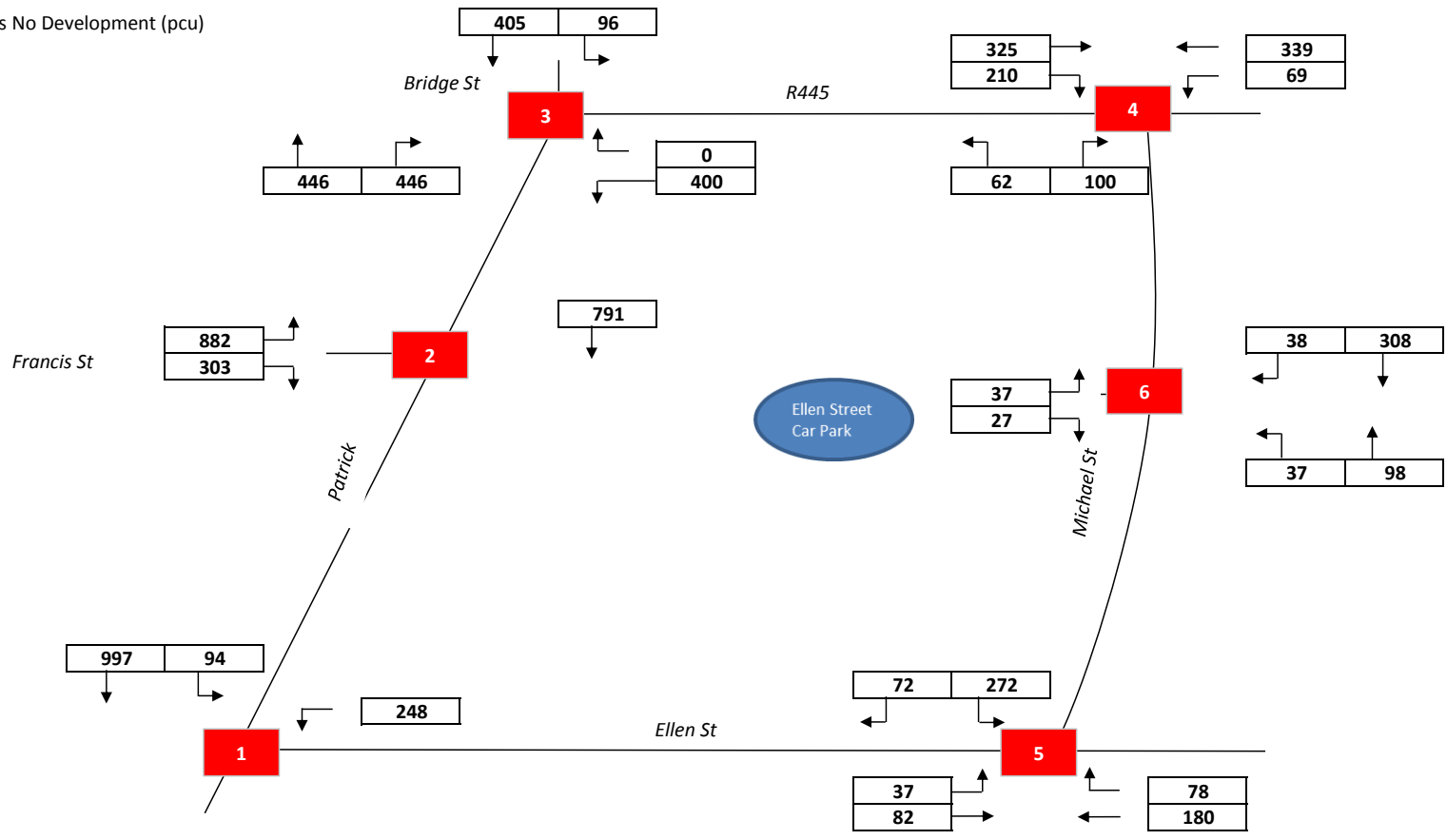


Figure 12
 PM 2022 Base Flows + Development (pcu)
 17:00 - 18:00

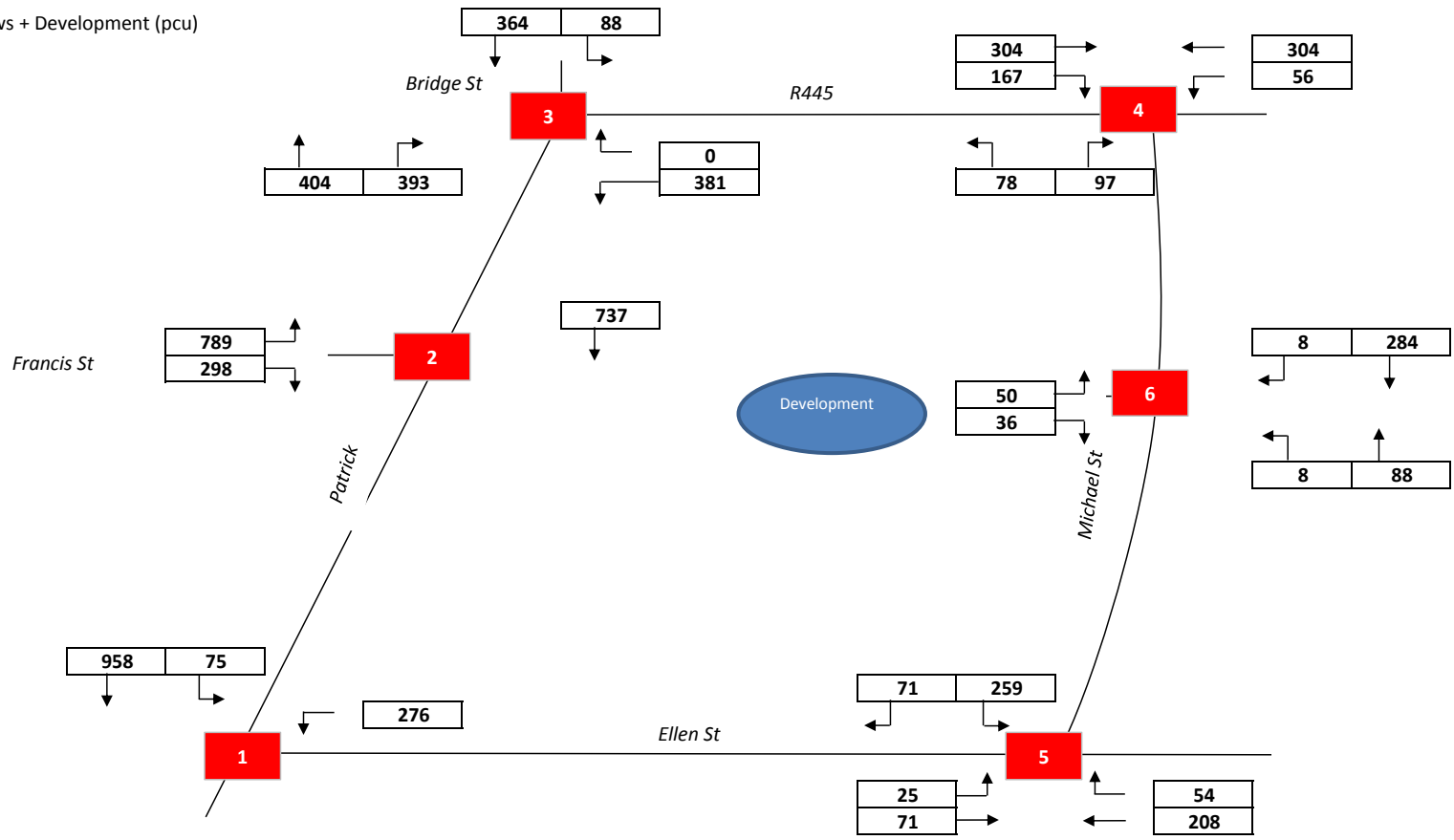


Figure 13
 PM 2027 Base Flows + Development (pcu)
 17:00 - 18:00

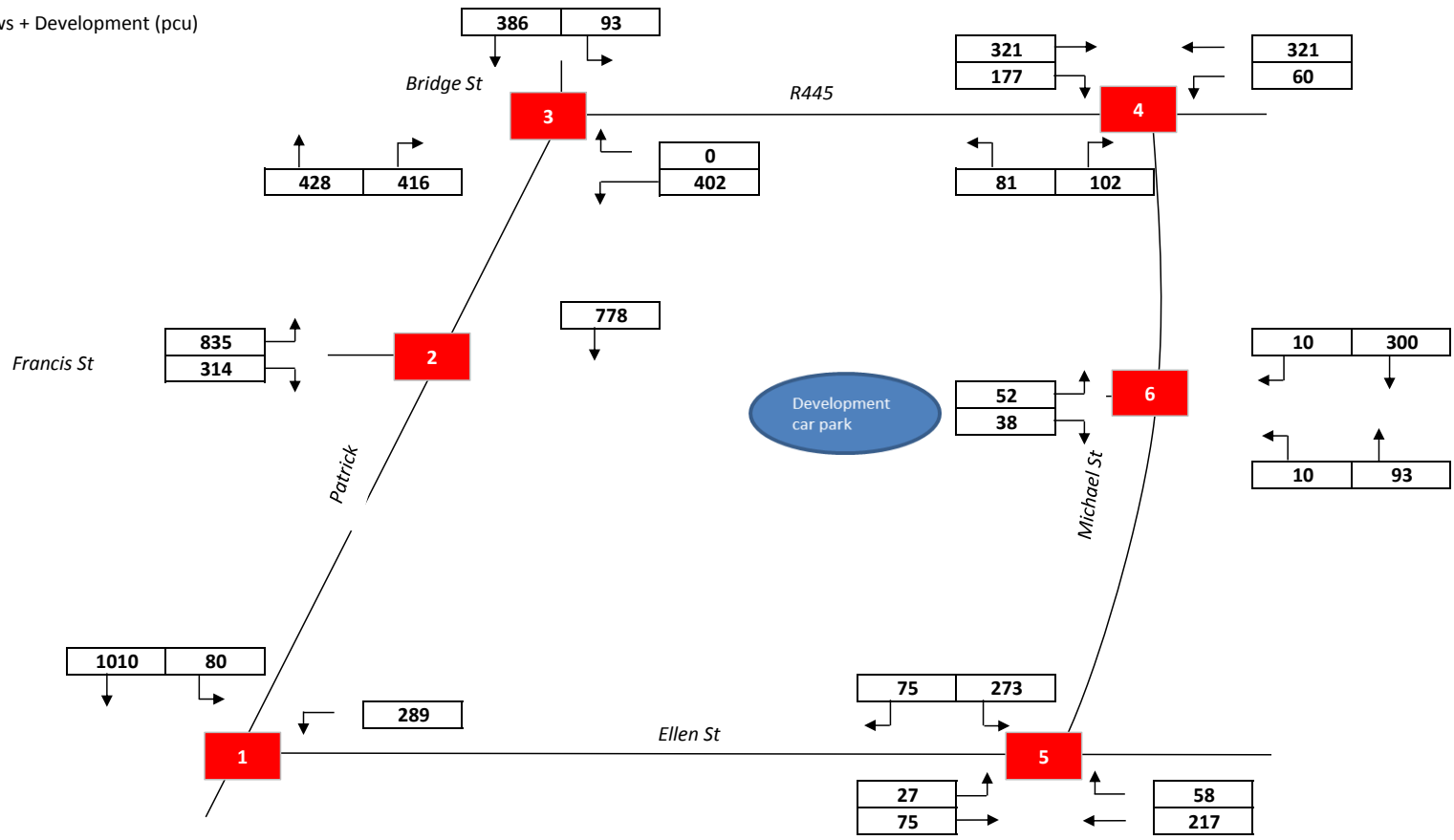
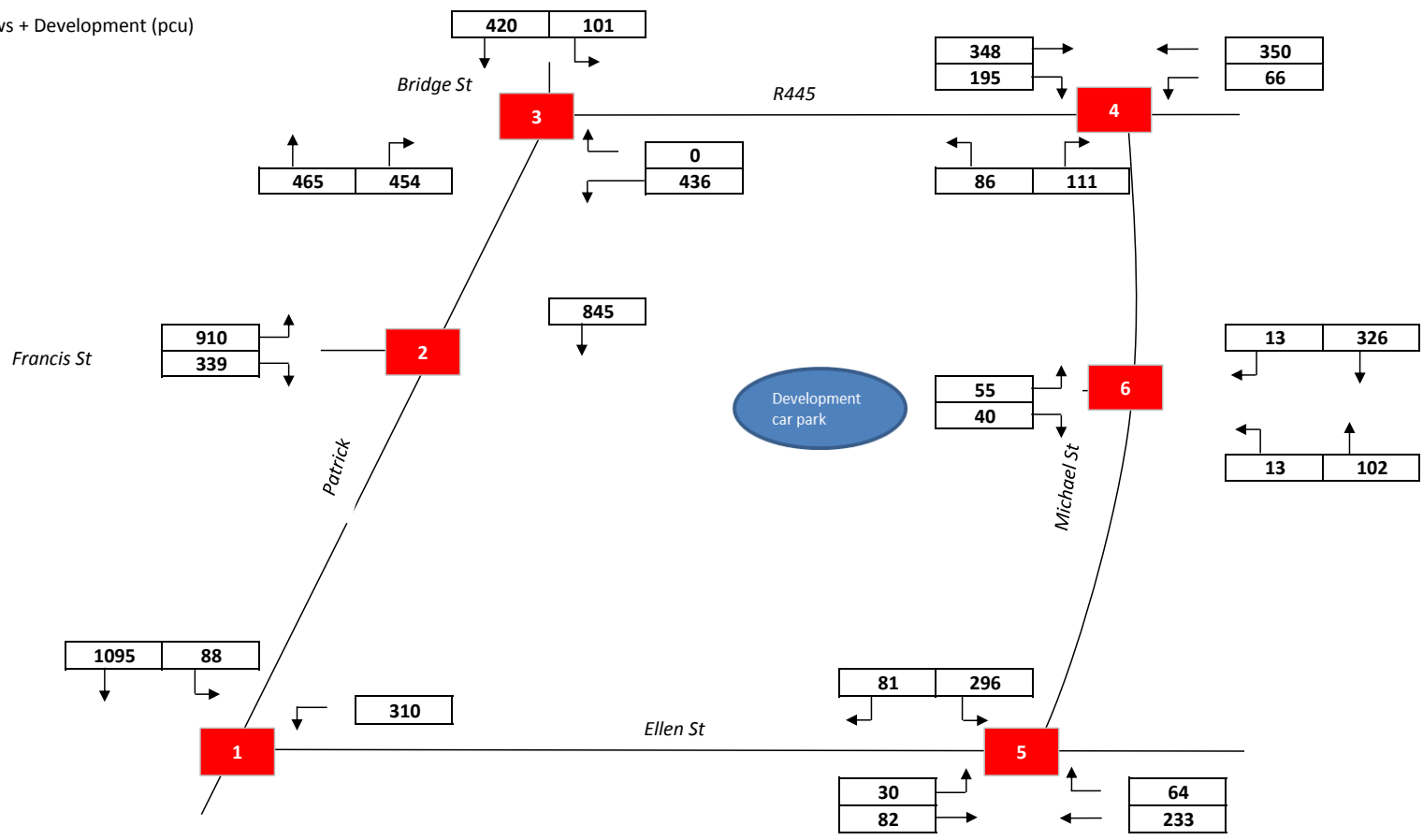


Figure 14
 PM 2037 Base Flows + Development (pcu)
 17:00 - 18:00



Appendix 13.F

Junction 1; Patrick St/Ellen Street Priority

Assessment Year	Peak Period	Junction Arm and Link	Base		Base + Development Traffic	
			RFC	MMQ	RFC	MMQ
2017 (Base Year)	AM Peak (08:00 – 09:00)	Ellen Street -> Patrick Street	0.34	0.5		
		Patrick Street -> Ellen Street	0.00	0.0		
	PM Peak (16:00 – 17:00)	Ellen Street -> Patrick Street	0.44	0.8		
		Patrick Street -> Ellen Street	0.00	0.0		
2022 (Opening Year)	AM Peak (08:00 – 09:00)	Ellen Street -> Patrick Street	0.36	0.6	0.40	0.7
		Patrick Street -> Ellen Street	0.00	0.0	0.00	0.0
	PM Peak (16:00 – 17:00)	Ellen Street -> Patrick Street	0.48	0.9	0.63	1.7
		Patrick Street -> Ellen Street	0.00	0.0	0.00	0.0
2027 (Opening Year+5)	AM Peak (08:00 – 09:00)	Ellen Street -> Patrick Street	0.39	0.7	0.43	0.8
		Patrick Street -> Ellen Street	0.00	0.0	0.00	0.0
	PM Peak (16:00 – 17:00)	Ellen Street -> Patrick Street	0.51	1.1	0.67	2.1
		Patrick Street -> Ellen Street	0.00	0.0	0.00	0.0
2037 (Opening Year+15)	AM Peak (08:00 – 09:00)	Ellen Street -> Patrick Street	0.44	0.8	0.48	0.9
		Patrick Street -> Ellen Street	0.00	0.0	0.00	0.0
	PM Peak (16:00 – 17:00)	Ellen Street -> Patrick Street	0.58	1.4	0.74	2.9
		Patrick Street -> Ellen Street	0.00	0.0	0.00	0.0

Junction 4; R445/ Michael Street Priority

Assessment Year	Peak Period	Junction Arm and Link	Base		Base + Development Traffic	
			RFC	MMQ	RFC	MMQ
2017 (Base Year)	AM Peak (08:00 – 09:00)	Michael St -> R445	0.06	0.1		
		R445 -> Michael Street	0.14	0.2		
	PM Peak (16:00 – 17:00)	Michael St -> R445	0.32	0.5		
		R445 -> Michael Street	0.27	0.4		
2022 (Opening Year)	AM Peak (08:00 – 09:00)	Michael St -> R445	0.07	0.1	0.10	0.1
		R445 -> Michael Street	0.15	0.2	0.35	0.8
	PM Peak (16:00 – 17:00)	Michael St -> R445	0.35	0.5	0.46	0.8
		R445 -> Michael Street	0.29	0.4	0.40	1.0
2027 (Opening Year+5)	AM Peak (08:00 – 09:00)	Michael St -> R445	0.08	0.1	0.11	0.1
		R445 -> Michael Street	0.16	0.2	0.38	1.0
	PM Peak (16:00 – 17:00)	Michael St -> R445	0.38	0.6	0.49	1.0
		R445 -> Michael Street	0.31	0.5	0.44	1.1
2037 (Opening Year+15)	AM Peak (08:00 – 09:00)	Michael St -> R445	0.09	0.1	0.13	0.1
		R445 -> Michael Street	0.18	0.2	0.42	1.2
	PM Peak (16:00 – 17:00)	Michael St -> R445	0.43	0.7	0.56	1.2
		R445 -> Michael Street	0.35	0.5	0.50	1.5

Junction 5; Ellen Street/ Michael Street

Assessment Year	Peak Period	Junction Arm and Link	Base		Base + Development Traffic	
			RFC	MMQ	RFC	MMQ
2017 (Base Year)	AM Peak (08:00 – 09:00)	Michael St -> Ellen St	0.17	0.2		
		Ellen St -> Michael Street	0.08	0.1		
	PM Peak (16:00 – 17:00)	Michael St -> Ellen St	0.46	0.9		
		Ellen St -> Michael Street	0.11	0.1		
2022 (Opening Year)	AM Peak (08:00 – 09:00)	Michael St -> Ellen St	0.18	0.2	0.20	0.2
		Ellen St -> Michael Street	0.09	0.1	0.15	0.2
	PM Peak (16:00 – 17:00)	Michael St -> Ellen St	0.48	1.0	0.55	1.2
		Ellen St -> Michael Street	0.12	0.1	0.10	0.1
2027 (Opening Year+5)	AM Peak (08:00 – 09:00)	Michael St -> Ellen St	0.19	0.2	0.21	0.3
		Ellen St -> Michael Street	0.09	0.1	0.15	0.2
	PM Peak (16:00 – 17:00)	Michael St -> Ellen St	0.53	1.2	0.59	1.4
		Ellen St -> Michael Street	0.13	0.2	0.10	0.1
2037 (Opening Year+15)	AM Peak (08:00 – 09:00)	Michael St -> Ellen St	0.21	0.3	0.23	0.3
		Ellen St -> Michael Street	0.10	0.1	0.16	0.2
	PM Peak (16:00 – 17:00)	Michael St -> Ellen St	0.58	1.4	0.64	1.7
		Ellen St -> Michael Street	0.14	0.2	0.11	0.1

Junction 6; Michael Street/Site Access

Assessment Year	Peak Period	Junction Arm and Link	Base		Base + Development Traffic	
			RFC	MMQ	RFC	MMQ
2017 (Base Year)	AM Peak (08:00 – 09:00)	Site Access -> Michael Street	0.00	0.0		
		Michael Street -> Site Access	0.01	0.0		
	PM Peak (16:00 – 17:00)	Site Access -> Michael Street	0.10	0.1		
		Michael Street -> Site Access	0.06	0.1		
2022 (Opening Year)	AM Peak (08:00 – 09:00)	Site Access -> Michael Street	0.00	0.0	0.01	0.0
		Michael Street -> Site Access	0.01	0.0	0.11	0.1
	PM Peak (16:00 – 17:00)	Site Access -> Michael Street	0.11	0.1	0.16	0.2
		Michael Street -> Site Access	0.06	0.1	0.01	0.0
2027 (Opening Year+5)	AM Peak (08:00 – 09:00)	Site Access -> Michael Street	0.00	0.0	0.02	0.0
		Michael Street -> Site Access	0.01	0.0	0.11	0.1
	PM Peak (16:00 – 17:00)	Site Access -> Michael Street	0.11	0.1	0.17	0.2
		Michael Street -> Site Access	0.06	0.1	0.02	0.0
2037 (Opening Year+15)	AM Peak (08:00 – 09:00)	Site Access -> Michael Street	0.00	0.0	0.02	0.0
		Michael Street -> Site Access	0.02	0.0	0.11	0.1
	PM Peak (16:00 – 17:00)	Site Access -> Michael Street	0.13	0.1	0.18	0.2
		Michael Street -> Site Access	0.07	0.1	0.02	0.0

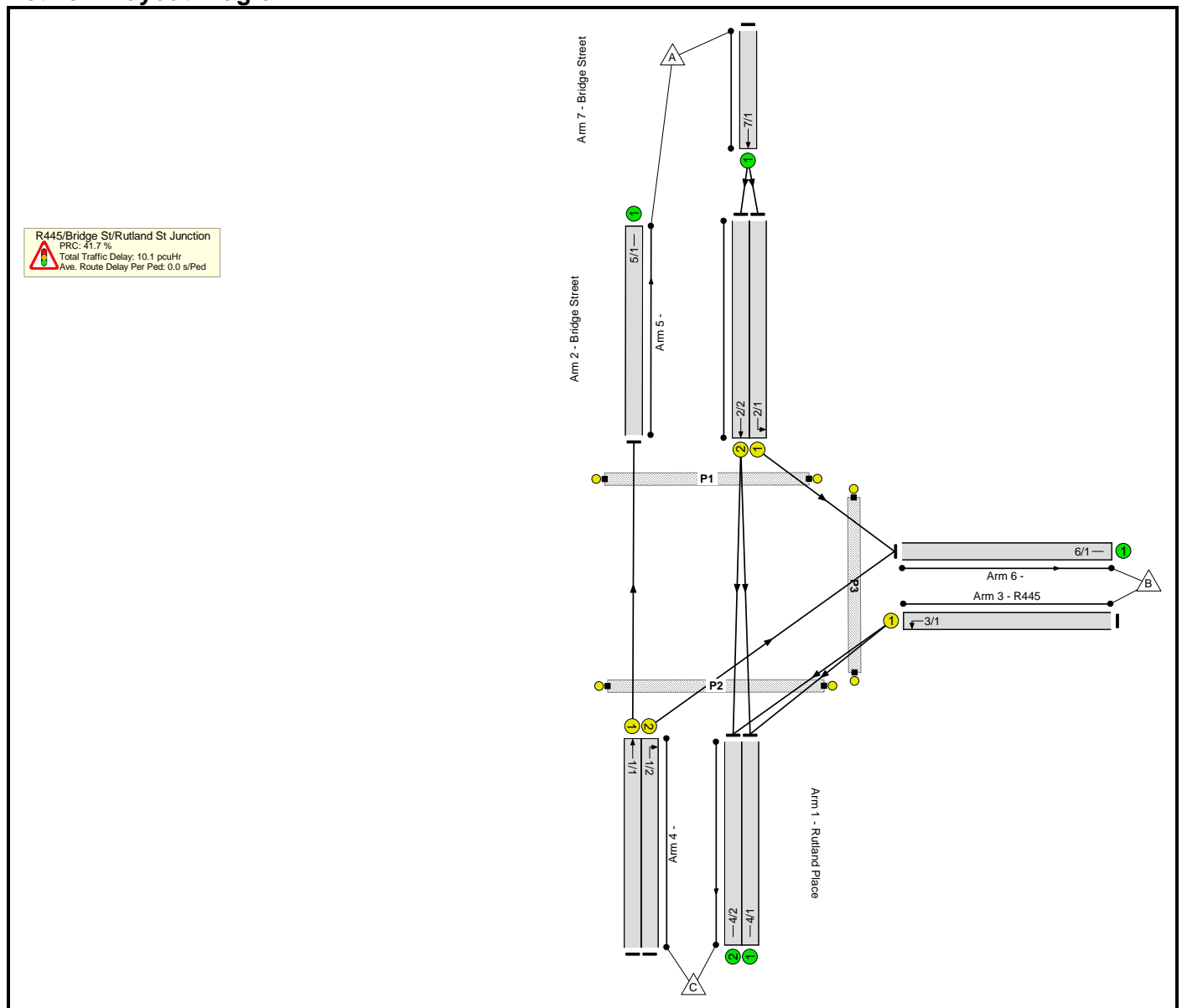
Basic Results Summary Rev1
Basic Results Summary Rev1

User and Project Details

Project:	Project Opera
Title:	
Location:	Limerick City
Additional detail:	
File name:	R445_BridgeSt_Rutland Pl_Junction.lsg3x
Author:	CL
Company:	AECOM
Address:	

Scenario 1: '2017 AM Base' (FG1: '2017 AM Base ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

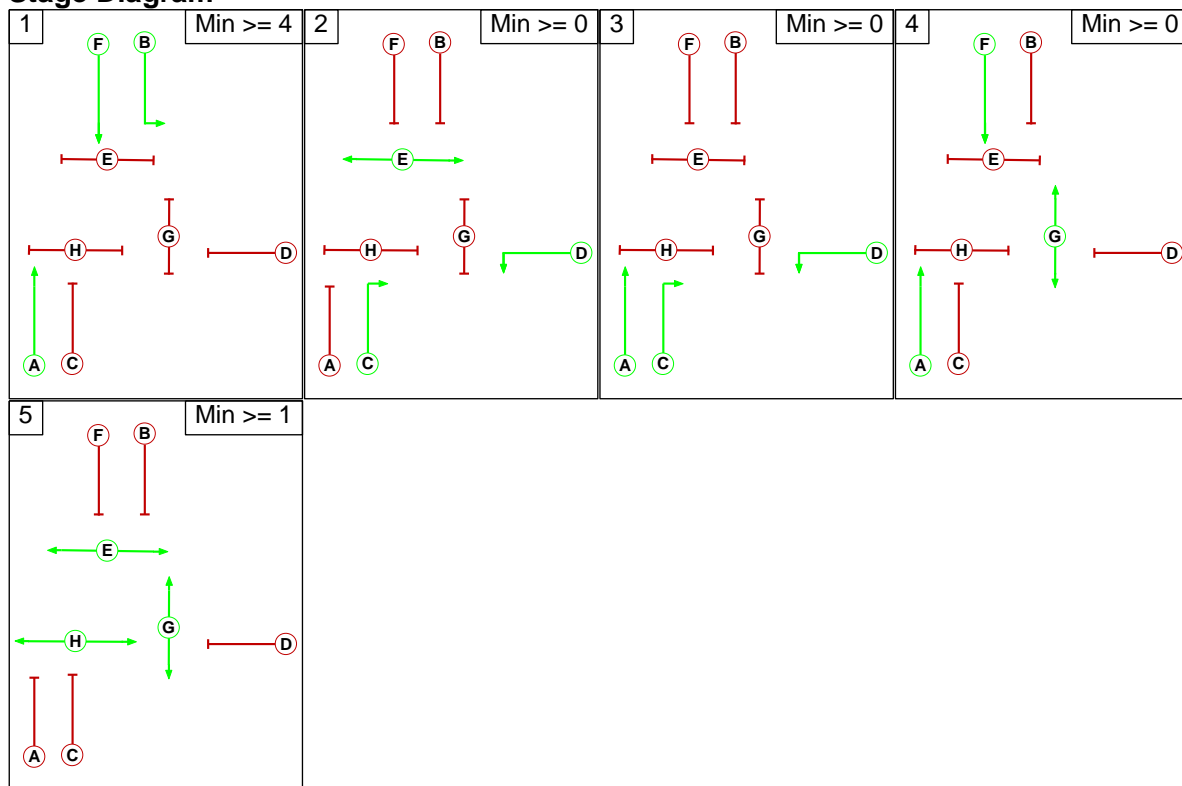
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	61	449	510
	B	0	0	294	294
	C	311	339	0	650
	Tot.	311	400	743	1454

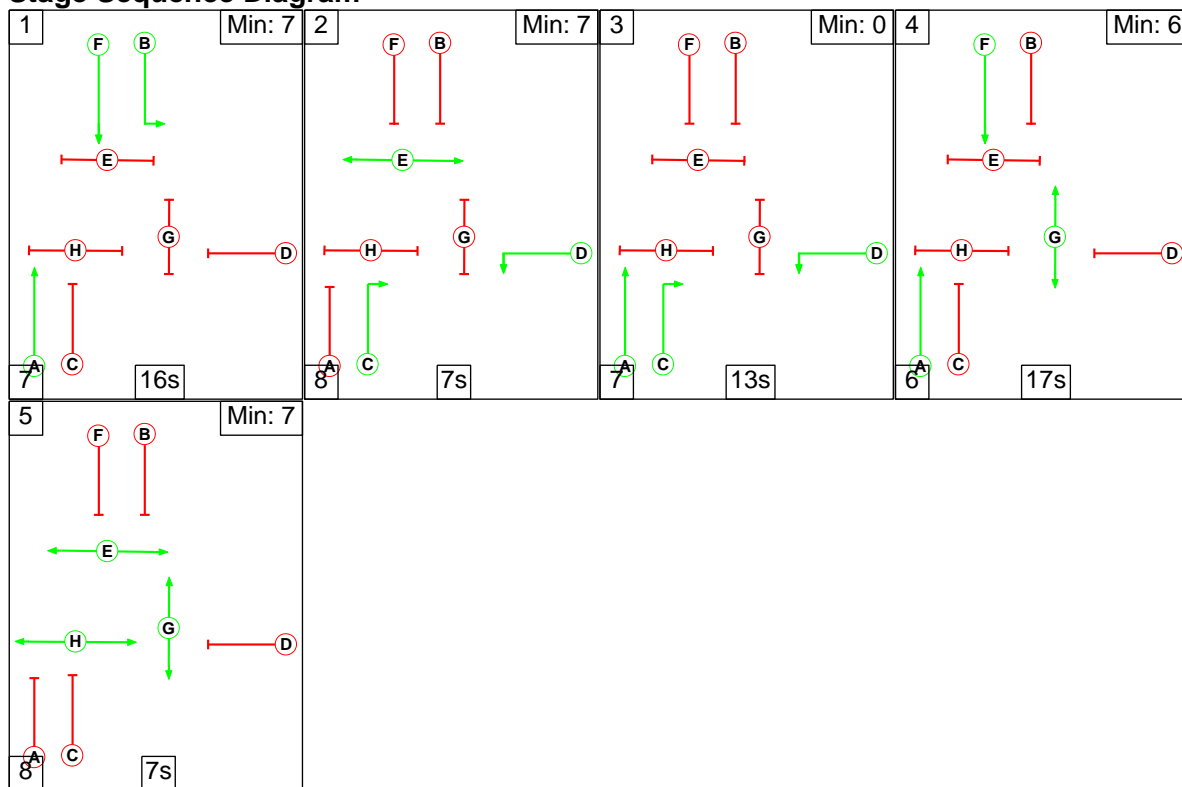
Phases in Stage

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

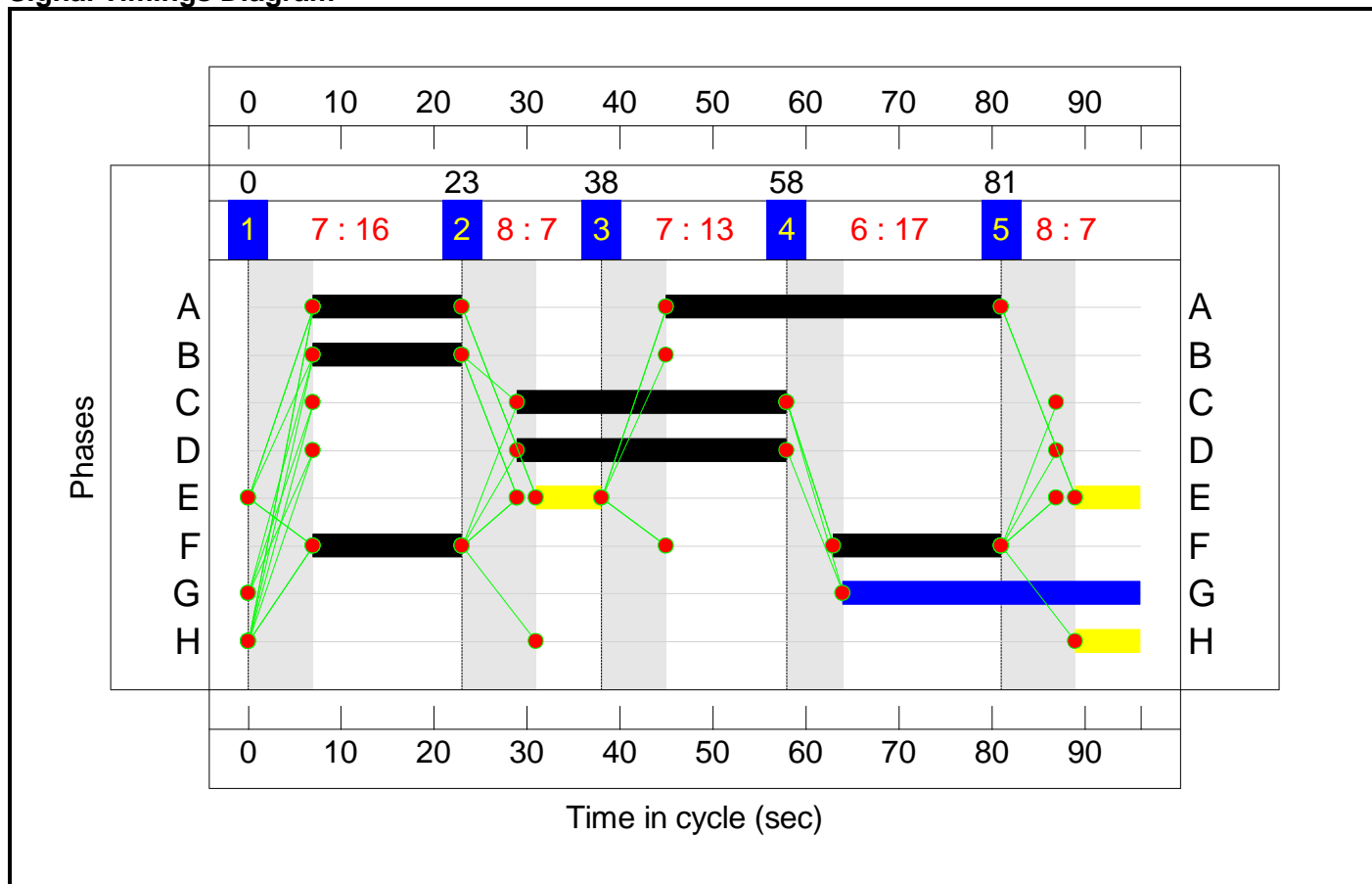
Stage Diagram



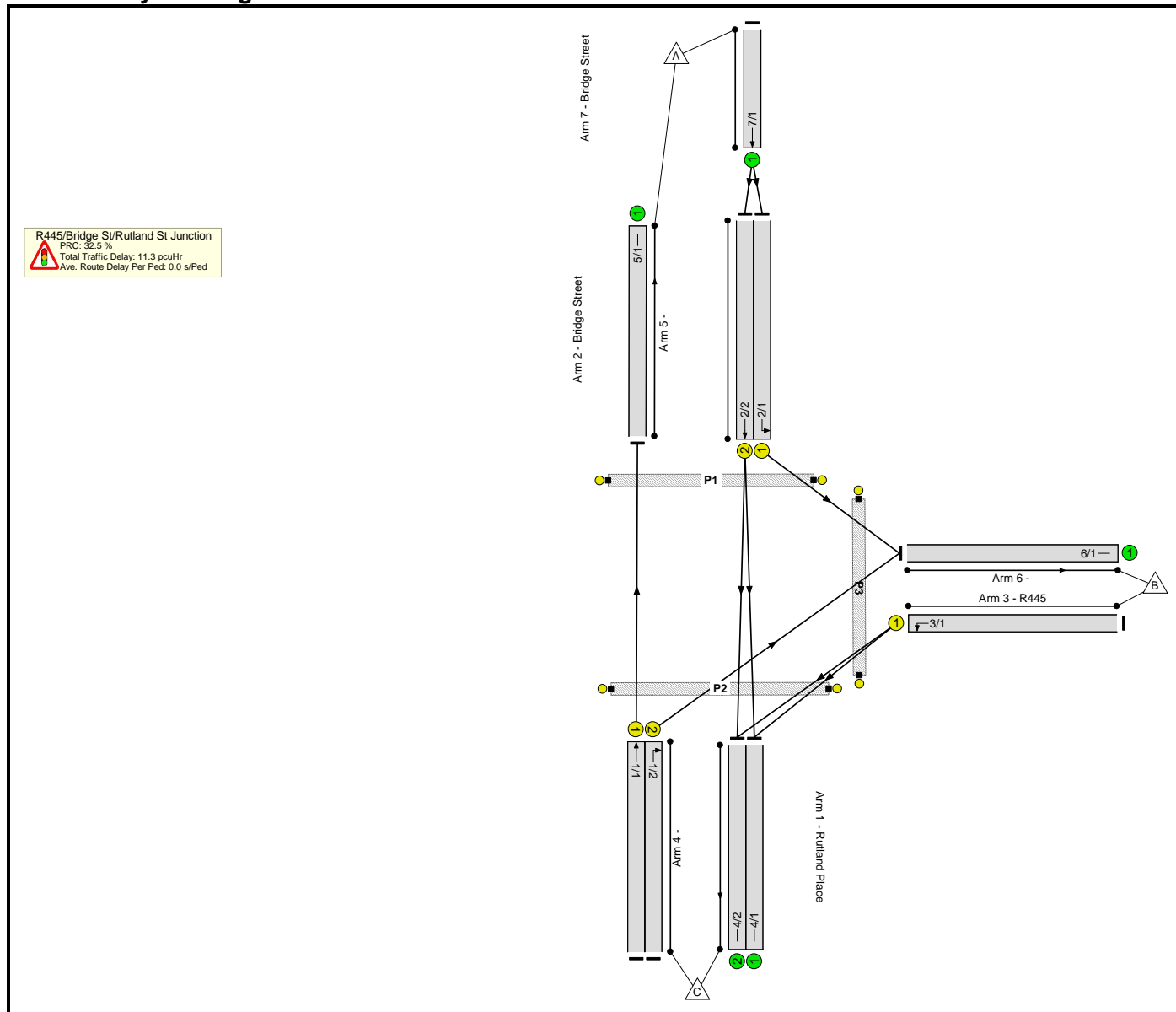
Stage Sequence Diagram



Signal Timings Diagram



Network Layout Diagram



Traffic Flows, Desired

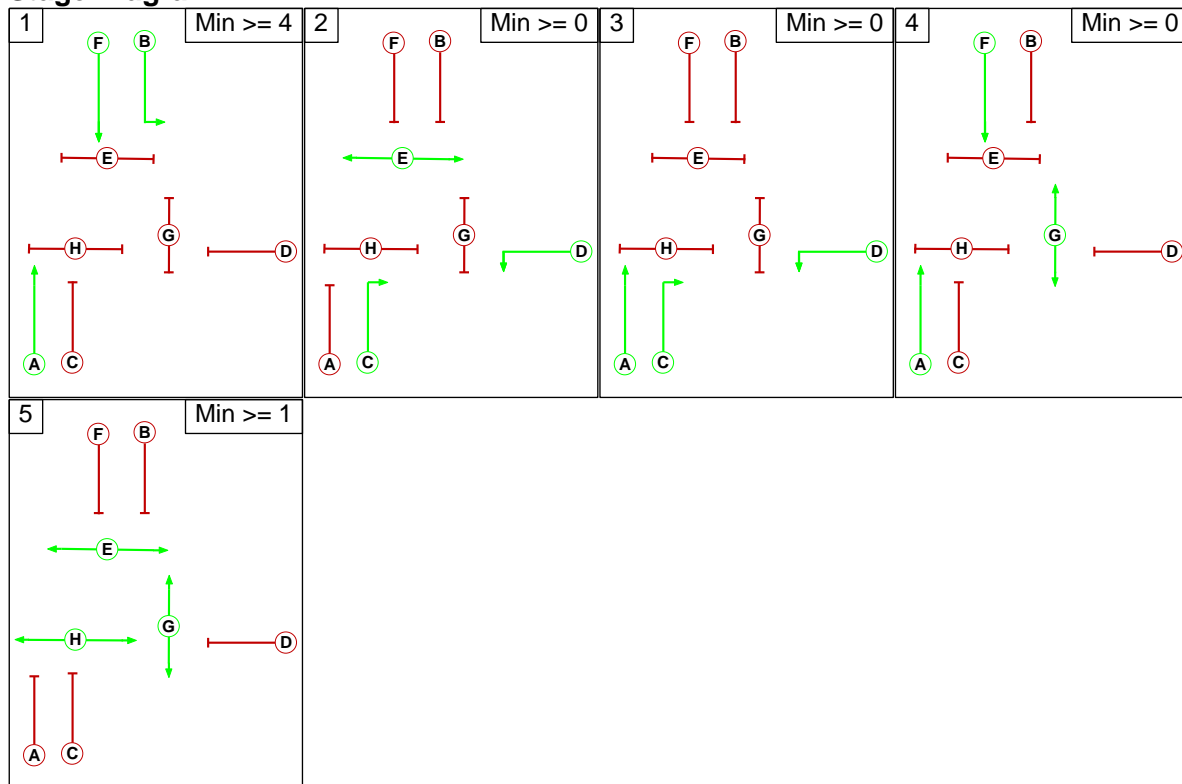
Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	65	480	545
	B	0	0	315	315
	C	333	363	0	696
	Tot.	333	428	795	1556

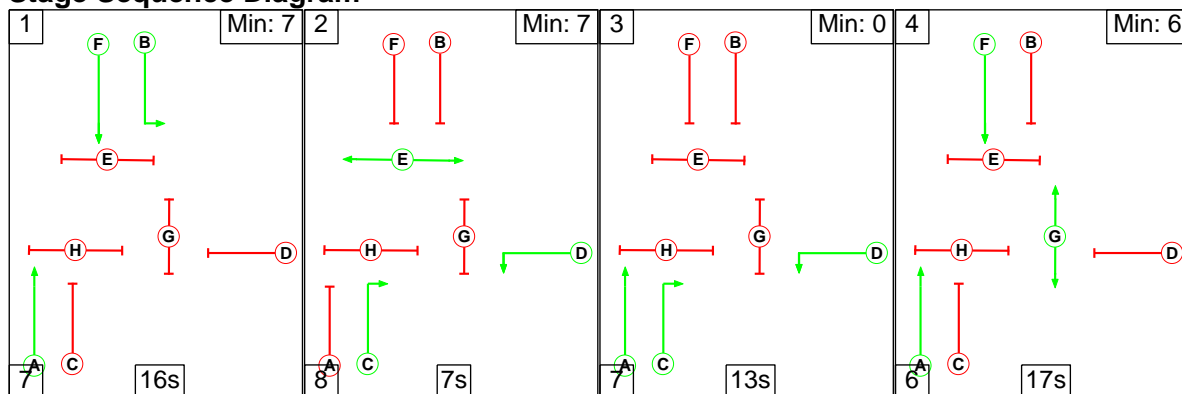
Phases in Stage

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

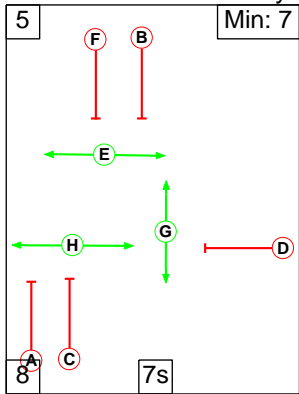
Stage Diagram



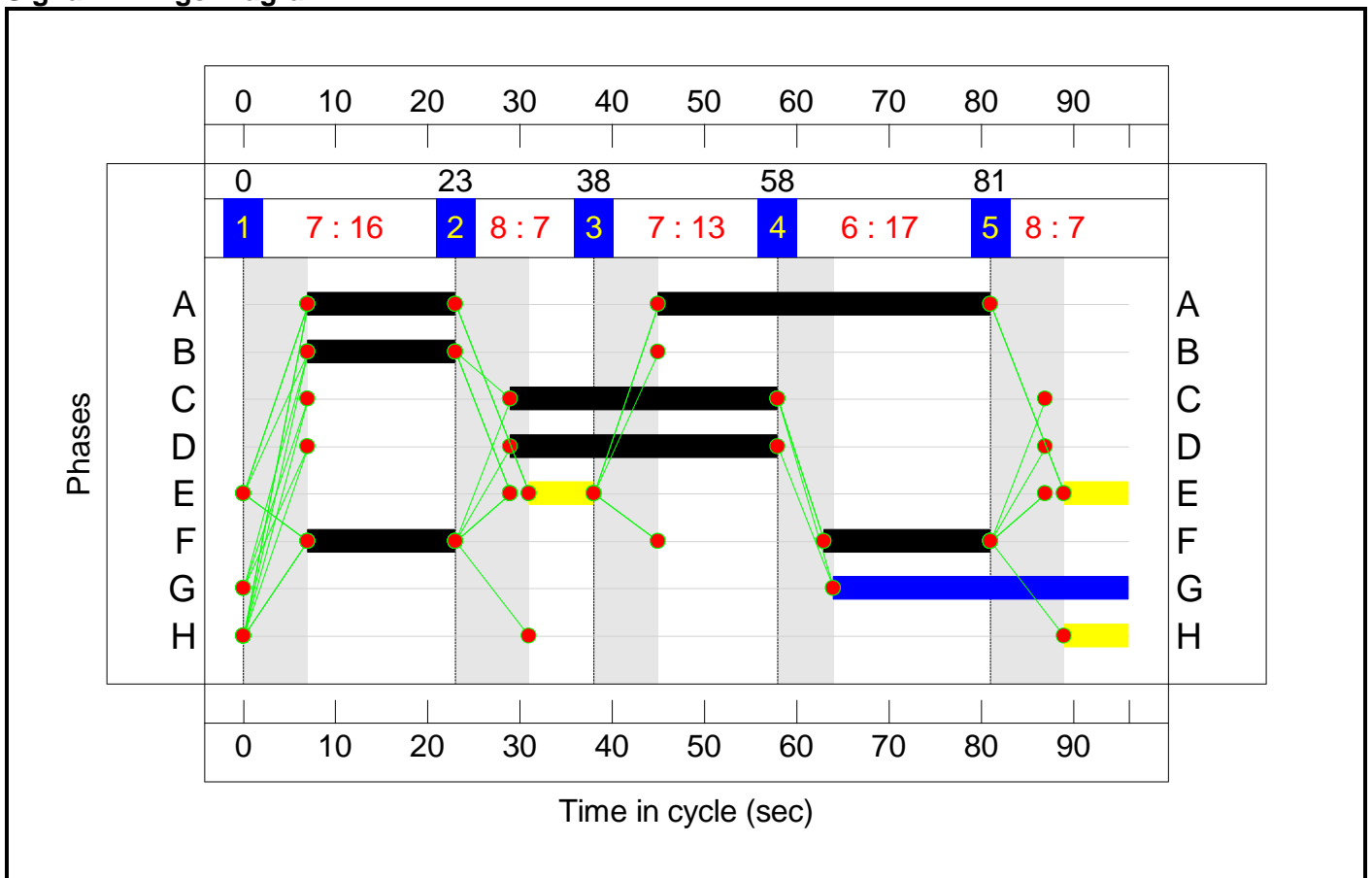
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram

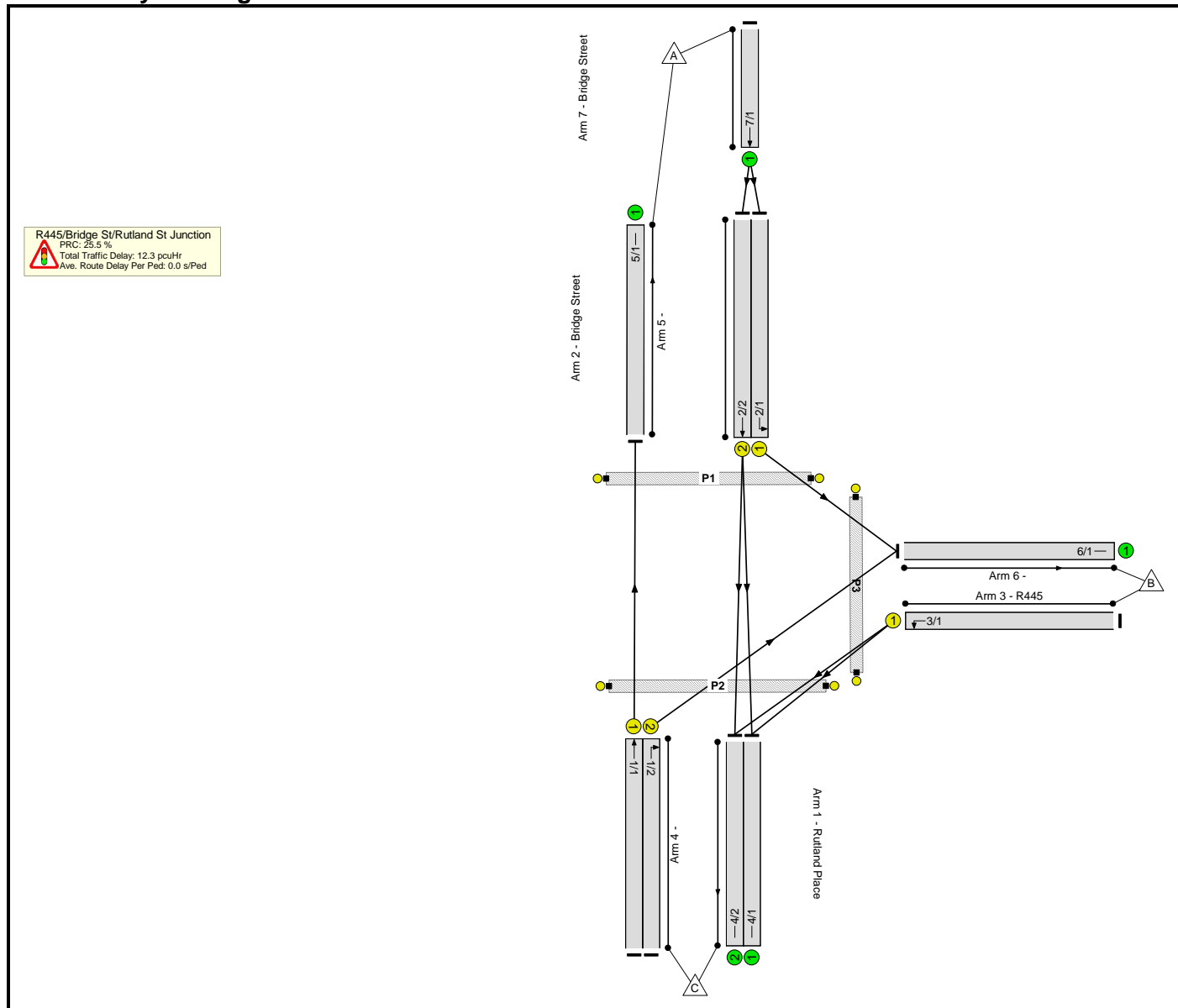


Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	67.9%	0	0	0	11.3	-	-
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	67.9%	0	0	0	11.3	-	-
1/1	Rutland Place Ahead	U	A		2	52	-	333	1915	1077	30.9%	-	-	-	0.7	8.0	2.5
1/2	Rutland Place Right	U	C		1	29	-	363	1760	550	66.0%	-	-	-	3.8	38.1	9.3
2/1	Bridge Street Left	U	B		1	16	-	65	1666	295	22.0%	-	-	-	0.8	41.7	1.6
2/2	Bridge Street Ahead	U	F		2	34	-	480	1885	707	67.9%	-	-	-	2.9	21.6	8.0
3/1	R445 Left	U	D		1	29	-	315	1793	560	56.2%	-	-	-	3.0	34.8	7.6
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	G		1	32	-	0	-	0	0.0%	-	-	-	-	-	-
C1				PRC for Signalled Lanes (%):		32.5		Total Delay for Signalled Lanes (pcuHr):				11.26		Cycle Time (s):		96	
				PRC Over All Lanes (%):		32.5		Total Delay Over All Lanes(pcuHr):				11.26					

Network Layout Diagram



Traffic Flows, Desired

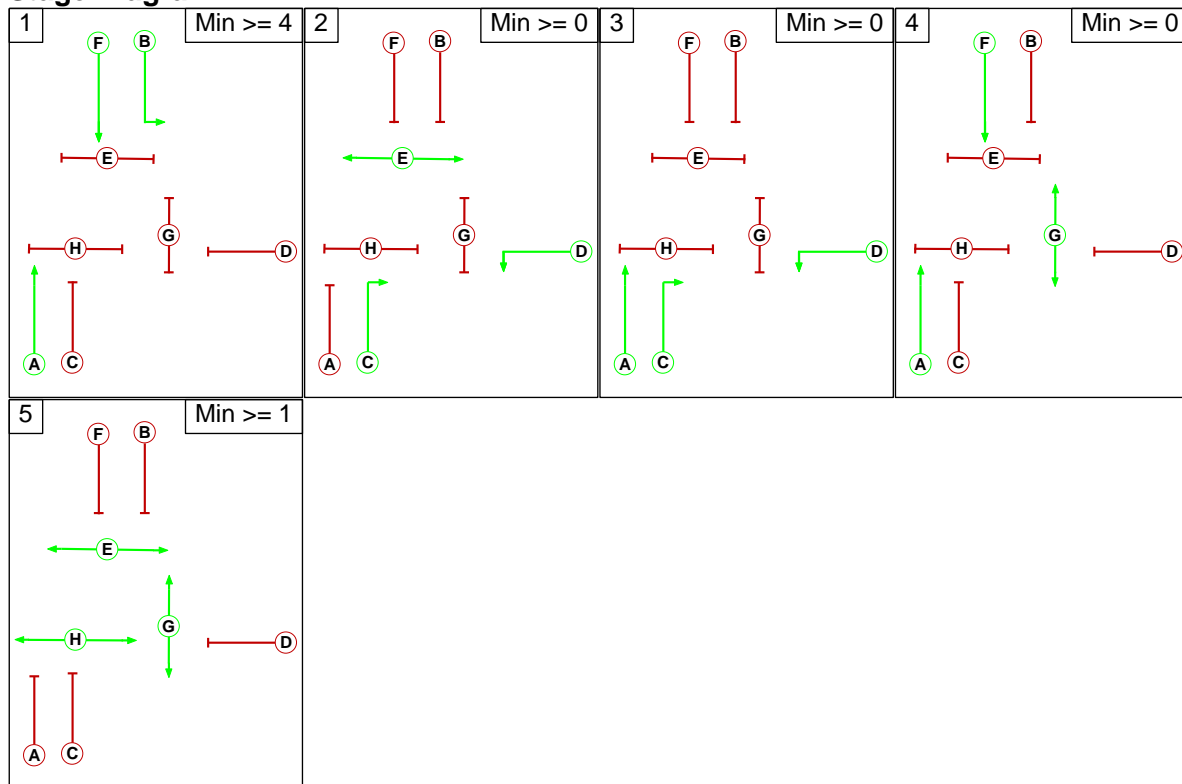
Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	69	507	576
	B	0	0	332	332
	C	351	383	0	734
	Tot.	351	452	839	1642

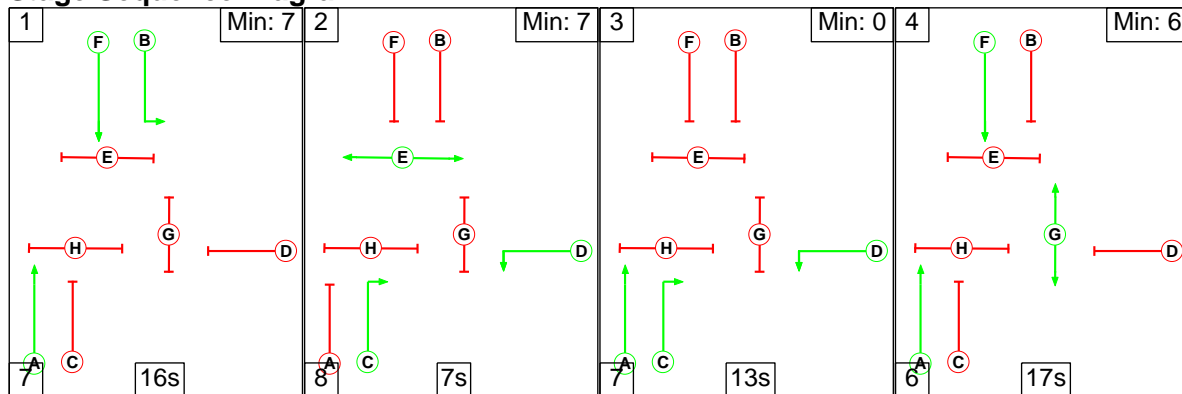
Phases in Stage

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

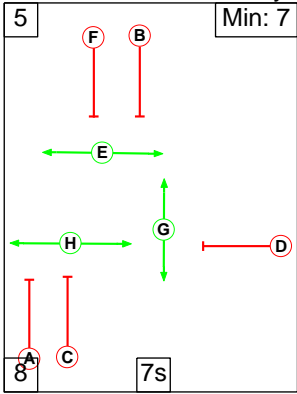
Stage Diagram



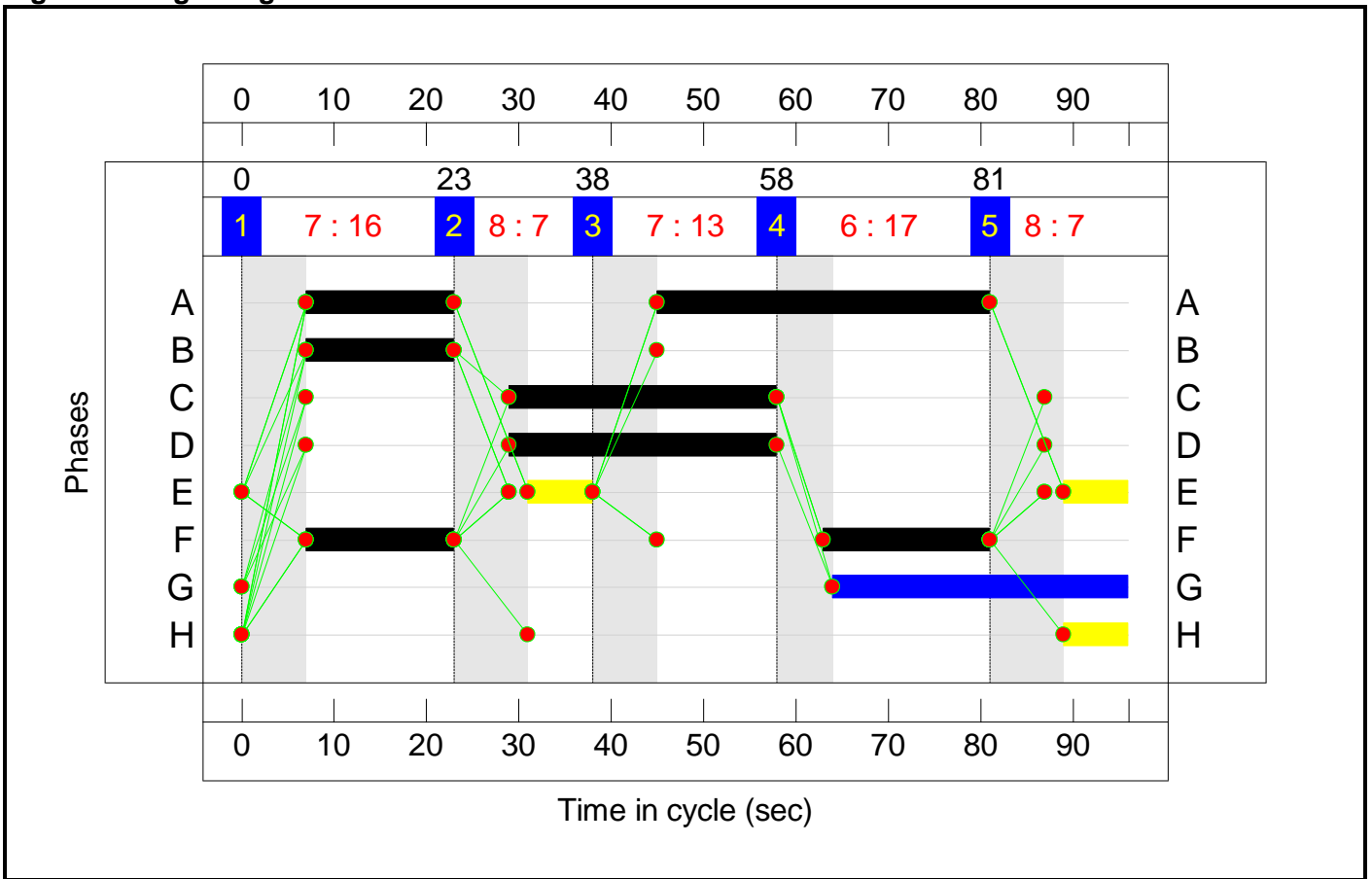
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram

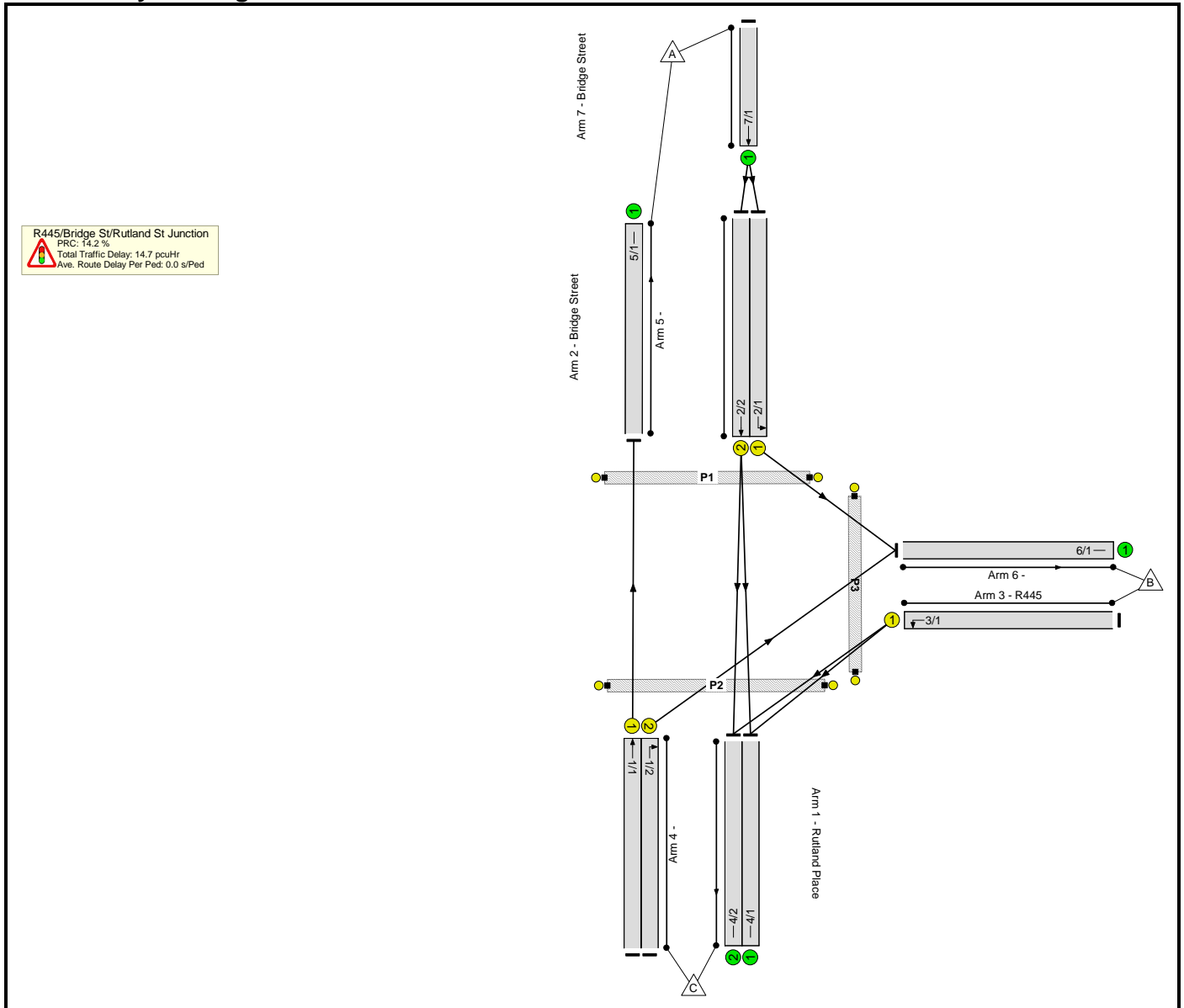


Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	71.7%	0	0	0	12.3	-	-
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	71.7%	0	0	0	12.3	-	-
1/1	Rutland Place Ahead	U	A		2	52	-	351	1915	1077	32.6%	-	-	-	0.8	8.1	2.7
1/2	Rutland Place Right	U	C		1	29	-	383	1760	550	69.6%	-	-	-	4.2	39.6	10.1
2/1	Bridge Street Left	U	B		1	16	-	69	1666	295	23.4%	-	-	-	0.8	41.9	1.7
2/2	Bridge Street Ahead	U	F		2	34	-	507	1885	707	71.7%	-	-	-	3.2	22.9	8.7
3/1	R445 Left	U	D		1	29	-	332	1793	560	59.3%	-	-	-	3.3	35.7	8.1
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	G		1	32	-	0	-	0	0.0%	-	-	-	-	-	-
C1					PRC for Signalled Lanes (%):		25.5	Total Delay for Signalled Lanes (pcuHr):				12.32	Cycle Time (s):		96		
					PRC Over All Lanes (%):		25.5	Total Delay Over All Lanes(pcuHr):				12.32					

Network Layout Diagram



Traffic Flows, Desired

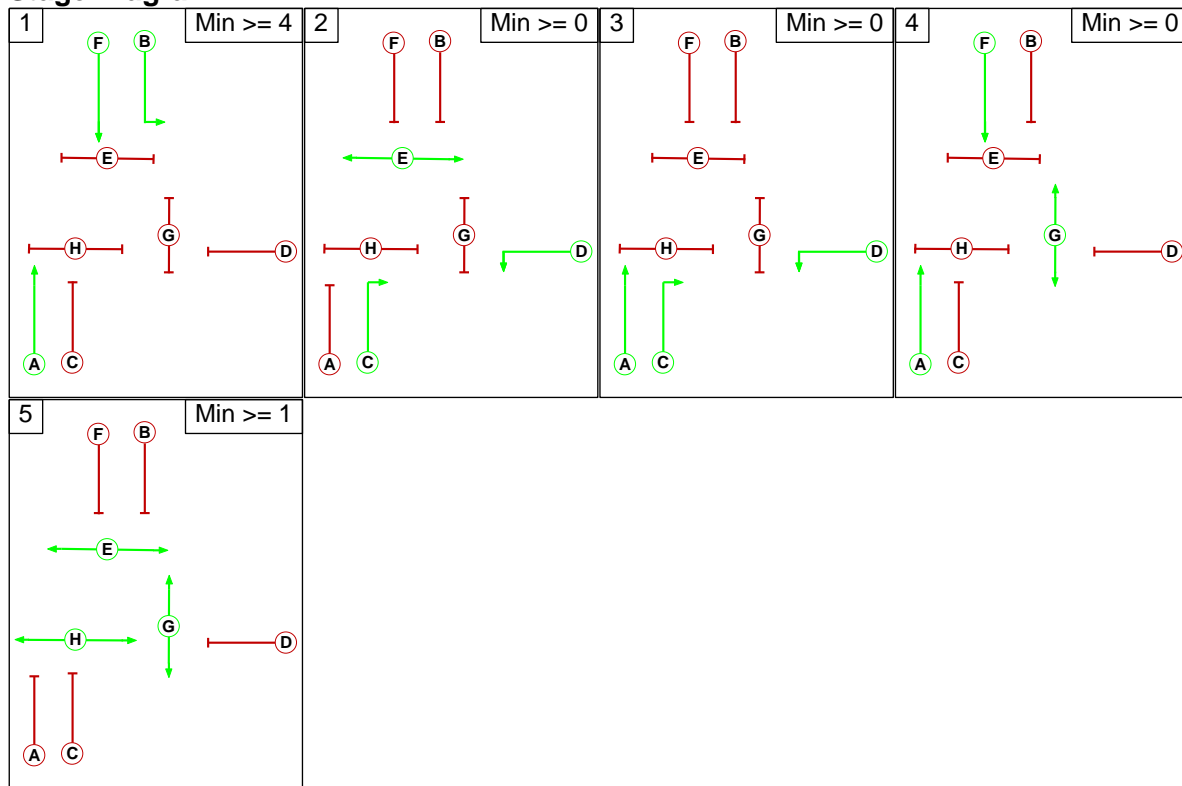
Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	76	557	633
	B	0	0	365	365
	C	386	420	0	806
	Tot.	386	496	922	1804

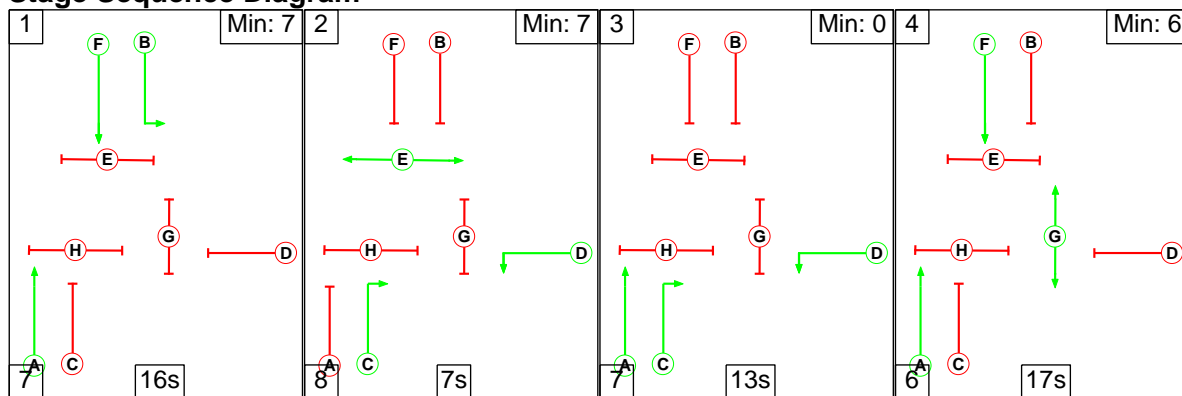
Phases in Stage

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

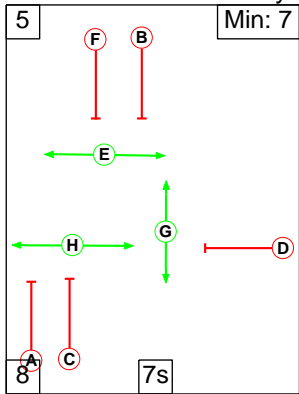
Stage Diagram



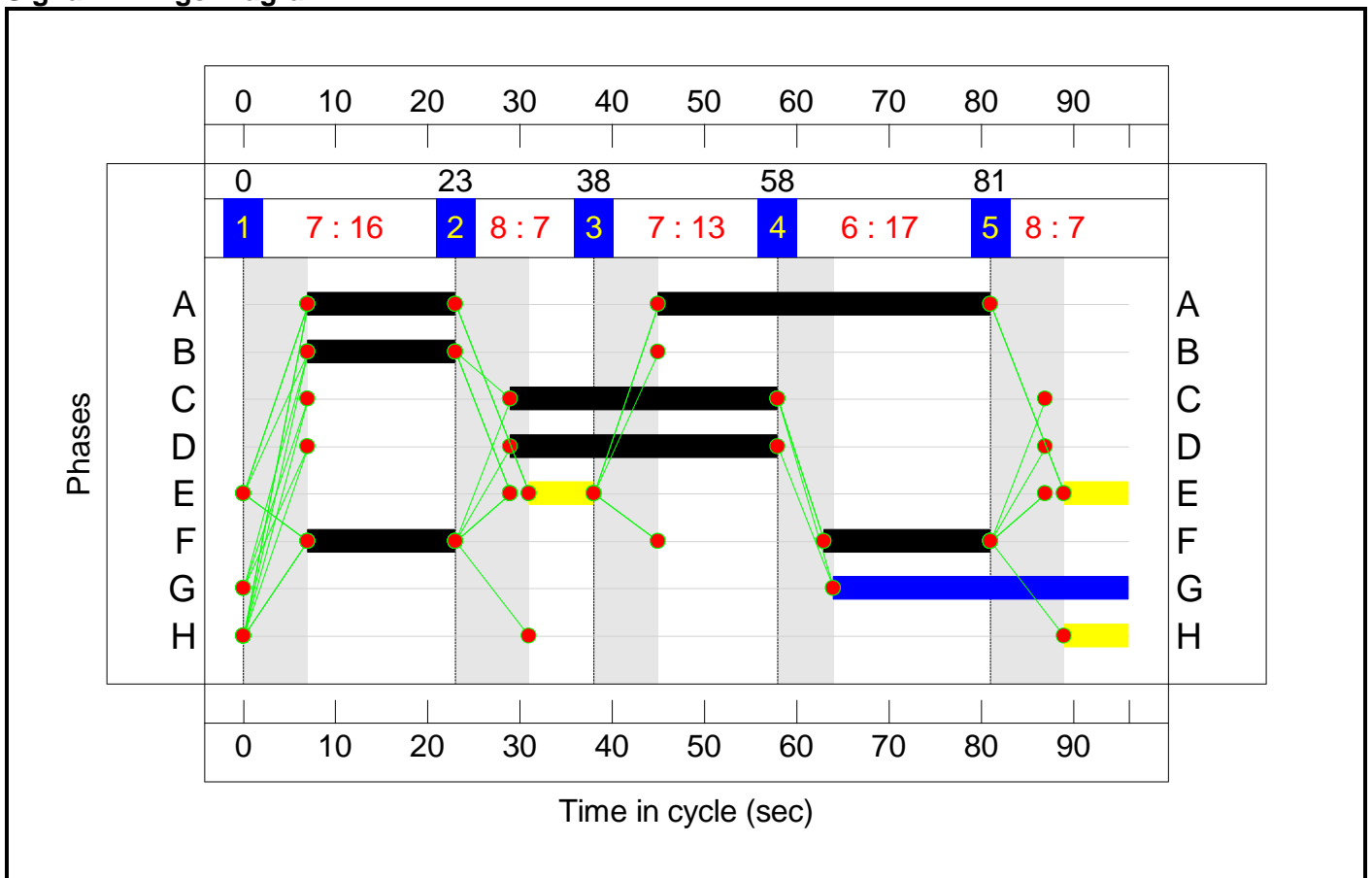
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram

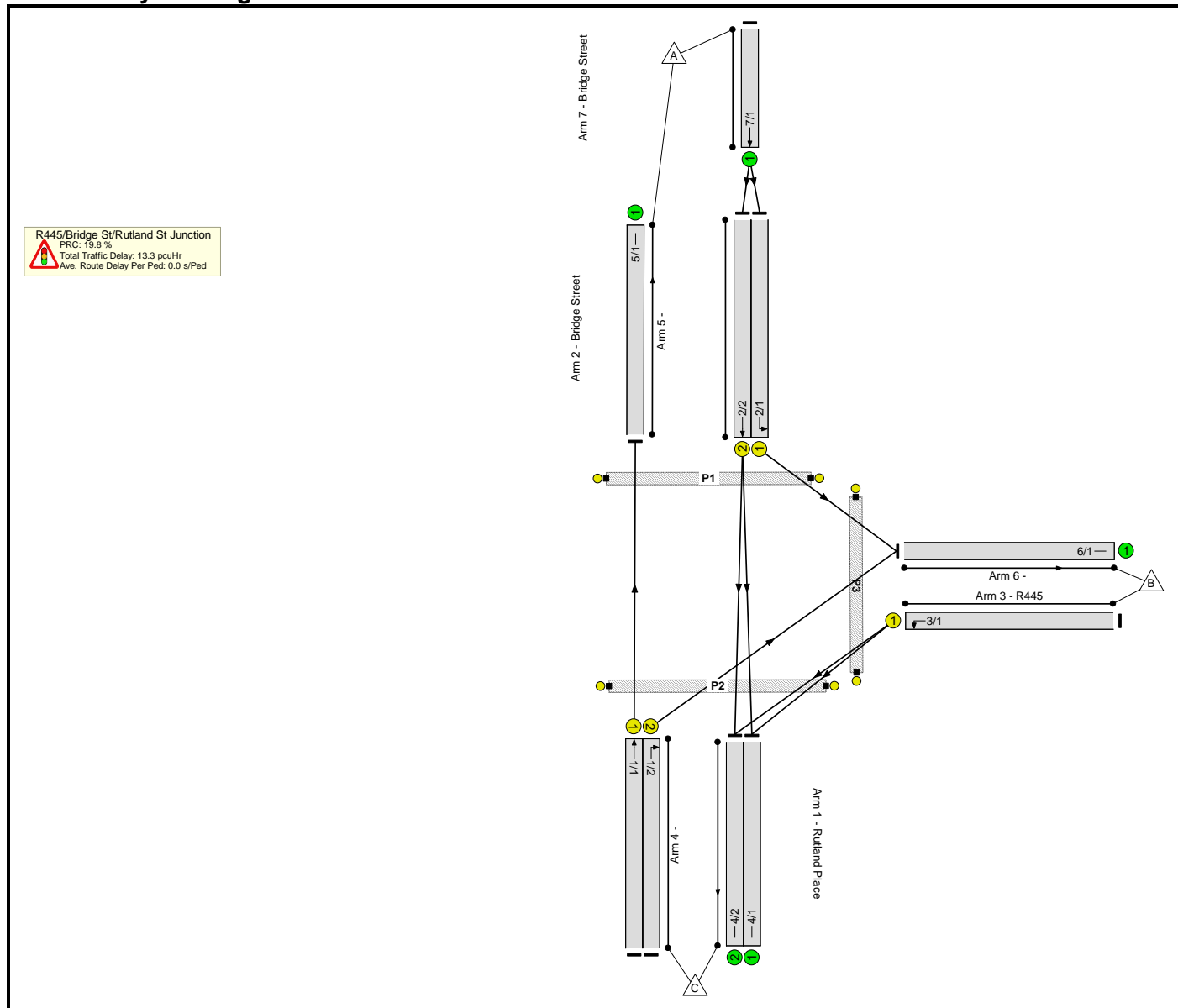


Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	78.8%	0	0	0	14.7	-	-
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	78.8%	0	0	0	14.7	-	-
1/1	Rutland Place Ahead	U	A		2	52	-	386	1915	1077	35.8%	-	-	-	0.9	8.4	3.1
1/2	Rutland Place Right	U	C		1	29	-	420	1760	550	76.4%	-	-	-	5.1	43.3	11.6
2/1	Bridge Street Left	U	B		1	16	-	76	1666	295	25.8%	-	-	-	0.9	42.3	1.9
2/2	Bridge Street Ahead	U	F		2	34	-	557	1885	707	78.8%	-	-	-	4.1	26.2	10.3
3/1	R445 Left	U	D		1	29	-	365	1793	560	65.1%	-	-	-	3.8	37.6	9.2
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	G		1	32	-	0	-	0	0.0%	-	-	-	-	-	-
C1				PRC for Signalled Lanes (%):		14.2		Total Delay for Signalled Lanes (pcuHr):				14.72		Cycle Time (s):		96	
				PRC Over All Lanes (%):		14.2		Total Delay Over All Lanes(pcuHr):				14.72					

Network Layout Diagram



Traffic Flows, Desired

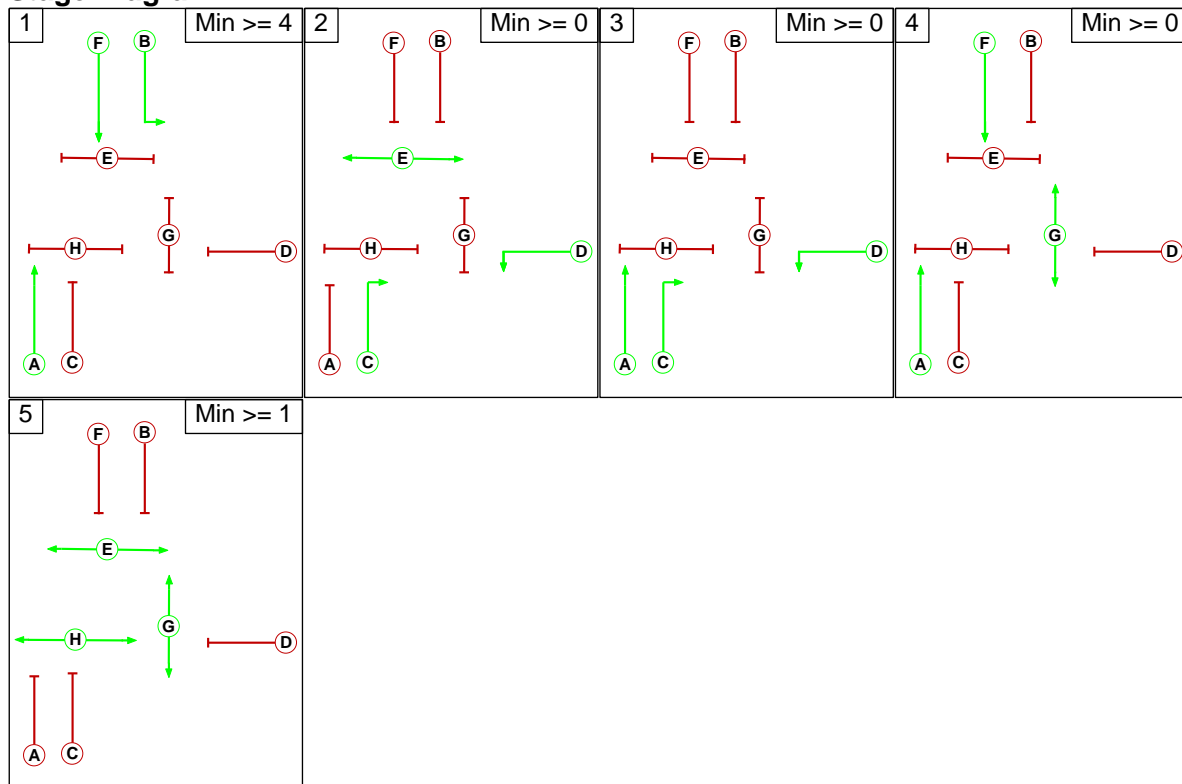
Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	72	531	603
	B	0	0	348	348
	C	334	403	0	737
	Tot.	334	475	879	1688

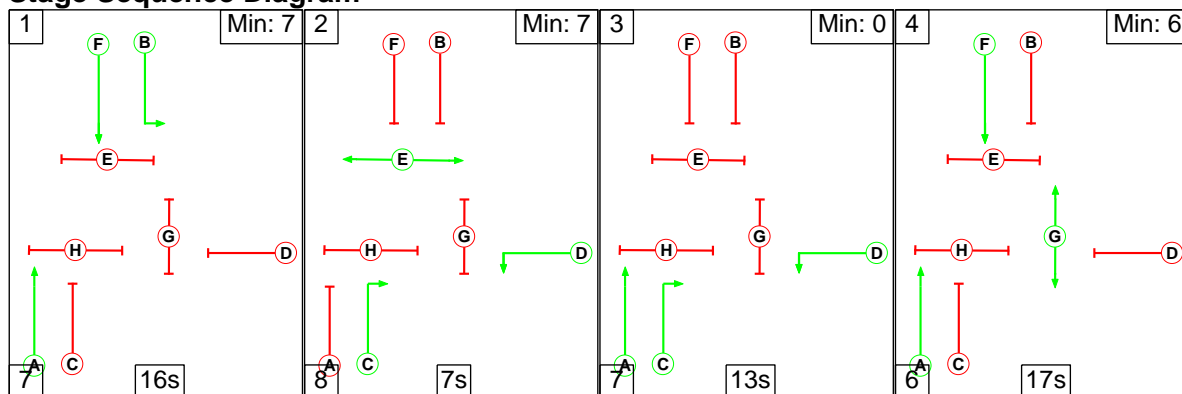
Phases in Stage

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

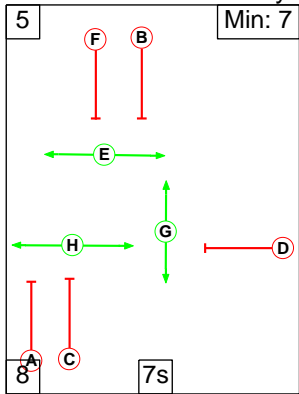
Stage Diagram



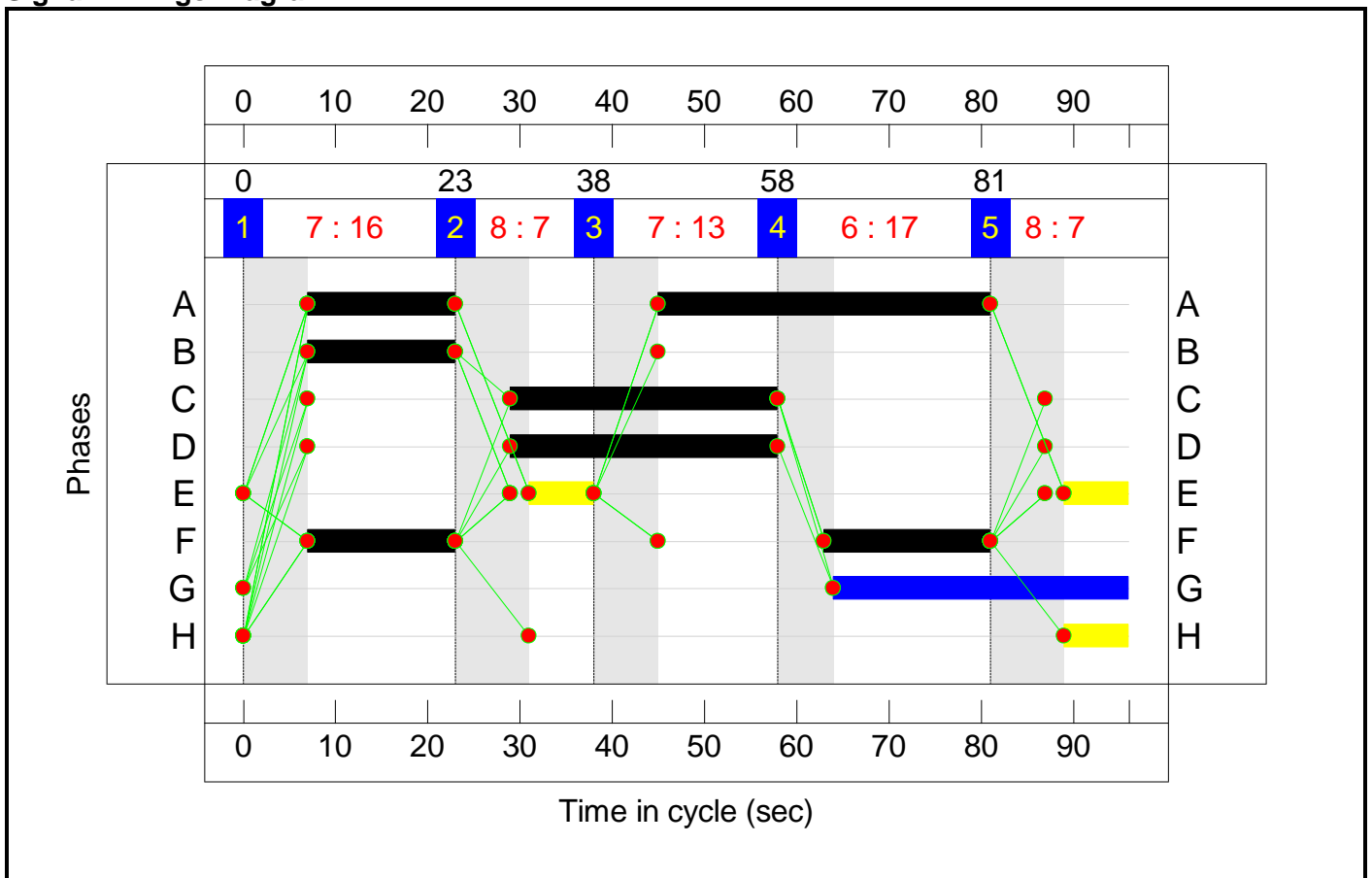
Stage Sequence Diagram



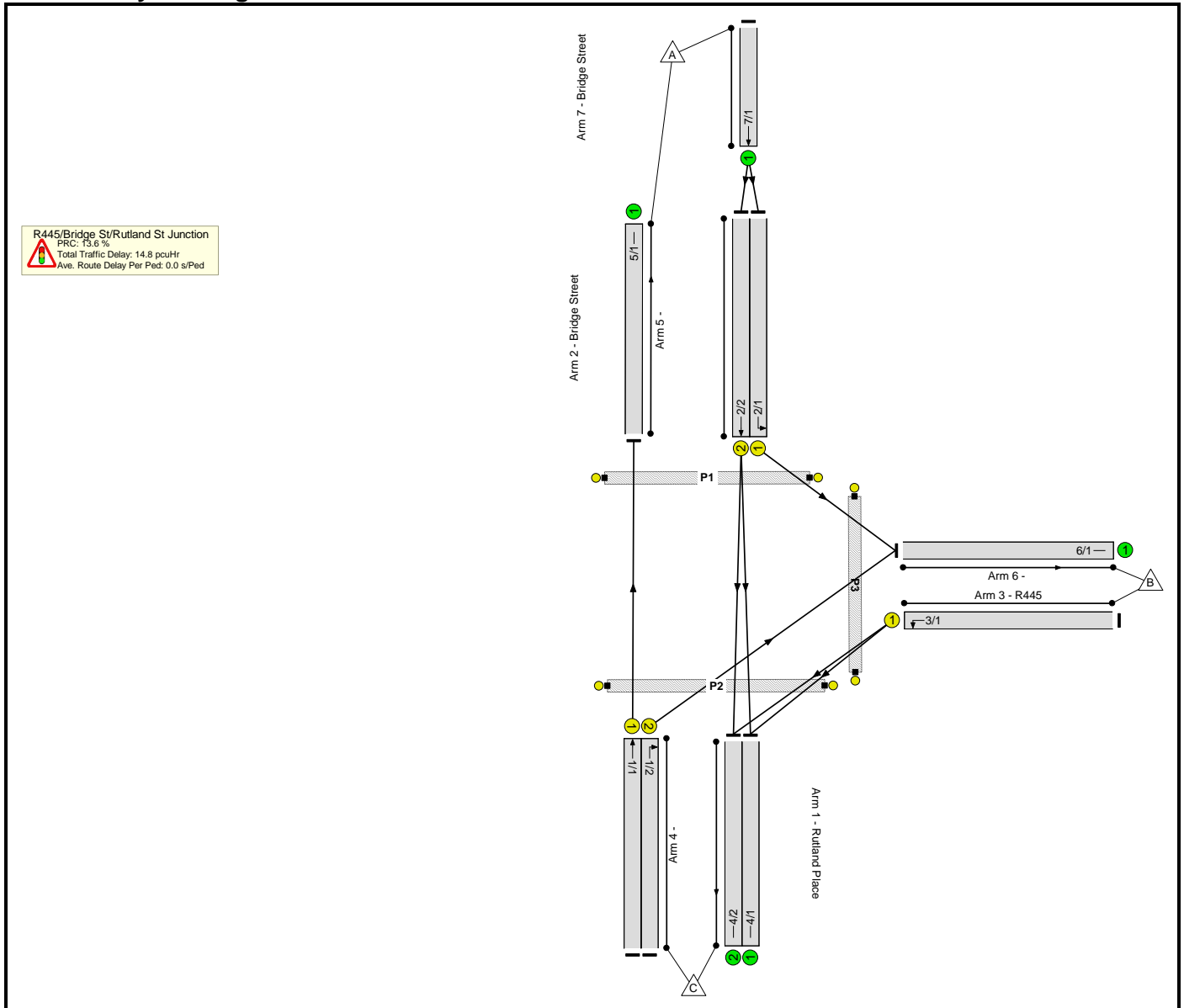
Basic Results Summary Rev1



Signal Timings Diagram



Network Layout Diagram



Traffic Flows, Desired

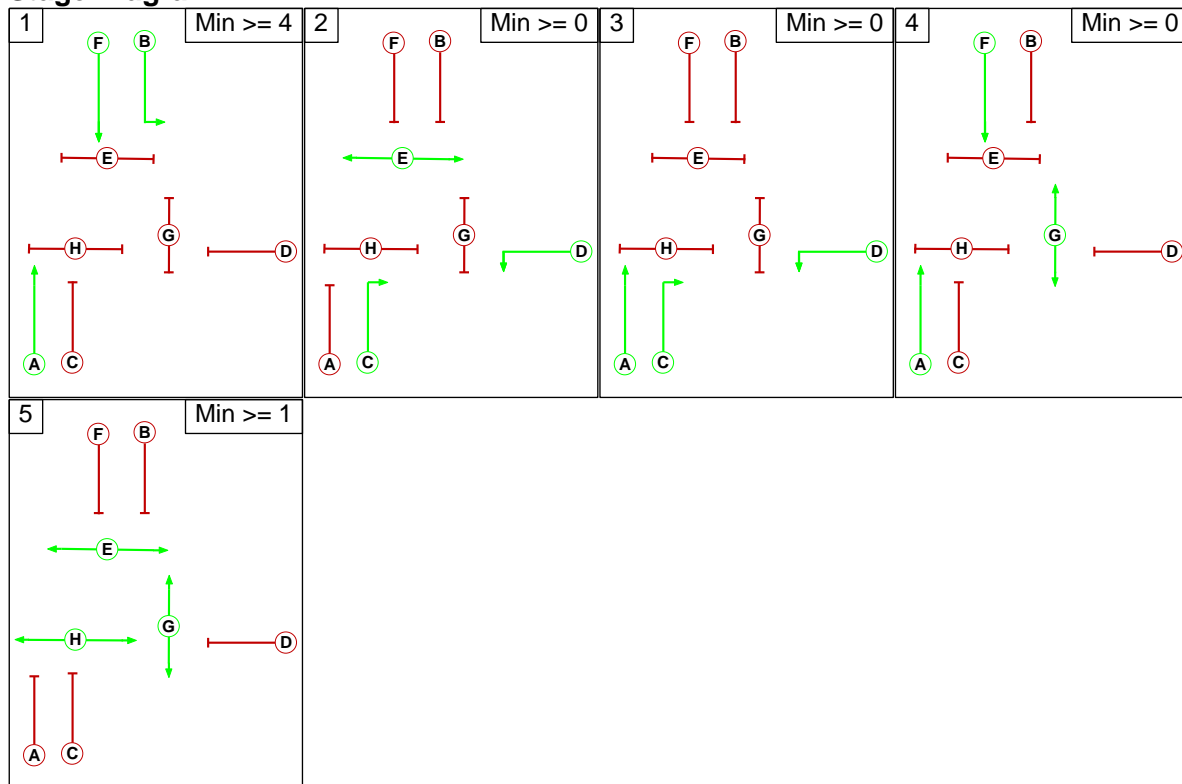
Desired Flow :

Origin	Destination				Tot.
	A	B	C	Tot.	
A	0	76	560	636	
B	0	0	367	367	
C	354	425	0	779	
Tot.	354	501	927	1782	

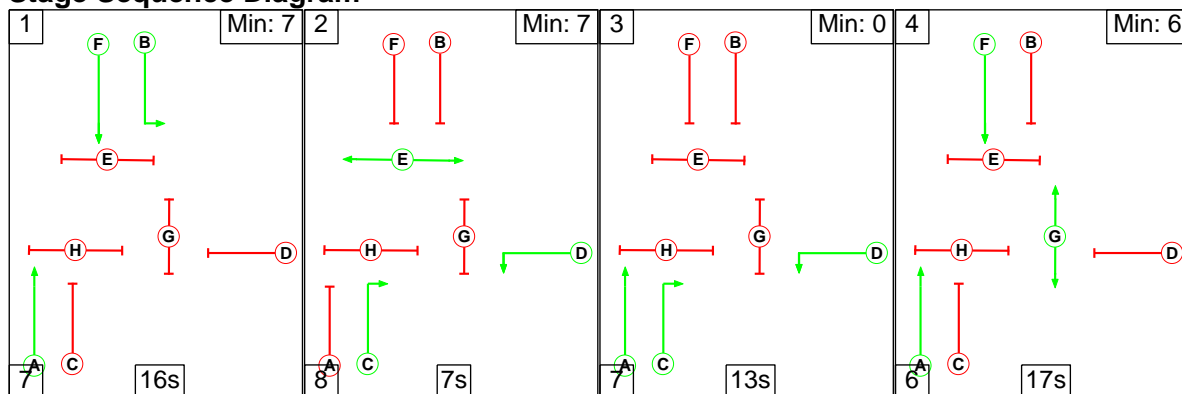
Phases in Stage

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

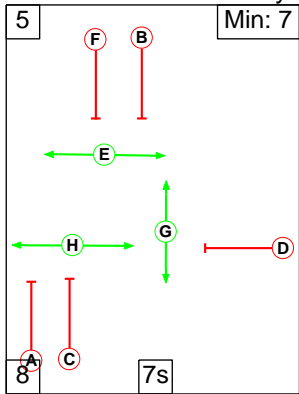
Stage Diagram



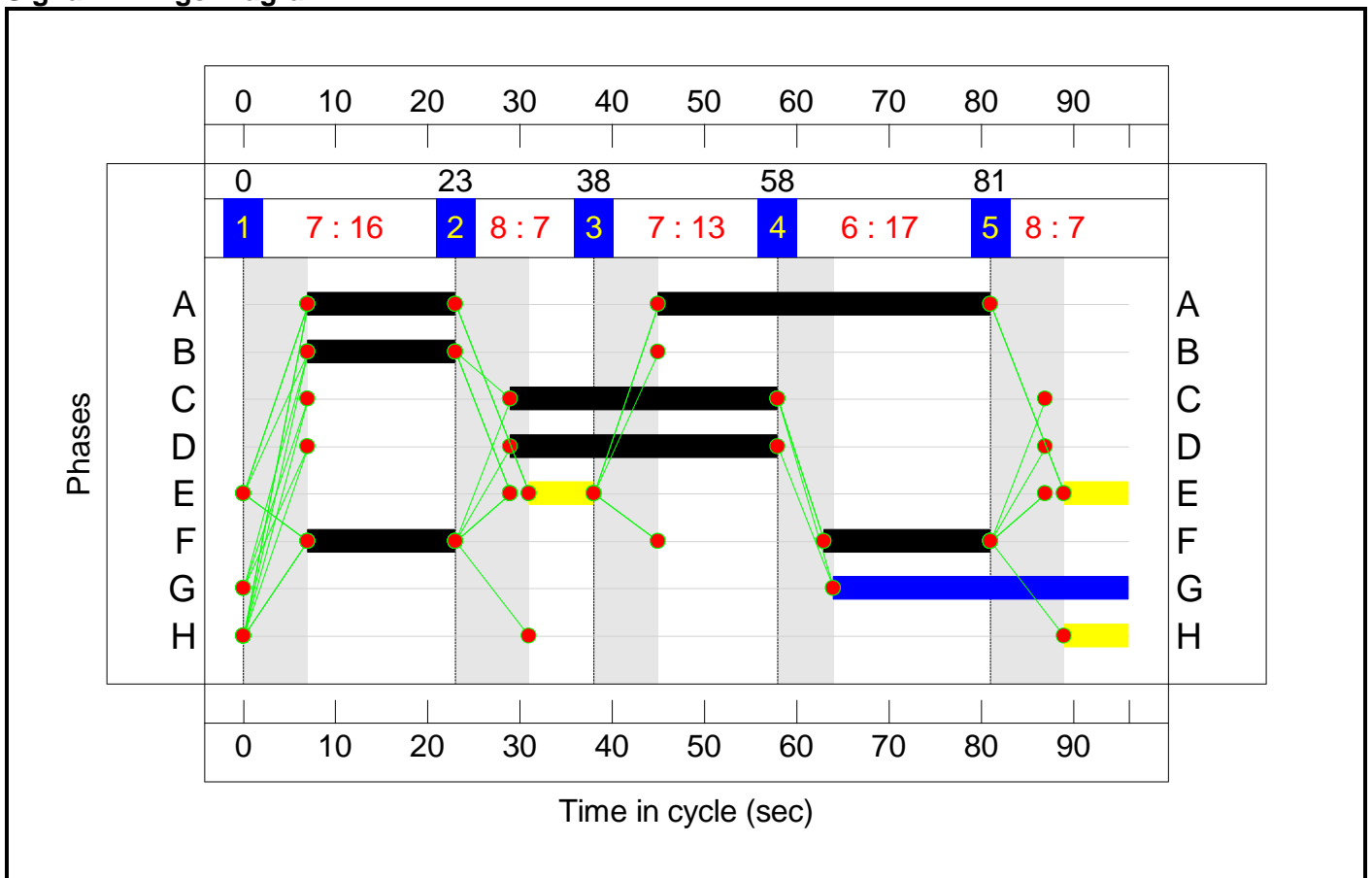
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram

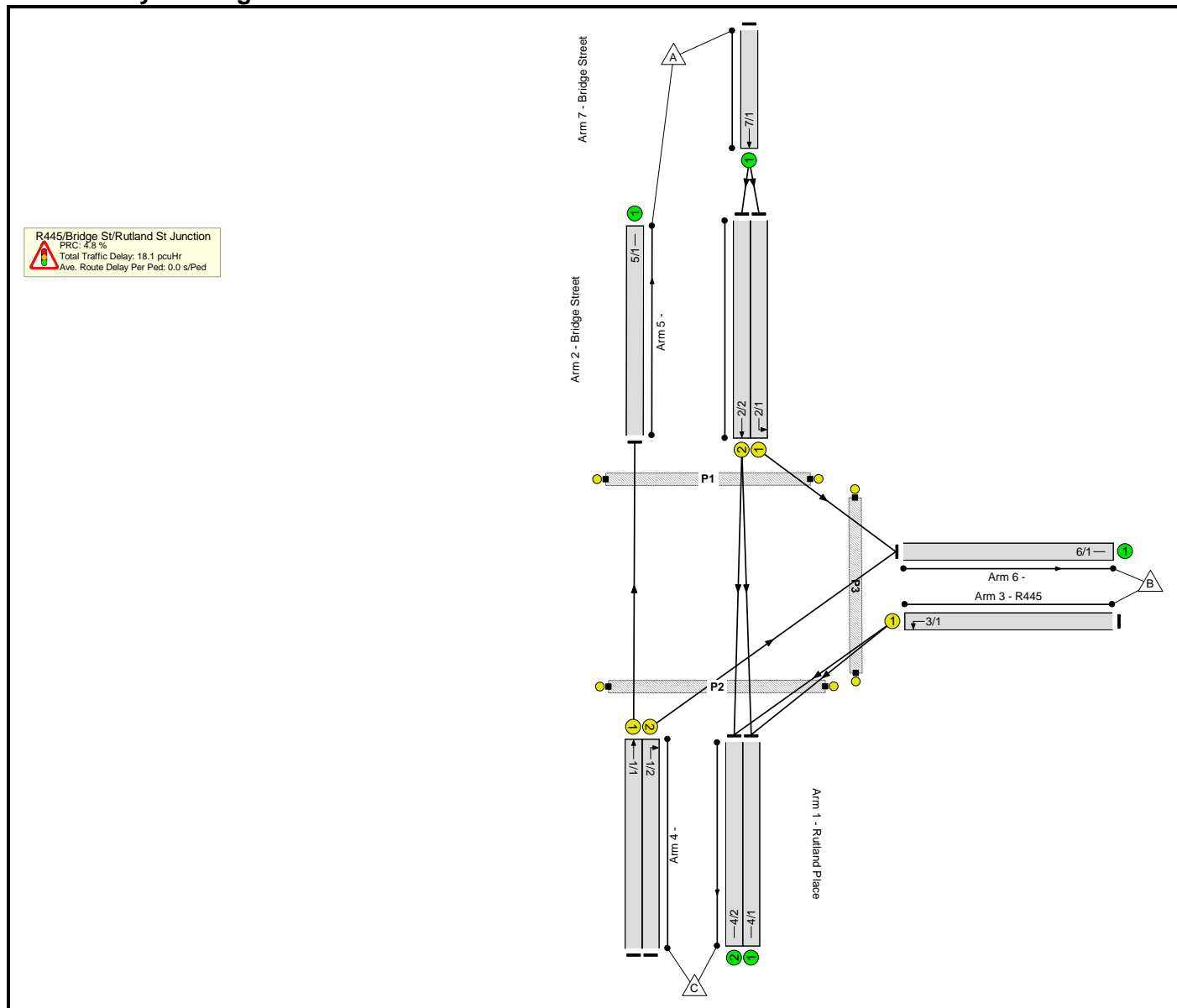


Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	79.2%	0	0	0	14.8	-	-
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	79.2%	0	0	0	14.8	-	-
1/1	Rutland Place Ahead	U	A		2	52	-	354	1915	1077	32.9%	-	-	-	0.8	8.1	2.7
1/2	Rutland Place Right	U	C		1	29	-	425	1760	550	77.3%	-	-	-	5.2	43.9	11.9
2/1	Bridge Street Left	U	B		1	16	-	76	1666	295	25.8%	-	-	-	0.9	42.3	1.9
2/2	Bridge Street Ahead	U	F		2	34	-	560	1885	707	79.2%	-	-	-	4.1	26.5	10.4
3/1	R445 Left	U	D		1	29	-	367	1793	560	65.5%	-	-	-	3.8	37.7	9.3
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	G		1	32	-	0	-	0	0.0%	-	-	-	-	-	-
C1				PRC for Signalled Lanes (%):		13.6		Total Delay for Signalled Lanes (pcuHr):				14.85		Cycle Time (s):		96	
				PRC Over All Lanes (%):		13.6		Total Delay Over All Lanes(pcuHr):				14.85					

Network Layout Diagram



Traffic Flows, Desired

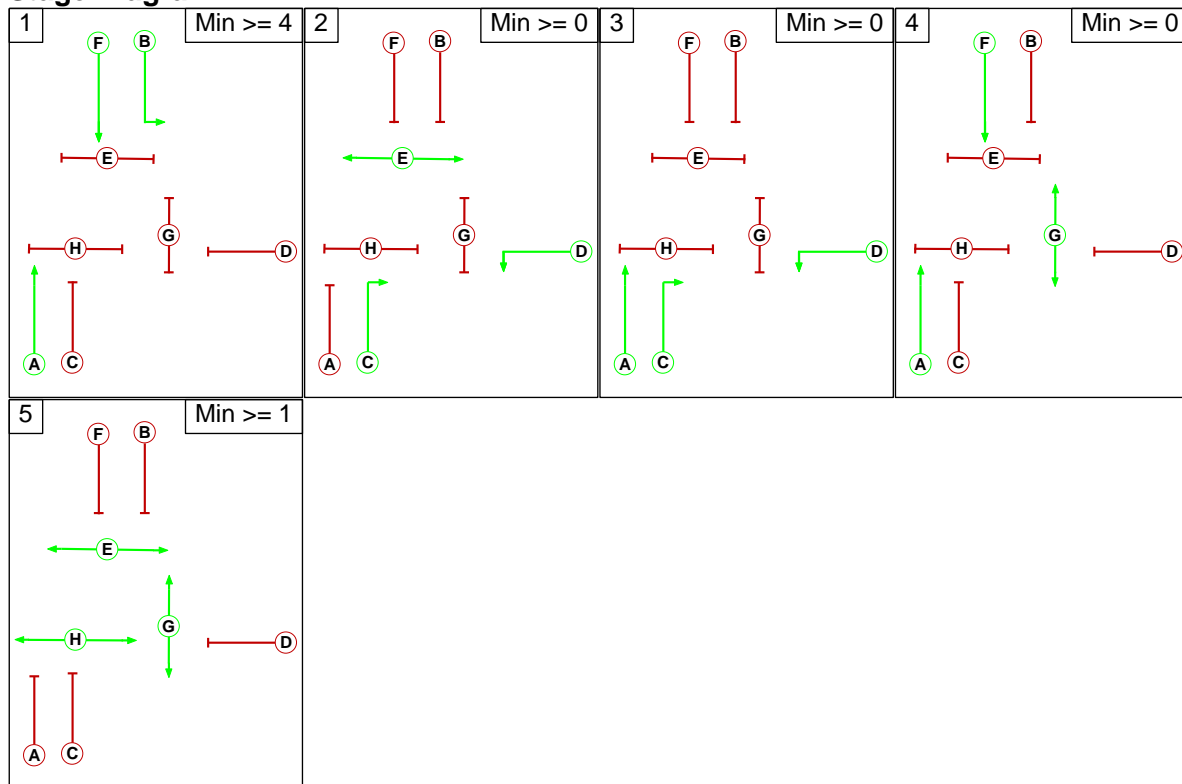
Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	83	607	690
	B	0	0	398	398
	C	387	461	0	848
	Tot.	387	544	1005	1936

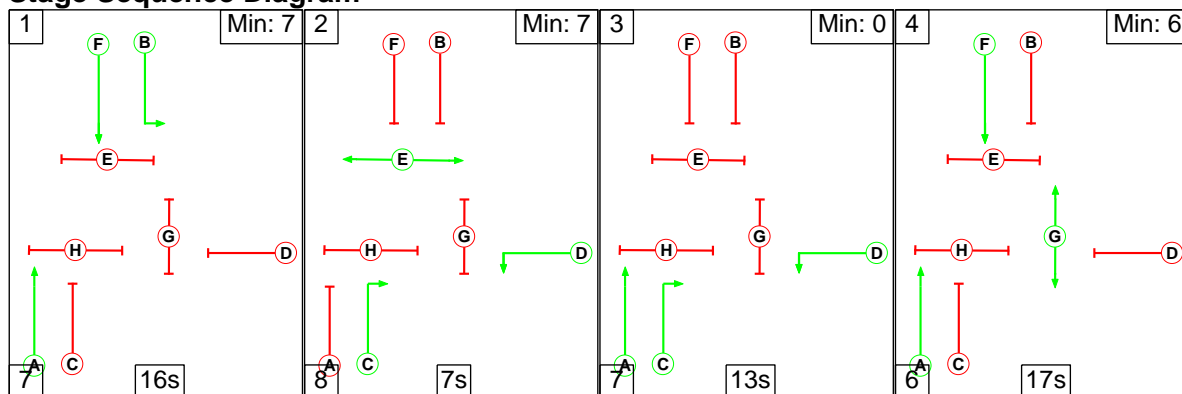
Phases in Stage

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

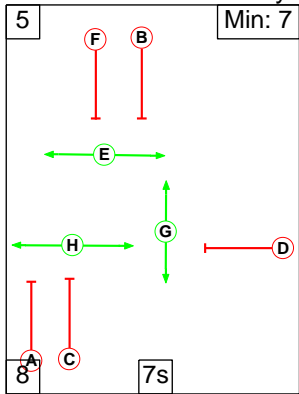
Stage Diagram



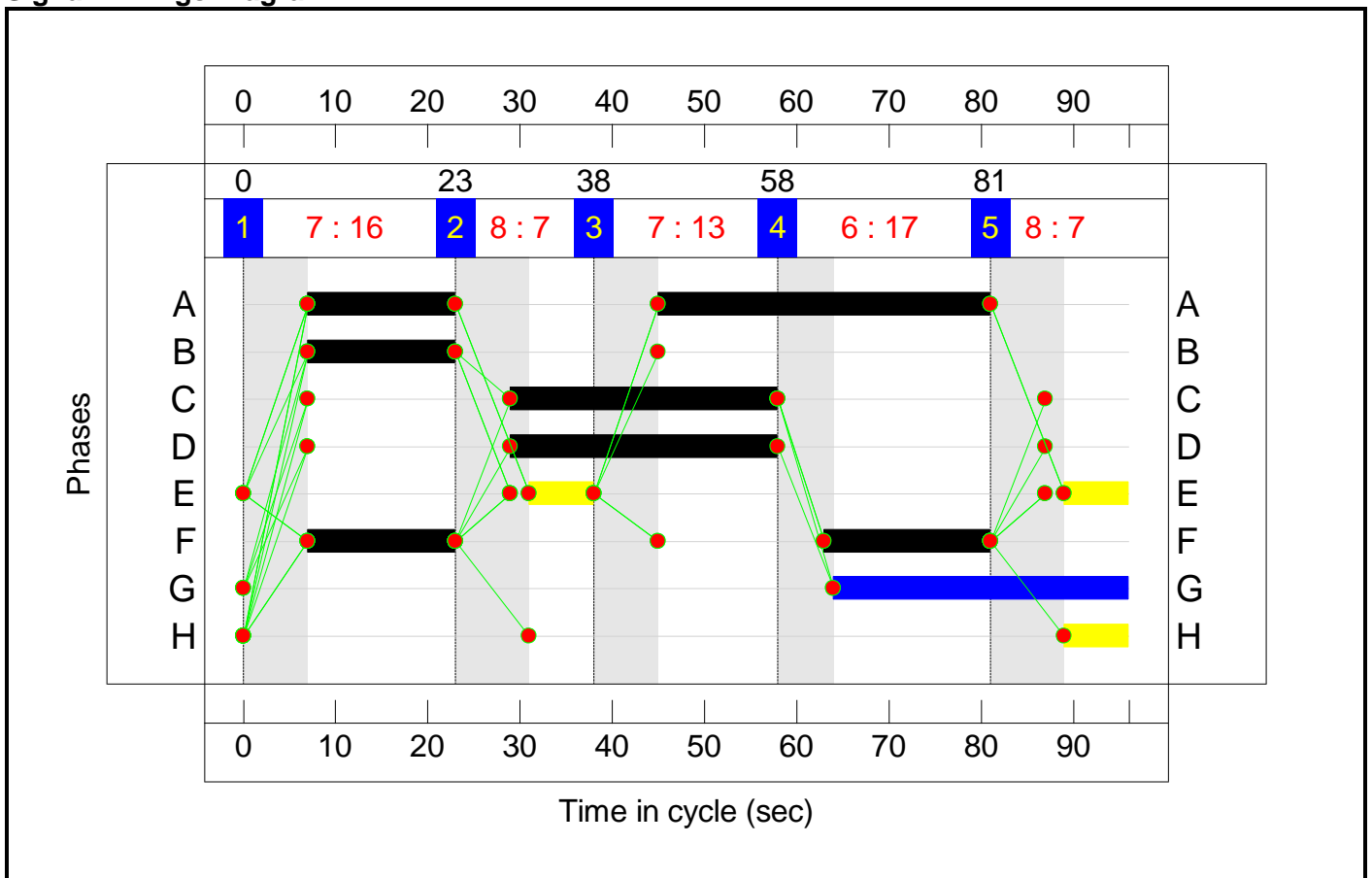
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram

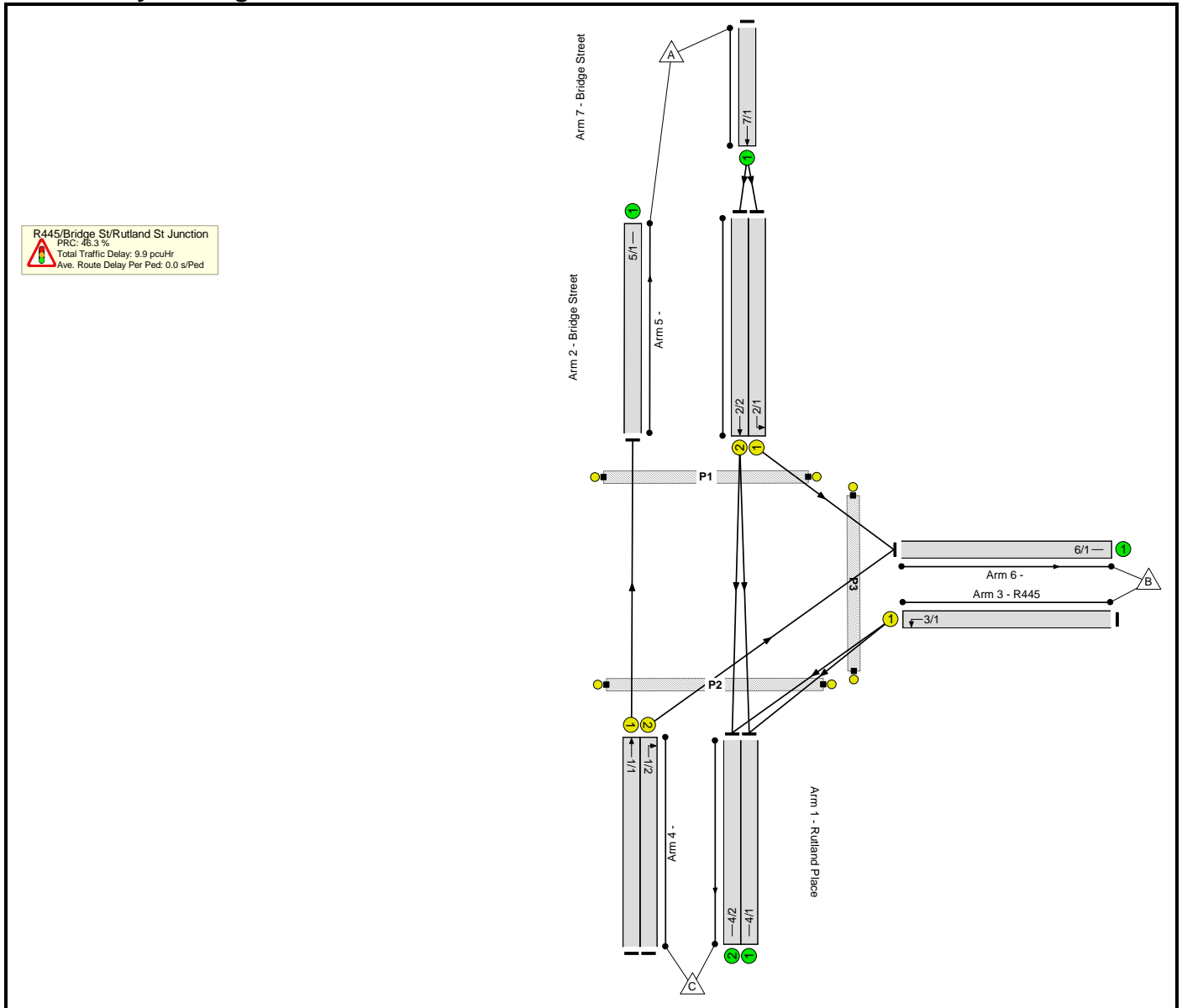


Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	85.9%	0	0	0	18.1	-	-
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	85.9%	0	0	0	18.1	-	-
1/1	Rutland Place Ahead	U	A		2	52	-	387	1915	1077	35.9%	-	-	-	0.9	8.4	3.1
1/2	Rutland Place Right	U	C		1	29	-	461	1760	550	83.8%	-	-	-	6.4	49.9	13.9
2/1	Bridge Street Left	U	B		1	16	-	83	1666	295	28.1%	-	-	-	1.0	42.7	2.1
2/2	Bridge Street Ahead	U	F		2	34	-	607	1885	707	85.9%	-	-	-	5.4	32.1	12.5
3/1	R445 Left	U	D		1	29	-	398	1793	560	71.0%	-	-	-	4.4	40.1	10.5
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	G		1	32	-	0	-	0	0.0%	-	-	-	-	-	-
C1				PRC for Signalled Lanes (%):	4.8	PRC Over All Lanes (%):		4.8	Total Delay for Signalled Lanes (pcuHr):		18.12	Total Delay Over All Lanes(pcuHr):		18.12	Cycle Time (s):		96

Network Layout Diagram



Traffic Flows, Desired

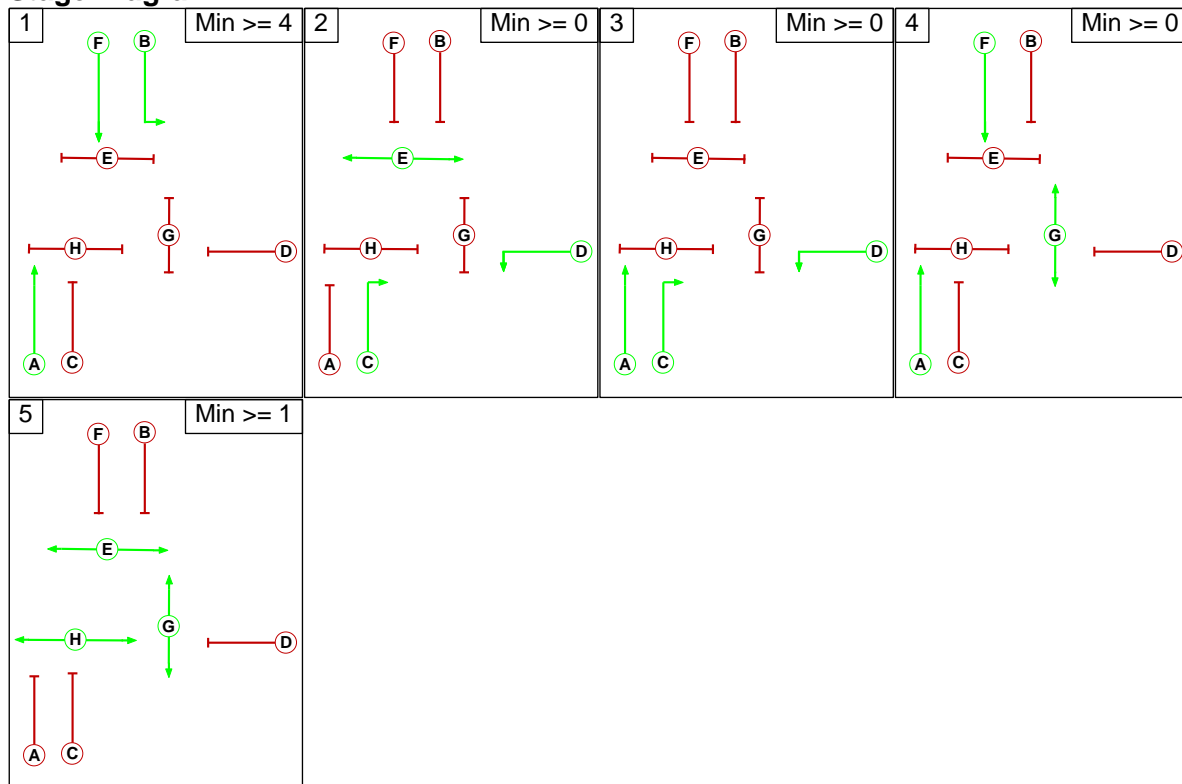
Desired Flow :

Origin	Destination				Tot.
	A	B	C	Tot.	
A	0	78	328	406	
B	0	0	324	324	
C	361	361	0	722	
Tot.	361	439	652	1452	

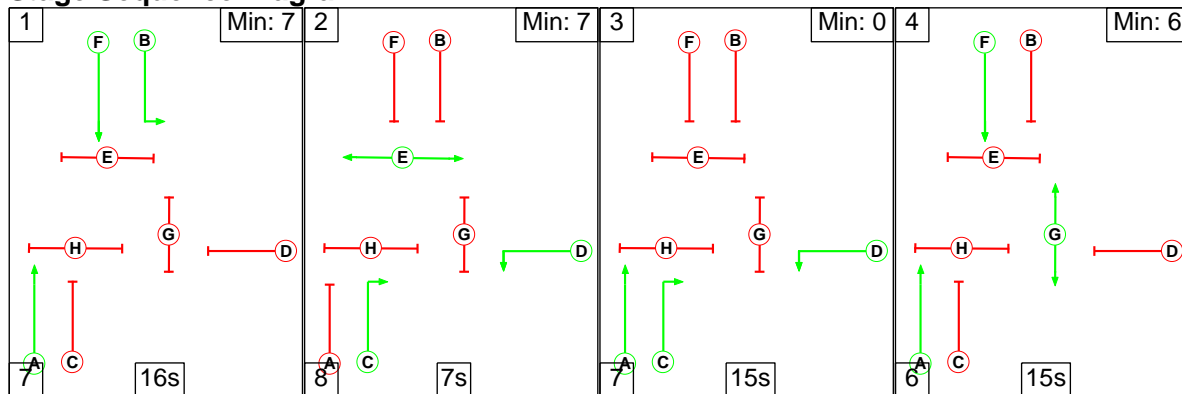
Phases in Stage

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

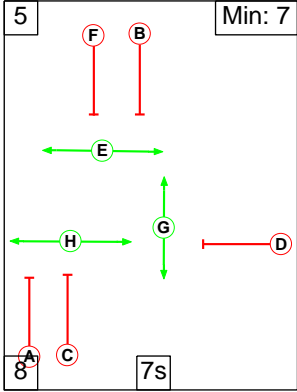
Stage Diagram



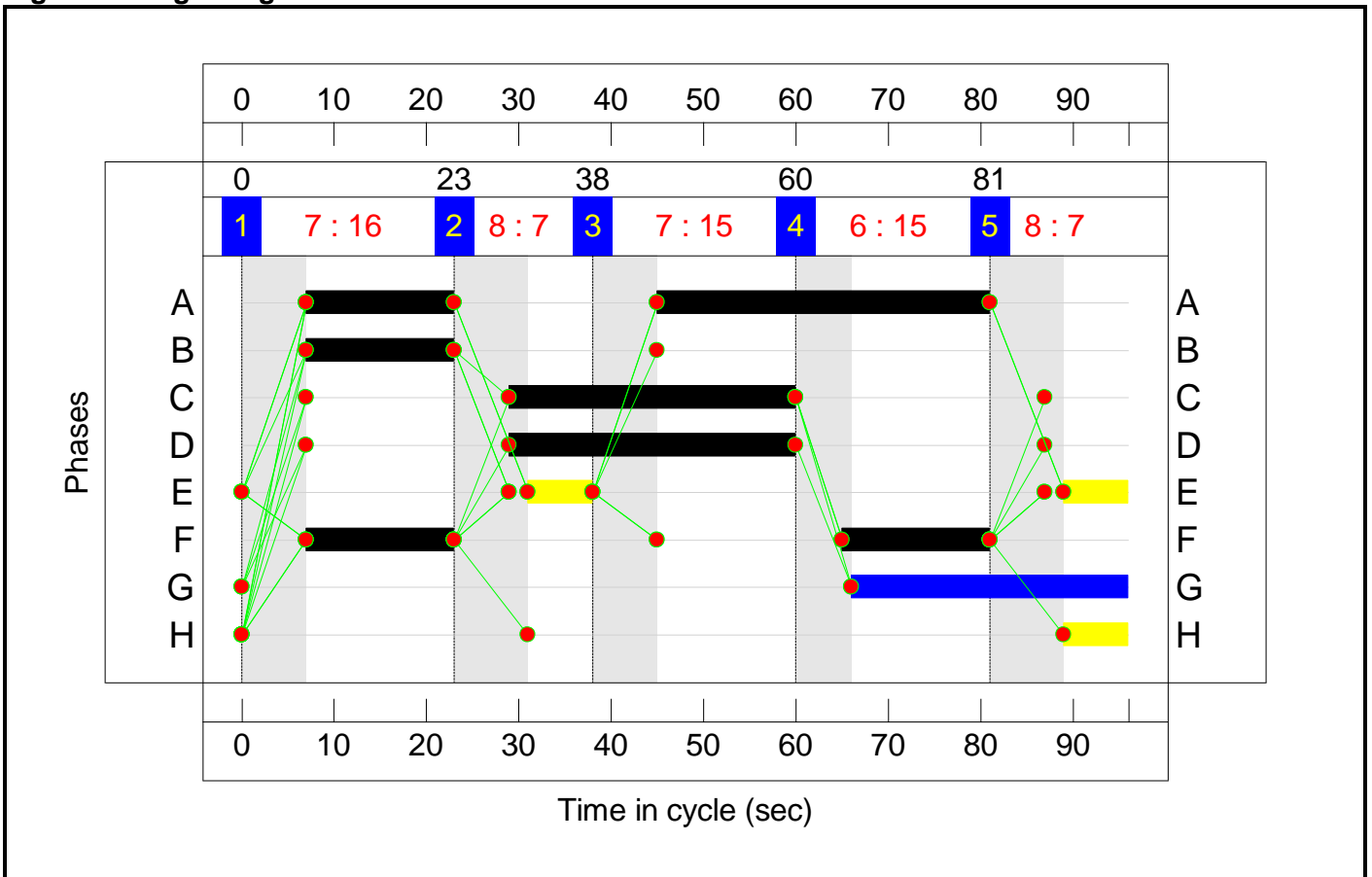
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram

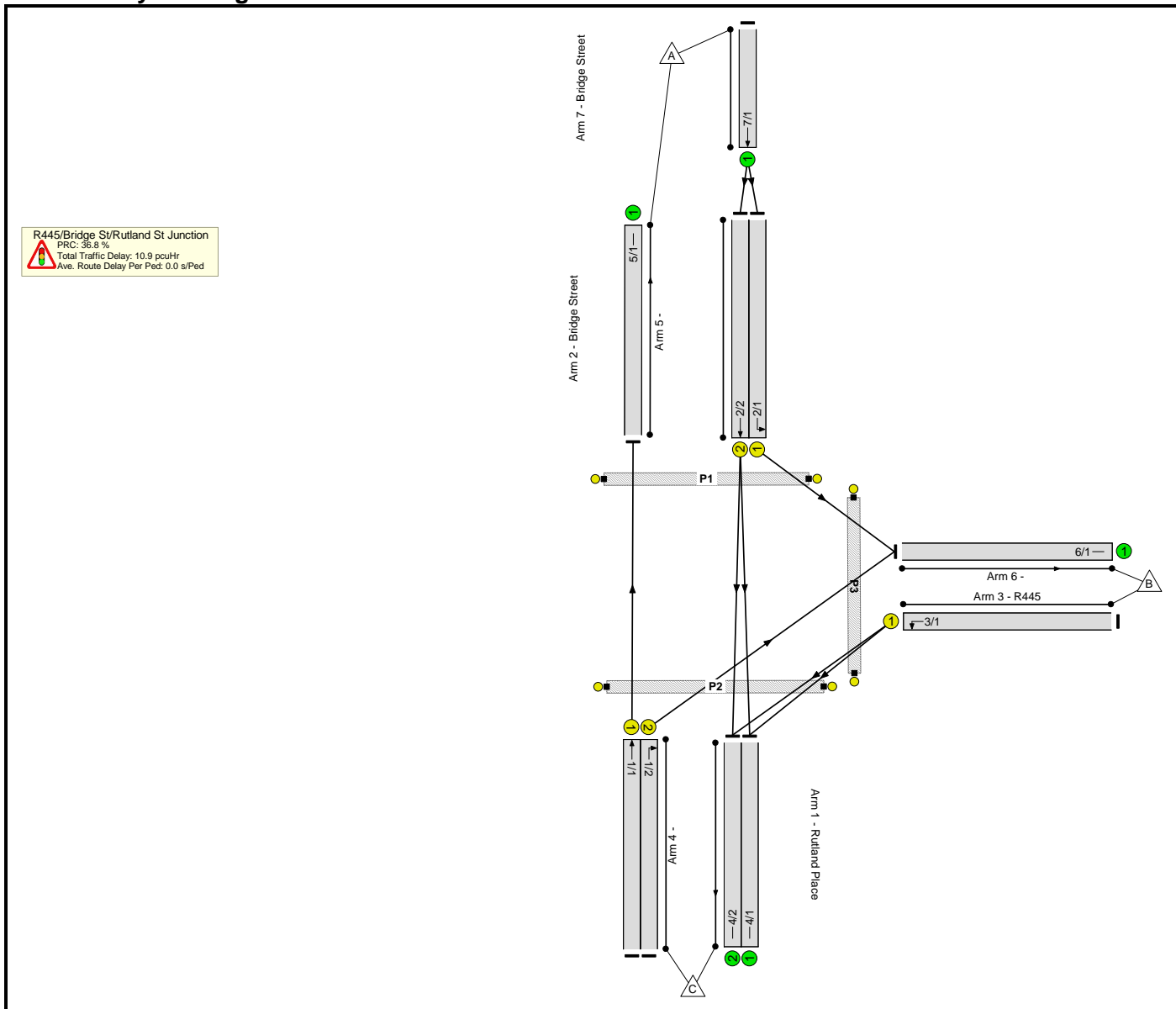


Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	61.5%	0	0	0	9.9	-	-
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	61.5%	0	0	0	9.9	-	-
1/1	Rutland Place Ahead	U	A		2	52	-	361	1915	1077	33.5%	-	-	-	0.8	8.2	2.8
1/2	Rutland Place Right	U	C		1	31	-	361	1760	587	61.5%	-	-	-	3.5	34.8	8.8
2/1	Bridge Street Left	U	B		1	16	-	78	1666	295	26.4%	-	-	-	0.9	42.4	2.0
2/2	Bridge Street Ahead	U	F		2	32	-	328	1885	668	49.1%	-	-	-	1.7	18.7	4.9
3/1	R445 Left	U	D		1	31	-	324	1793	598	54.2%	-	-	-	2.9	32.6	7.6
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	G		1	30	-	0	-	0	0.0%	-	-	-	-	-	-
C1					PRC for Signalled Lanes (%):		46.3	Total Delay for Signalled Lanes (pcuHr):				9.86	Cycle Time (s):		96		
					PRC Over All Lanes (%):		46.3	Total Delay Over All Lanes(pcuHr):				9.86					

Network Layout Diagram



Traffic Flows, Desired

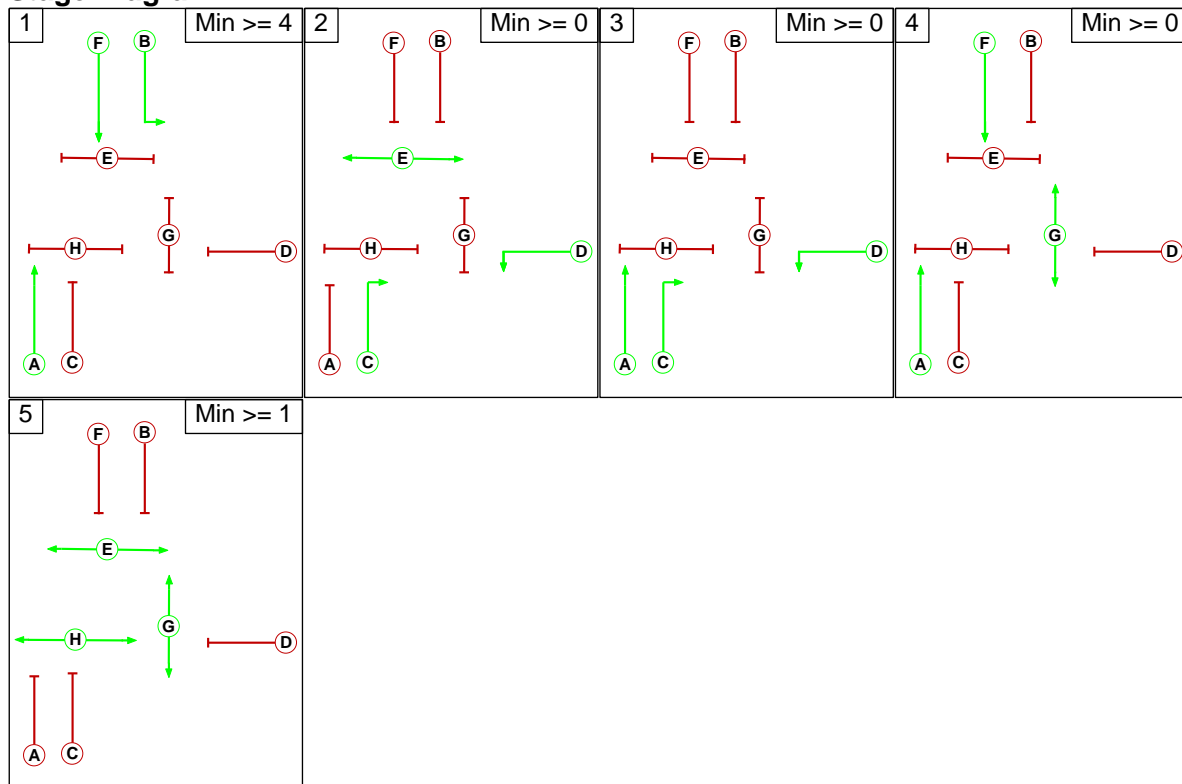
Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	83	351	434
	B	0	0	347	347
	C	386	386	0	772
	Tot.	386	469	698	1553

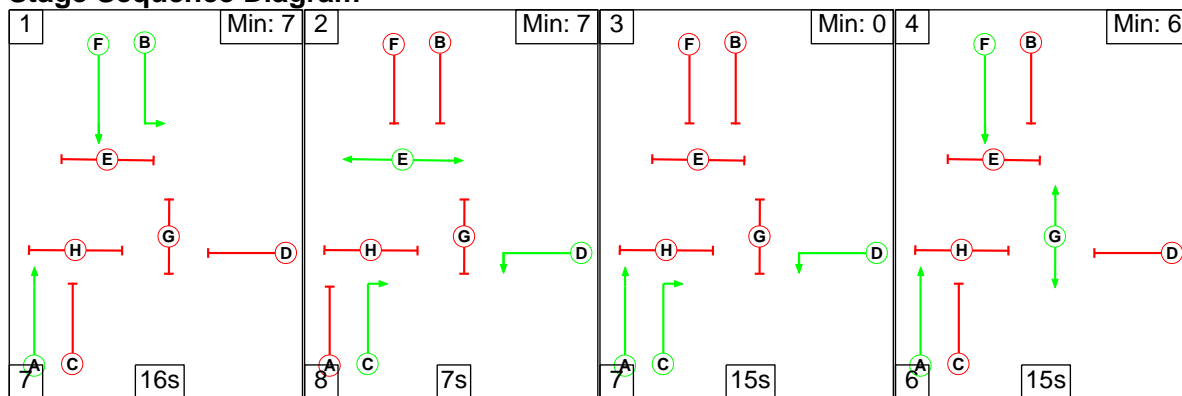
Phases in Stage

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

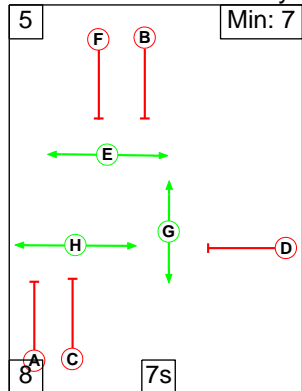
Stage Diagram



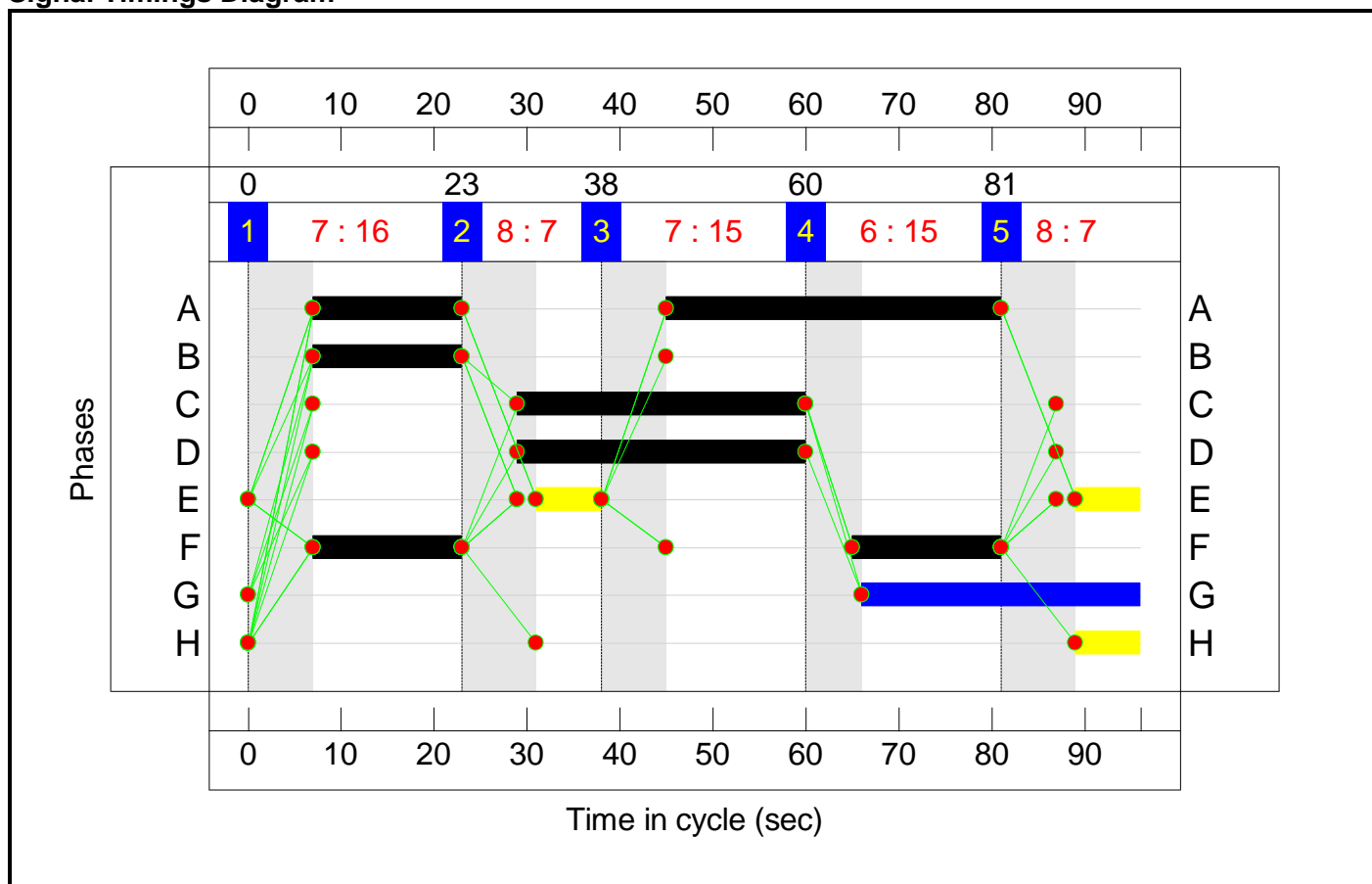
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram

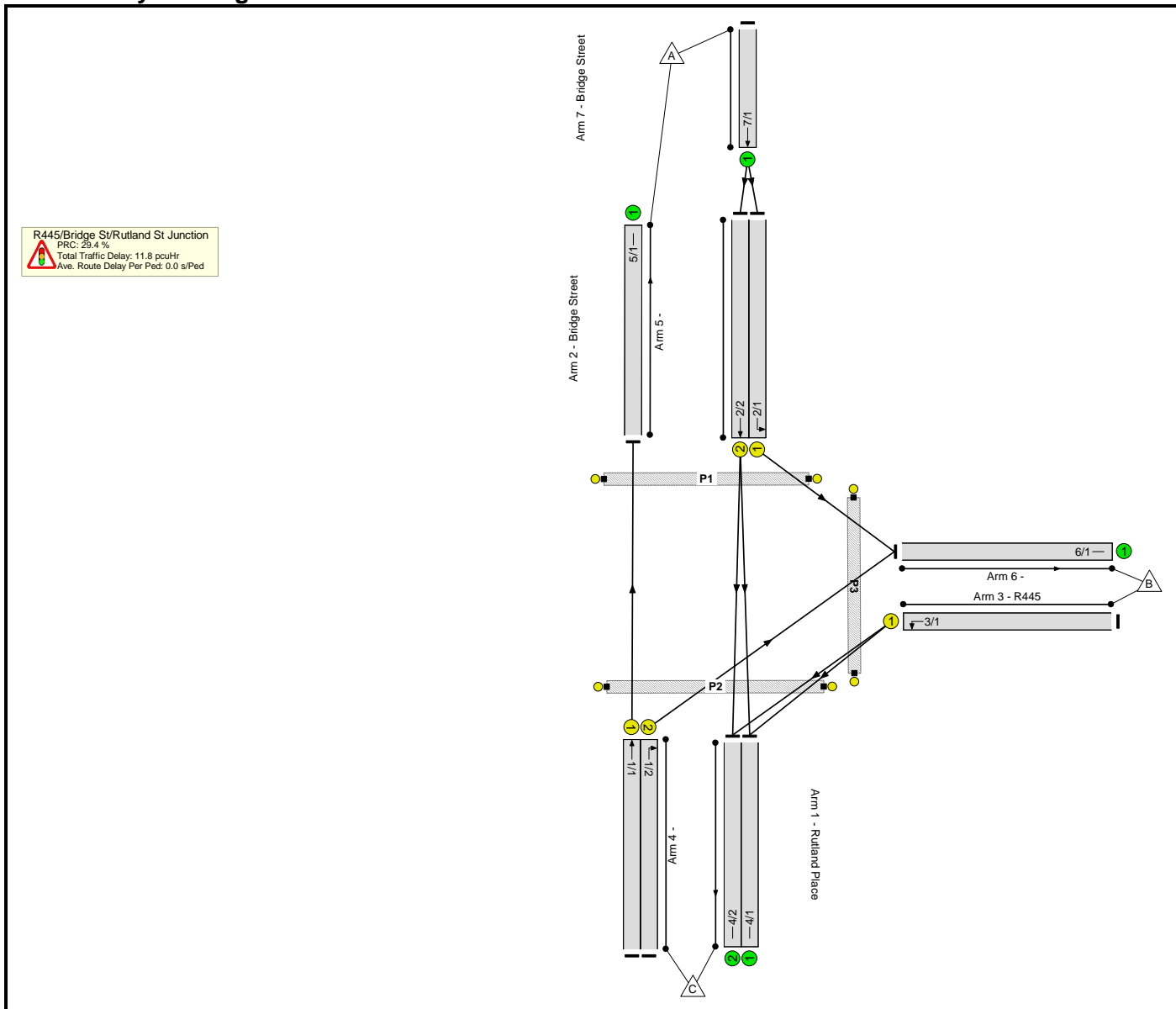


Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	65.8%	0	0	0	10.9	-	-	
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	65.8%	0	0	0	10.9	-	-	
1/1	Rutland Place Ahead	U	A		2	52	-	386	1915	1077	35.8%	-	-	-	0.9	8.4	3.1	
1/2	Rutland Place Right	U	C		1	31	-	386	1760	587	65.8%	-	-	-	3.9	36.2	9.6	
2/1	Bridge Street Left	U	B		1	16	-	83	1666	295	28.1%	-	-	-	1.0	42.7	2.1	
2/2	Bridge Street Ahead	U	F		2	32	-	351	1885	668	52.6%	-	-	-	1.9	19.3	5.4	
3/1	R445 Left	U	D		1	31	-	347	1793	598	58.1%	-	-	-	3.2	33.6	8.3	
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	G		1	30	-	0	-	0	0.0%	-	-	-	-	-	-	
C1				PRC for Signalled Lanes (%):	36.8	Total Delay for Signalled Lanes (pcuHr):				10.88	Cycle Time (s):		96					
				PRC Over All Lanes (%):	36.8	Total Delay Over All Lanes(pcuHr):				10.88								

Network Layout Diagram



Traffic Flows, Desired

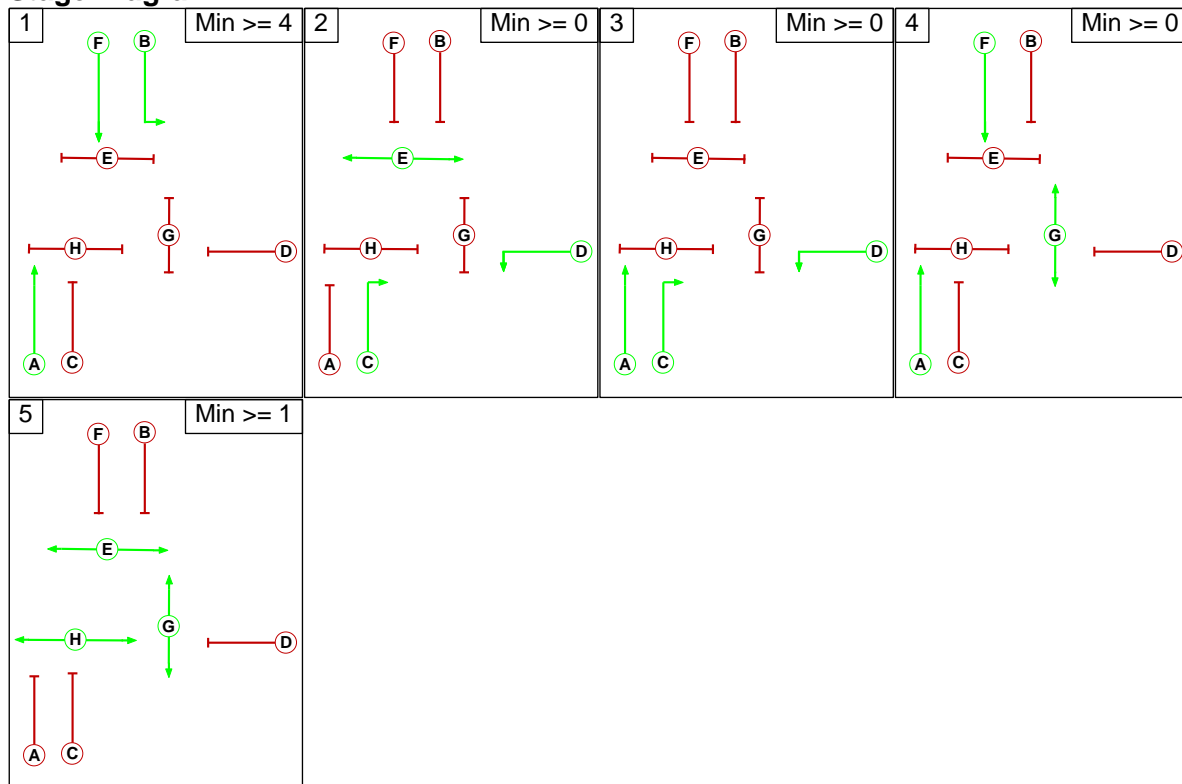
Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	88	371	459
	B	0	0	366	366
	C	408	408	0	816
	Tot.	408	496	737	1641

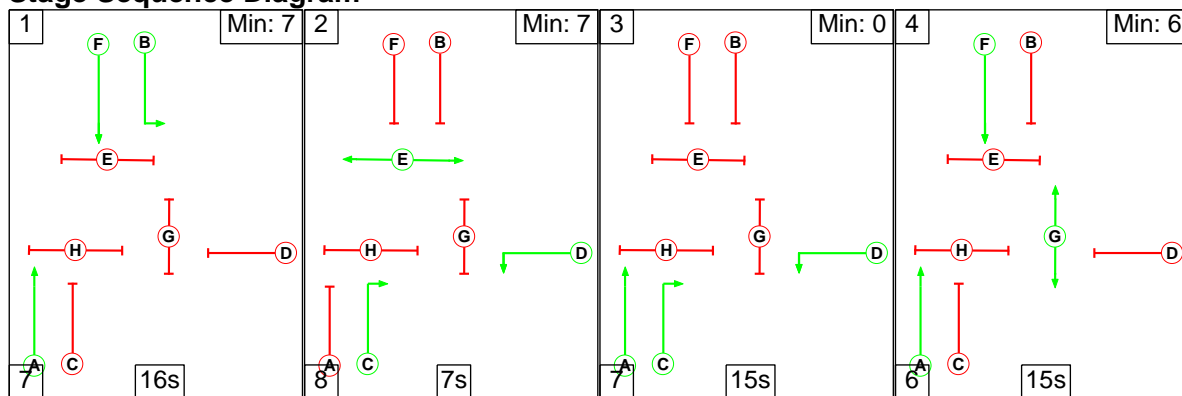
Phases in Stage

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

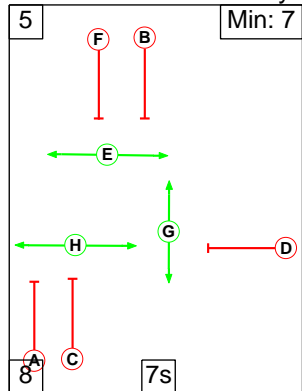
Stage Diagram



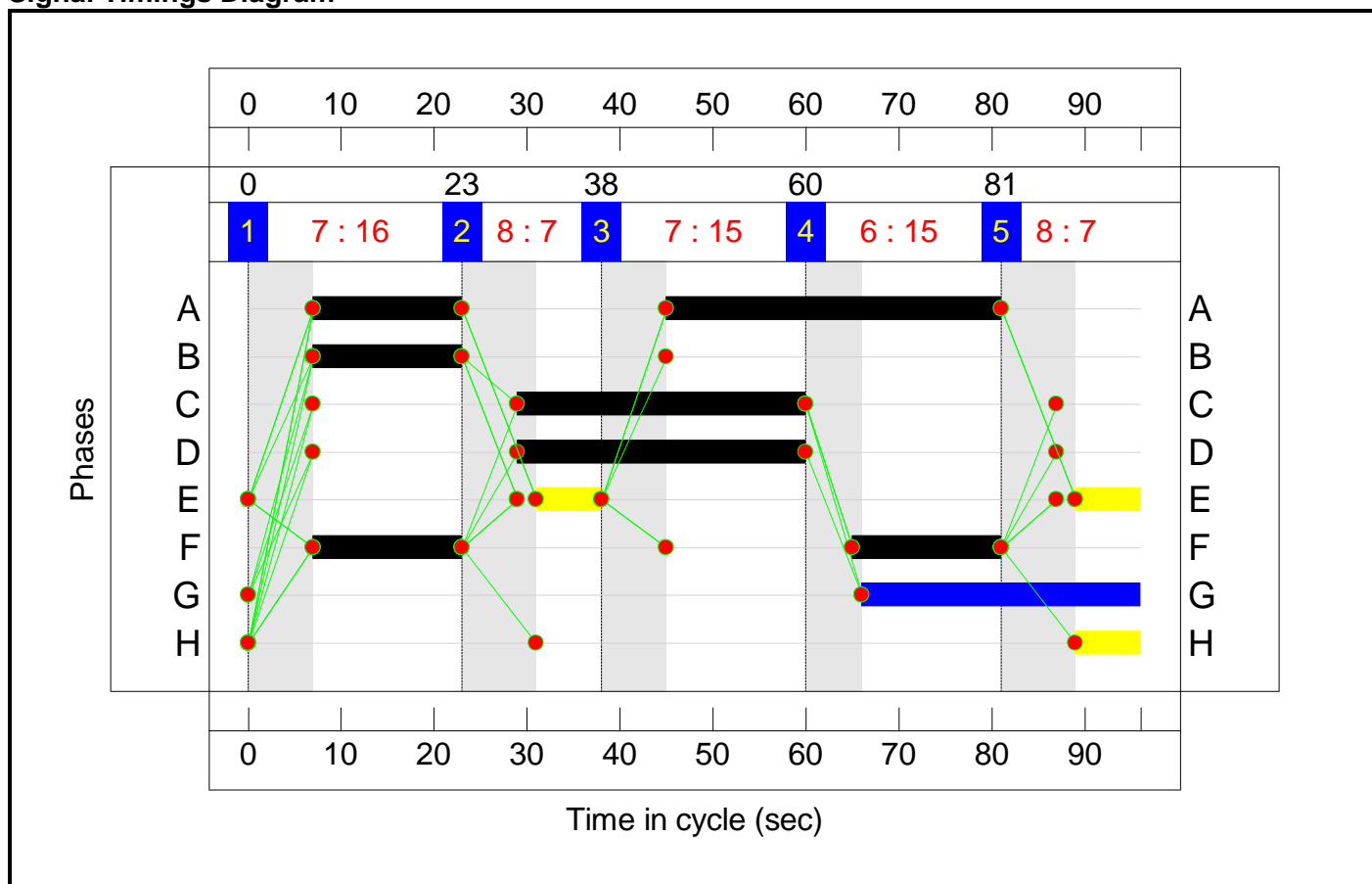
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram

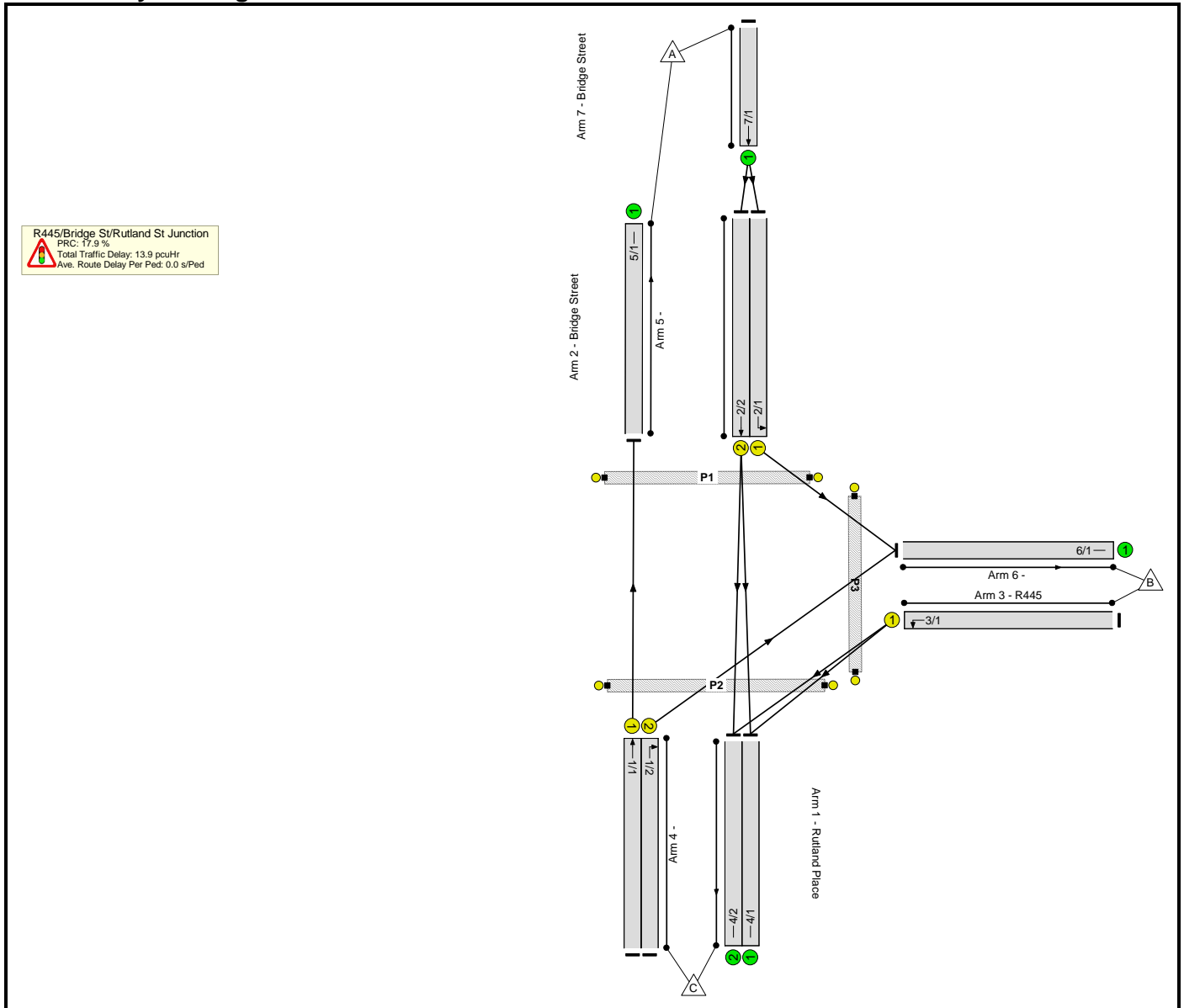


Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	69.5%	0	0	0	11.8	-	-	
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	69.5%	0	0	0	11.8	-	-	
1/1	Rutland Place Ahead	U	A		2	52	-	408	1915	1077	37.9%	-	-	-	1.0	8.5	3.3	
1/2	Rutland Place Right	U	C		1	31	-	408	1760	587	69.5%	-	-	-	4.3	37.7	10.5	
2/1	Bridge Street Left	U	B		1	16	-	88	1666	295	29.8%	-	-	-	1.1	43.0	2.2	
2/2	Bridge Street Ahead	U	F		2	32	-	371	1885	668	55.6%	-	-	-	2.0	19.8	5.9	
3/1	R445 Left	U	D		1	31	-	366	1793	598	61.2%	-	-	-	3.5	34.5	8.9	
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	G		1	30	-	0	-	0	0.0%	-	-	-	-	-	-	
C1							PRC for Signalled Lanes (%):	29.4	Total Delay for Signalled Lanes (pcuHr):			11.85	Cycle Time (s):		96			
							PRC Over All Lanes (%):	29.4	Total Delay Over All Lanes(pcuHr):			11.85						

Network Layout Diagram



Traffic Flows, Desired

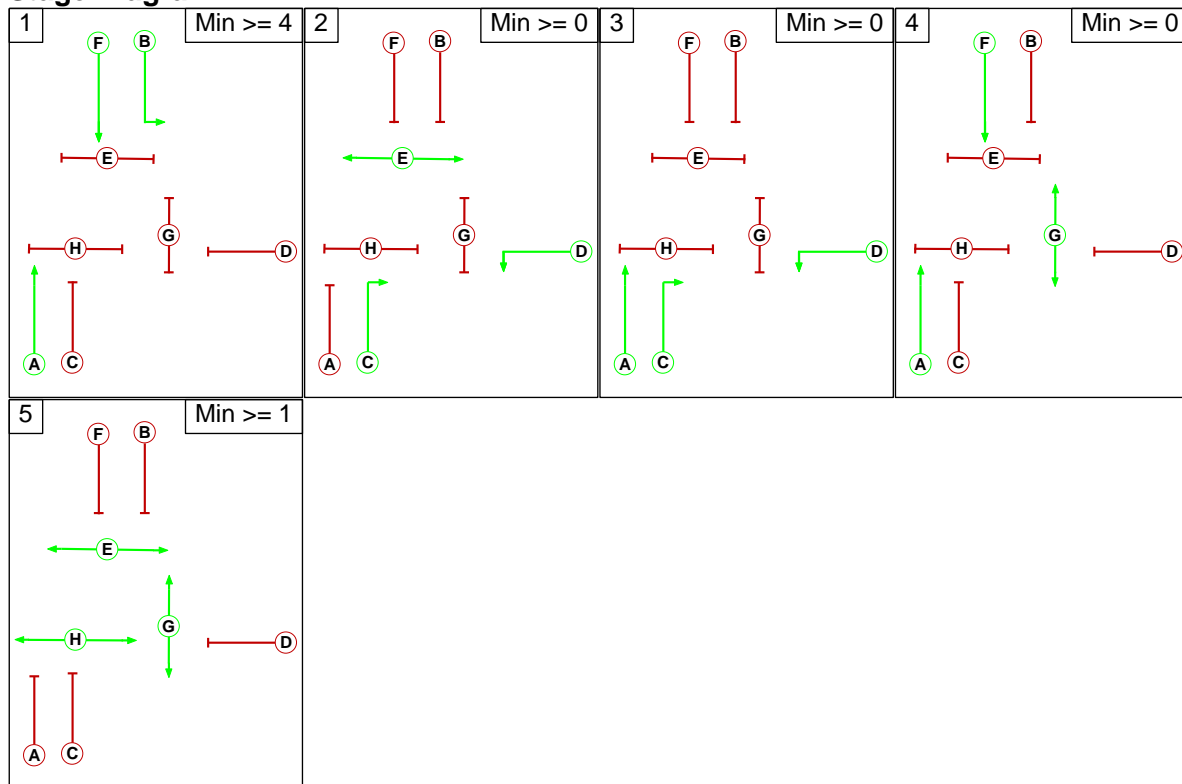
Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	97	407	504
	B	0	0	402	402
	C	448	448	0	896
	Tot.	448	545	809	1802

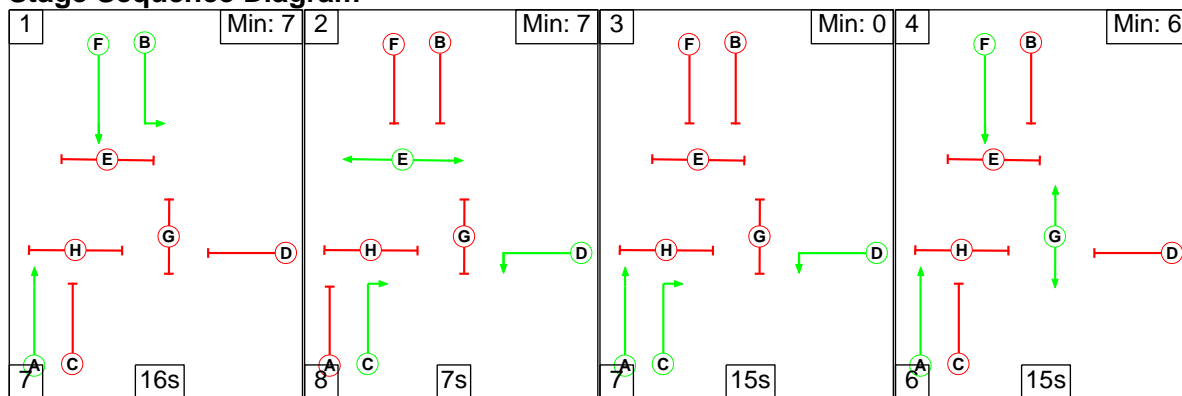
Phases in Stage

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

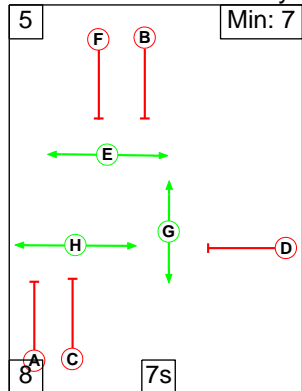
Stage Diagram



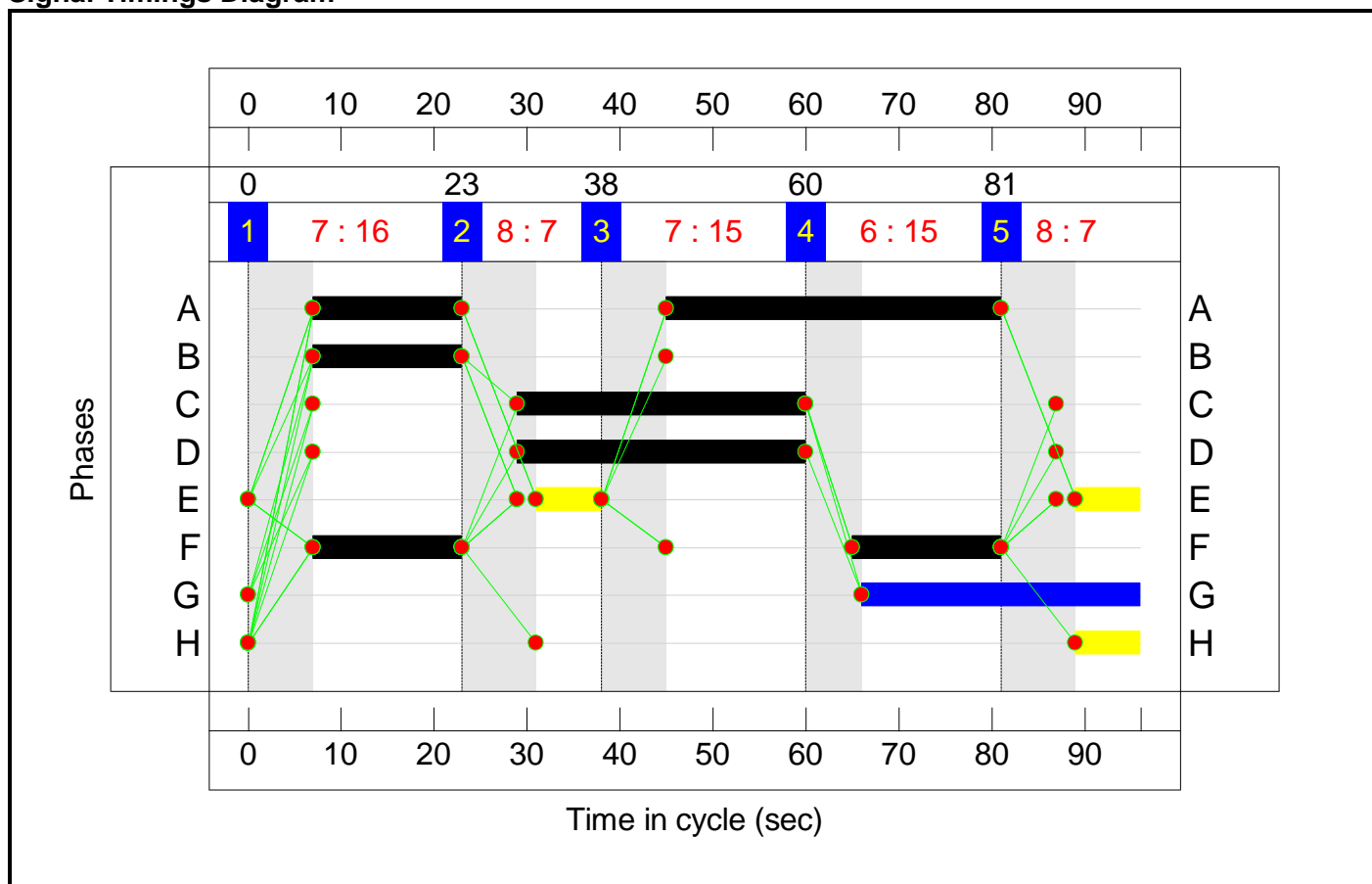
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram

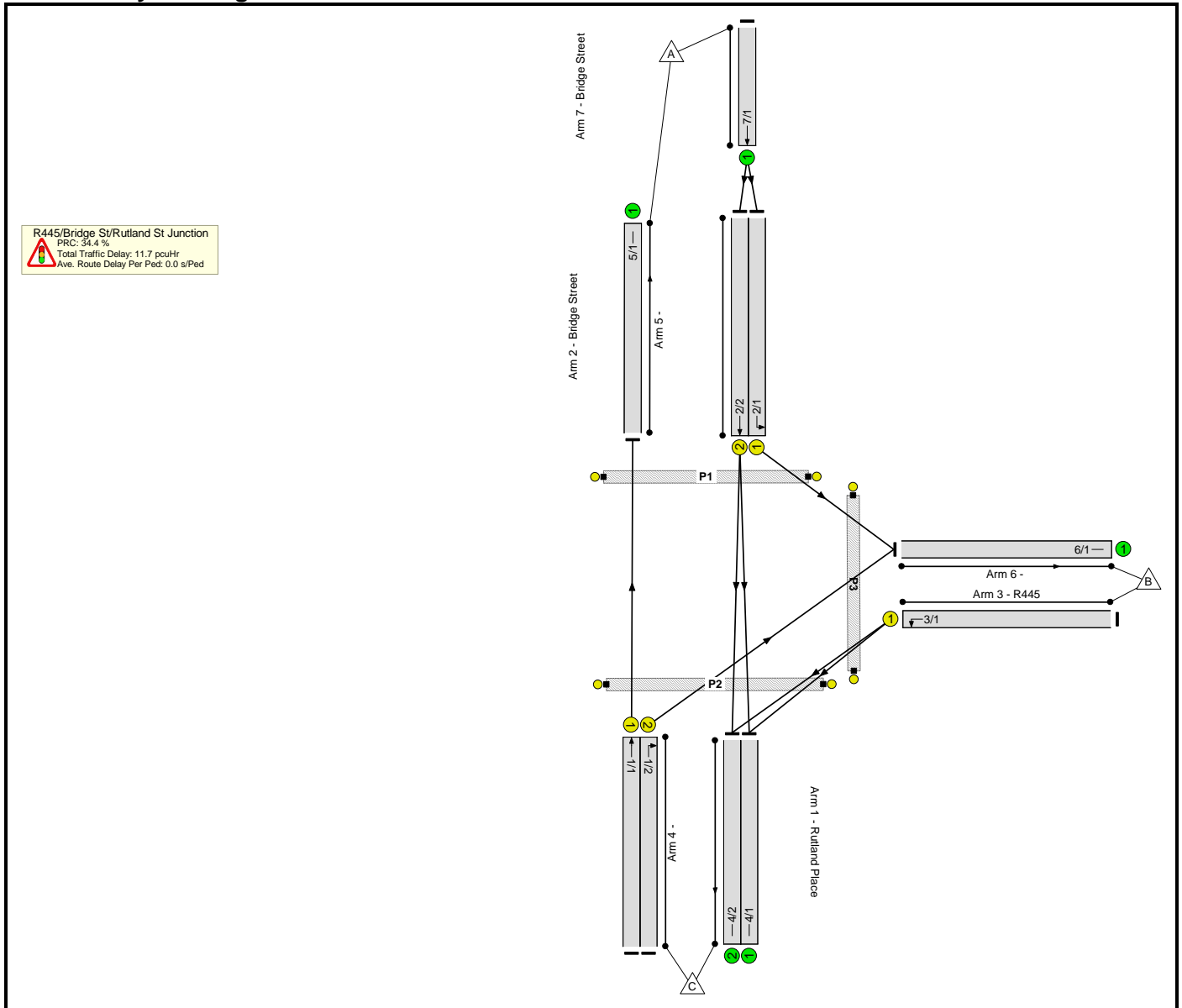


Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	76.4%	0	0	0	13.9	-	-
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	76.4%	0	0	0	13.9	-	-
1/1	Rutland Place Ahead	U	A		2	52	-	448	1915	1077	41.6%	-	-	-	1.1	8.9	3.7
1/2	Rutland Place Right	U	C		1	31	-	448	1760	587	76.4%	-	-	-	5.1	41.3	12.2
2/1	Bridge Street Left	U	B		1	16	-	97	1666	295	32.9%	-	-	-	1.2	43.6	2.5
2/2	Bridge Street Ahead	U	F		2	32	-	407	1885	668	61.0%	-	-	-	2.4	21.0	6.7
3/1	R445 Left	U	D		1	31	-	402	1793	598	67.3%	-	-	-	4.1	36.6	10.2
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	G		1	30	-	0	-	0	0.0%	-	-	-	-	-	-
C1				PRC for Signalled Lanes (%):		17.9		Total Delay for Signalled Lanes (pcuHr):		13.88		Cycle Time (s):		96			
				PRC Over All Lanes (%):		17.9		Total Delay Over All Lanes(pcuHr):		13.88							

Network Layout Diagram



Traffic Flows, Desired

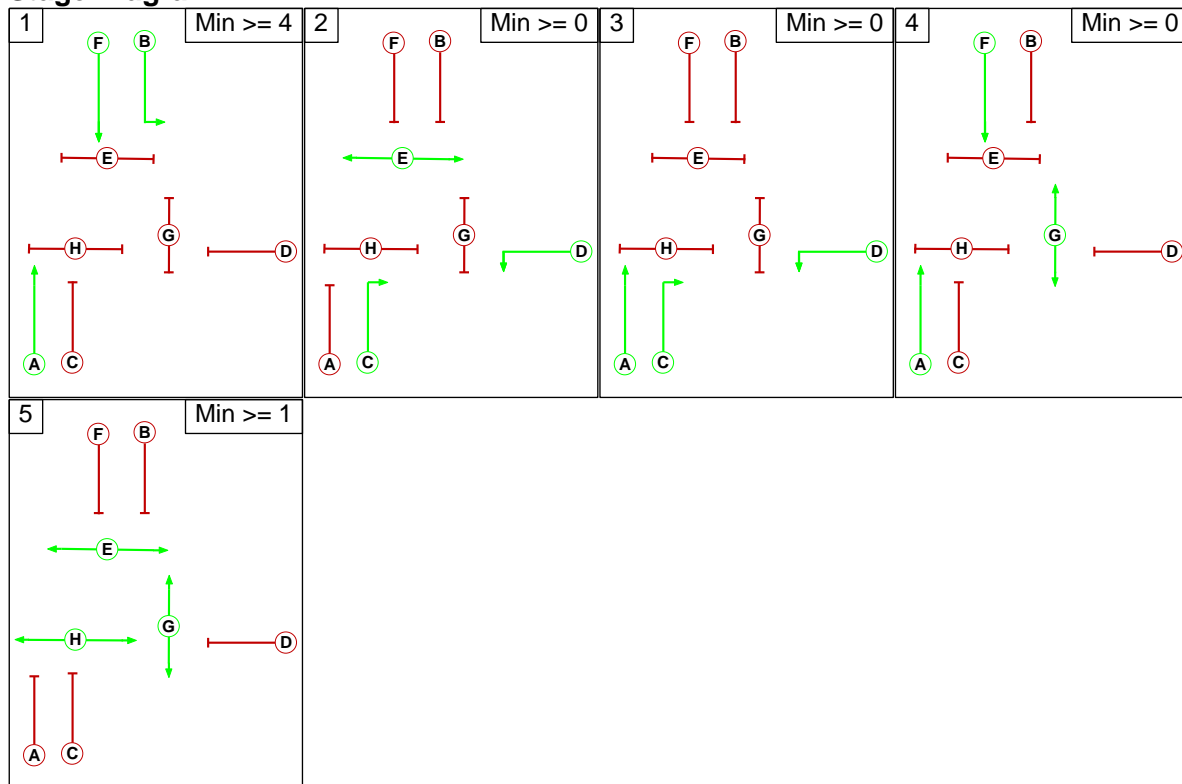
Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	88	364	452
	B	0	0	381	381
	C	404	393	0	797
	Tot.	404	481	745	1630

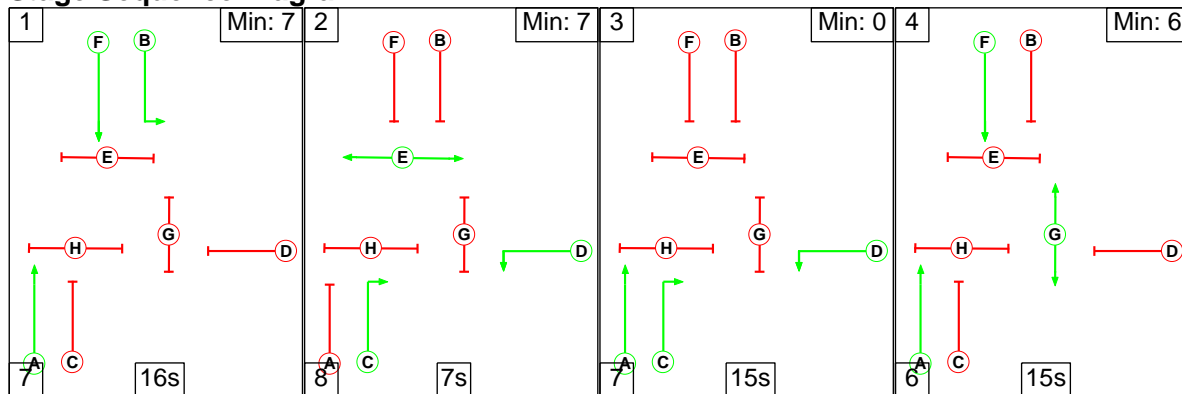
Phases in Stage

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

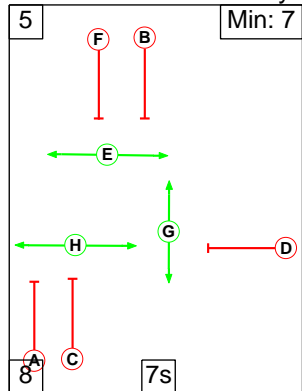
Stage Diagram



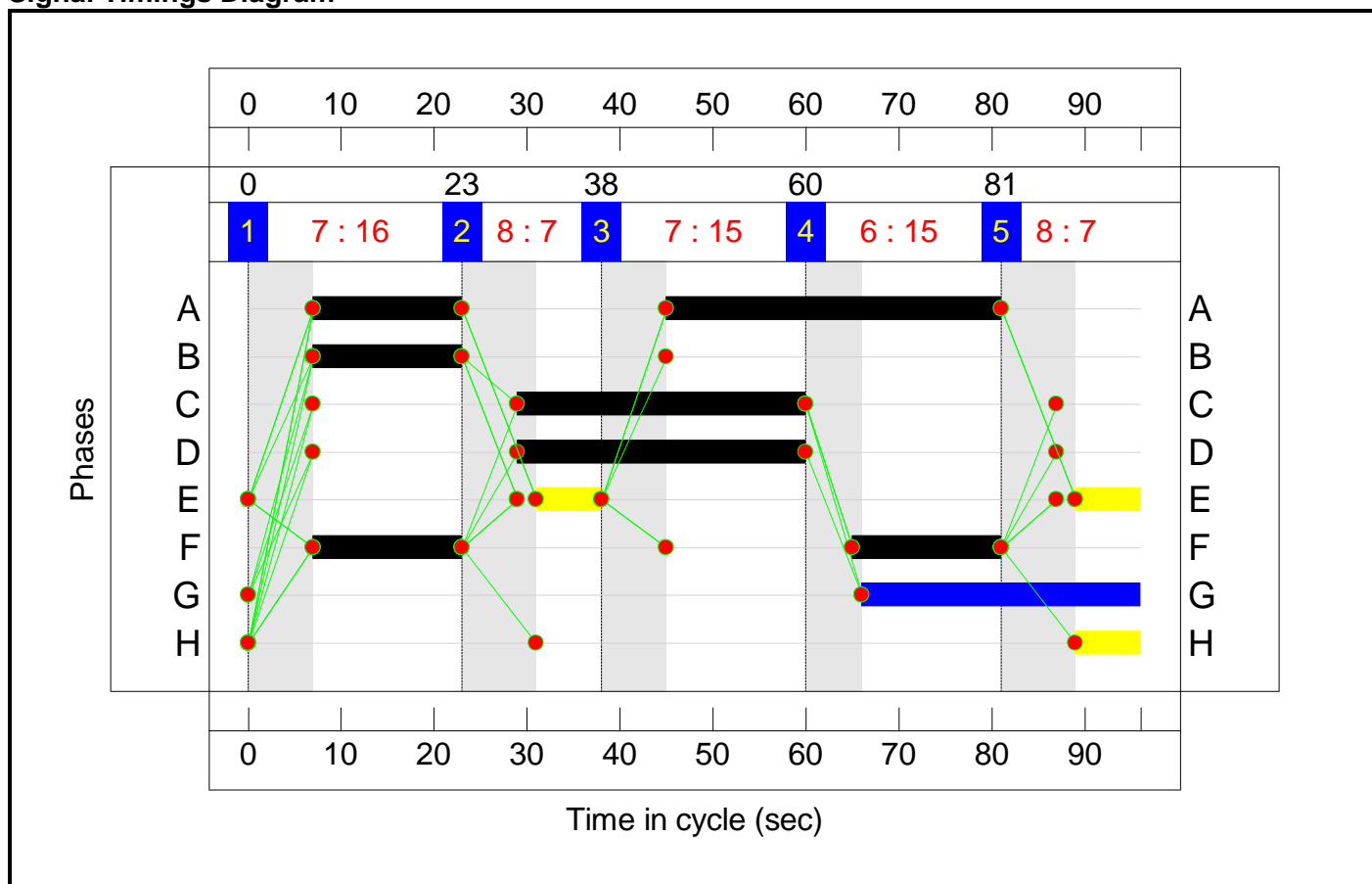
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram

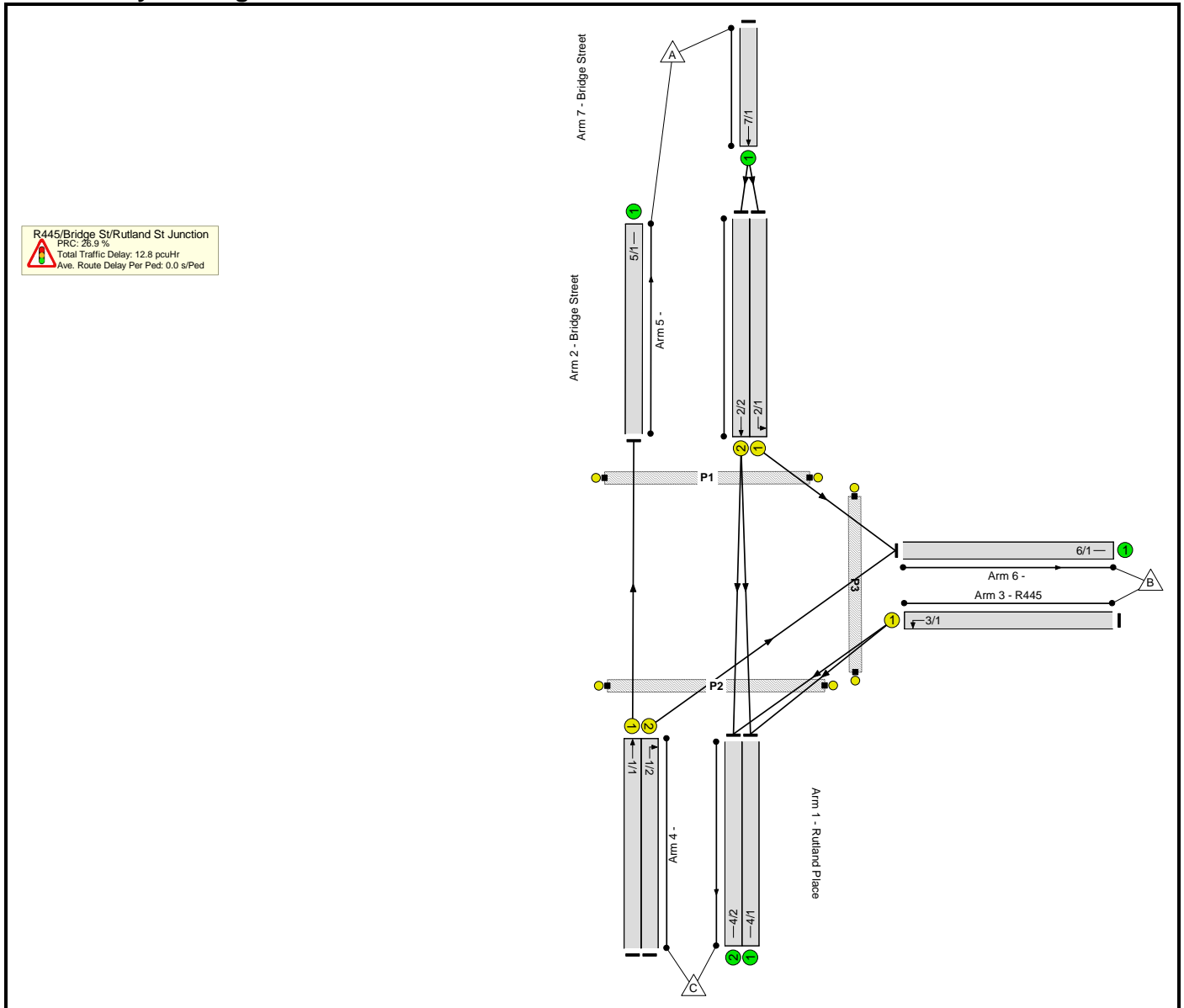


Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	67.0%	0	0	0	11.7	-	-	
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	67.0%	0	0	0	11.7	-	-	
1/1	Rutland Place Ahead	U	A		2	52	-	404	1915	1077	37.5%	-	-	-	1.0	8.5	3.2	
1/2	Rutland Place Right	U	C		1	31	-	393	1760	587	67.0%	-	-	-	4.0	36.7	10.0	
2/1	Bridge Street Left	U	B		1	16	-	88	1666	295	29.8%	-	-	-	1.1	43.0	2.2	
2/2	Bridge Street Ahead	U	F		2	32	-	364	1885	668	54.5%	-	-	-	2.0	19.6	5.7	
3/1	R445 Left	U	D		1	31	-	381	1793	598	63.7%	-	-	-	3.7	35.3	9.4	
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	G		1	30	-	0	-	0	0.0%	-	-	-	-	-	-	
C1				PRC for Signalled Lanes (%):	34.4	Total Delay for Signalled Lanes (pcuHr):				11.73	Cycle Time (s):		96					
				PRC Over All Lanes (%):	34.4	Total Delay Over All Lanes(pcuHr):				11.73								

Network Layout Diagram



Traffic Flows, Desired

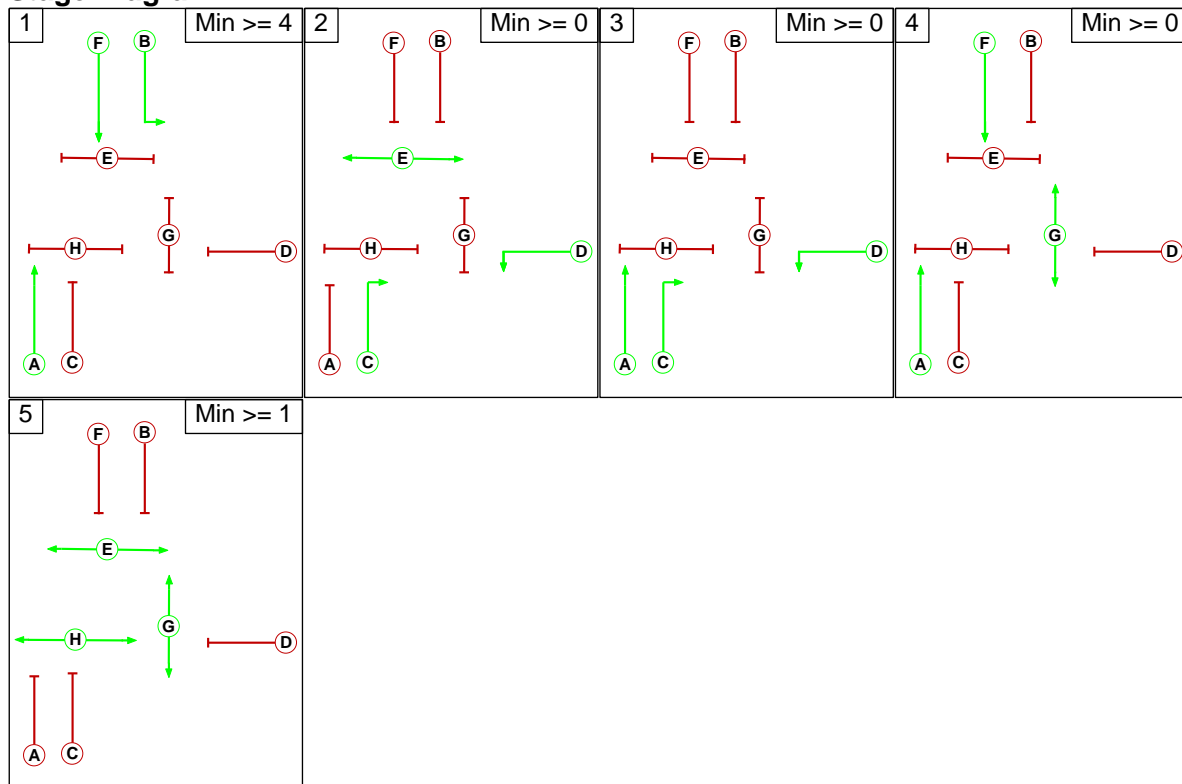
Desired Flow :

Origin	Destination				Tot.
	A	B	C	Tot.	
A	0	93	386	479	
B	0	0	402	402	
C	428	416	0	844	
Tot.	428	509	788	1725	

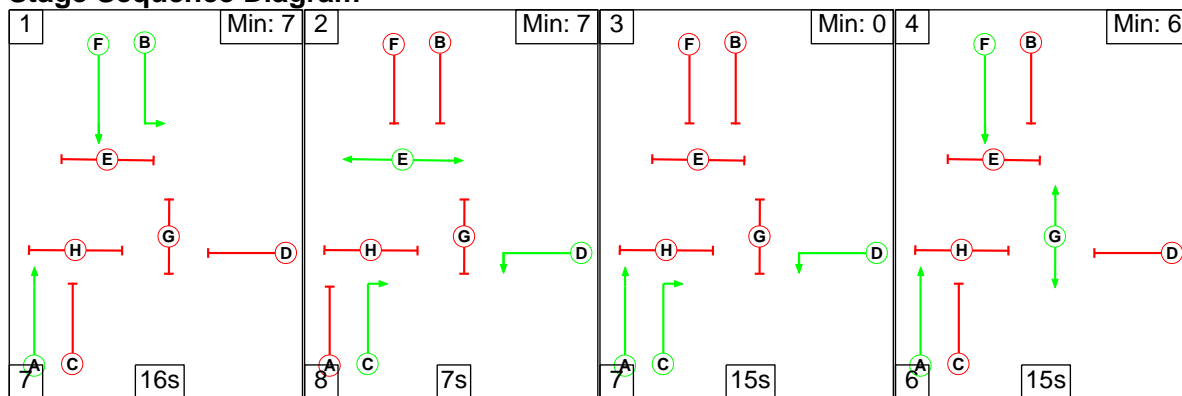
Phases in Stage

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

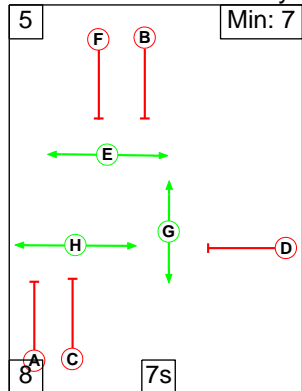
Stage Diagram



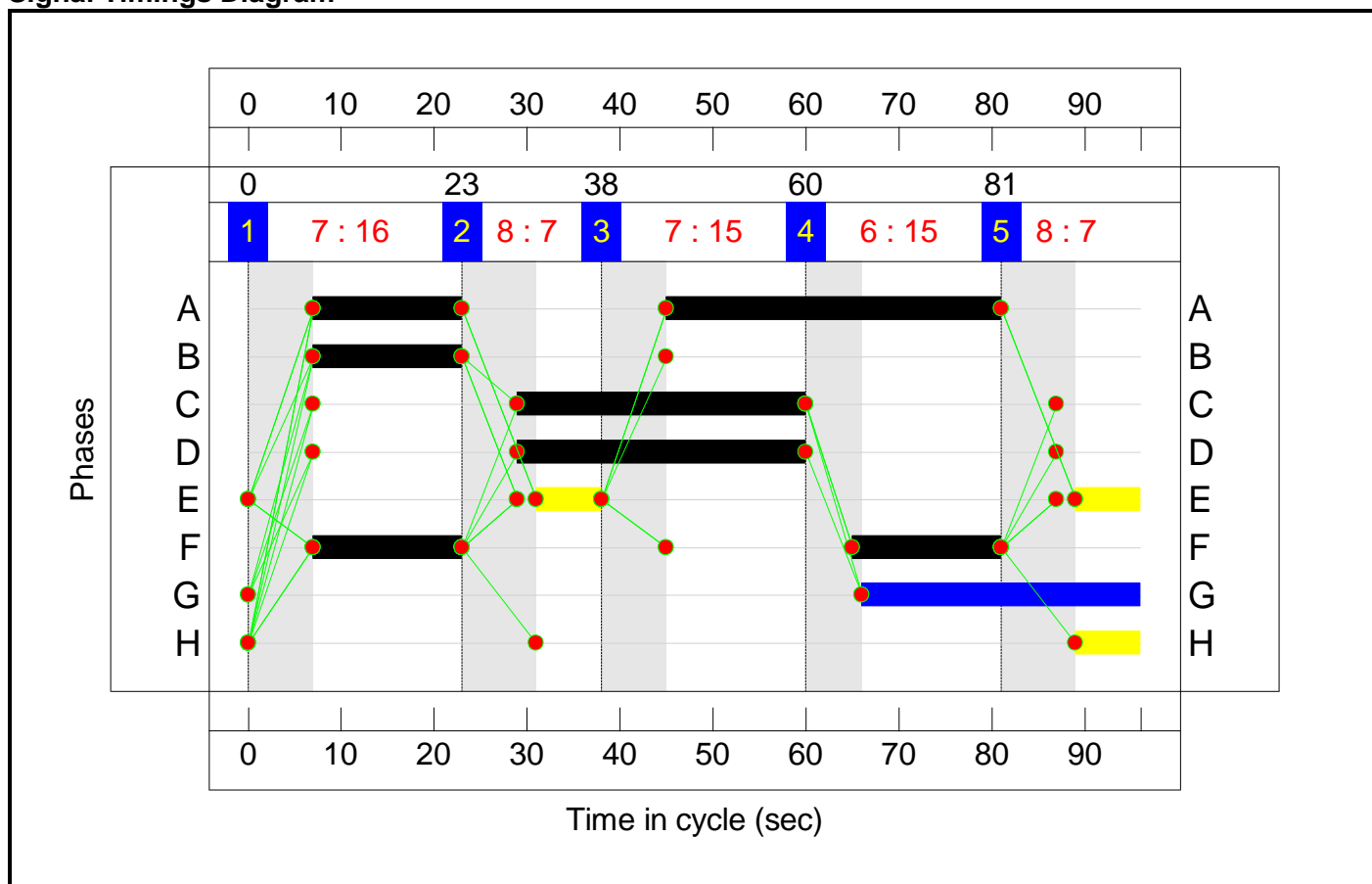
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram

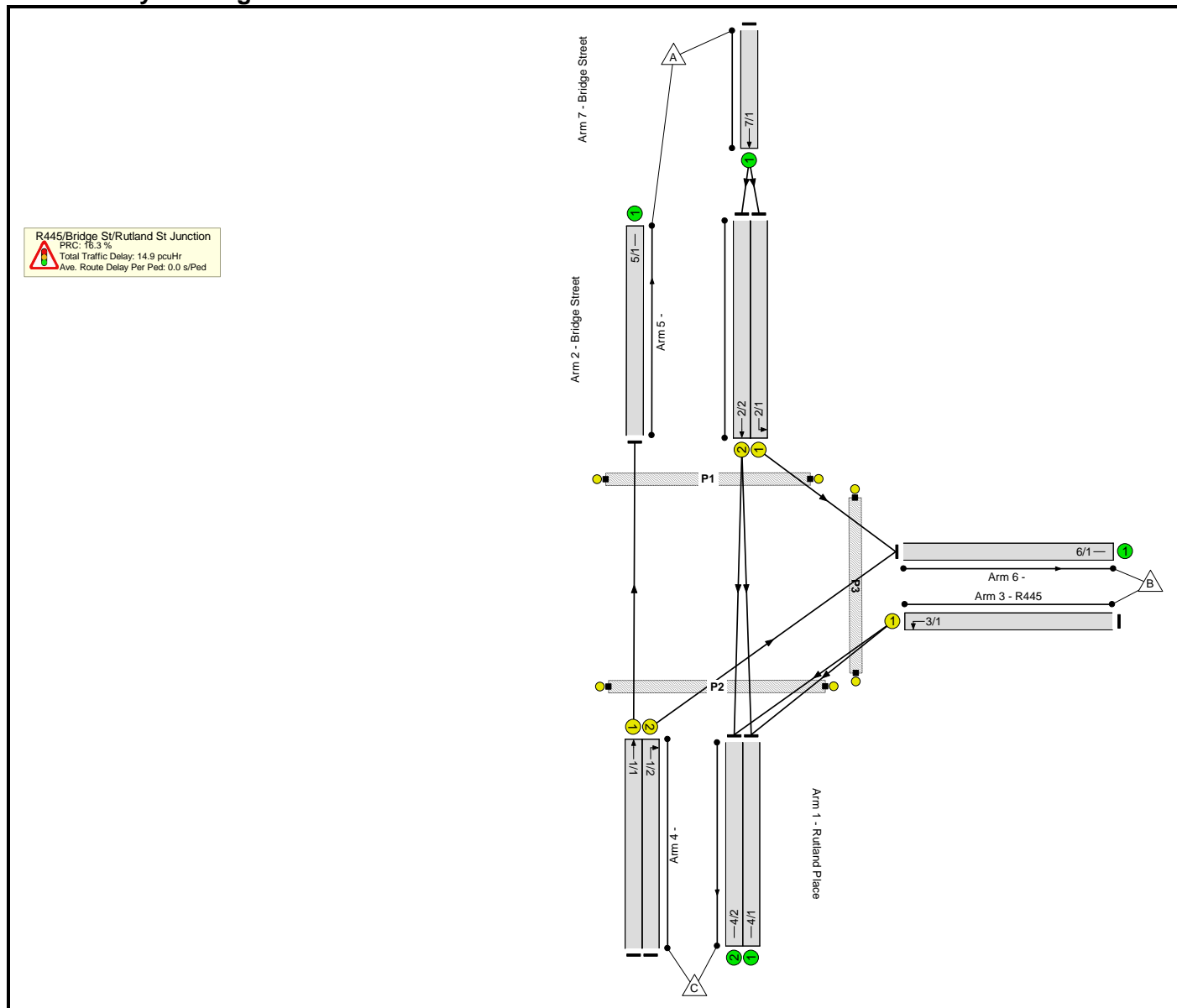


Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	70.9%	0	0	0	12.8	-	-
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	70.9%	0	0	0	12.8	-	-
1/1	Rutland Place Ahead	U	A		2	52	-	428	1915	1077	39.7%	-	-	-	1.0	8.7	3.5
1/2	Rutland Place Right	U	C		1	31	-	416	1760	587	70.9%	-	-	-	4.4	38.3	10.8
2/1	Bridge Street Left	U	B		1	16	-	93	1666	295	31.5%	-	-	-	1.1	43.3	2.4
2/2	Bridge Street Ahead	U	F		2	32	-	386	1885	668	57.8%	-	-	-	2.2	20.3	6.2
3/1	R445 Left	U	D		1	31	-	402	1793	598	67.3%	-	-	-	4.1	36.6	10.2
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	G		1	30	-	0	-	0	0.0%	-	-	-	-	-	-
C1					PRC for Signalled Lanes (%):		26.9	Total Delay for Signalled Lanes (pcuHr):		12.84	Cycle Time (s):		96				
					PRC Over All Lanes (%):		26.9	Total Delay Over All Lanes(pcuHr):		12.84							

Network Layout Diagram



Traffic Flows, Desired

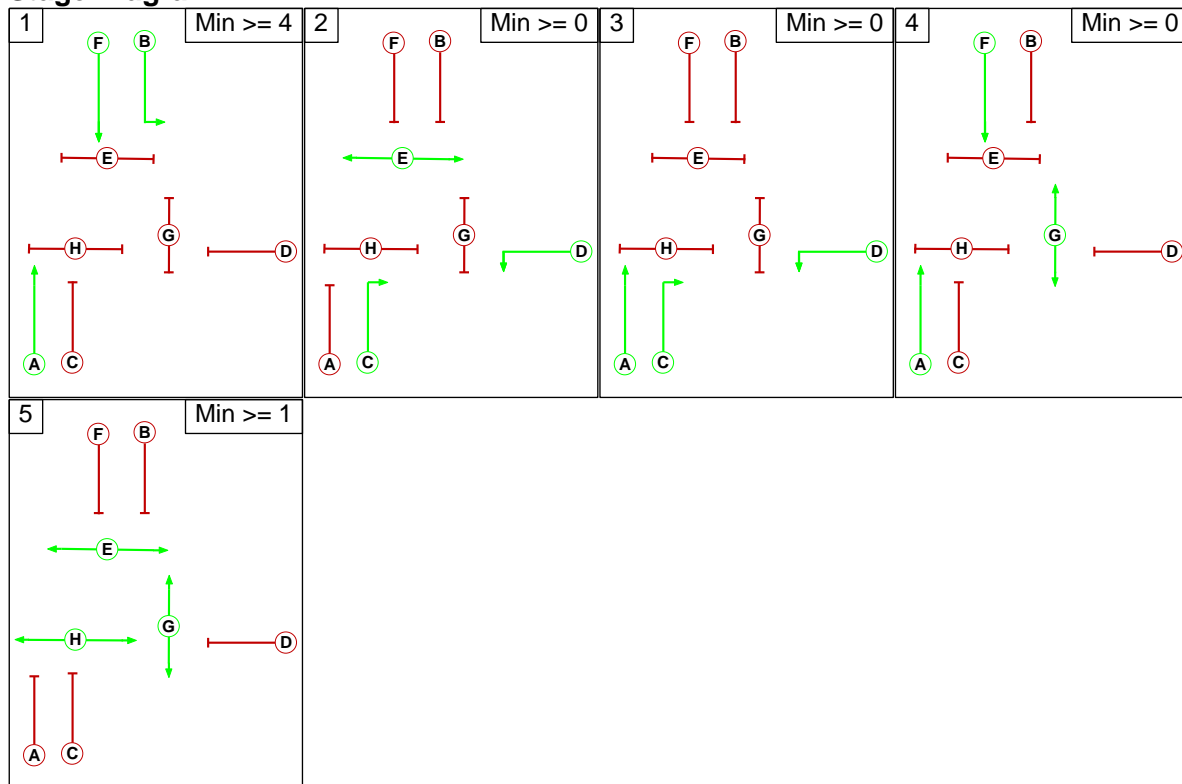
Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	101	420	521
	B	0	0	436	436
	C	465	454	0	919
	Tot.	465	555	856	1876

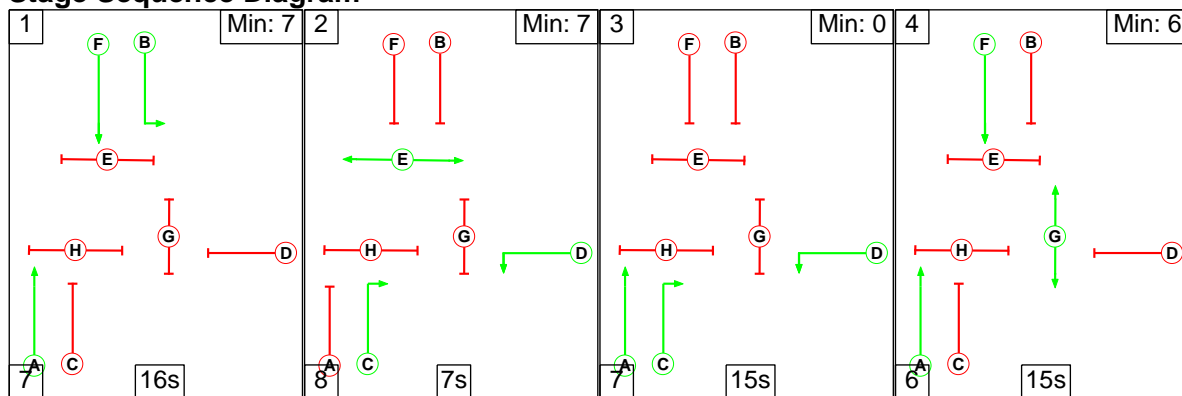
Phases in Stage

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

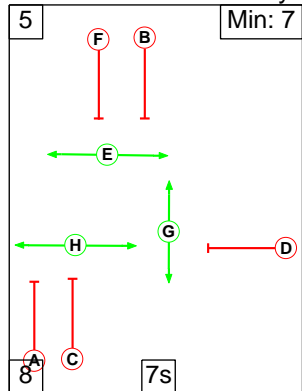
Stage Diagram



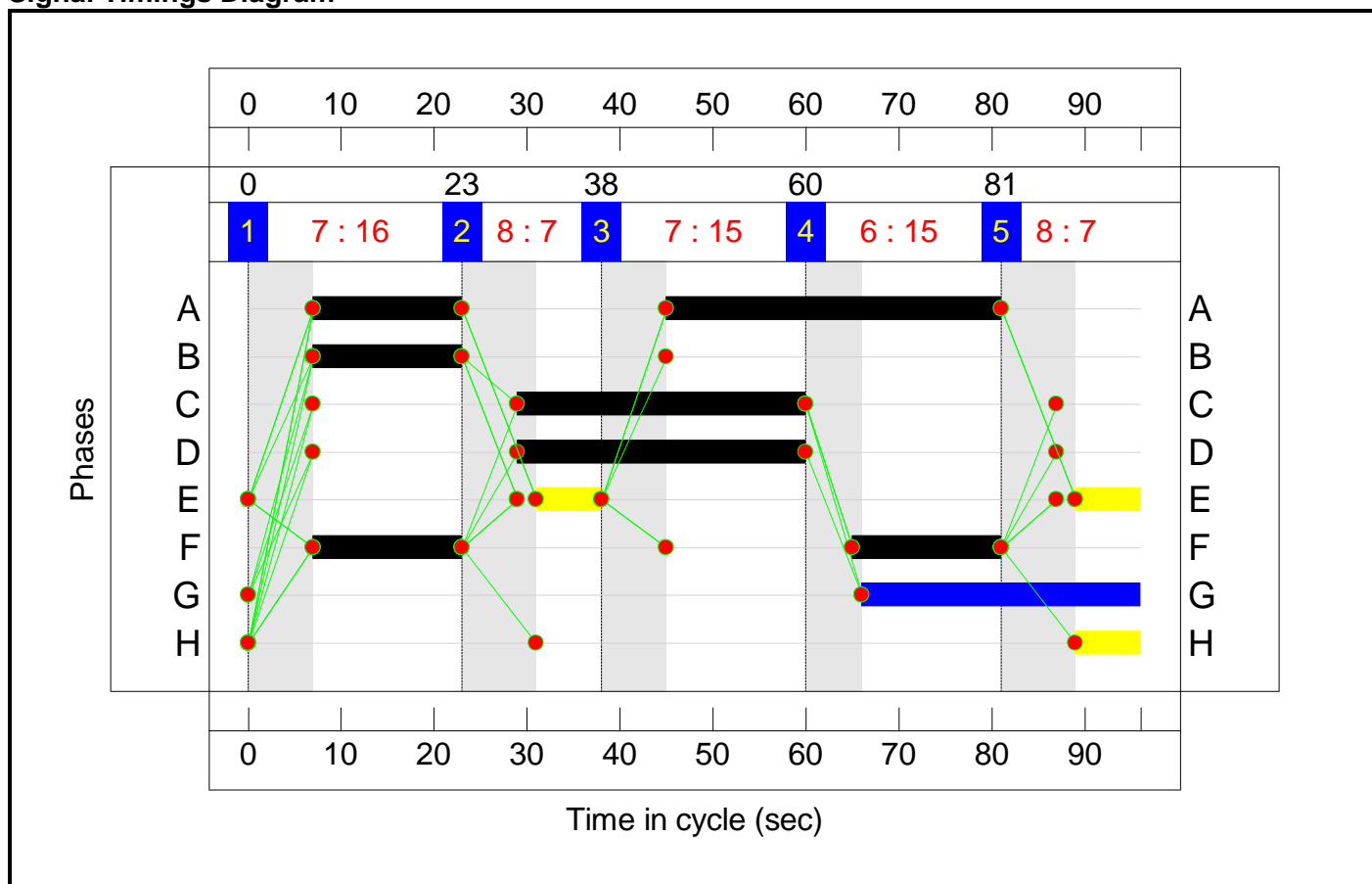
Stage Sequence Diagram



Basic Results Summary Rev1



Signal Timings Diagram



Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	77.4%	0	0	0	14.9	-	-	
R445/Bridge St/Rutland St Junction	-	-	-		-	-	-	-	-	-	77.4%	0	0	0	14.9	-	-	
1/1	Rutland Place Ahead	U	A		2	52	-	465	1915	1077	43.2%	-	-	-	1.2	9.0	3.9	
1/2	Rutland Place Right	U	C		1	31	-	454	1760	587	77.4%	-	-	-	5.3	42.0	12.5	
2/1	Bridge Street Left	U	B		1	16	-	101	1666	295	34.2%	-	-	-	1.2	43.9	2.6	
2/2	Bridge Street Ahead	U	F		2	32	-	420	1885	668	62.9%	-	-	-	2.5	21.4	6.9	
3/1	R445 Left	U	D		1	31	-	436	1793	598	73.0%	-	-	-	4.7	39.1	11.5	
Ped Link: P1	Unnamed Ped Link	-	E		2	14	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	H		1	7	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	G		1	30	-	0	-	0	0.0%	-	-	-	-	-	-	
C1				PRC for Signalled Lanes (%):	16.3	Total Delay for Signalled Lanes (pcuHr):				14.93	Cycle Time (s):				96			
				PRC Over All Lanes (%):	16.3	Total Delay Over All Lanes(pcuHr):				14.93								

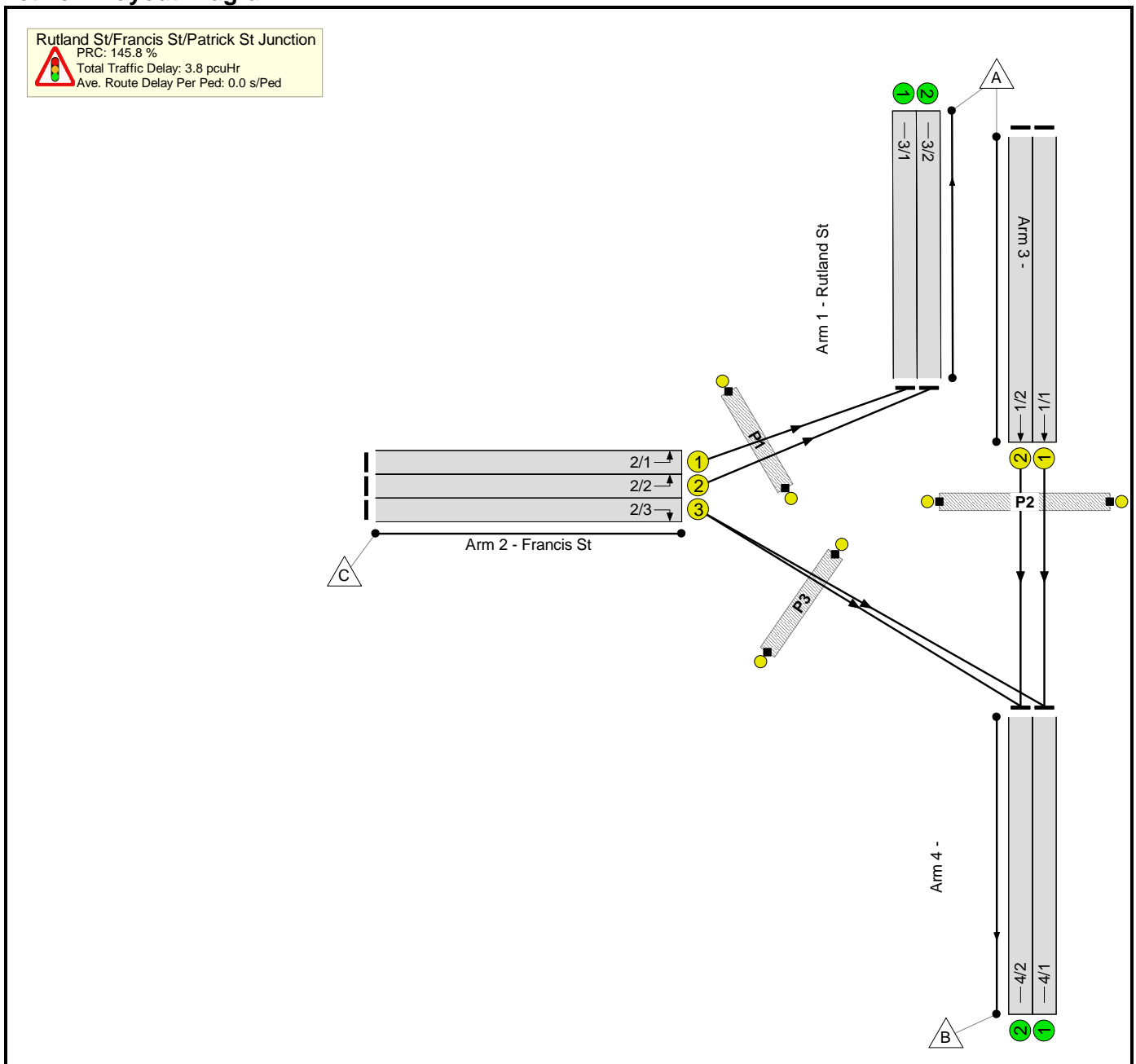
Basic Results Summary Rev1
Basic Results Summary Rev1

User and Project Details

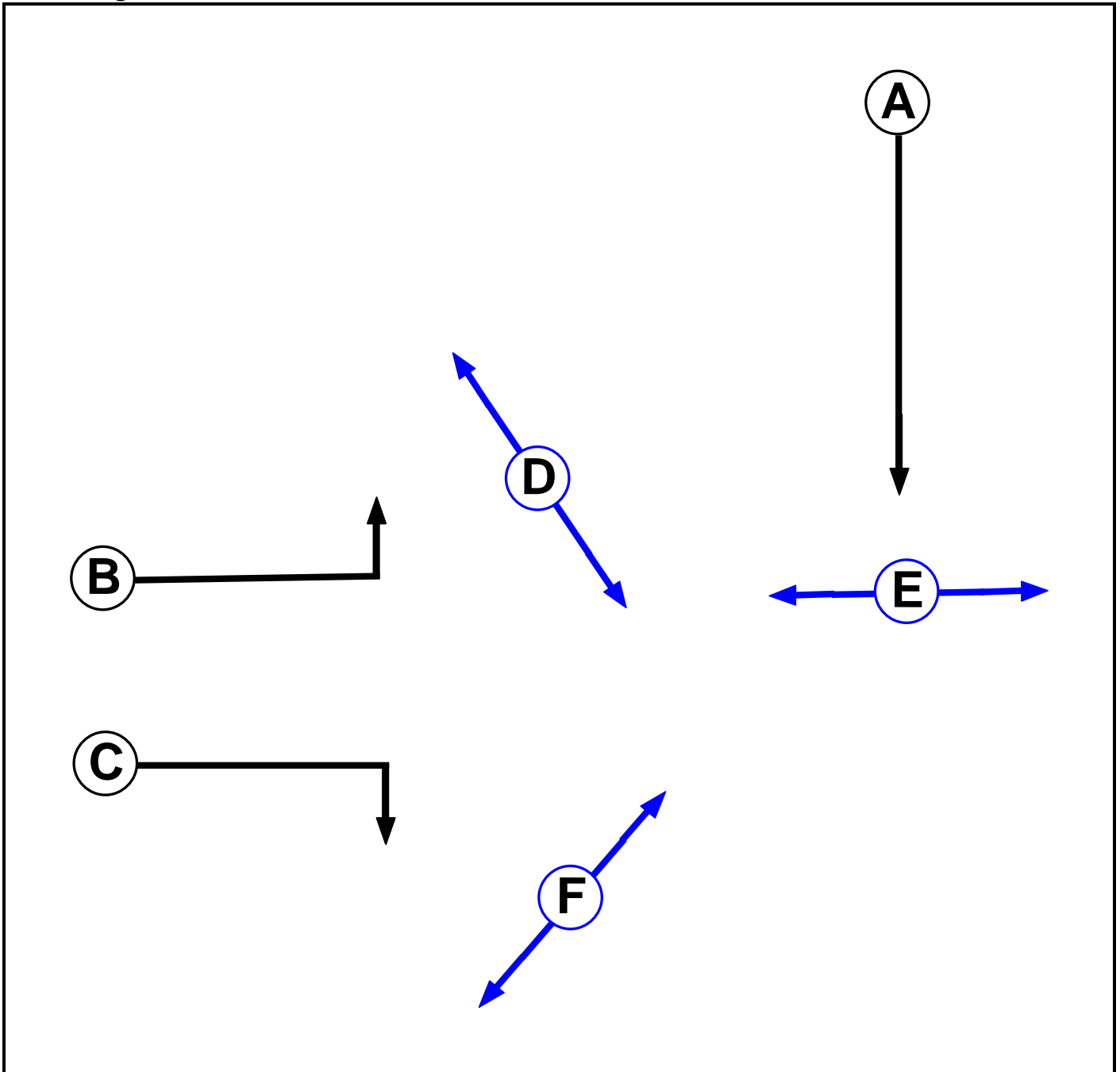
Project:	Project Opera
Title:	
Location:	Limerick City
Additional detail:	
File name:	Rutland St_Francis St_Patrick St_Junction.lsg3x
Author:	CL
Company:	AECOM
Address:	

Scenario 1: '2017 AM Base' (FG1: '2017 AM Base ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

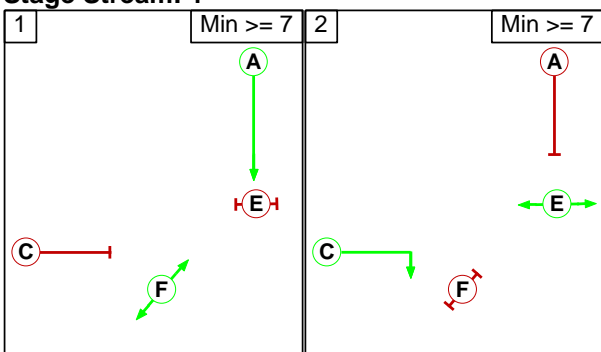


Phase Diagram



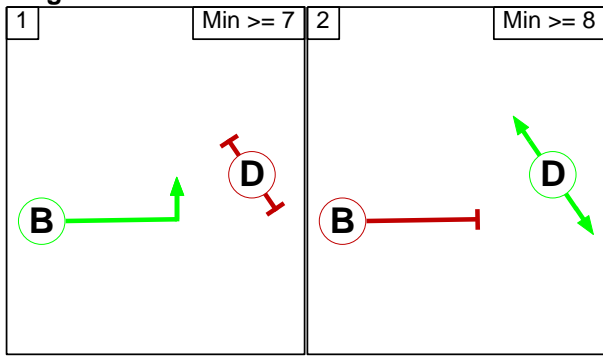
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



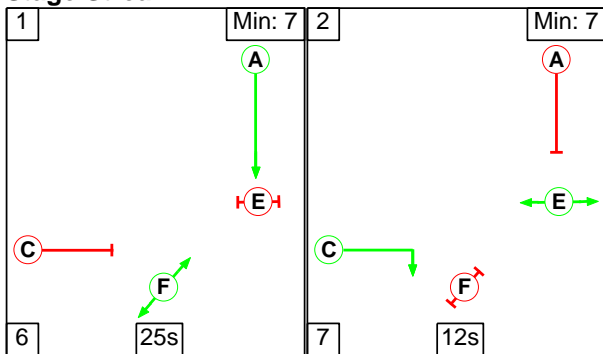
Traffic Flows, Actual

Actual Flow :

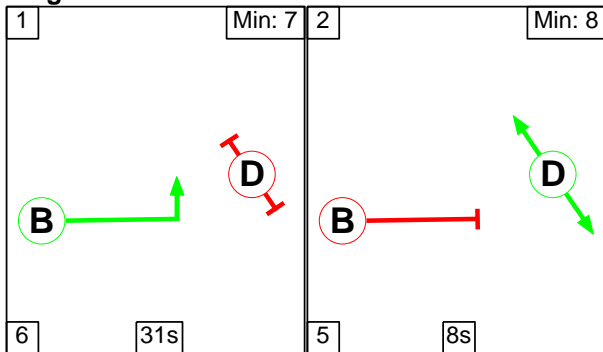
	Destination				
		A	B	C	Tot.
Origin	A	0	732	0	732
	B	0	0	0	0
	C	656	109	0	765
	Tot.	656	841	0	1497

Stage Sequence Diagram

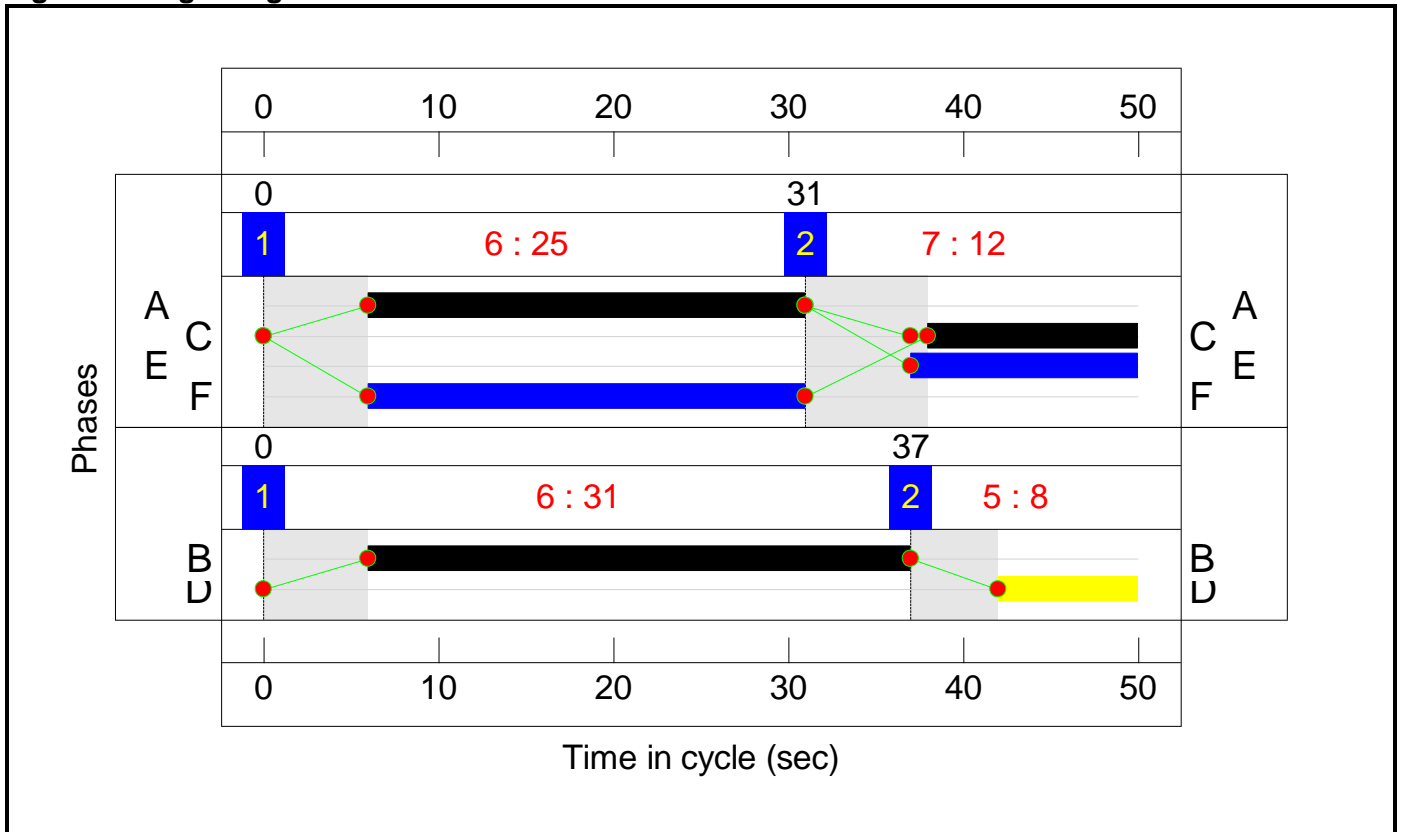
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

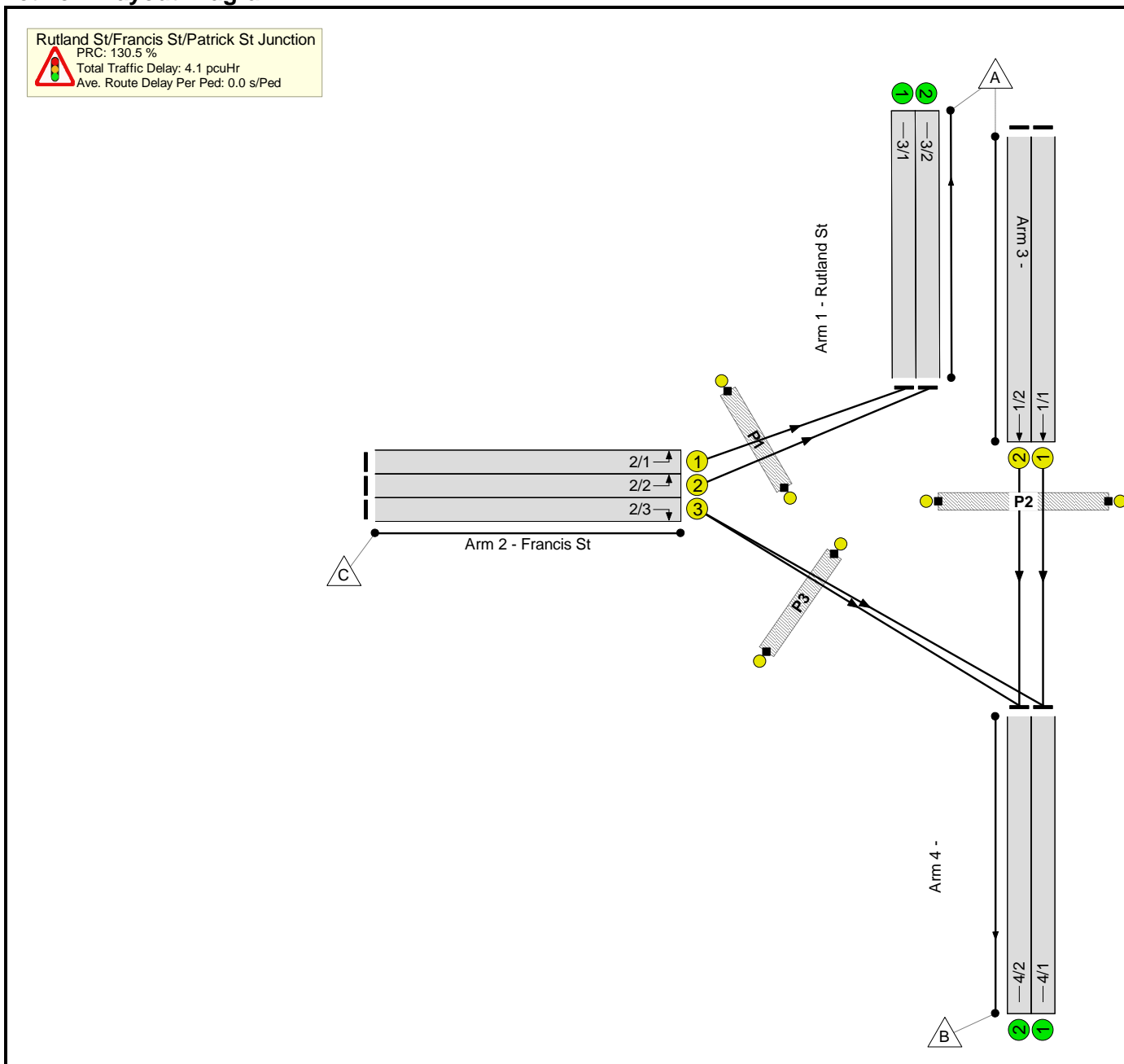


Basic Results Summary Rev1

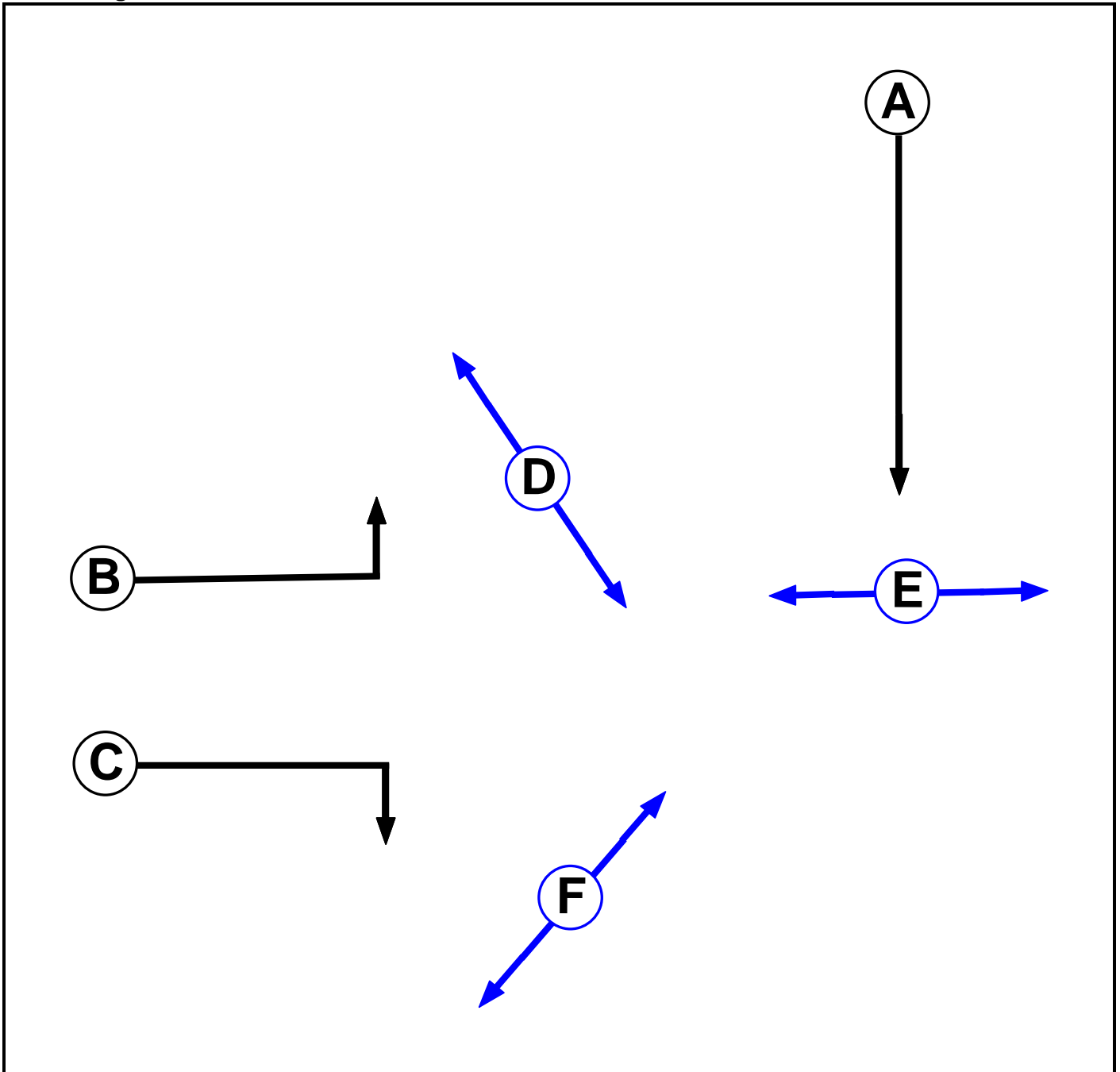
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	36.6%	0	0	0	3.8	-	-	
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	36.6%	0	0	0	3.8	-	-	
1/1	Rutland St Ahead	U	A		1	25	-	354	1915	996	35.5%	-	-	-	1.0	9.9	3.1	
1/2	Rutland St Ahead	U	A		1	25	-	378	1985	1032	36.6%	-	-	-	1.0	9.9	3.3	
2/1	Francis St Left	U	B		1	31	-	323	1714	1097	29.4%	-	-	-	0.6	6.3	2.2	
2/2	Francis St Left	U	B		1	31	-	333	1741	1114	29.9%	-	-	-	0.6	6.3	2.2	
2/3	Francis St Right	U	C		1	12	-	109	1681	437	24.9%	-	-	-	0.6	20.2	1.3	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	E		1	13	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	F		1	25	-	0	-	0	0.0%	-	-	-	-	-	-	
							C1 Stream: 1 PRC for Signalled Lanes (%):	145.8	Total Delay for Signalled Lanes (pcuHr):			2.62	Cycle Time (s):		50			
							C1 Stream: 2 PRC for Signalled Lanes (%):	201.1	Total Delay for Signalled Lanes (pcuHr):			1.15	Cycle Time (s):		50			
							PRC Over All Lanes (%):	145.8	Total Delay Over All Lanes(pcuHr):			3.77						

Network Layout Diagram

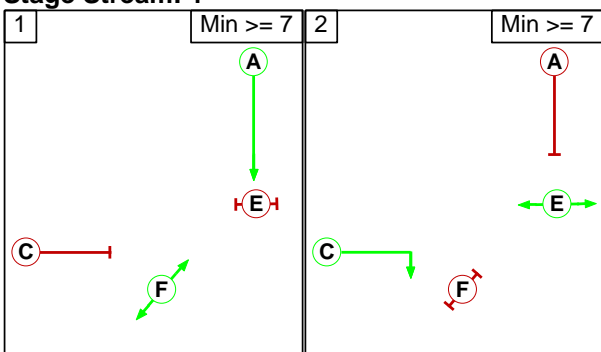


Phase Diagram



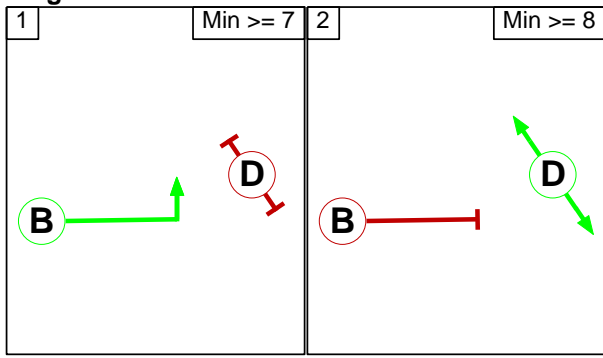
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



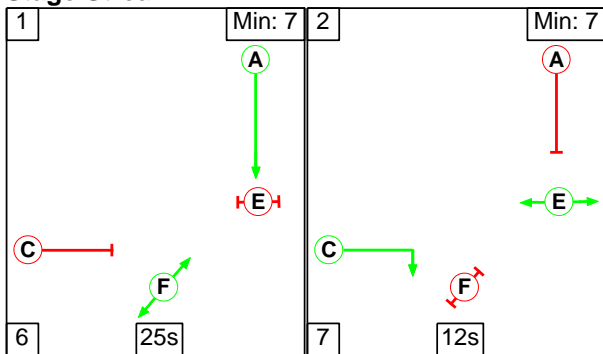
Traffic Flows, Actual

Actual Flow :

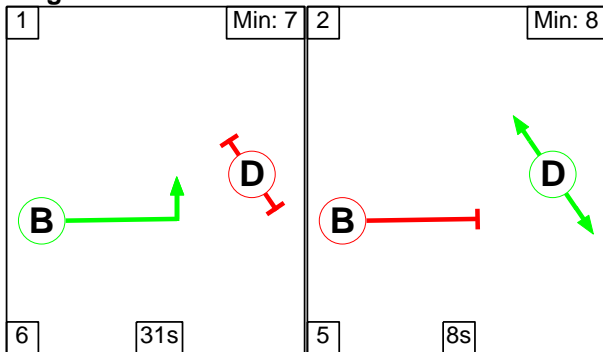
	Destination				
	A	B	C	Tot.	
Origin	A	0	781	0	781
B	0	0	0	0	
C	700	116	0	816	
Tot.	700	897	0	1597	

Stage Sequence Diagram

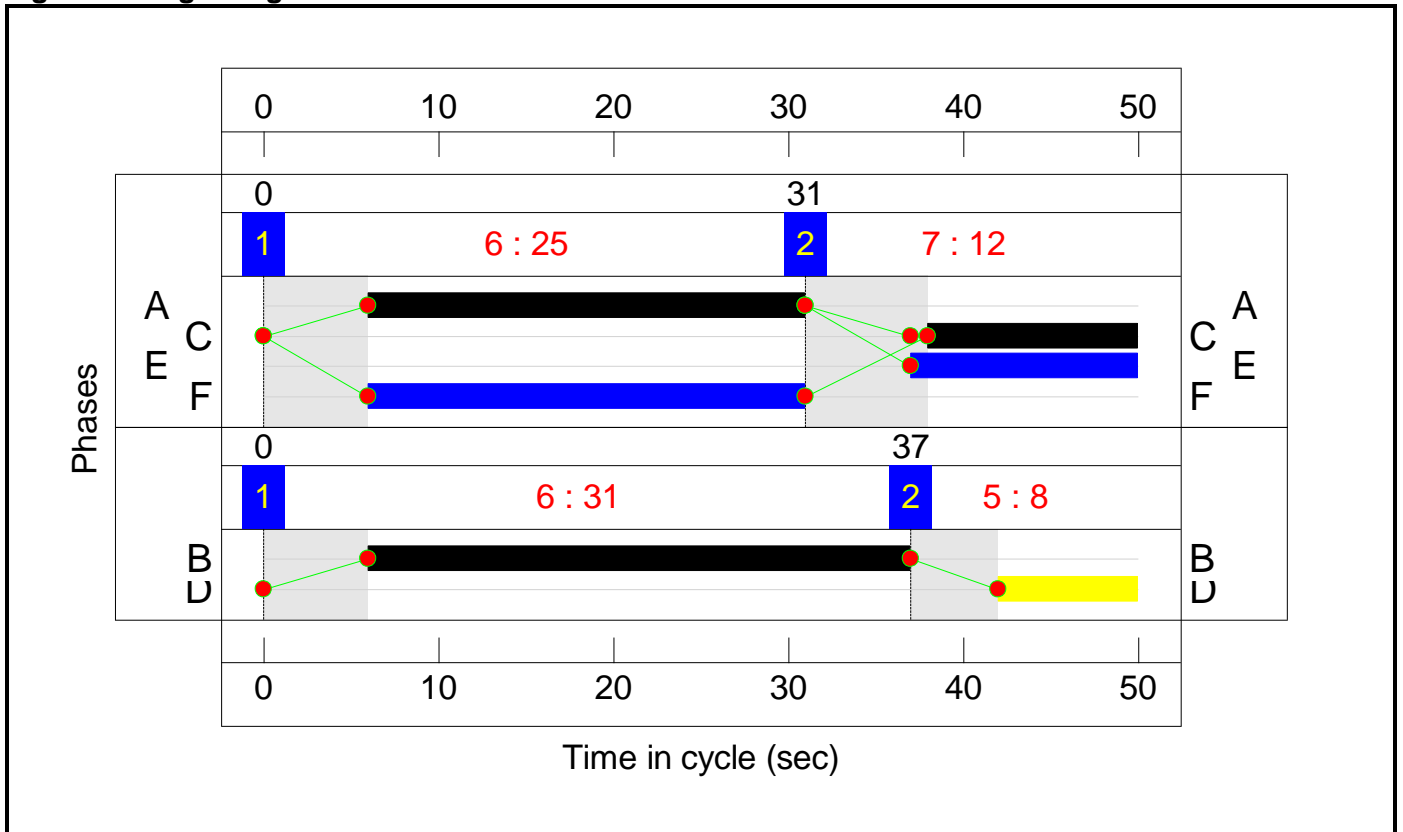
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

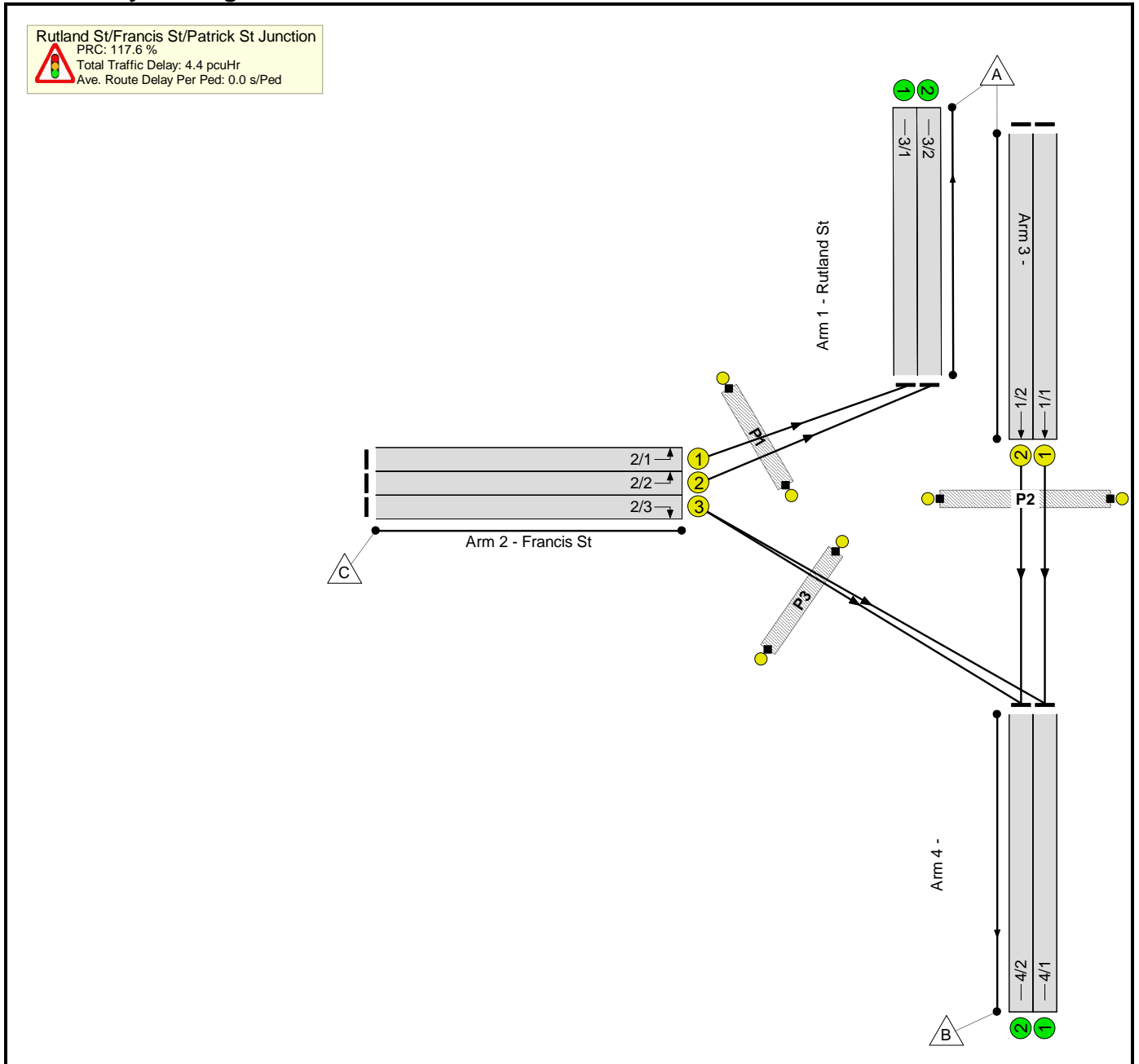


Basic Results Summary Rev1

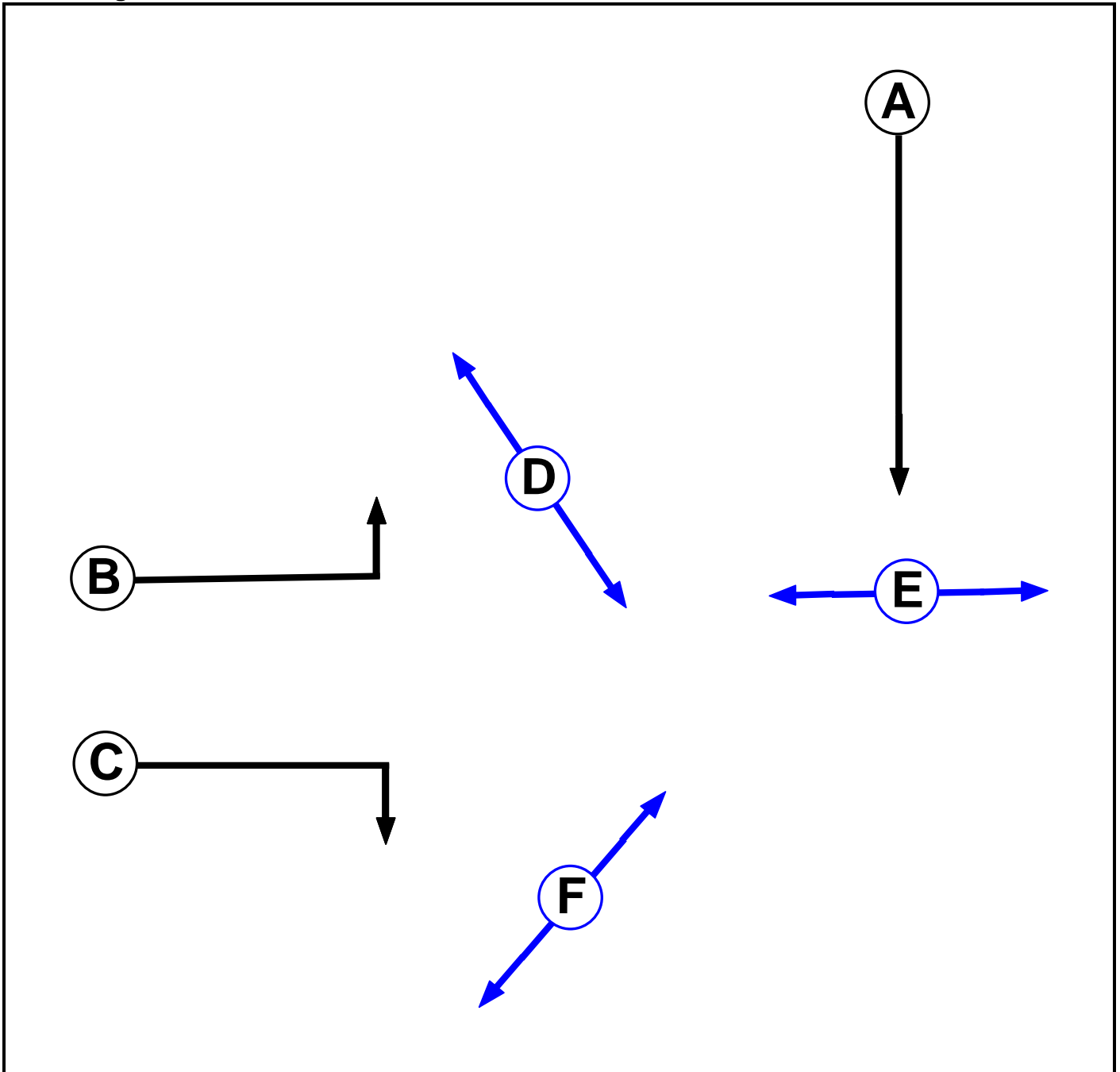
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	39.0%	0	0	0	4.1	-	-	
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	39.0%	0	0	0	4.1	-	-	
1/1	Rutland St Ahead	U	A		1	25	-	378	1915	996	38.0%	-	-	-	1.1	10.1	3.4	
1/2	Rutland St Ahead	U	A		1	25	-	403	1985	1032	39.0%	-	-	-	1.1	10.1	3.7	
2/1	Francis St Left	U	B		1	31	-	344	1714	1097	31.4%	-	-	-	0.6	6.5	2.3	
2/2	Francis St Left	U	B		1	31	-	356	1741	1114	32.0%	-	-	-	0.6	6.5	2.4	
2/3	Francis St Right	U	C		1	12	-	116	1681	437	26.5%	-	-	-	0.7	20.3	1.4	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	E		1	13	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	F		1	25	-	0	-	0	0.0%	-	-	-	-	-	-	
							C1 Stream: 1 PRC for Signalled Lanes (%):	130.5	Total Delay for Signalled Lanes (pcuHr):			2.84	Cycle Time (s):		50			
							C1 Stream: 2 PRC for Signalled Lanes (%):	181.7	Total Delay for Signalled Lanes (pcuHr):			1.25	Cycle Time (s):		50			
							PRC Over All Lanes (%):	130.5	Total Delay Over All Lanes(pcuHr):			4.10						

Network Layout Diagram

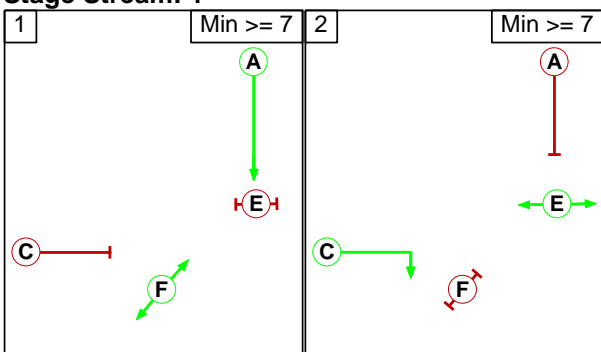


Phase Diagram



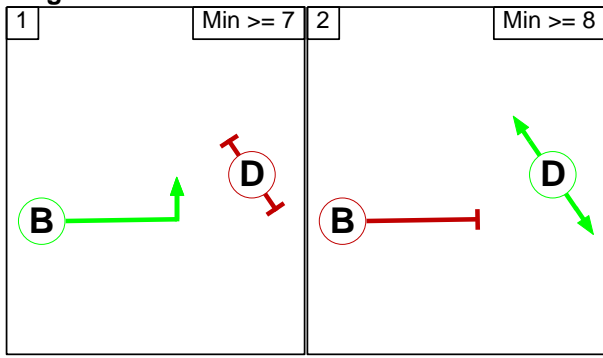
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



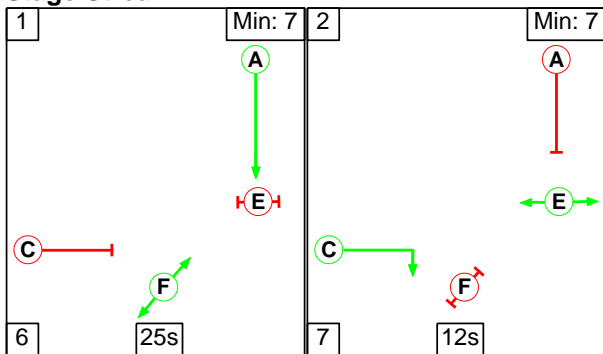
Traffic Flows, Actual

Actual Flow :

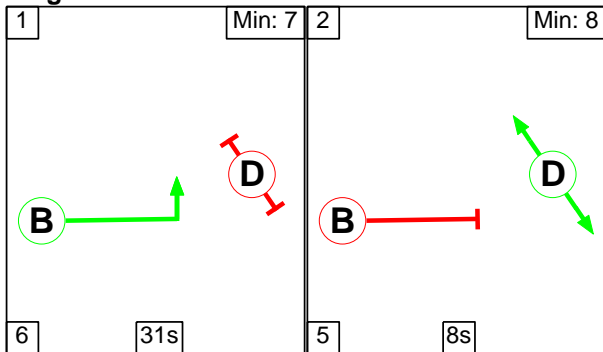
	Destination				
	A	B	C	Tot.	
Origin	A	0	828	0	828
	B	0	0	0	0
	C	742	123	0	865
	Tot.	742	951	0	1693

Stage Sequence Diagram

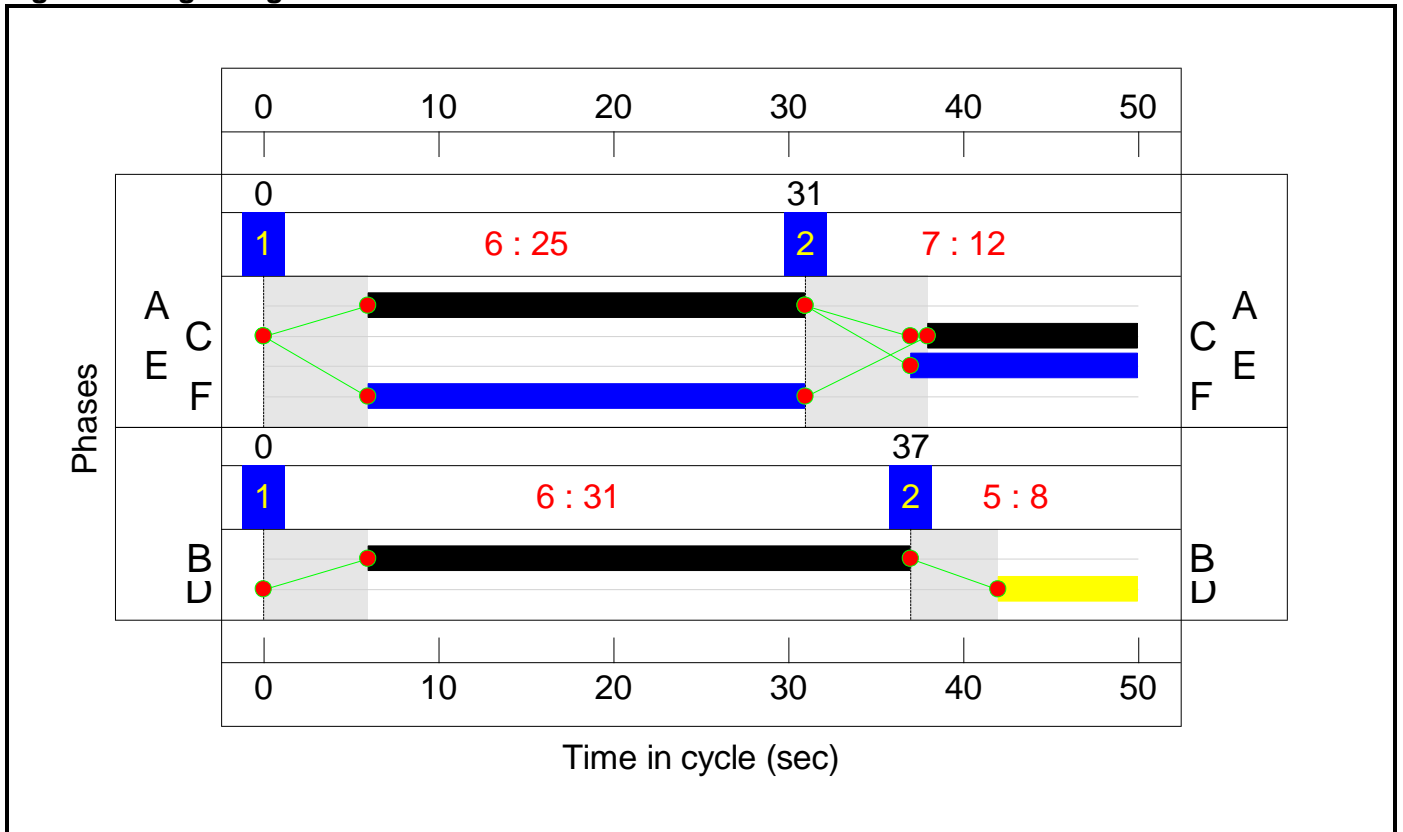
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

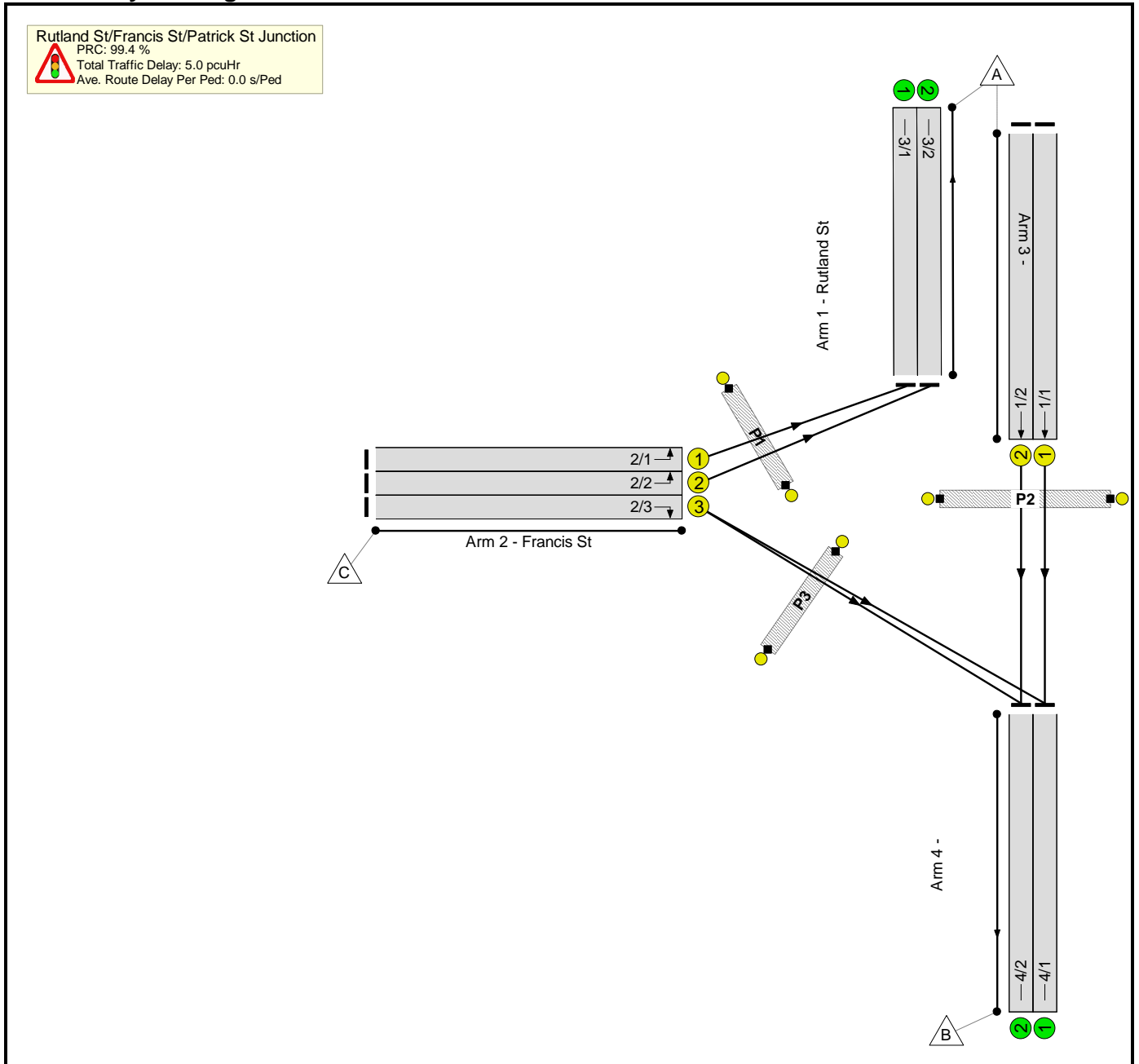


Basic Results Summary Rev1

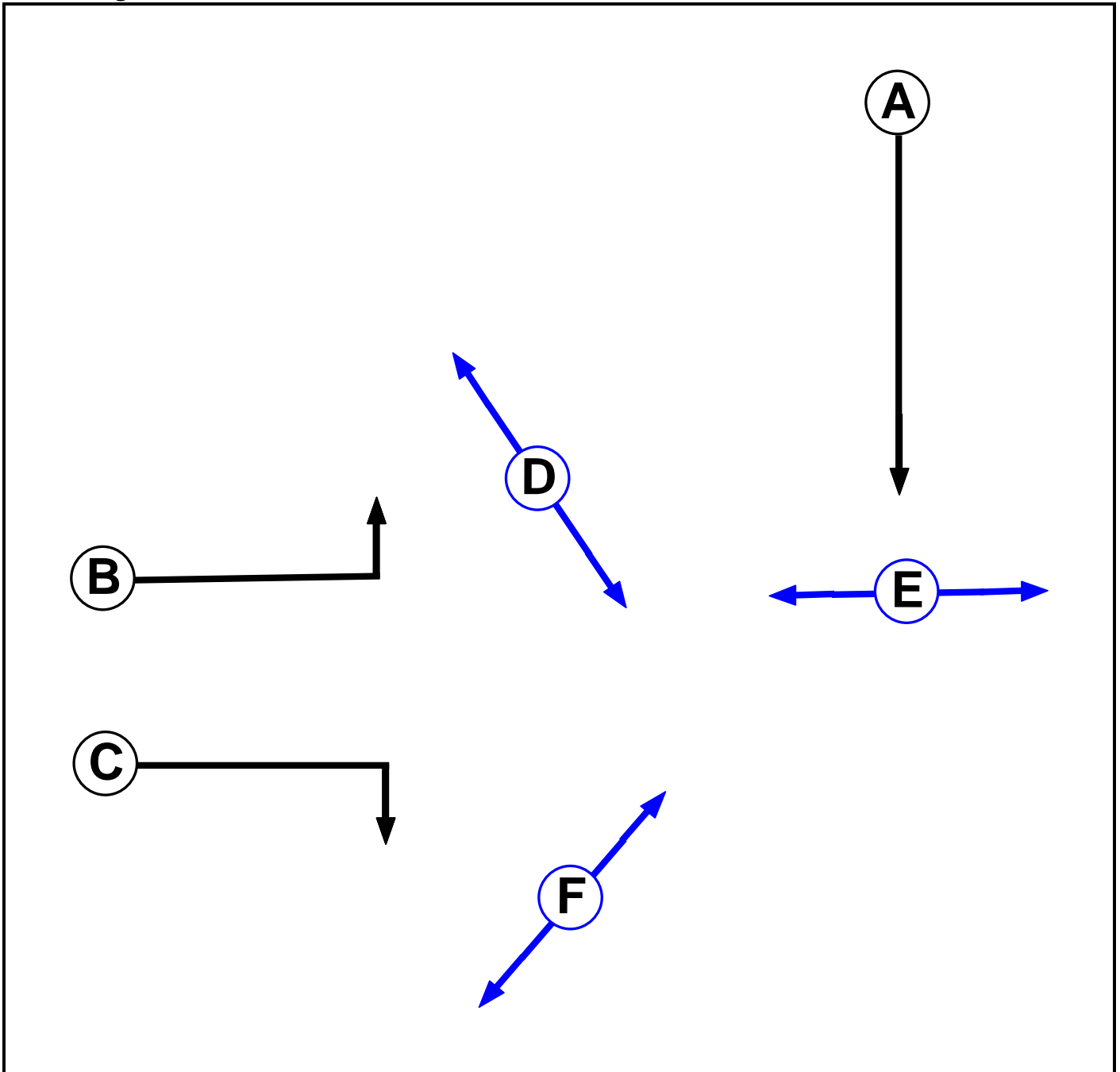
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	41.4%	0	0	0	4.4	-	-	
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	41.4%	0	0	0	4.4	-	-	
1/1	Rutland St Ahead	U	A		1	25	-	401	1915	996	40.3%	-	-	-	1.1	10.3	3.7	
1/2	Rutland St Ahead	U	A		1	25	-	427	1985	1032	41.4%	-	-	-	1.2	10.3	3.9	
2/1	Francis St Left	U	B		1	31	-	365	1714	1097	33.3%	-	-	-	0.7	6.6	2.5	
2/2	Francis St Left	U	B		1	31	-	377	1741	1114	33.8%	-	-	-	0.7	6.6	2.6	
2/3	Francis St Right	U	C		1	12	-	123	1681	437	28.1%	-	-	-	0.7	20.5	1.5	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	E		1	13	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	F		1	25	-	0	-	0	0.0%	-	-	-	-	-	-	
							C1 Stream: 1 PRC for Signalled Lanes (%):	117.6	Total Delay for Signalled Lanes (pcuHr):				3.07	Cycle Time (s):		50		
							C1 Stream: 2 PRC for Signalled Lanes (%):	166.0	Total Delay for Signalled Lanes (pcuHr):				1.36	Cycle Time (s):		50		
							PRC Over All Lanes (%):	117.6	Total Delay Over All Lanes(pcuHr):				4.43					

Network Layout Diagram

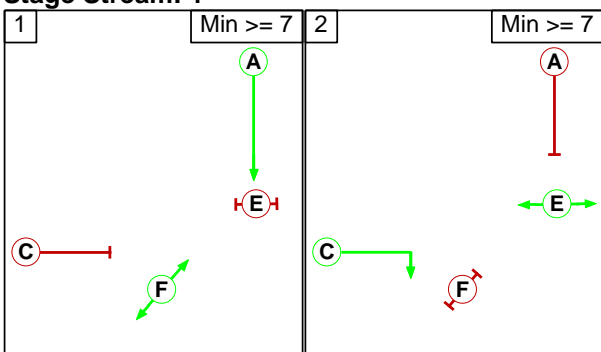


Phase Diagram



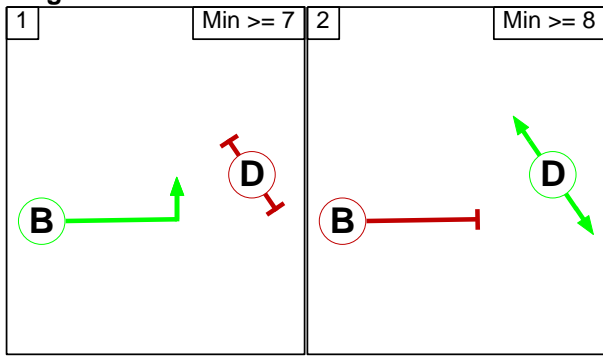
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



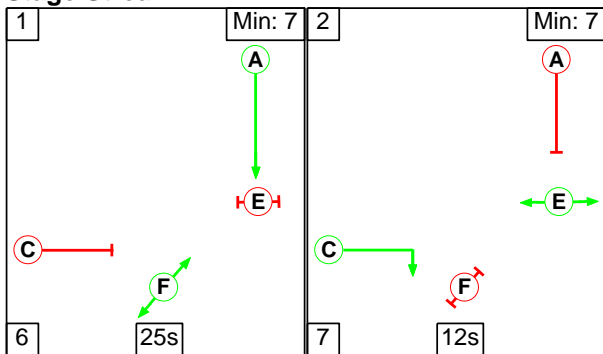
Traffic Flows, Actual

Actual Flow :

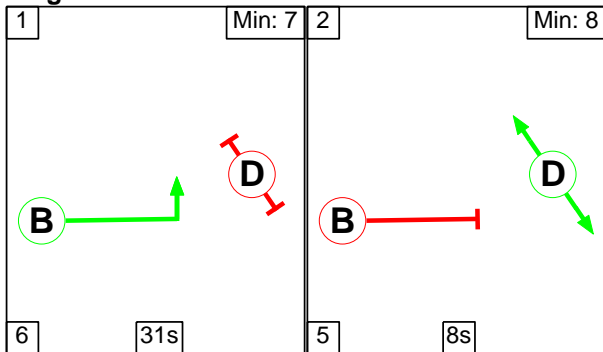
	Destination				
	A	B	C	Tot.	
Origin	A	0	905	0	905
	B	0	0	0	0
	C	811	135	0	946
	Tot.	811	1040	0	1851

Stage Sequence Diagram

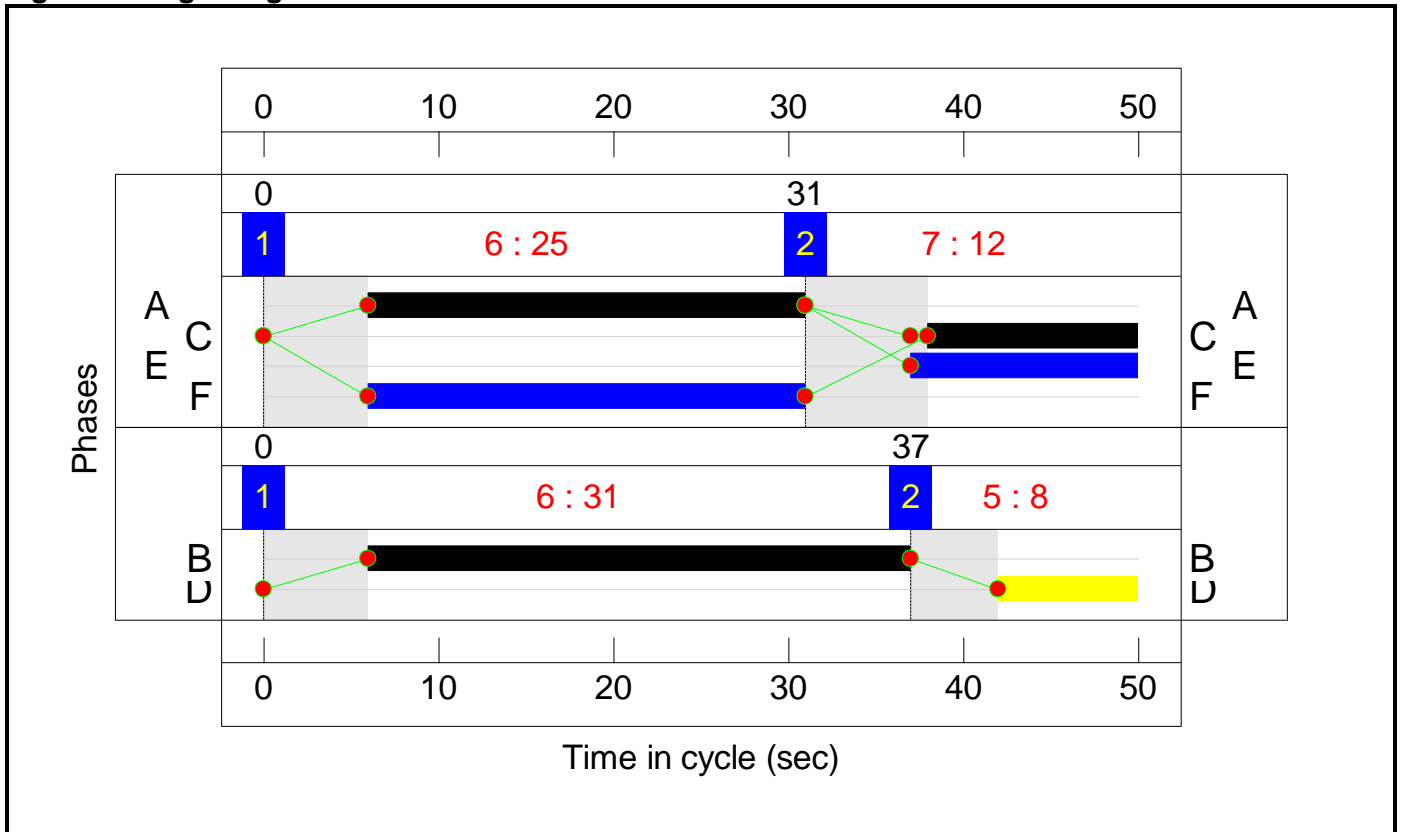
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

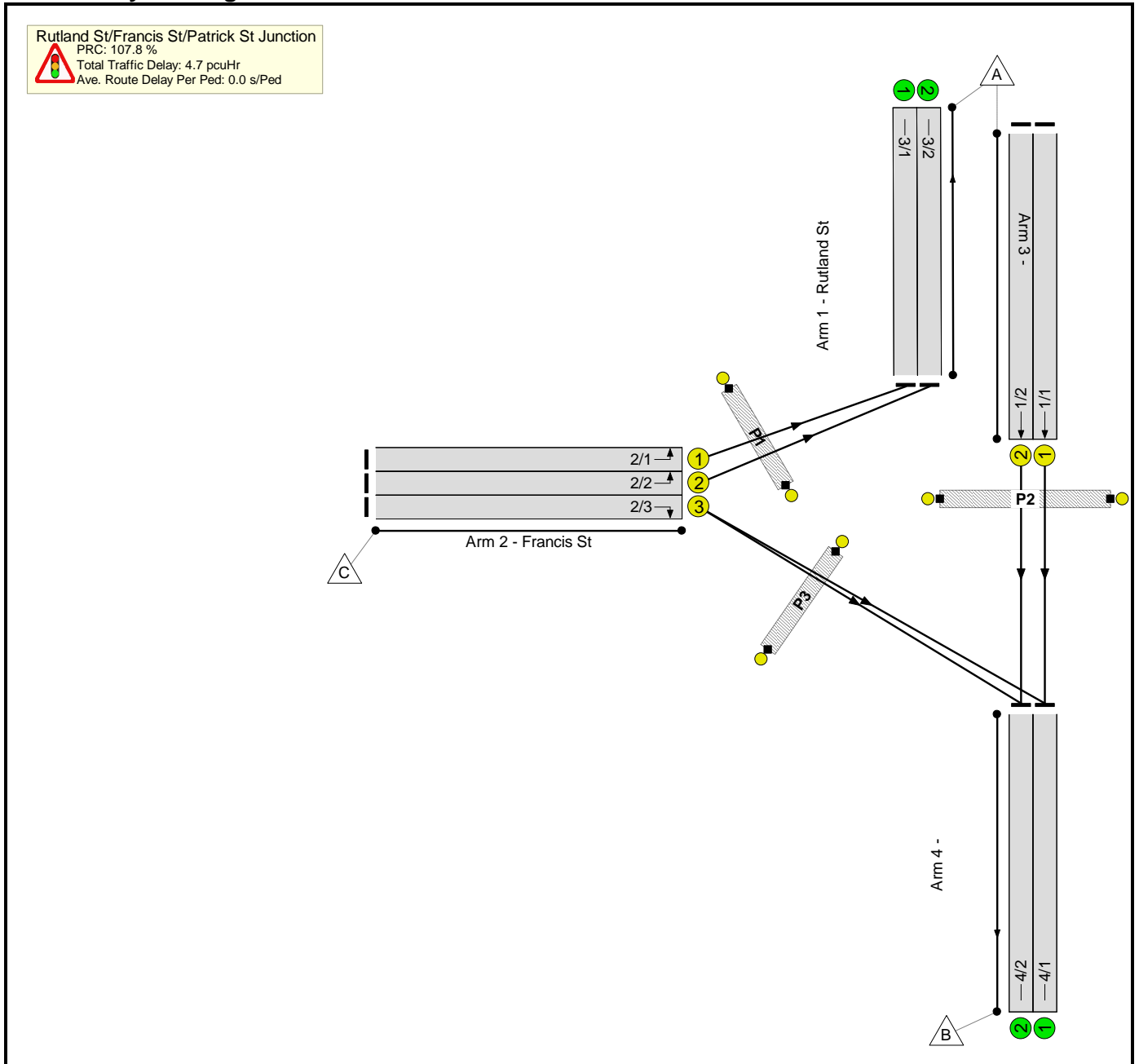


Basic Results Summary Rev1

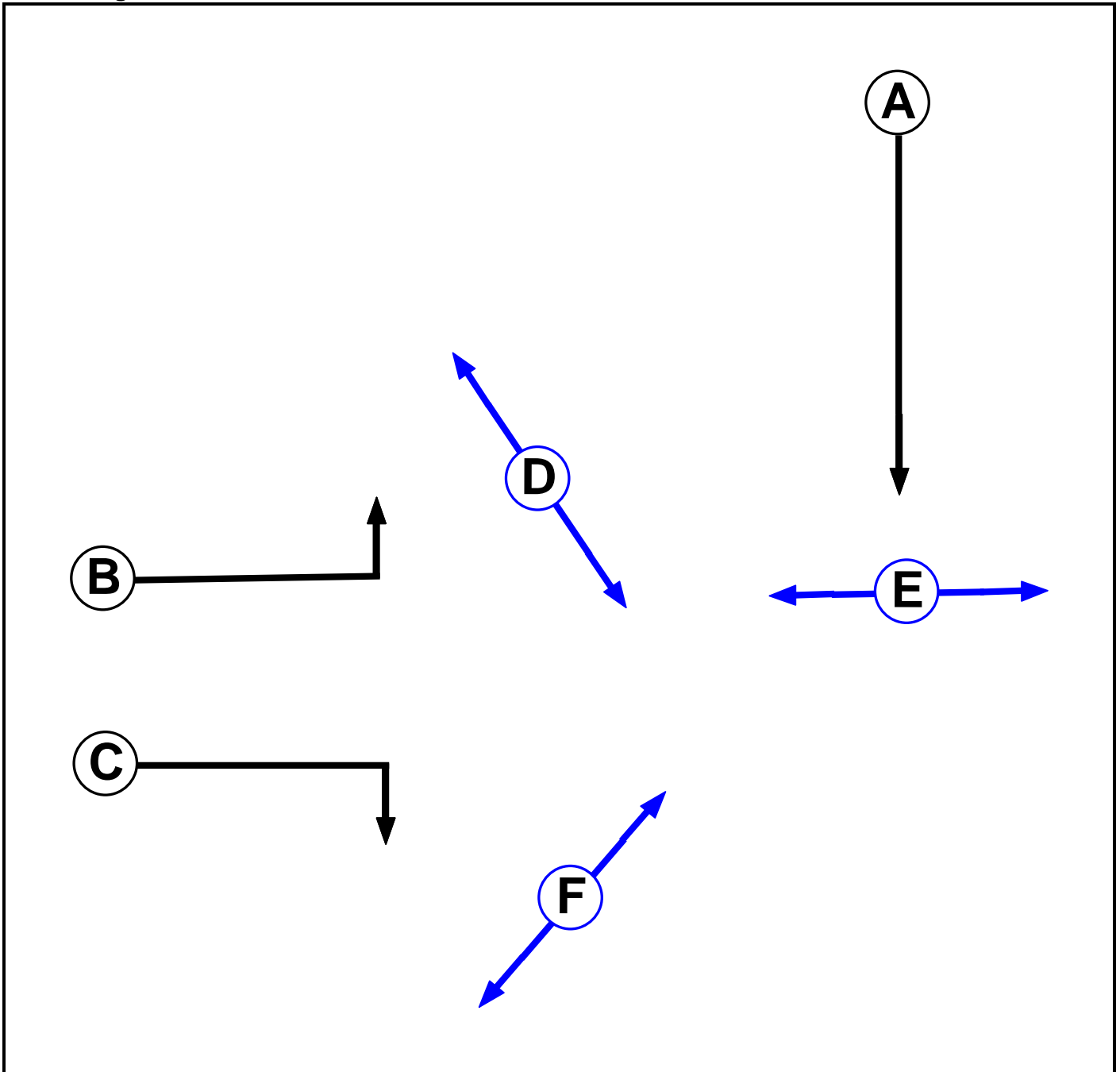
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	45.1%	0	0	0	5.0	-	-
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	45.1%	0	0	0	5.0	-	-
1/1	Rutland St Ahead	U	A		1	25	-	439	1915	996	44.1%	-	-	-	1.3	10.7	4.2
1/2	Rutland St Ahead	U	A		1	25	-	466	1985	1032	45.1%	-	-	-	1.4	10.7	4.4
2/1	Francis St Left	U	B		1	31	-	399	1714	1097	36.4%	-	-	-	0.8	6.8	2.8
2/2	Francis St Left	U	B		1	31	-	412	1741	1114	37.0%	-	-	-	0.8	6.8	2.9
2/3	Francis St Right	U	C		1	12	-	135	1681	437	30.9%	-	-	-	0.8	20.9	1.7
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	E		1	13	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	F		1	25	-	0	-	0	0.0%	-	-	-	-	-	-
					C1	Stream: 1 PRC for Signalled Lanes (%):		99.4	Total Delay for Signalled Lanes (pcuHr):			3.47	Cycle Time (s):		50		
					C1	Stream: 2 PRC for Signalled Lanes (%):		143.4	Total Delay for Signalled Lanes (pcuHr):			1.53	Cycle Time (s):		50		
						PRC Over All Lanes (%):		99.4	Total Delay Over All Lanes(pcuHr):			5.01					

Network Layout Diagram

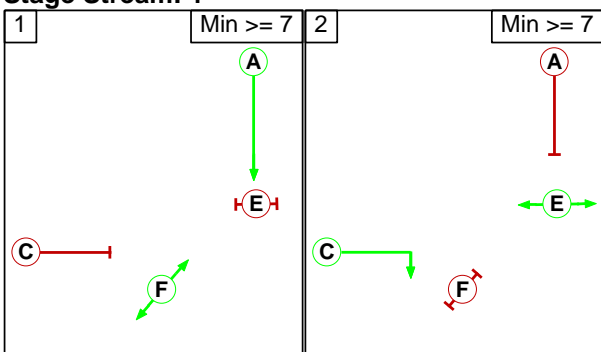


Phase Diagram



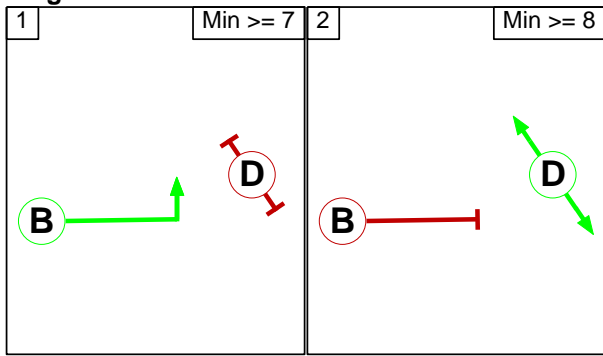
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



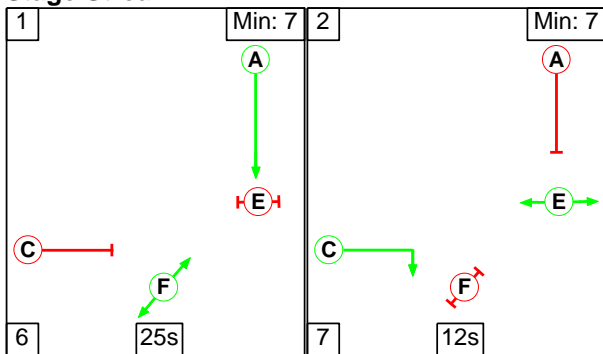
Traffic Flows, Actual

Actual Flow :

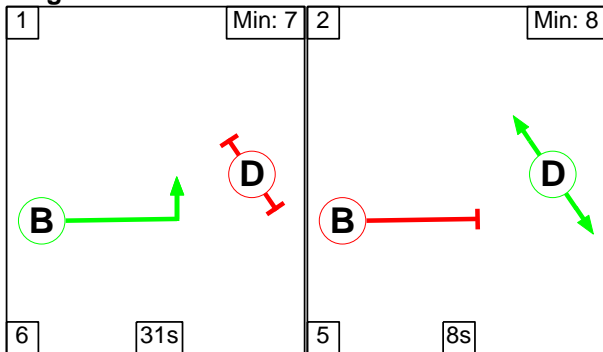
	Destination				
	A	B	C	Tot.	
Origin	A	0	867	0	867
	B	0	0	0	0
	C	744	136	0	880
	Tot.	744	1003	0	1747

Stage Sequence Diagram

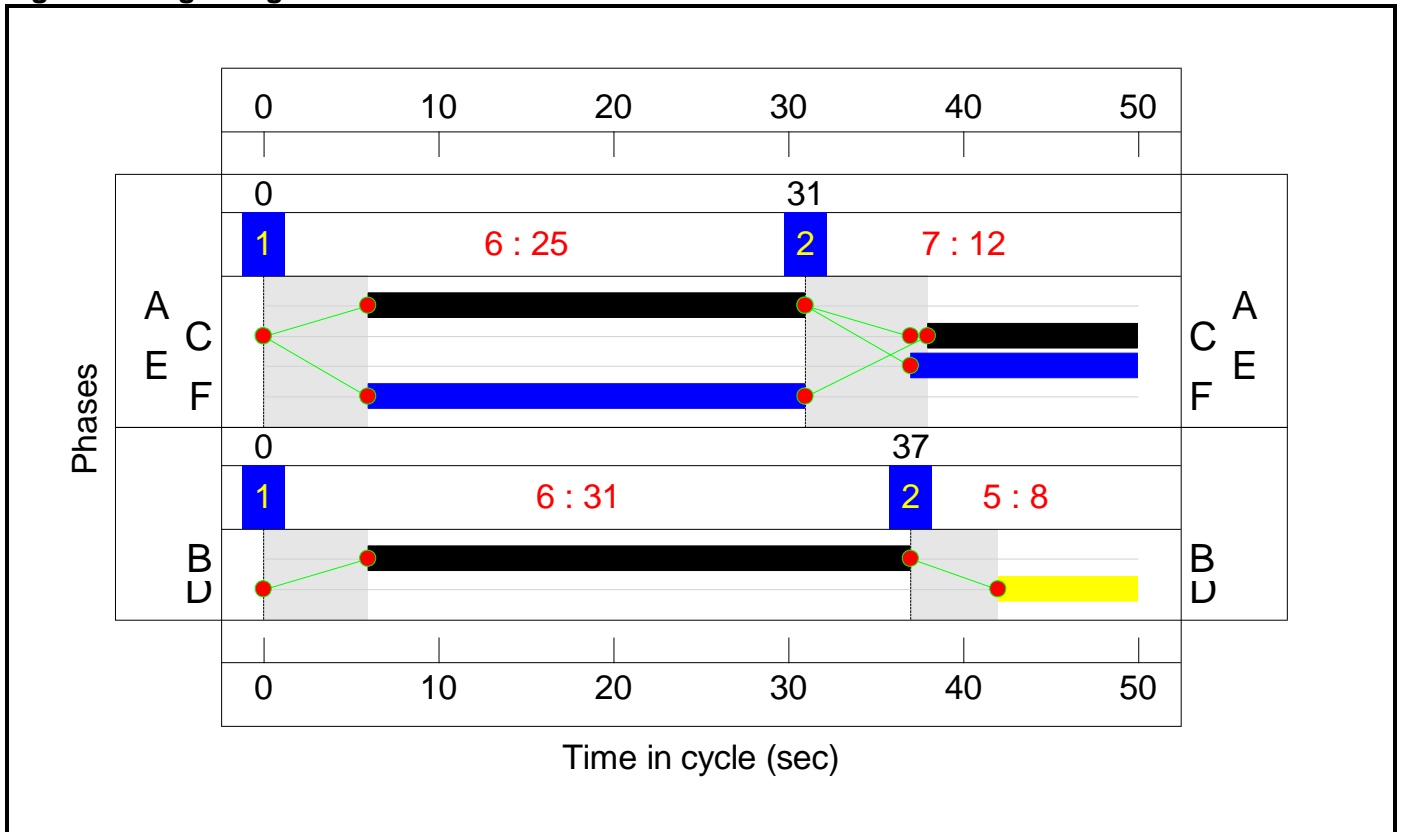
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

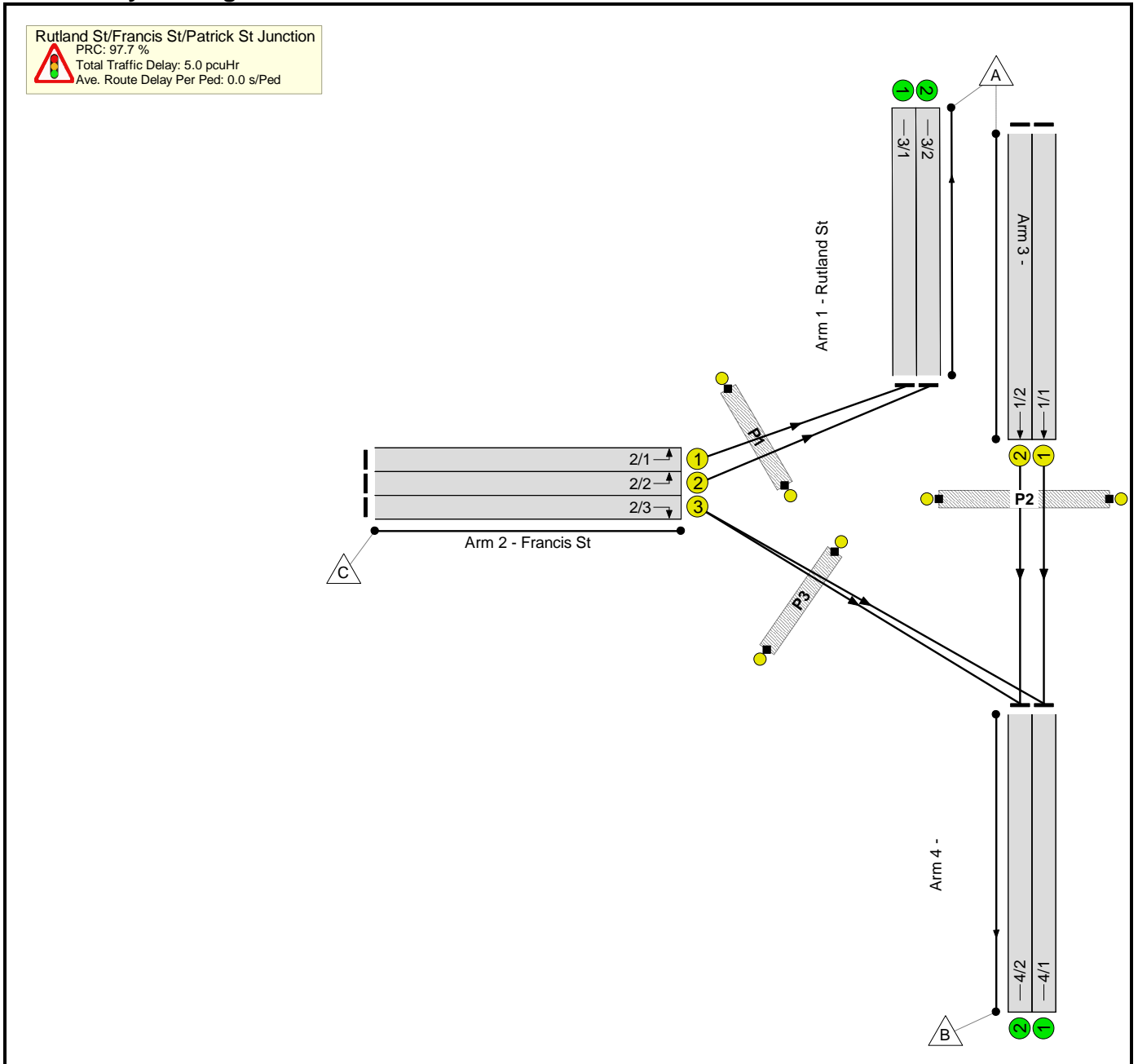


Basic Results Summary Rev1

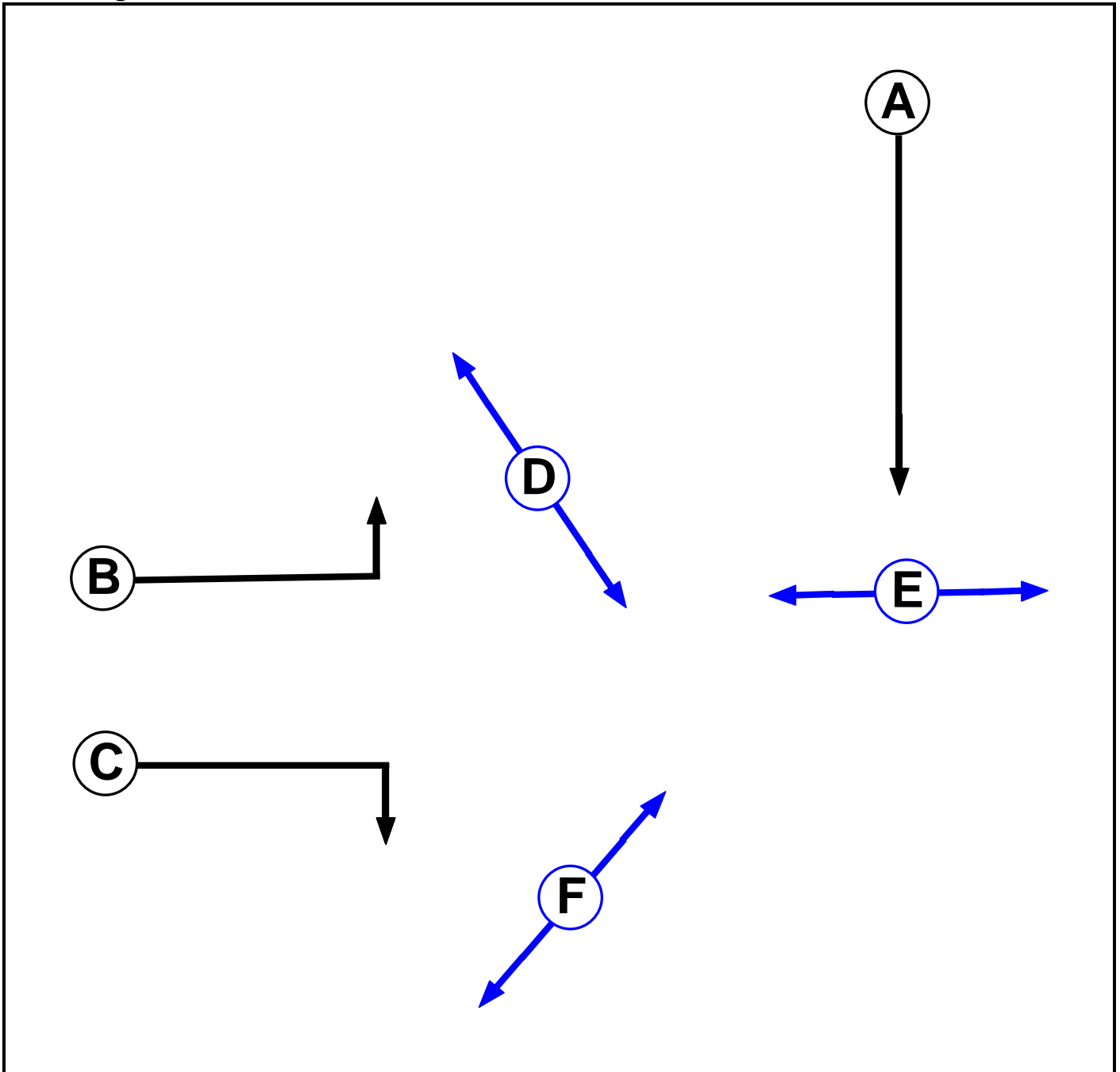
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	43.3%	0	0	0	4.7	-	-	
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	43.3%	0	0	0	4.7	-	-	
1/1	Rutland St Ahead	U	A		1	25	-	420	1915	996	42.2%	-	-	-	1.2	10.5	3.9	
1/2	Rutland St Ahead	U	A		1	25	-	447	1985	1032	43.3%	-	-	-	1.3	10.5	4.1	
2/1	Francis St Left	U	B		1	31	-	366	1714	1097	33.4%	-	-	-	0.7	6.6	2.5	
2/2	Francis St Left	U	B		1	31	-	378	1741	1114	33.9%	-	-	-	0.7	6.6	2.6	
2/3	Francis St Right	U	C		1	12	-	136	1681	437	31.1%	-	-	-	0.8	20.9	1.7	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	E		1	13	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	F		1	25	-	0	-	0	0.0%	-	-	-	-	-	-	
							C1 Stream: 1 PRC for Signalled Lanes (%):	107.8	Total Delay for Signalled Lanes (pcuHr):				3.32	Cycle Time (s):		50		
							C1 Stream: 2 PRC for Signalled Lanes (%):	165.3	Total Delay for Signalled Lanes (pcuHr):				1.36	Cycle Time (s):		50		
							PRC Over All Lanes (%):	107.8	Total Delay Over All Lanes(pcuHr):				4.68					

Network Layout Diagram

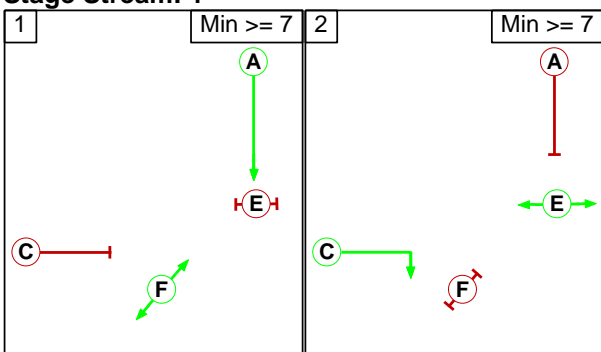


Phase Diagram



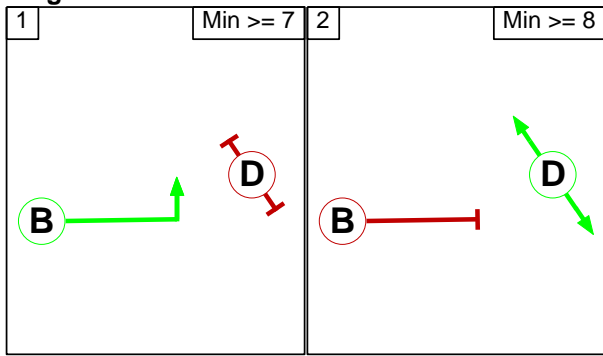
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



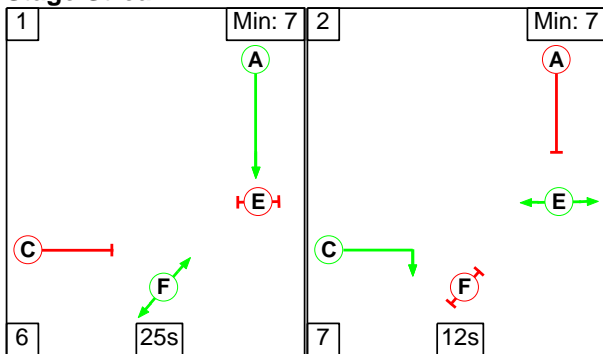
Traffic Flows, Actual

Actual Flow :

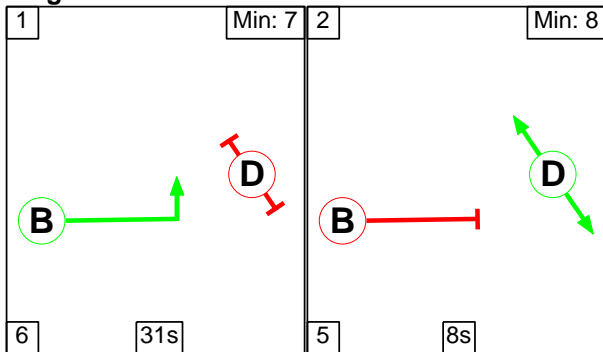
	Destination				
	A	B	C	Tot.	
Origin	A	0	914	0	914
	B	0	0	0	0
	C	786	143	0	929
	Tot.	786	1057	0	1843

Stage Sequence Diagram

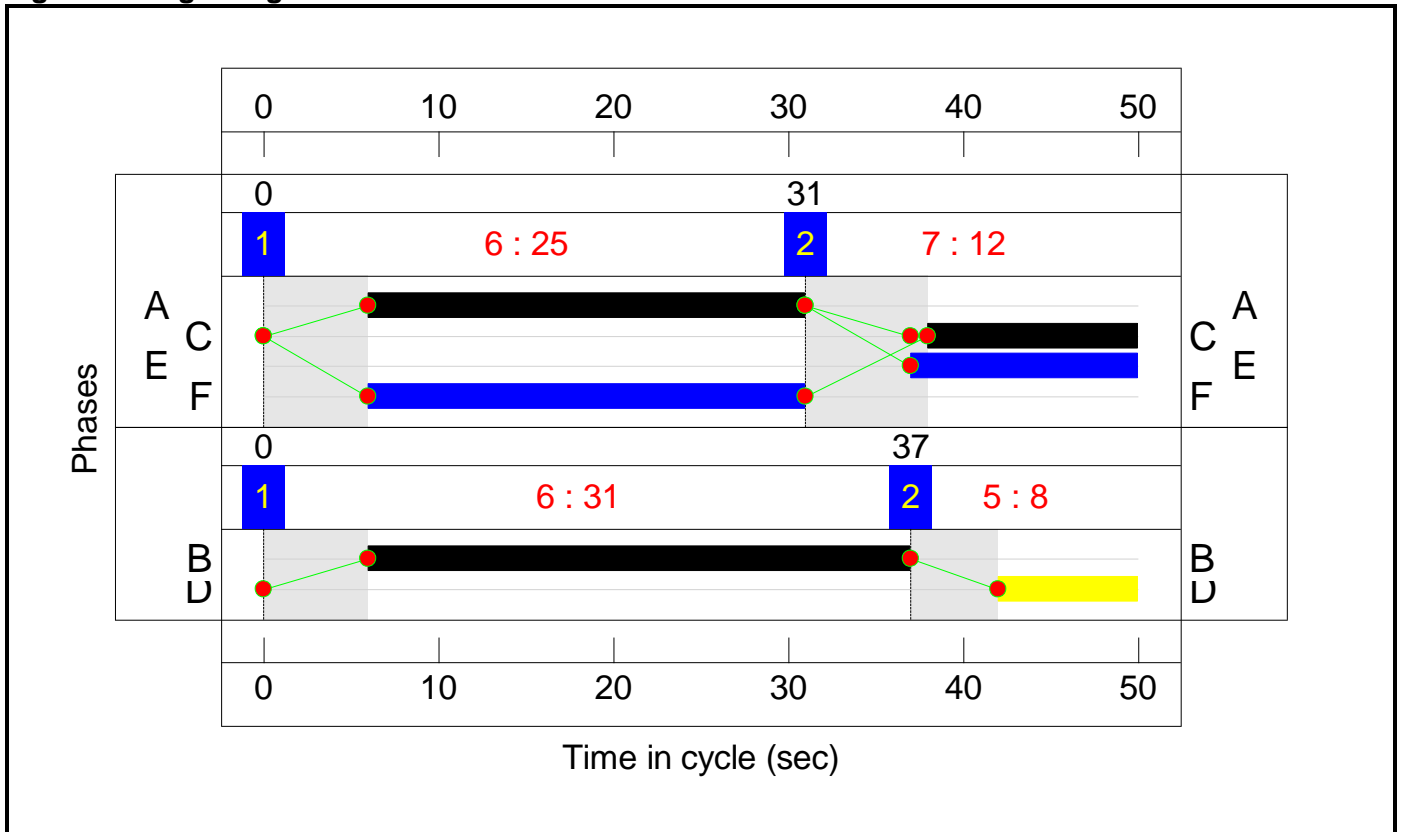
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

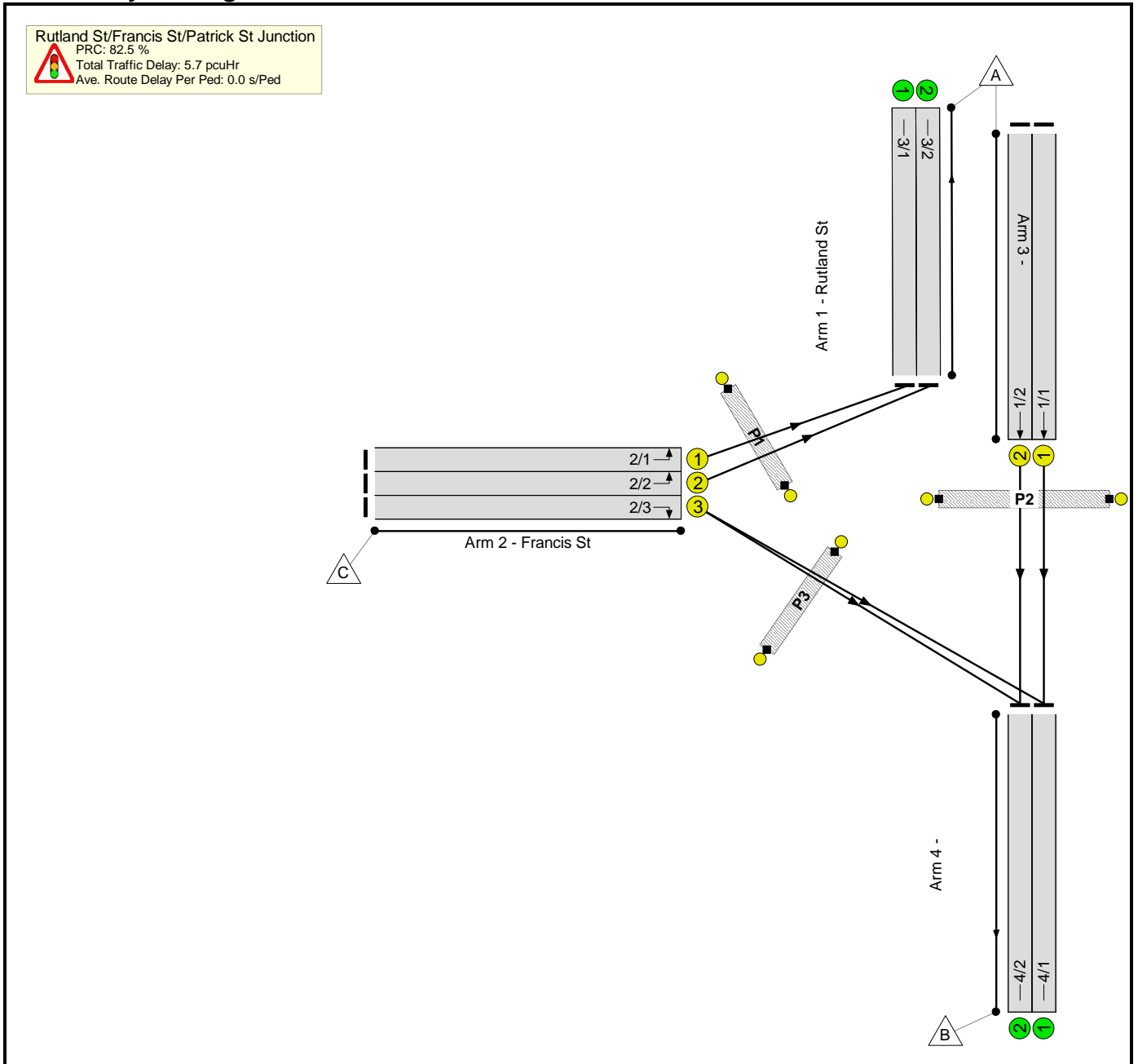


Basic Results Summary Rev1

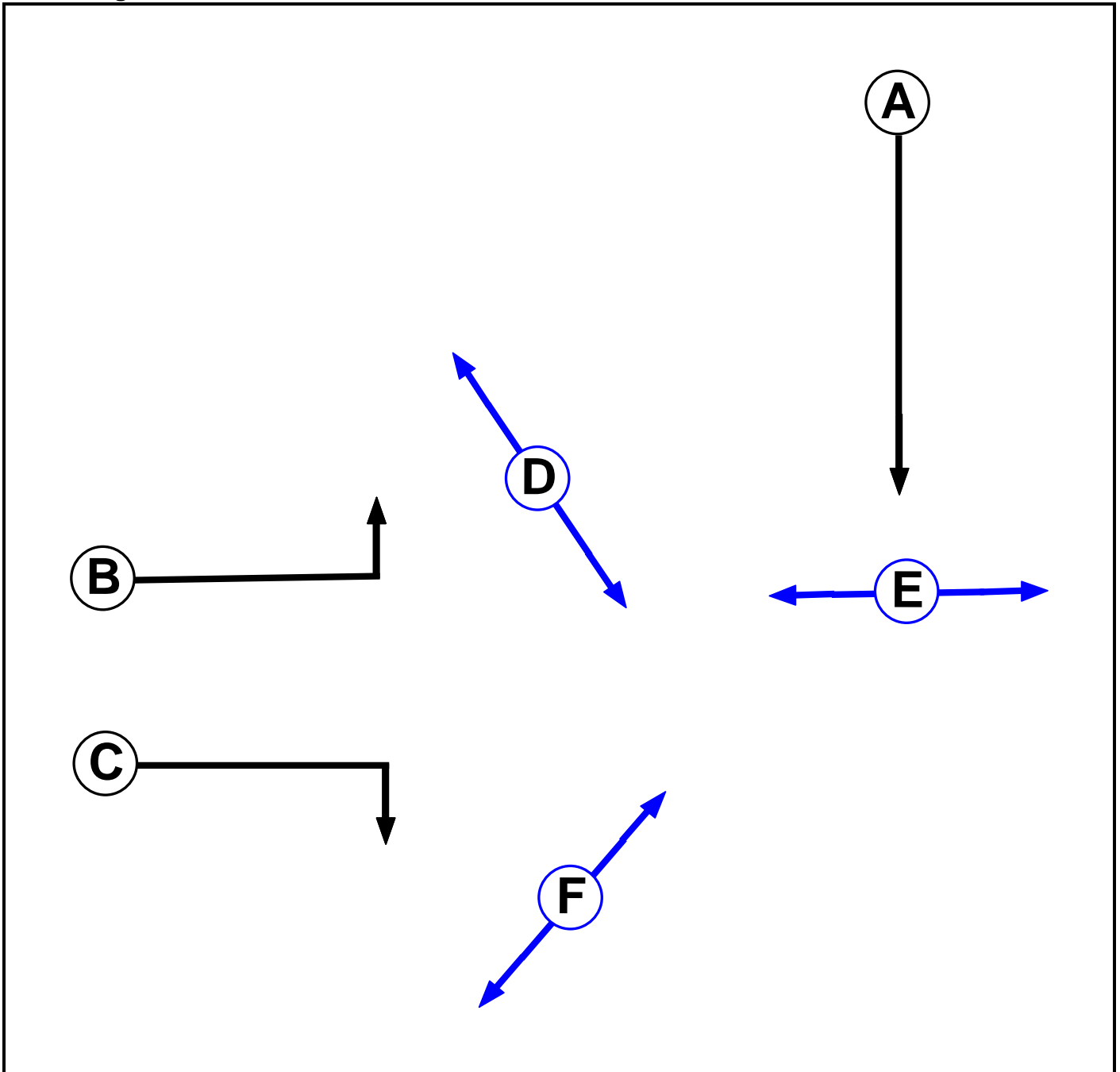
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	45.5%	0	0	0	5.0	-	-	
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	45.5%	0	0	0	5.0	-	-	
1/1	Rutland St Ahead	U	A		1	25	-	444	1915	996	44.6%	-	-	-	1.3	10.8	4.2	
1/2	Rutland St Ahead	U	A		1	25	-	470	1985	1032	45.5%	-	-	-	1.4	10.8	4.5	
2/1	Francis St Left	U	B		1	31	-	387	1714	1097	35.3%	-	-	-	0.7	6.7	2.7	
2/2	Francis St Left	U	B		1	31	-	399	1741	1114	35.8%	-	-	-	0.7	6.7	2.8	
2/3	Francis St Right	U	C		1	12	-	143	1681	437	32.7%	-	-	-	0.8	21.1	1.8	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	E		1	13	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	F		1	25	-	0	-	0	0.0%	-	-	-	-	-	-	
							C1 Stream: 1 PRC for Signalled Lanes (%):	97.7	Total Delay for Signalled Lanes (pcuHr):			3.57	Cycle Time (s):		50			
							C1 Stream: 2 PRC for Signalled Lanes (%):	151.3	Total Delay for Signalled Lanes (pcuHr):			1.47	Cycle Time (s):		50			
							PRC Over All Lanes (%):	97.7	Total Delay Over All Lanes(pcuHr):			5.04						

Network Layout Diagram

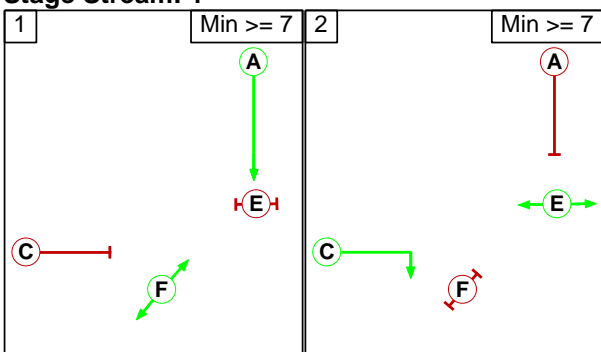


Phase Diagram



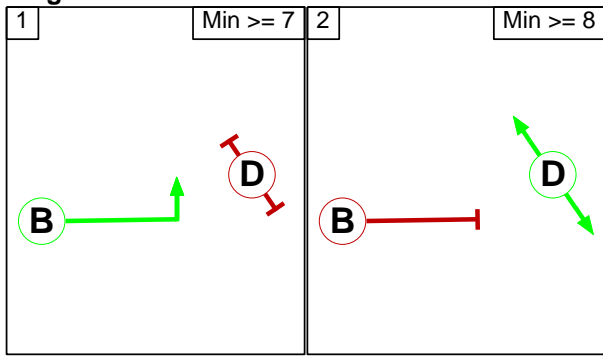
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



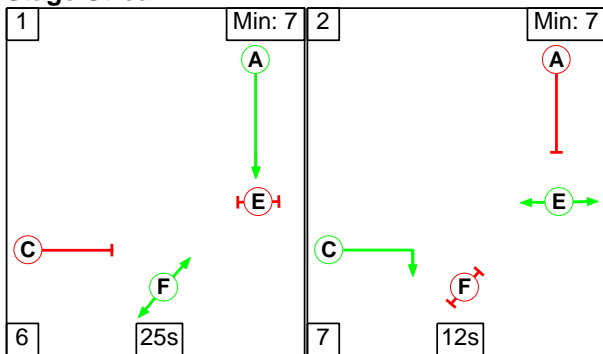
Traffic Flows, Actual

Actual Flow :

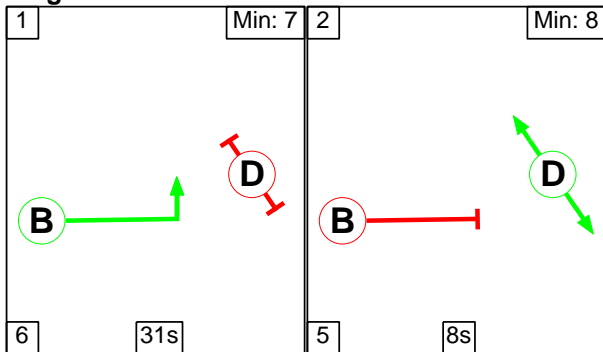
	Destination				
	A	B	C	Tot.	
Origin	A	0	991	0	991
	B	0	0	0	0
	C	855	155	0	1010
	Tot.	855	1146	0	2001

Stage Sequence Diagram

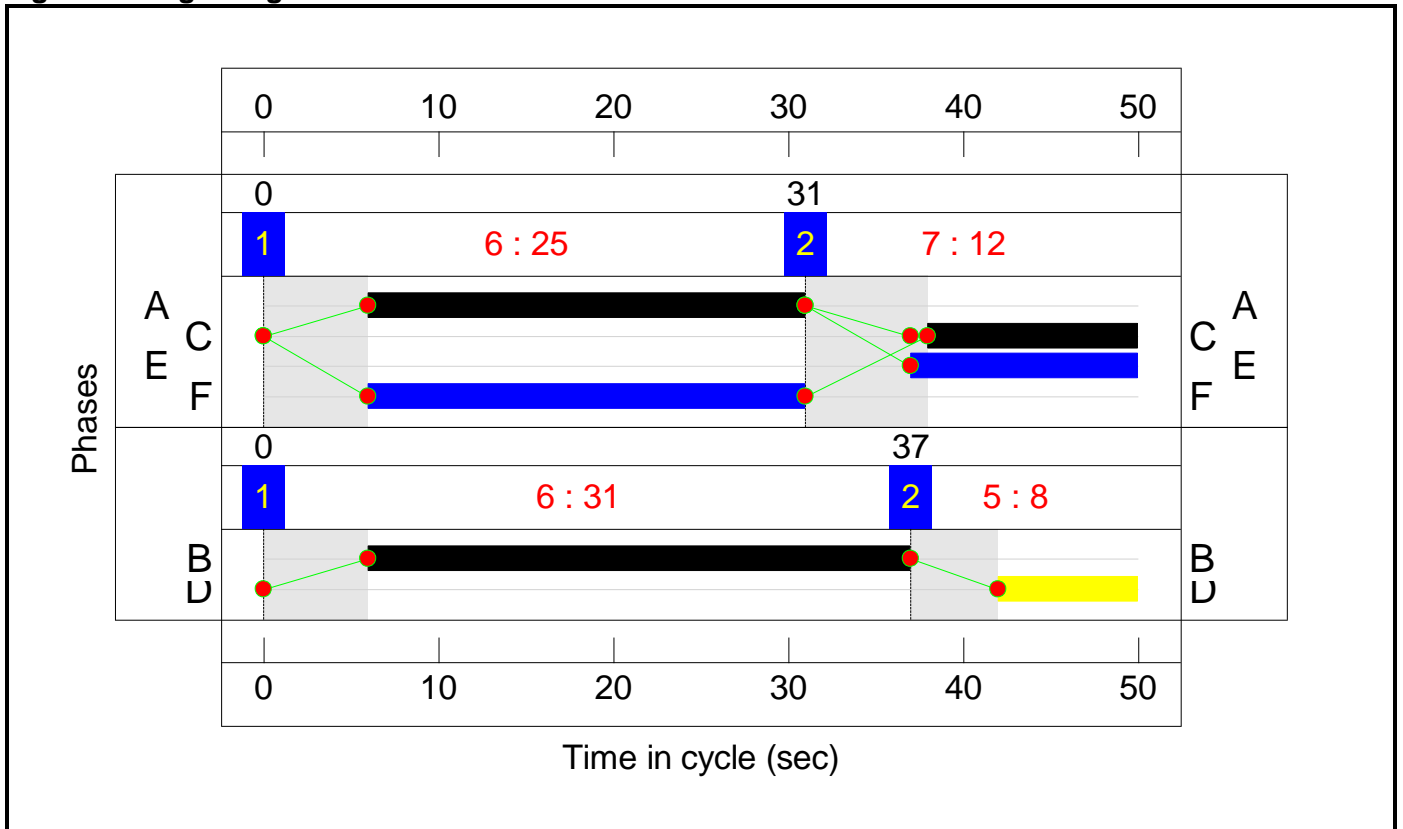
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

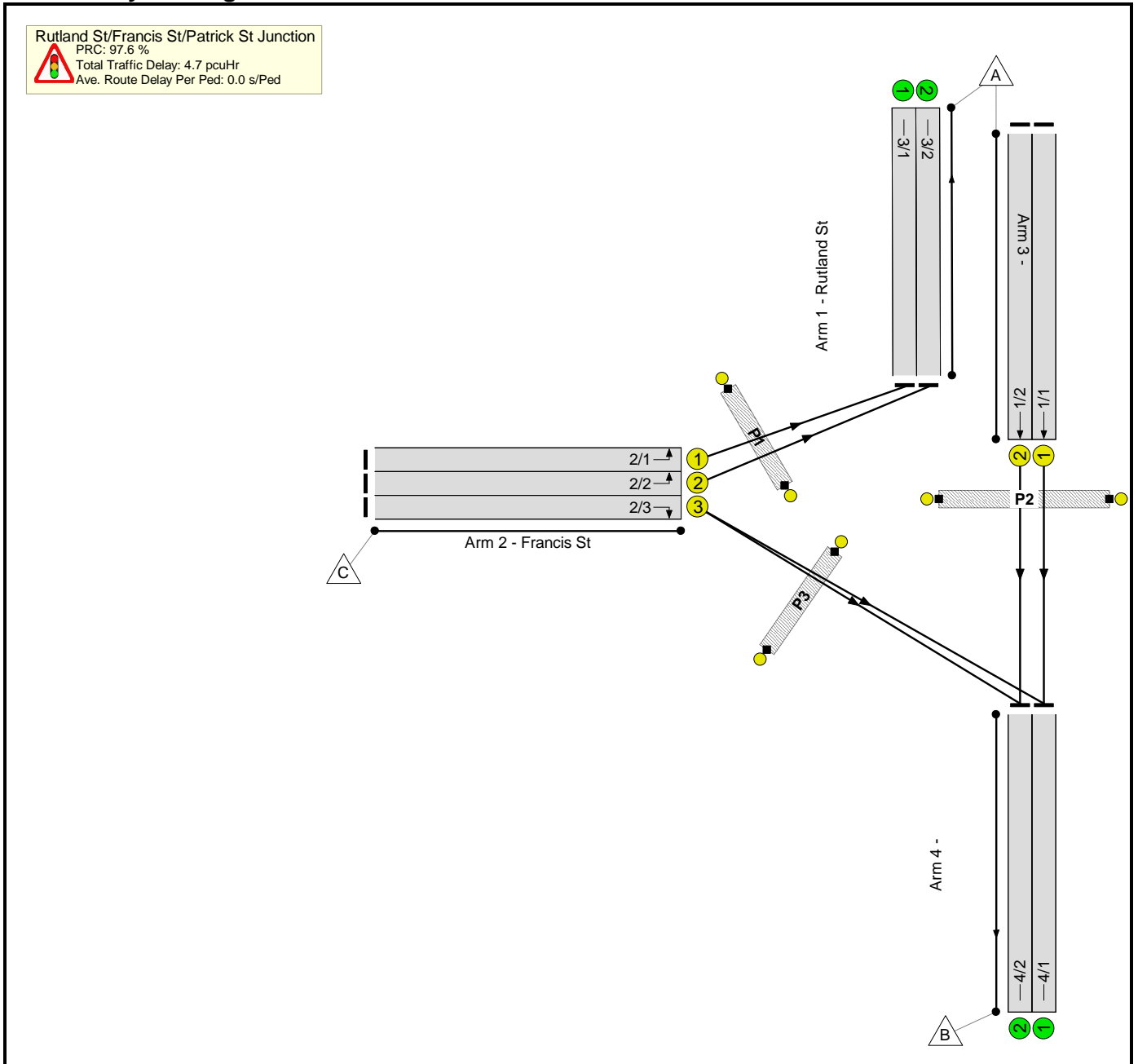


Basic Results Summary Rev1

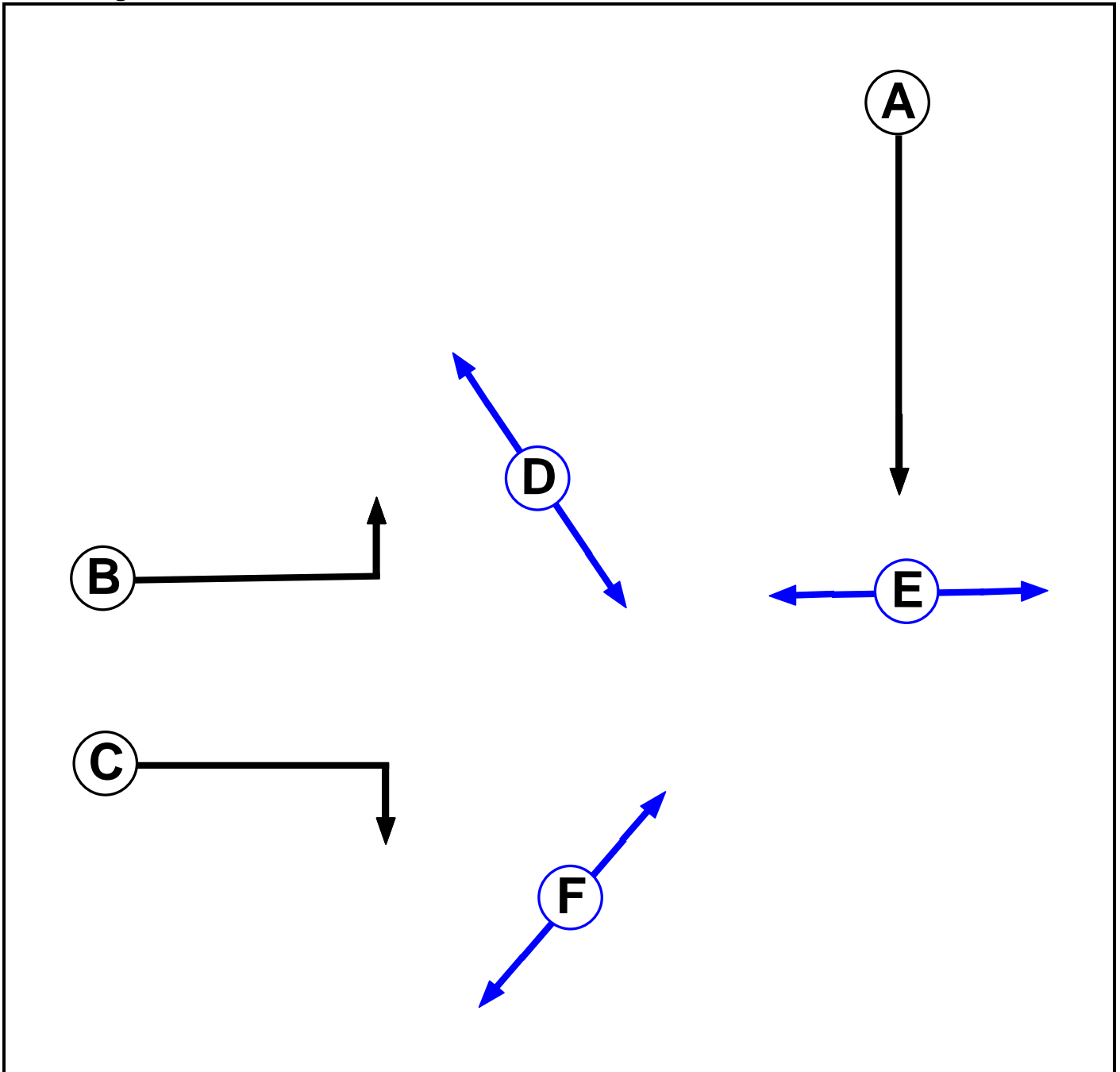
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	49.3%	0	0	0	5.7	-	-	
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	49.3%	0	0	0	5.7	-	-	
1/1	Rutland St Ahead	U	A		1	25	-	482	1915	996	48.4%	-	-	-	1.5	11.2	4.8	
1/2	Rutland St Ahead	U	A		1	25	-	509	1985	1032	49.3%	-	-	-	1.6	11.2	5.0	
2/1	Francis St Left	U	B		1	31	-	421	1714	1097	38.4%	-	-	-	0.8	7.0	3.0	
2/2	Francis St Left	U	B		1	31	-	434	1741	1114	39.0%	-	-	-	0.8	7.0	3.1	
2/3	Francis St Right	U	C		1	12	-	155	1681	437	35.5%	-	-	-	0.9	21.5	2.0	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	E		1	13	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	F		1	25	-	0	-	0	0.0%	-	-	-	-	-	-	
							C1 Stream: 1 PRC for Signalled Lanes (%):	82.5	Total Delay for Signalled Lanes (pcuHr):			4.00	Cycle Time (s):		50			
							C1 Stream: 2 PRC for Signalled Lanes (%):	131.1	Total Delay for Signalled Lanes (pcuHr):			1.65	Cycle Time (s):		50			
							PRC Over All Lanes (%):	82.5	Total Delay Over All Lanes(pcuHr):			5.66						

Network Layout Diagram

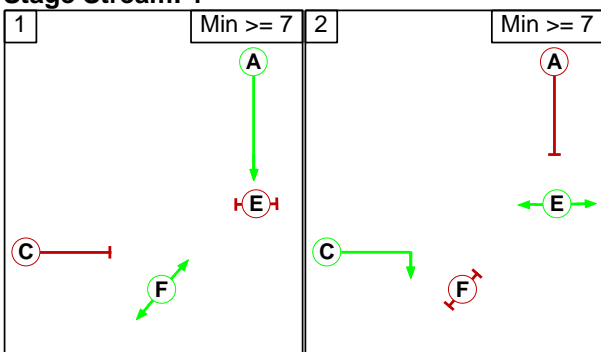


Phase Diagram



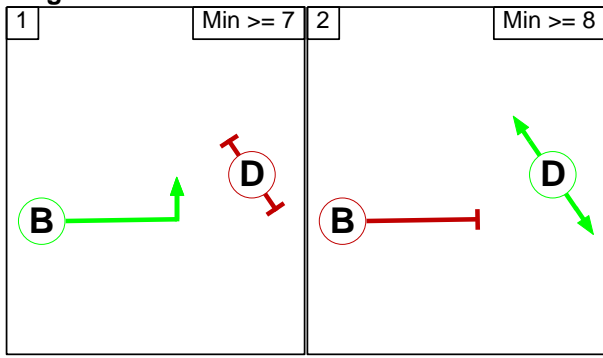
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



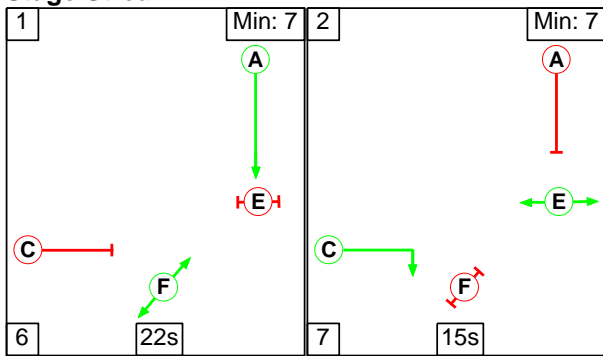
Traffic Flows, Actual

Actual Flow :

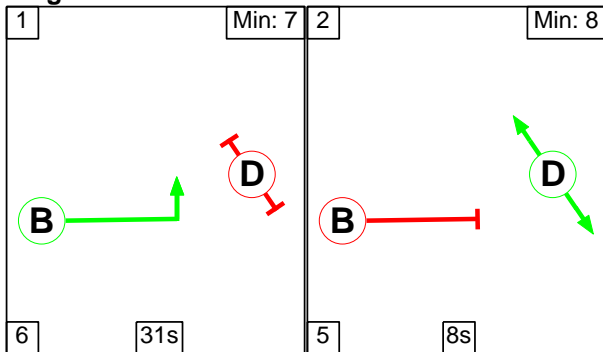
	Destination				
	A	B	C	Tot.	
Origin	A	0	640	0	640
	B	0	0	0	0
	C	714	245	0	959
	Tot.	714	885	0	1599

Stage Sequence Diagram

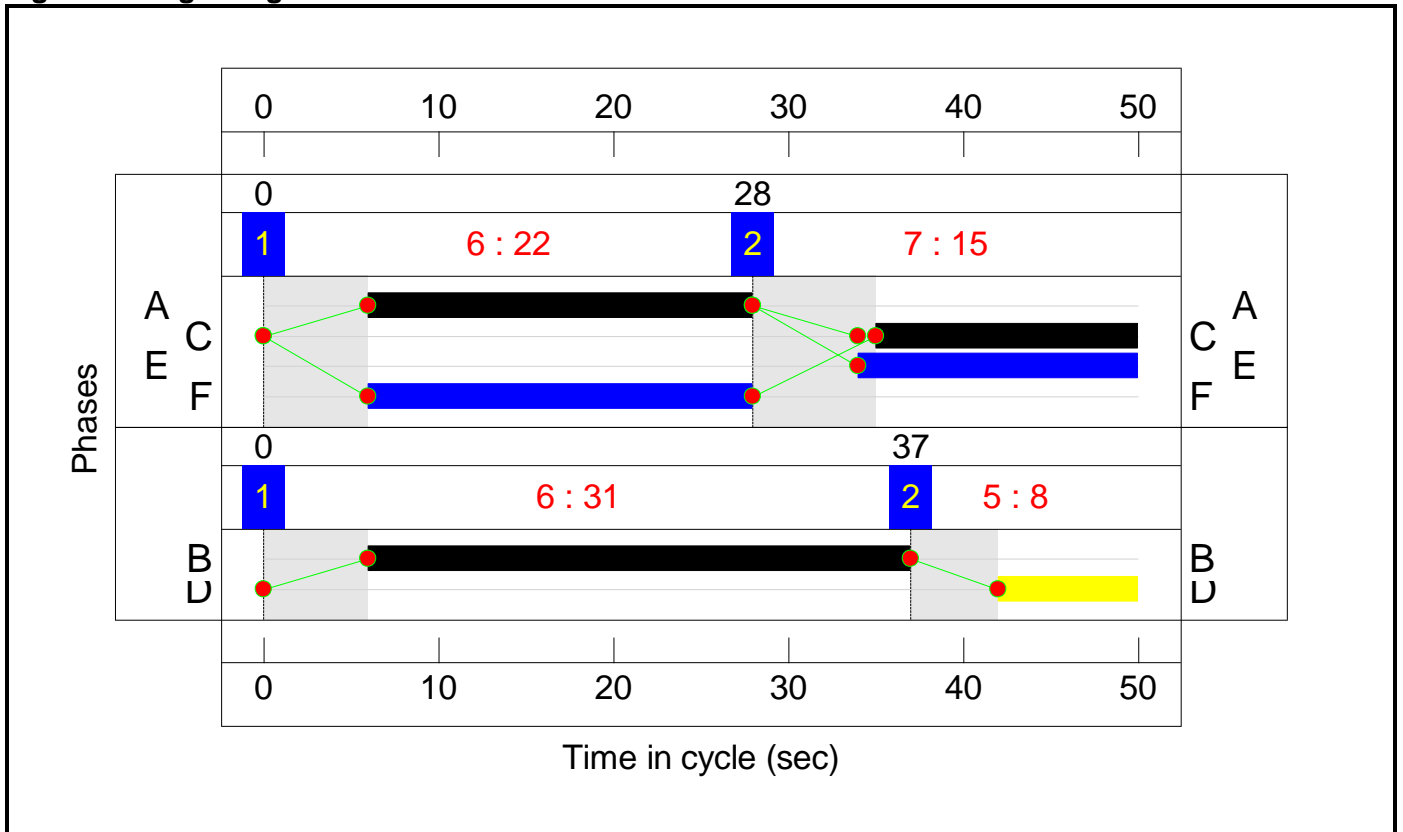
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

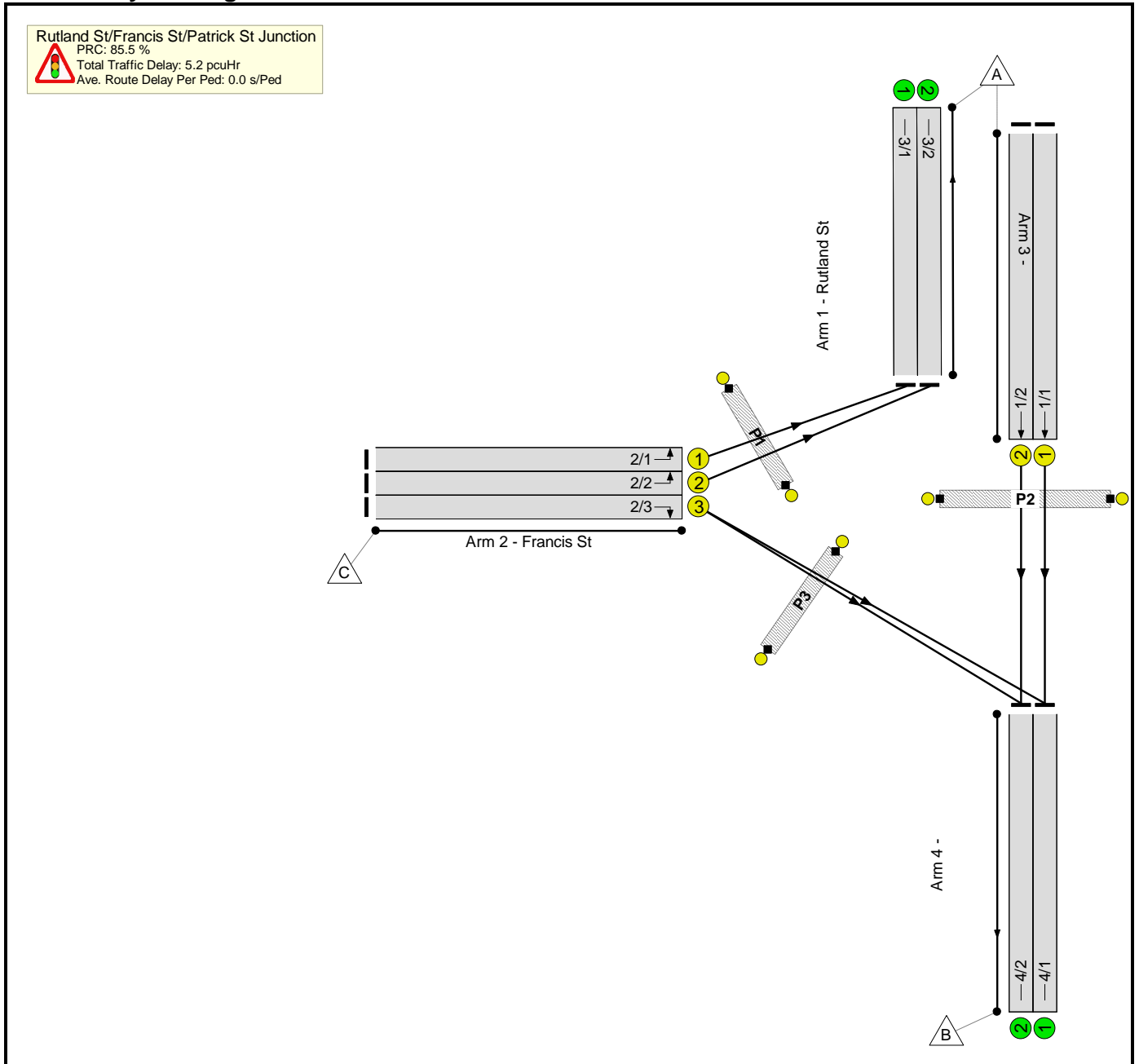


Basic Results Summary Rev1

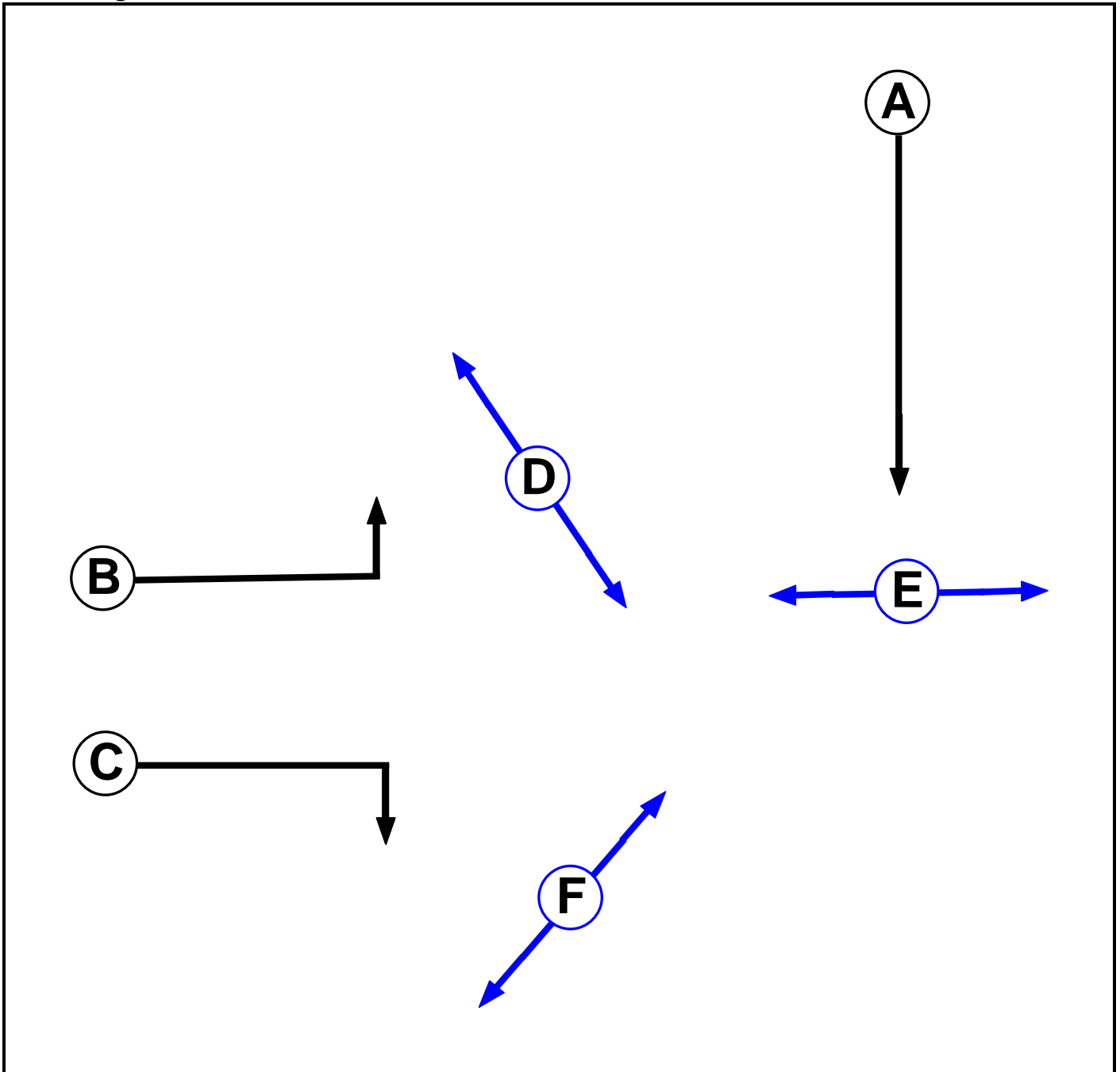
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	45.5%	0	0	0	4.7	-	-
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	45.5%	0	0	0	4.7	-	-
1/1	Rutland St Ahead	U	A		1	22	-	309	1915	881	35.1%	-	-	-	1.0	11.8	3.0
1/2	Rutland St Ahead	U	A		1	22	-	331	1985	913	36.3%	-	-	-	1.1	11.9	3.2
2/1	Francis St Left	U	B		1	31	-	351	1714	1097	32.0%	-	-	-	0.6	6.5	2.4
2/2	Francis St Left	U	B		1	31	-	363	1741	1114	32.6%	-	-	-	0.7	6.5	2.5
2/3	Francis St Right	U	C		1	15	-	245	1681	538	45.5%	-	-	-	1.3	19.7	3.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	E		1	16	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	F		1	22	-	0	-	0	0.0%	-	-	-	-	-	-
					C1	Stream: 1 PRC for Signalled Lanes (%):		97.6	Total Delay for Signalled Lanes (pcuHr):			3.44	Cycle Time (s):		50		
					C1	Stream: 2 PRC for Signalled Lanes (%):		176.3	Total Delay for Signalled Lanes (pcuHr):			1.29	Cycle Time (s):		50		
						PRC Over All Lanes (%):		97.6	Total Delay Over All Lanes(pcuHr):			4.73					

Network Layout Diagram

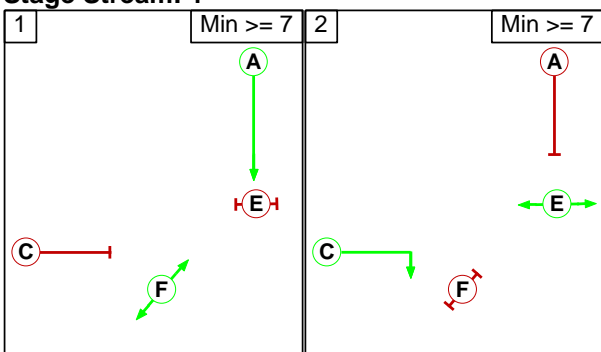


Phase Diagram



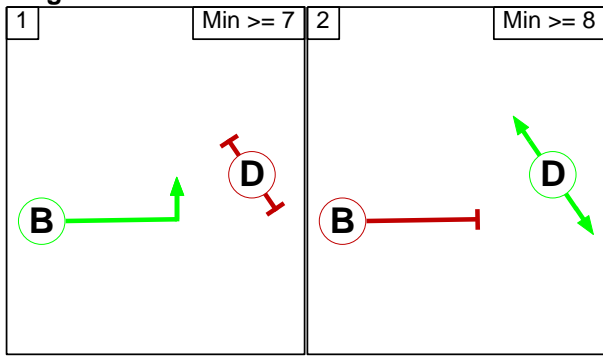
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



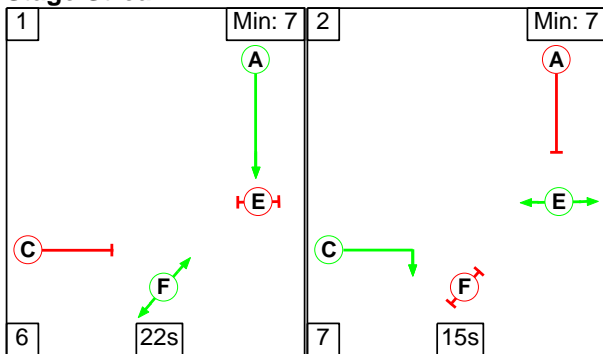
Traffic Flows, Actual

Actual Flow :

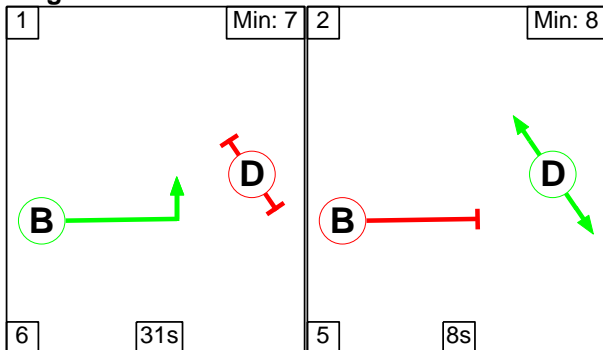
	Destination				
	A	B	C	Tot.	
Origin	A	0	683	0	683
	B	0	0	0	0
	C	762	261	0	1023
	Tot.	762	944	0	1706

Stage Sequence Diagram

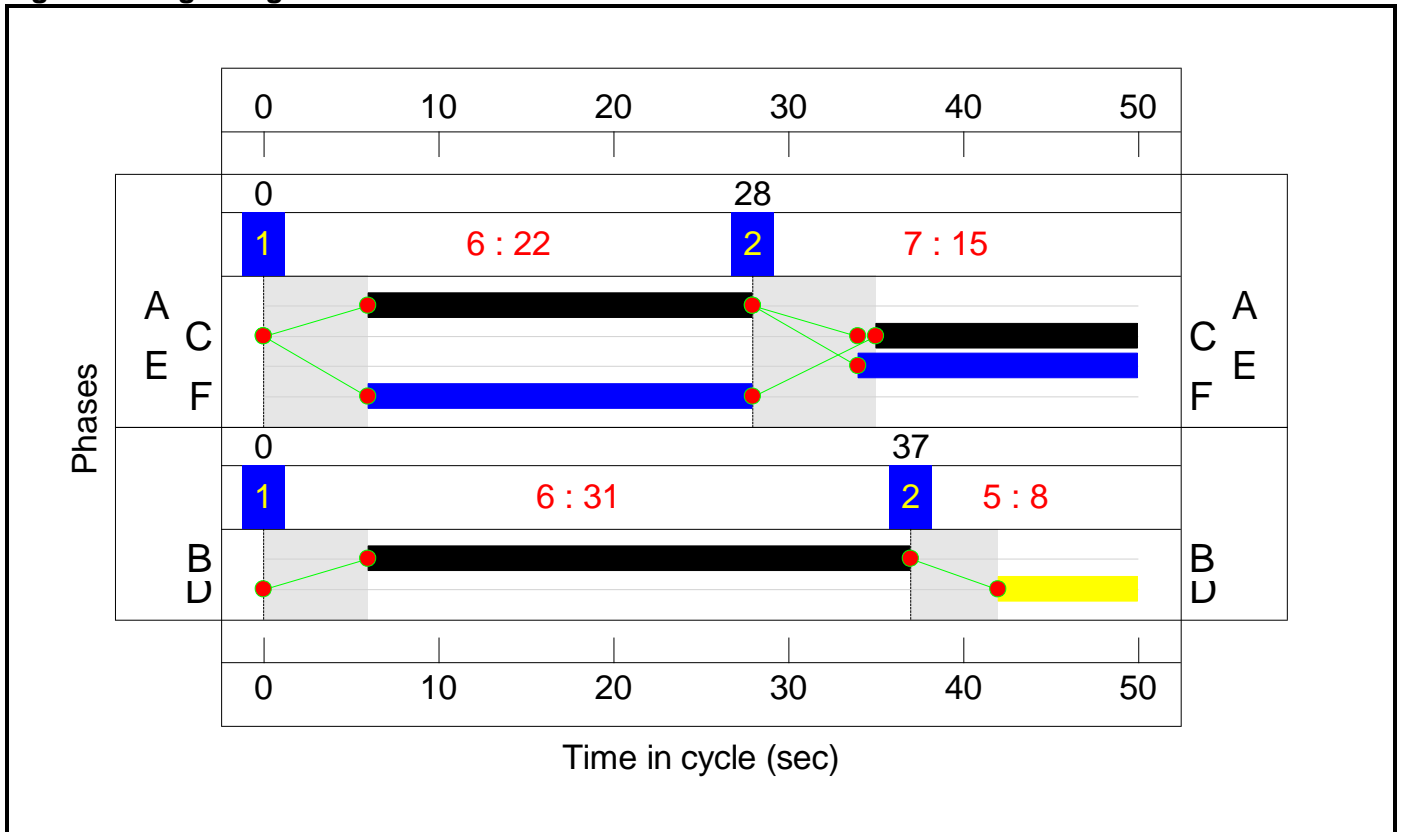
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

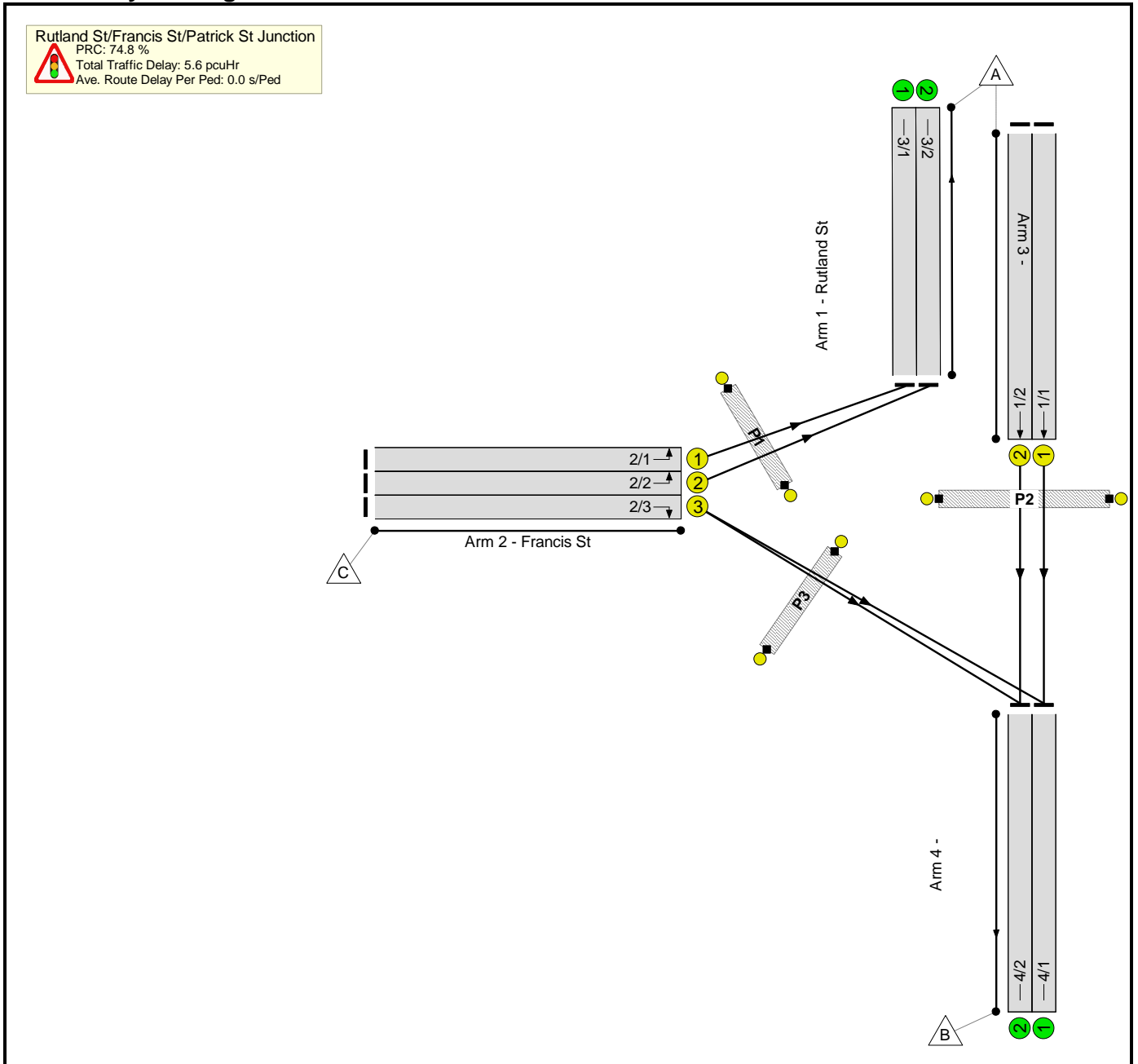


Basic Results Summary Rev1

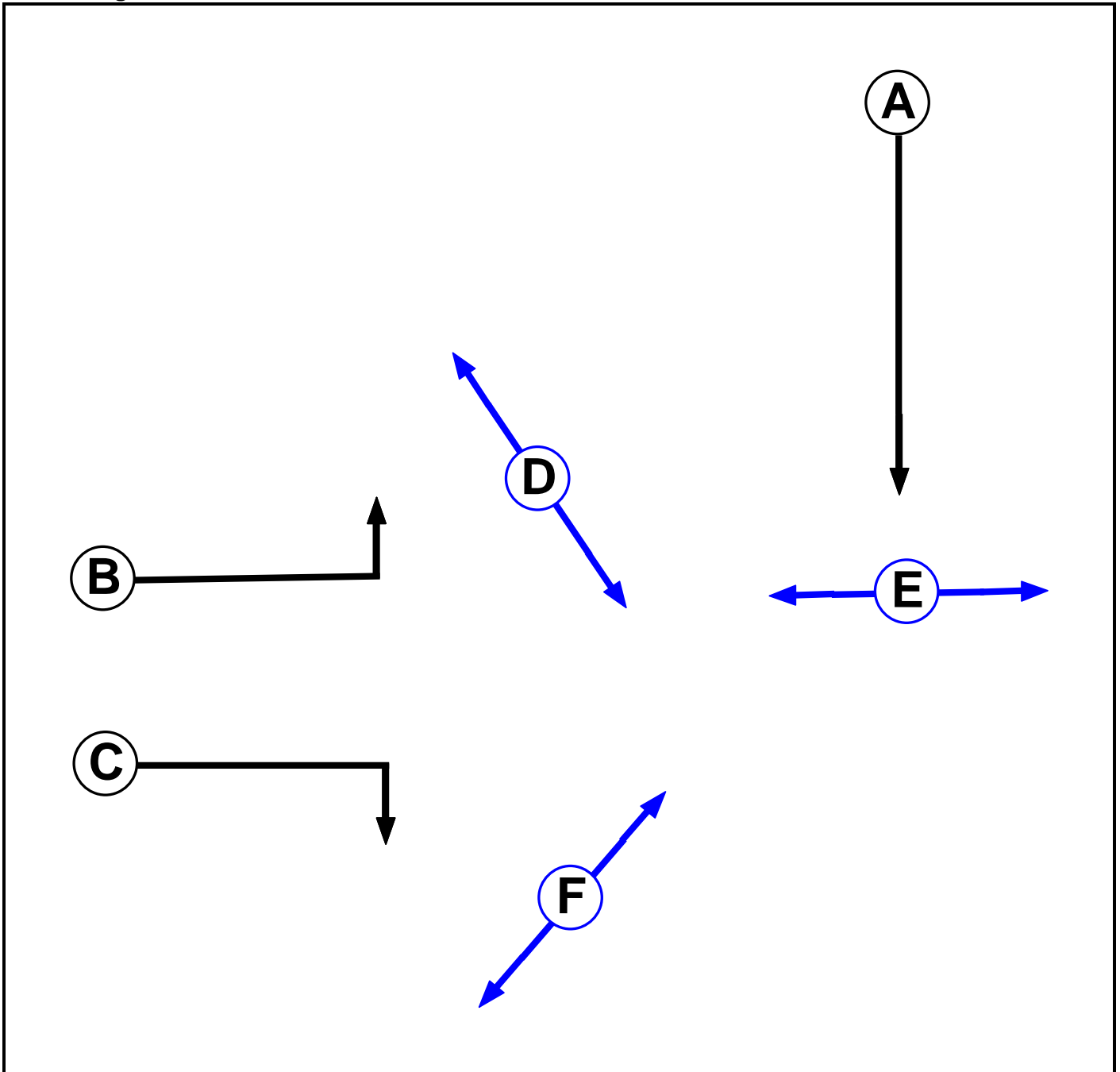
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	48.5%	0	0	0	5.2	-	-	
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	48.5%	0	0	0	5.2	-	-	
1/1	Rutland St Ahead	U	A		1	22	-	330	1915	881	37.5%	-	-	-	1.1	12.1	3.2	
1/2	Rutland St Ahead	U	A		1	22	-	353	1985	913	38.7%	-	-	-	1.2	12.1	3.5	
2/1	Francis St Left	U	B		1	31	-	375	1714	1097	34.2%	-	-	-	0.7	6.6	2.7	
2/2	Francis St Left	U	B		1	31	-	387	1741	1114	34.7%	-	-	-	0.7	6.6	2.7	
2/3	Francis St Right	U	C		1	15	-	261	1681	538	48.5%	-	-	-	1.5	20.2	3.4	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	E		1	16	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	F		1	22	-	0	-	0	0.0%	-	-	-	-	-	-	
							C1 Stream: 1 PRC for Signalled Lanes (%):	85.5	Total Delay for Signalled Lanes (pcuHr):			3.75	Cycle Time (s):		50			
							C1 Stream: 2 PRC for Signalled Lanes (%):	159.1	Total Delay for Signalled Lanes (pcuHr):			1.41	Cycle Time (s):		50			
							PRC Over All Lanes (%):	85.5	Total Delay Over All Lanes(pcuHr):			5.16						

Network Layout Diagram

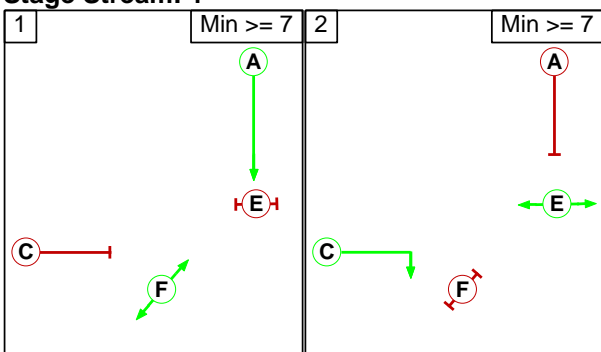


Phase Diagram



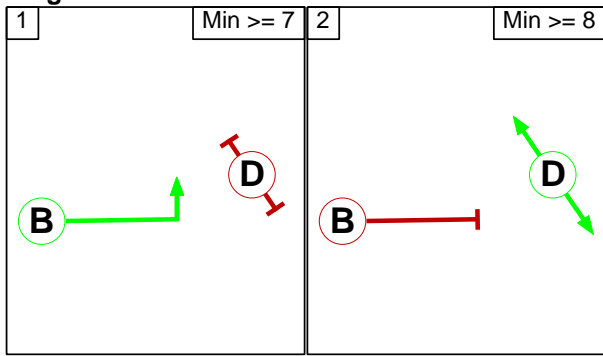
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



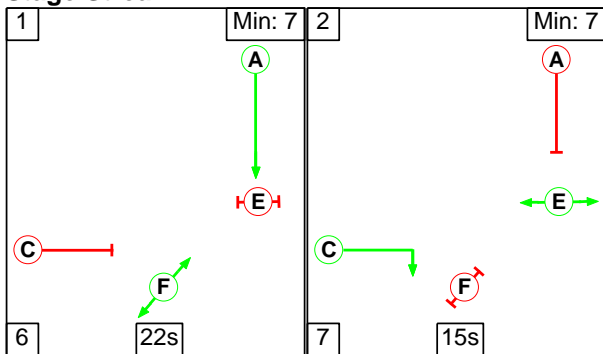
Traffic Flows, Actual

Actual Flow :

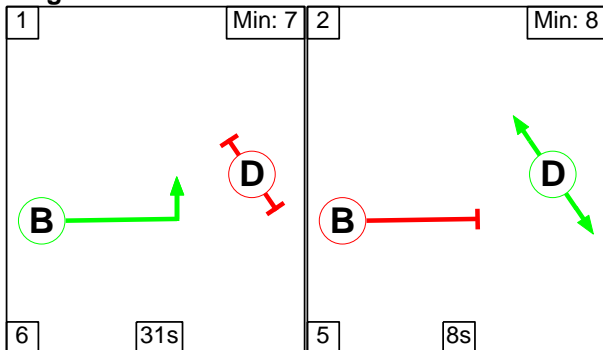
	Destination				
	A	B	C	Tot.	
Origin	A	0	724	0	724
B	0	0	0	0	0
C	808	277	0	1085	
Tot.	808	1001	0	1809	

Stage Sequence Diagram

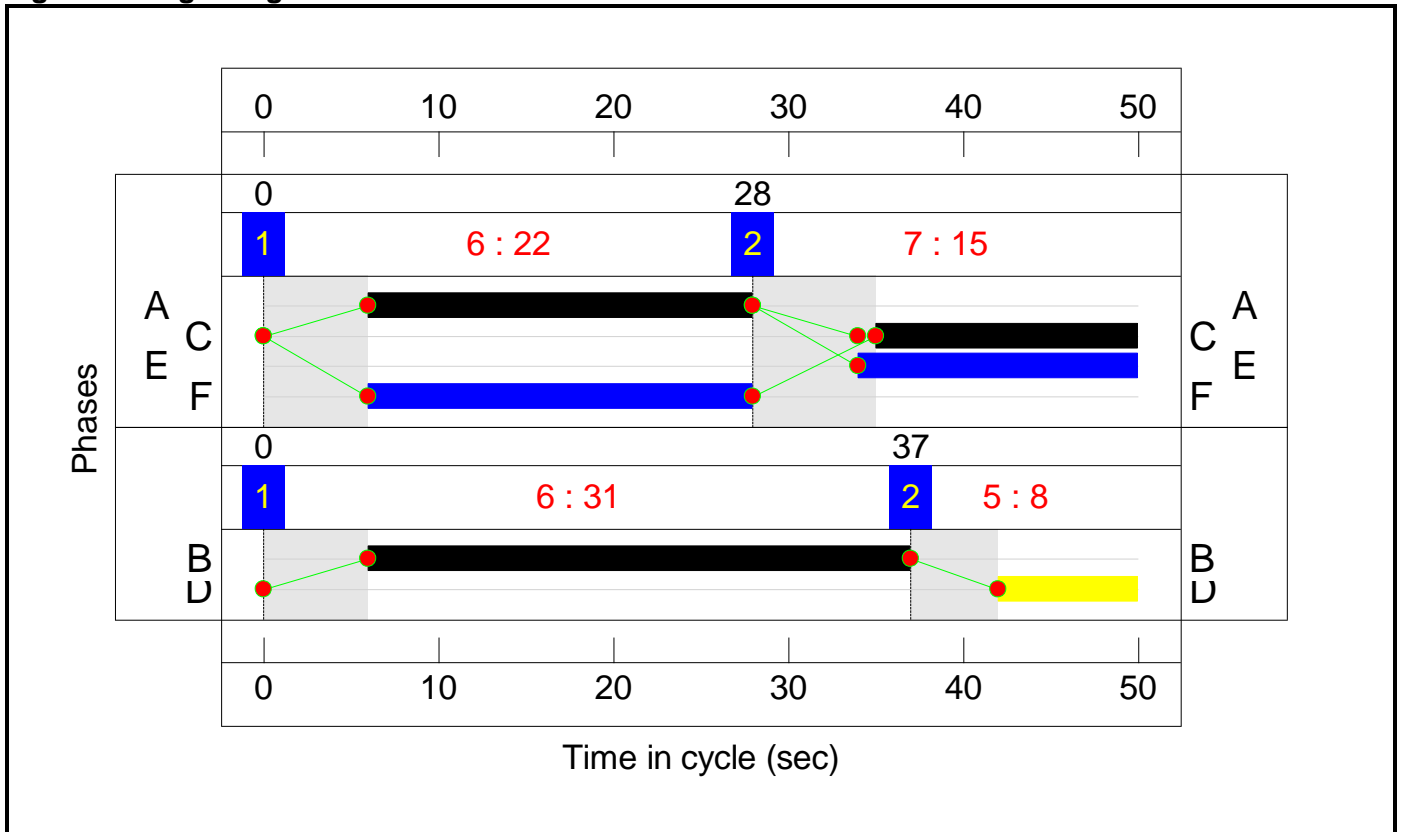
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

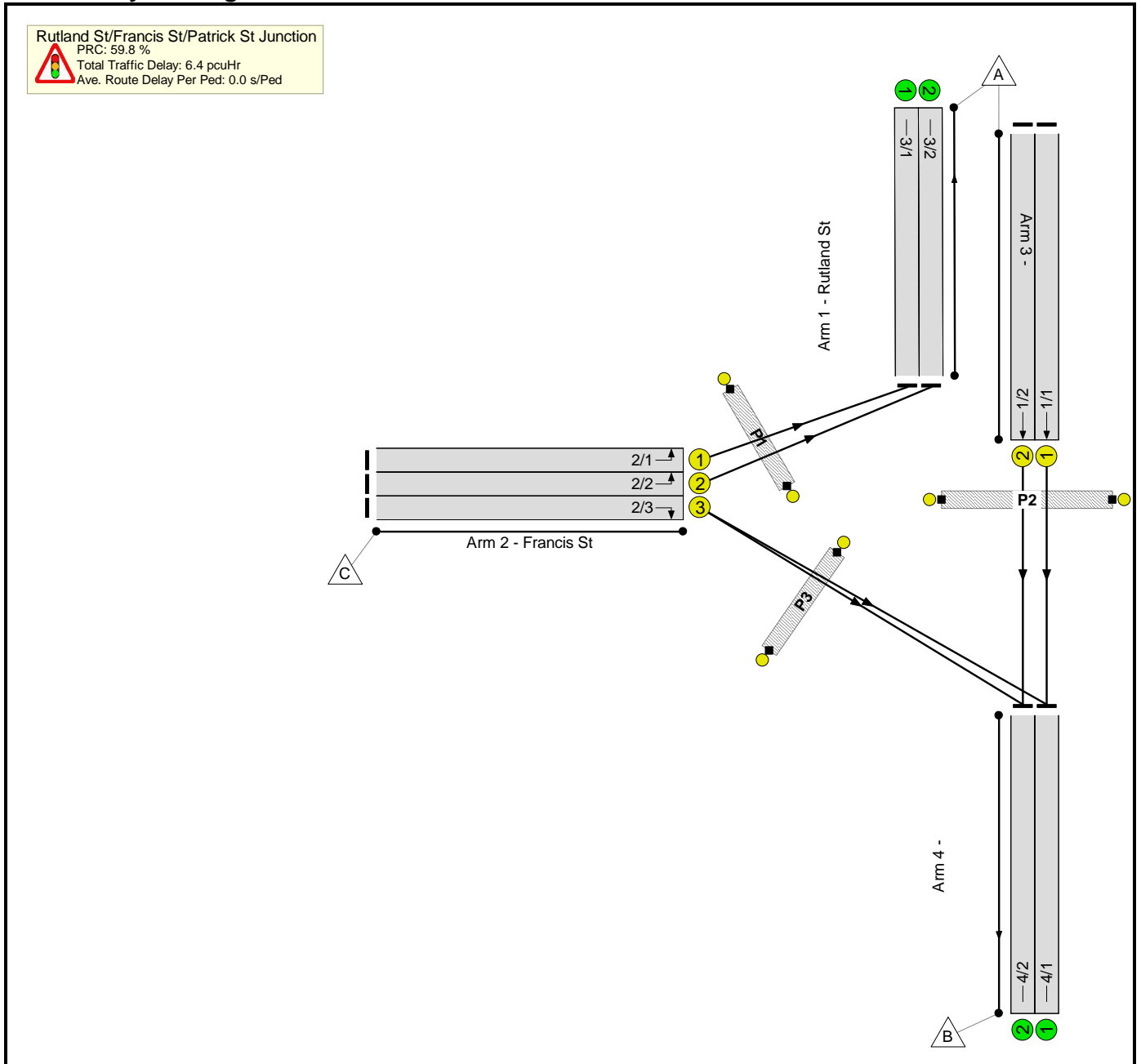


Basic Results Summary Rev1

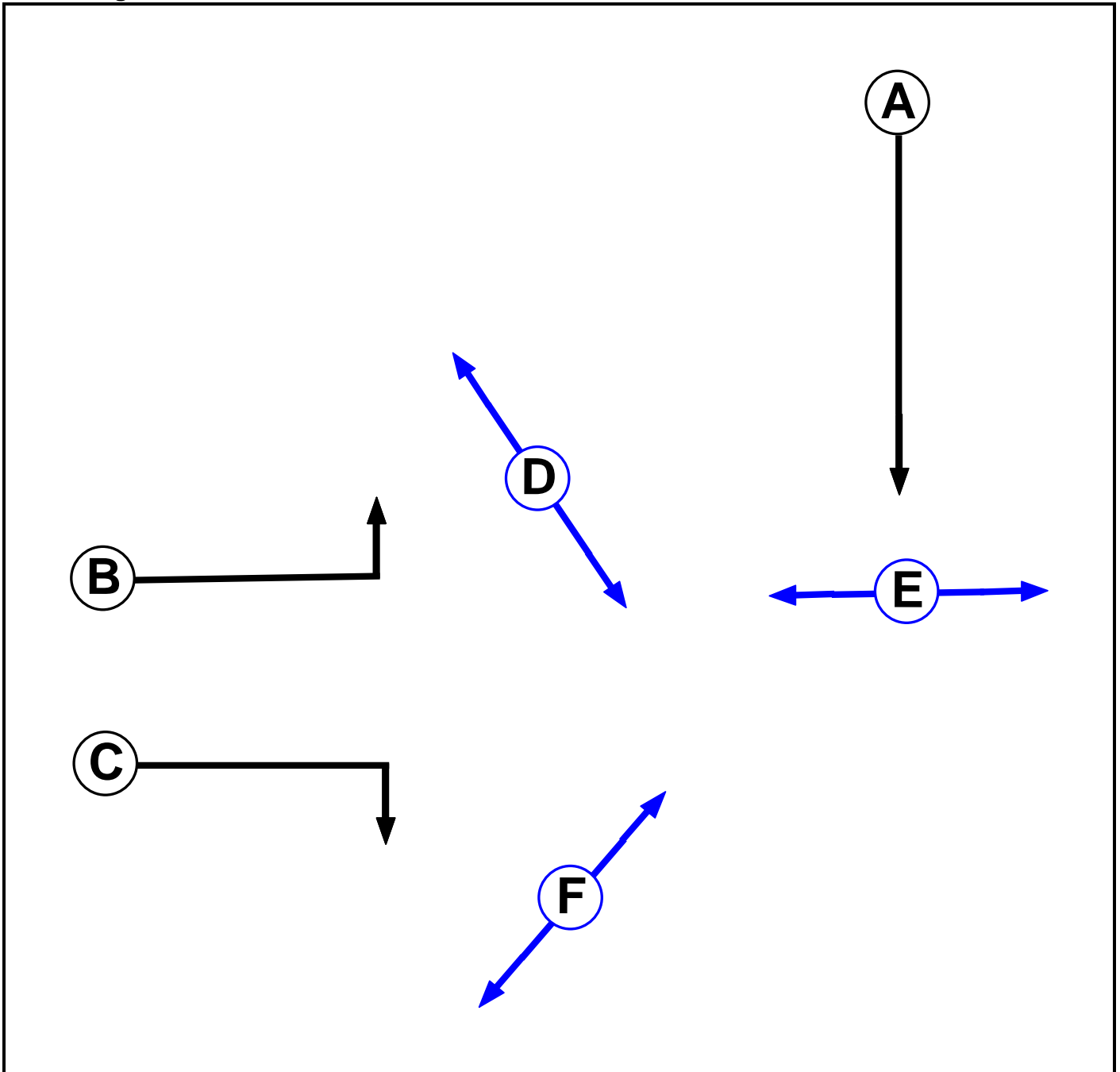
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	51.5%	0	0	0	5.6	-	-	
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	51.5%	0	0	0	5.6	-	-	
1/1	Rutland St Ahead	U	A		1	22	-	351	1915	881	39.8%	-	-	-	1.2	12.3	3.5	
1/2	Rutland St Ahead	U	A		1	22	-	373	1985	913	40.8%	-	-	-	1.3	12.3	3.8	
2/1	Francis St Left	U	B		1	31	-	398	1714	1097	36.3%	-	-	-	0.8	6.8	2.8	
2/2	Francis St Left	U	B		1	31	-	410	1741	1114	36.8%	-	-	-	0.8	6.8	2.9	
2/3	Francis St Right	U	C		1	15	-	277	1681	538	51.5%	-	-	-	1.6	20.7	3.6	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	E		1	16	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	F		1	22	-	0	-	0	0.0%	-	-	-	-	-	-	
							C1 Stream: 1 PRC for Signalled Lanes (%):	74.8	Total Delay for Signalled Lanes (pcuHr):			4.07	Cycle Time (s):		50			
							C1 Stream: 2 PRC for Signalled Lanes (%):	144.6	Total Delay for Signalled Lanes (pcuHr):			1.53	Cycle Time (s):		50			
							PRC Over All Lanes (%):	74.8	Total Delay Over All Lanes(pcuHr):			5.60						

Network Layout Diagram

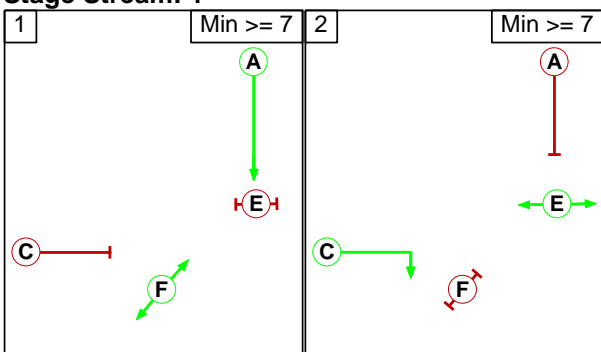


Phase Diagram



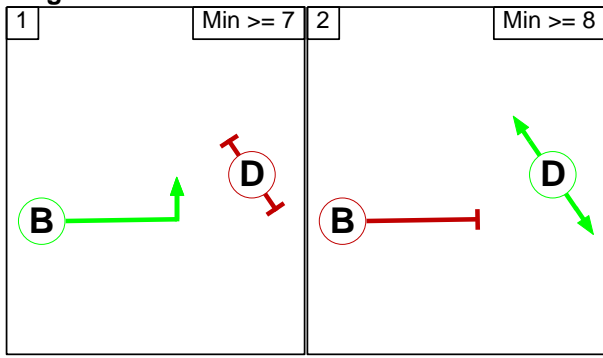
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



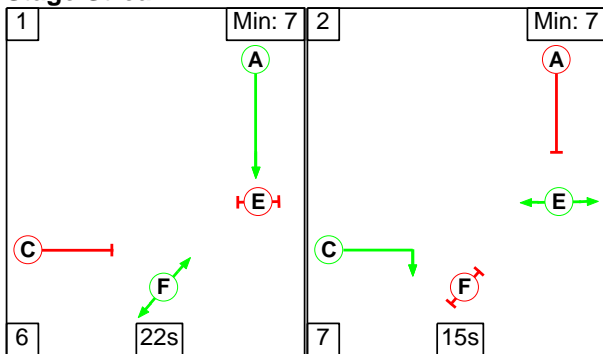
Traffic Flows, Actual

Actual Flow :

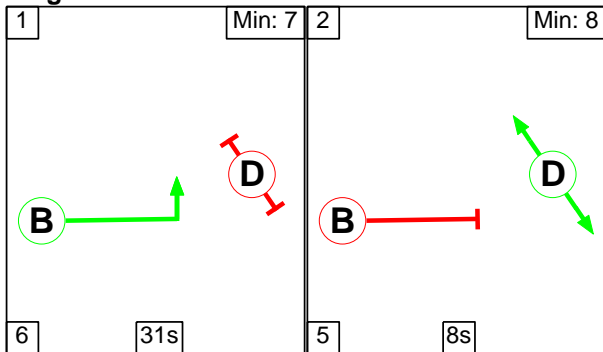
	Destination				
	A	B	C	Tot.	
Origin	A	0	791	0	791
	B	0	0	0	0
	C	882	303	0	1185
	Tot.	882	1094	0	1976

Stage Sequence Diagram

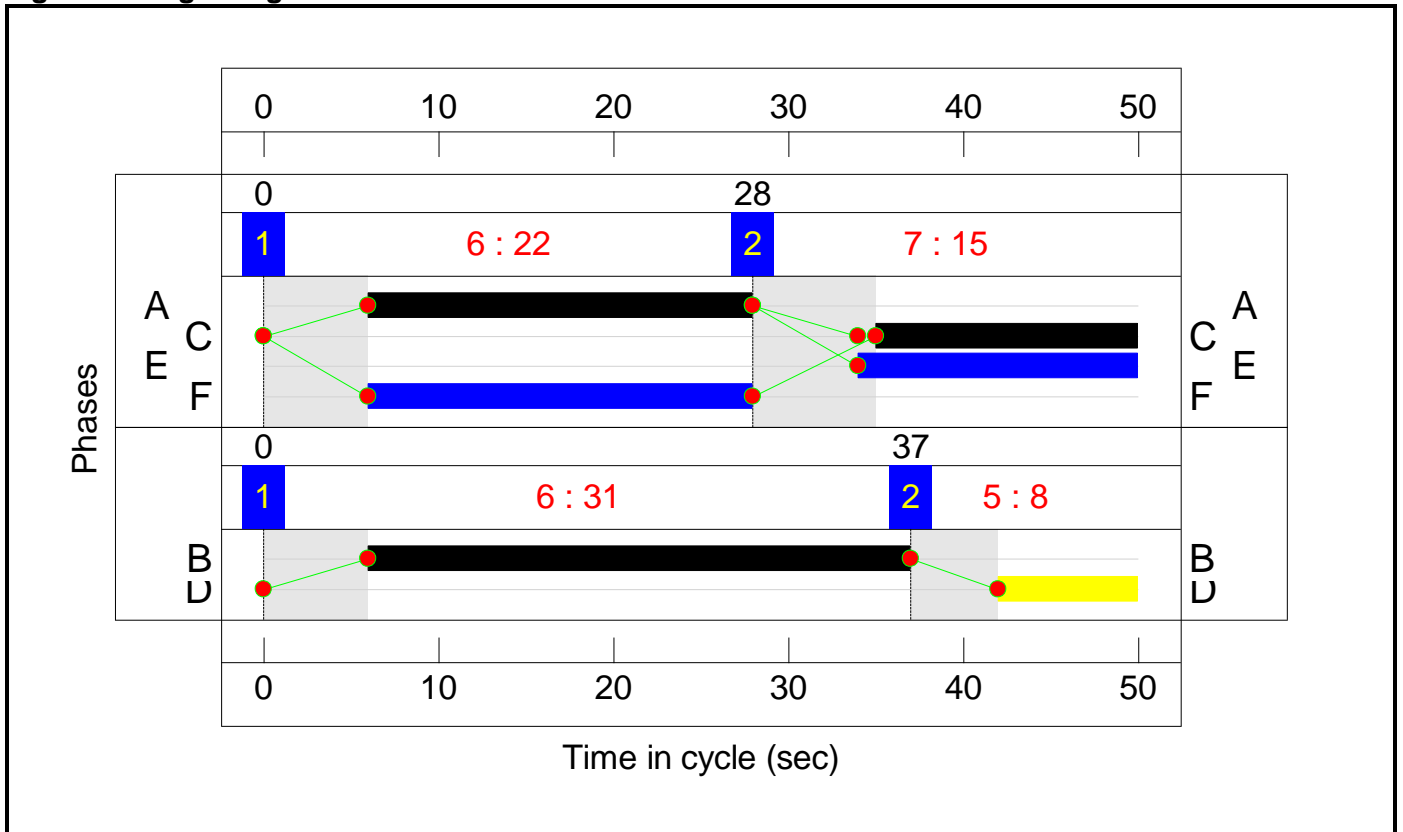
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

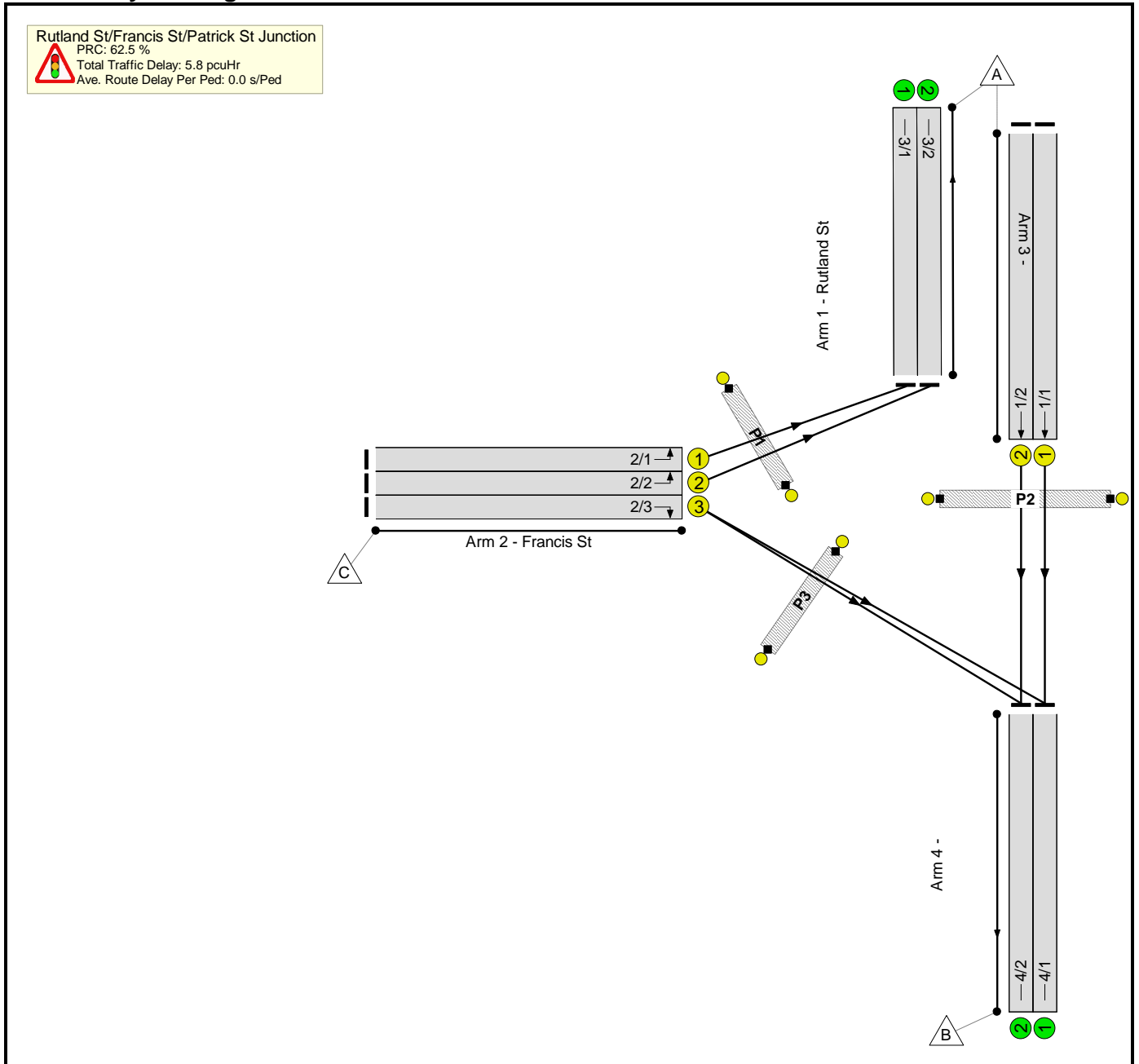


Basic Results Summary Rev1

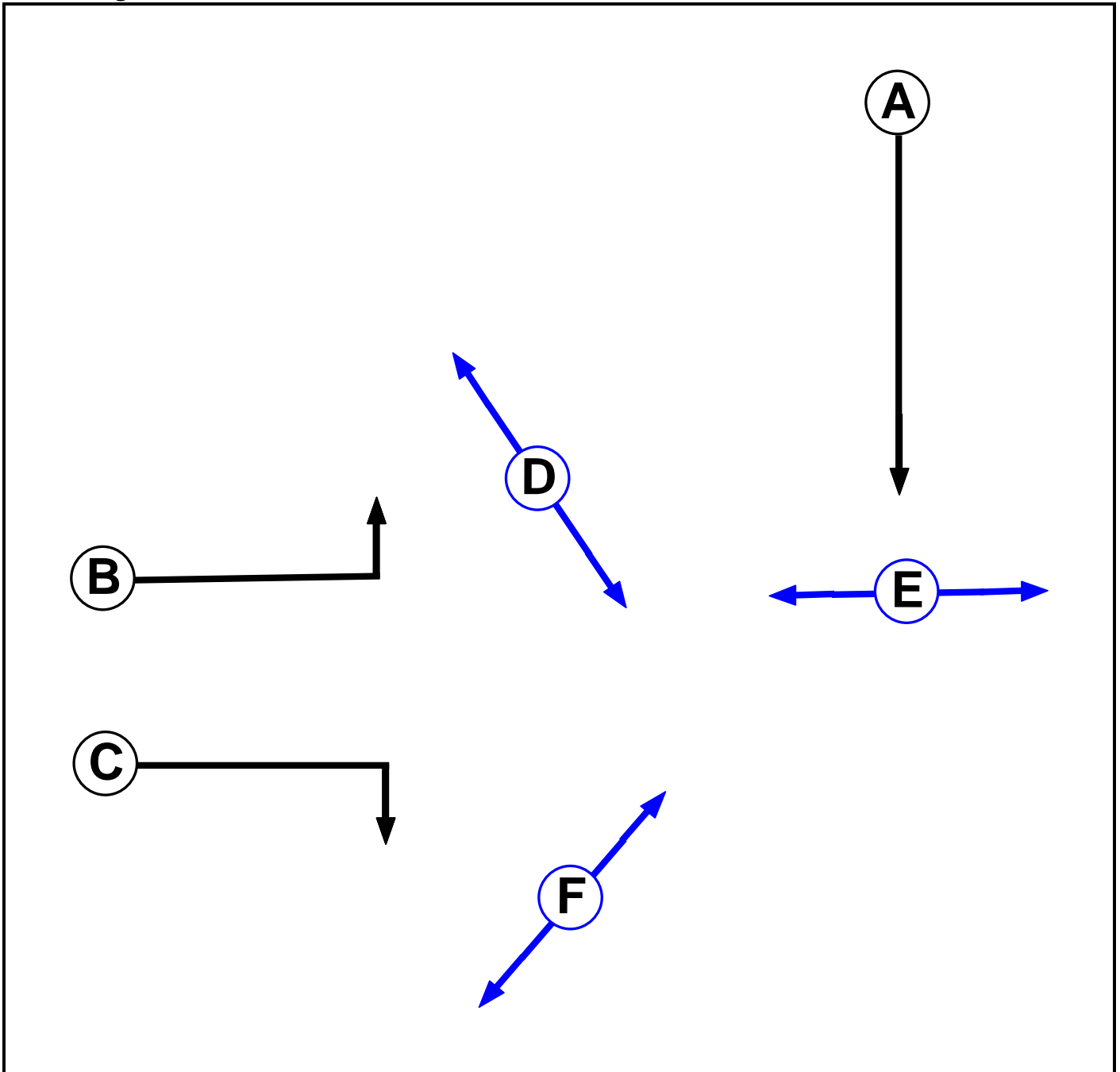
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	56.3%	0	0	0	6.4	-	-	
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	56.3%	0	0	0	6.4	-	-	
1/1	Rutland St Ahead	U	A		1	22	-	383	1915	881	43.5%	-	-	-	1.4	12.7	3.9	
1/2	Rutland St Ahead	U	A		1	22	-	408	1985	913	44.7%	-	-	-	1.4	12.7	4.1	
2/1	Francis St Left	U	B		1	31	-	435	1714	1097	39.7%	-	-	-	0.9	7.1	3.2	
2/2	Francis St Left	U	B		1	31	-	447	1741	1114	40.1%	-	-	-	0.9	7.1	3.3	
2/3	Francis St Right	U	C		1	15	-	303	1681	538	56.3%	-	-	-	1.8	21.7	4.1	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	E		1	16	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	F		1	22	-	0	-	0	0.0%	-	-	-	-	-	-	
							C1 Stream: 1 PRC for Signalled Lanes (%):	59.8	Total Delay for Signalled Lanes (pcuHr):			4.63	Cycle Time (s):		50			
							C1 Stream: 2 PRC for Signalled Lanes (%):	124.3	Total Delay for Signalled Lanes (pcuHr):			1.73	Cycle Time (s):		50			
							PRC Over All Lanes (%):	59.8	Total Delay Over All Lanes(pcuHr):			6.36						

Network Layout Diagram

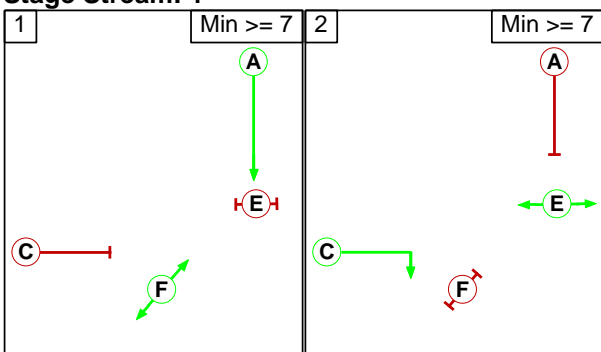


Phase Diagram



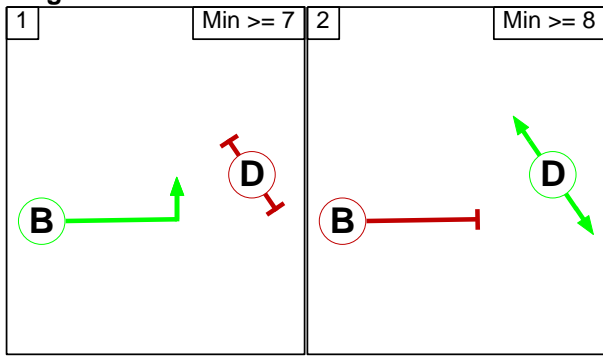
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



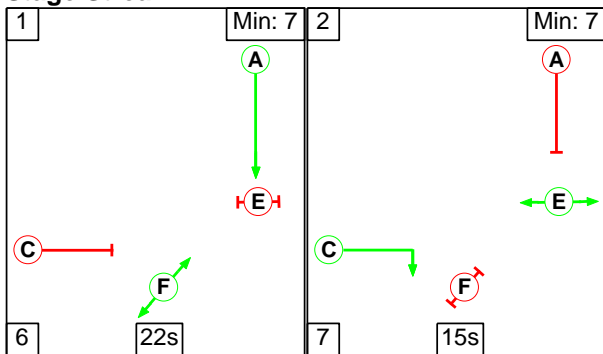
Traffic Flows, Actual

Actual Flow :

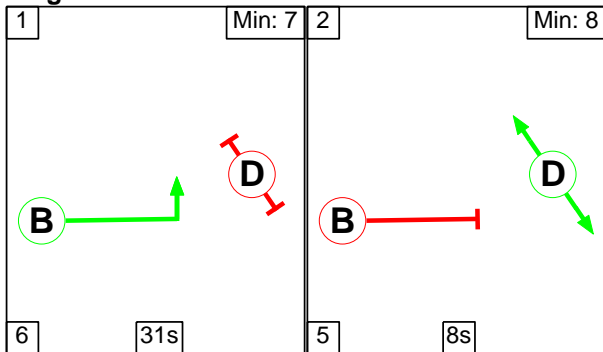
	Destination				
		A	B	C	Tot.
Origin	A	0	737	0	737
	B	0	0	0	0
	C	789	298	0	1087
	Tot.	789	1035	0	1824

Stage Sequence Diagram

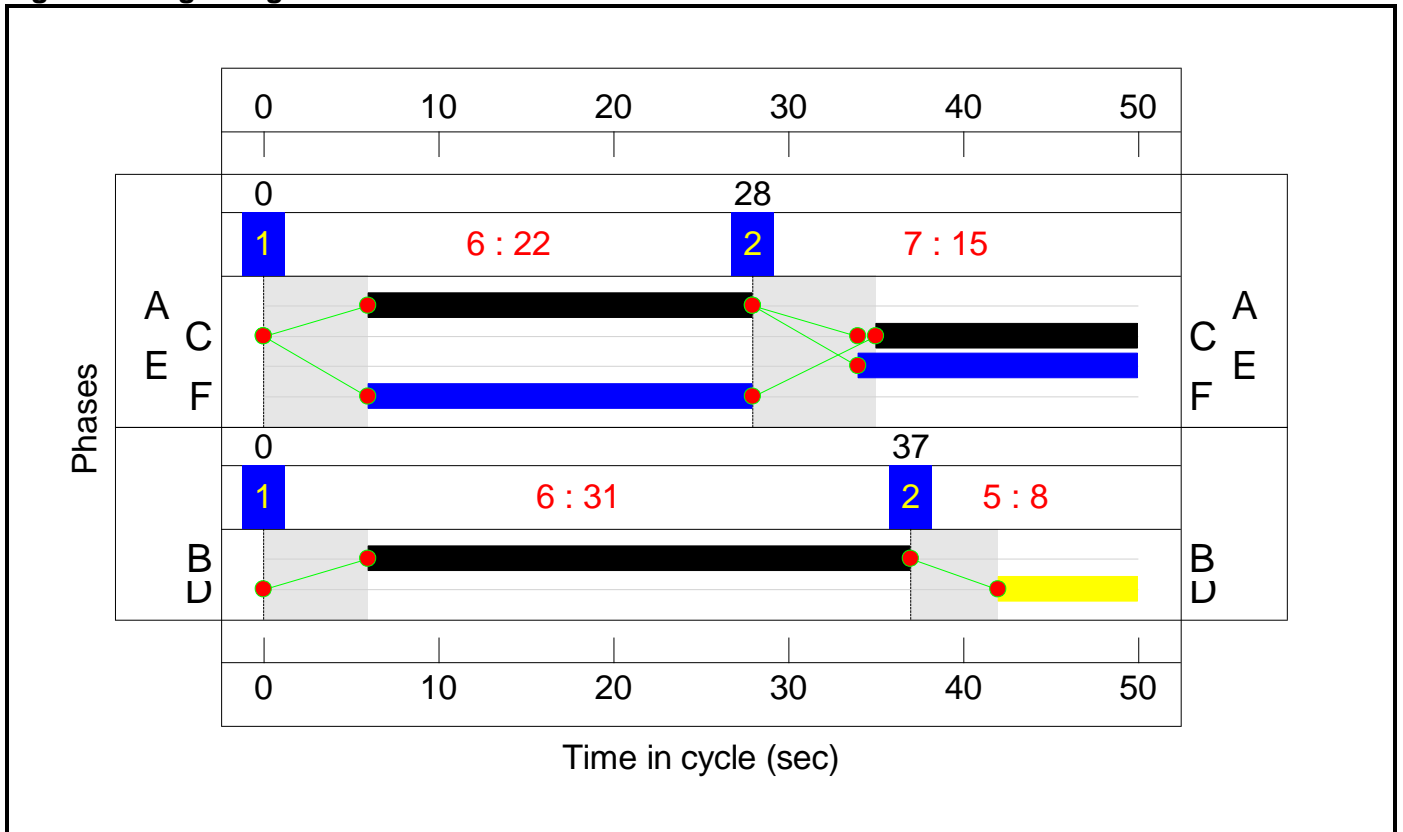
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

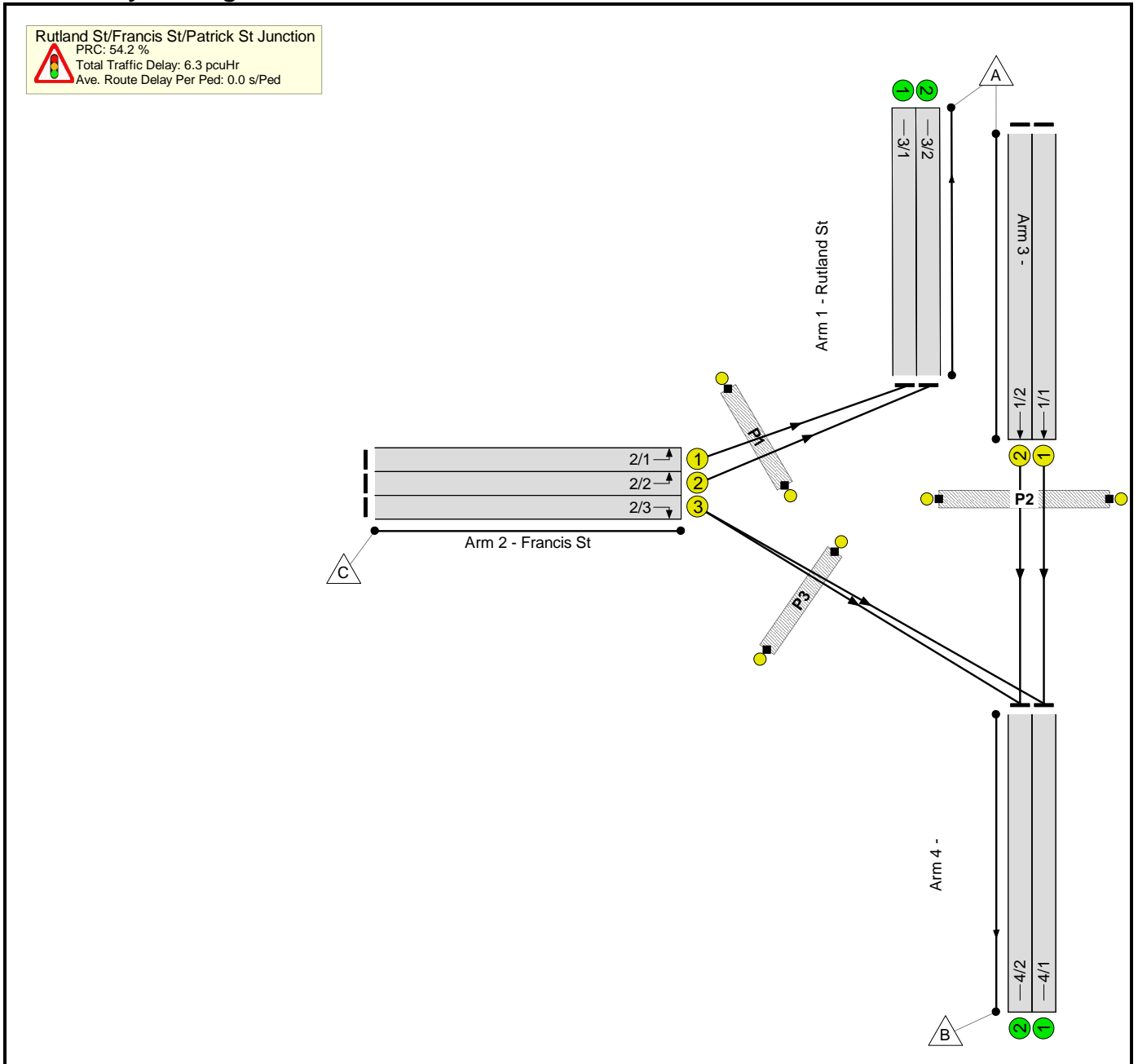


Basic Results Summary Rev1

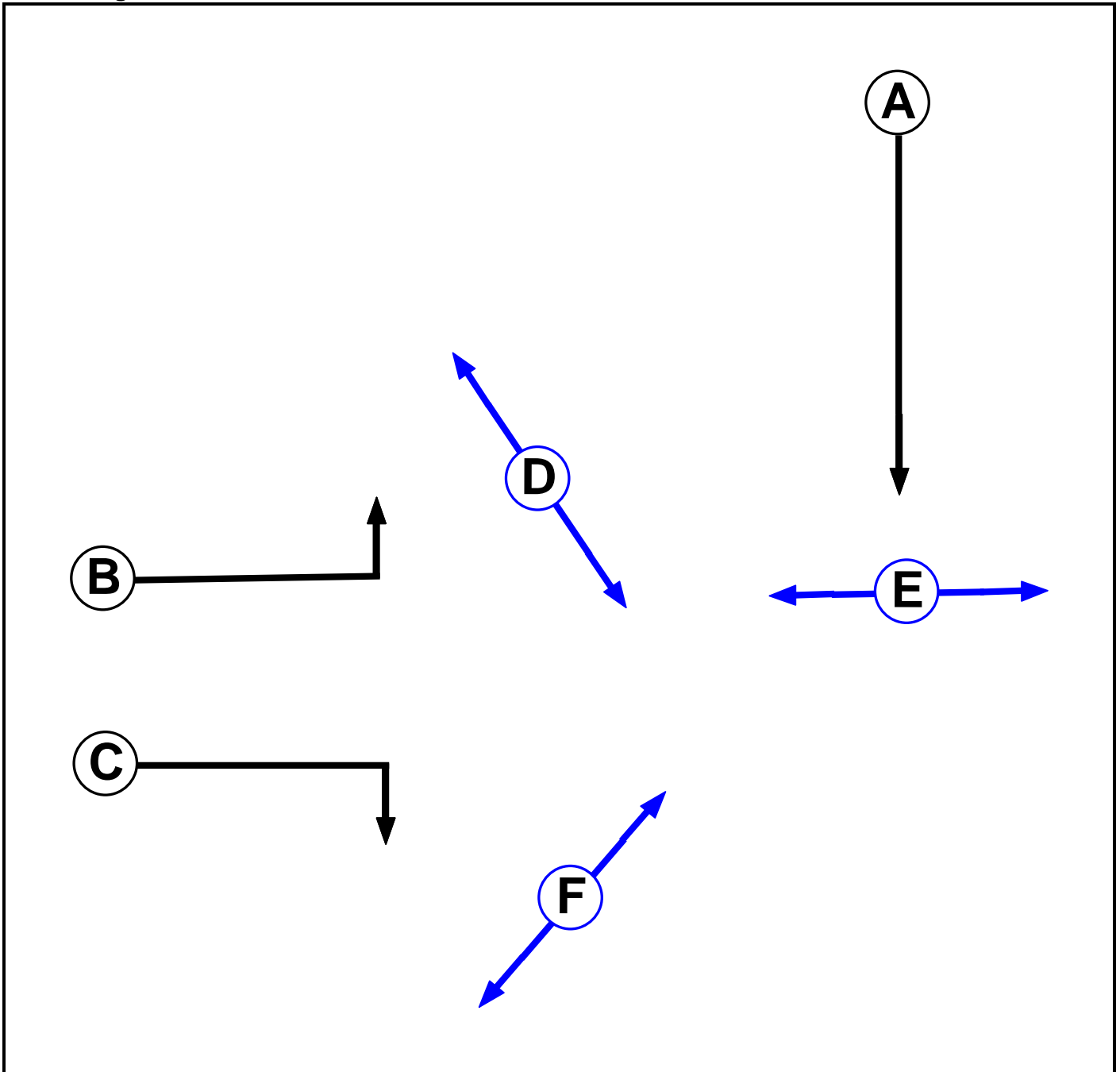
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	55.4%	0	0	0	5.8	-	-	
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	55.4%	0	0	0	5.8	-	-	
1/1	Rutland St Ahead	U	A		1	22	-	357	1915	881	40.5%	-	-	-	1.2	12.4	3.6	
1/2	Rutland St Ahead	U	A		1	22	-	380	1985	913	41.6%	-	-	-	1.3	12.4	3.8	
2/1	Francis St Left	U	B		1	31	-	389	1714	1097	35.5%	-	-	-	0.7	6.7	2.8	
2/2	Francis St Left	U	B		1	31	-	400	1741	1114	35.9%	-	-	-	0.7	6.7	2.8	
2/3	Francis St Right	U	C		1	15	-	298	1681	538	55.4%	-	-	-	1.8	21.5	4.0	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	E		1	16	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	F		1	22	-	0	-	0	0.0%	-	-	-	-	-	-	
							C1 Stream: 1 PRC for Signalled Lanes (%):	62.5	Total Delay for Signalled Lanes (pcuHr):			4.32	Cycle Time (s):		50			
							C1 Stream: 2 PRC for Signalled Lanes (%):	150.7	Total Delay for Signalled Lanes (pcuHr):			1.48	Cycle Time (s):		50			
							PRC Over All Lanes (%):	62.5	Total Delay Over All Lanes(pcuHr):			5.80						

Network Layout Diagram

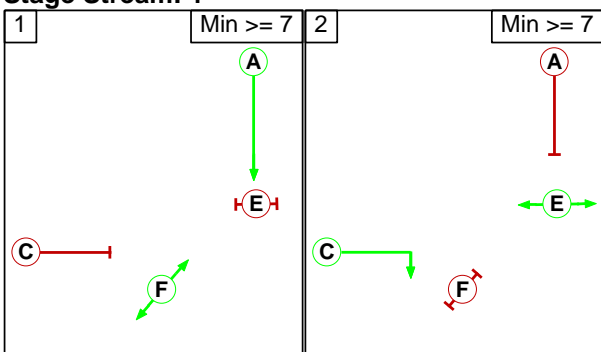


Phase Diagram



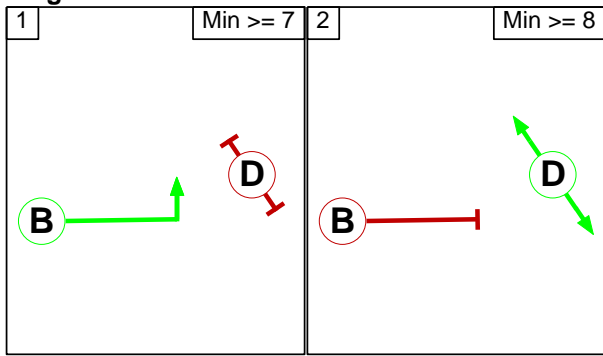
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



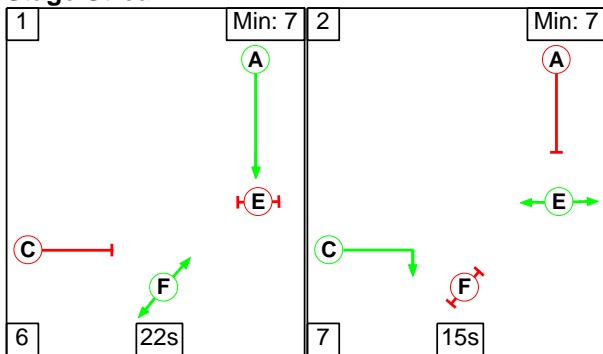
Traffic Flows, Actual

Actual Flow :

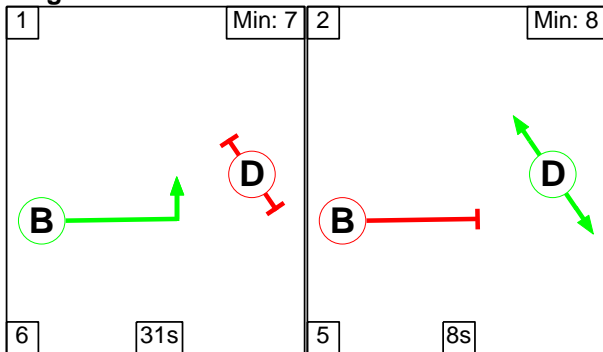
	Destination				
	A	B	C	Tot.	
Origin	A	0	778	0	778
	B	0	0	0	0
	C	835	314	0	1149
	Tot.	835	1092	0	1927

Stage Sequence Diagram

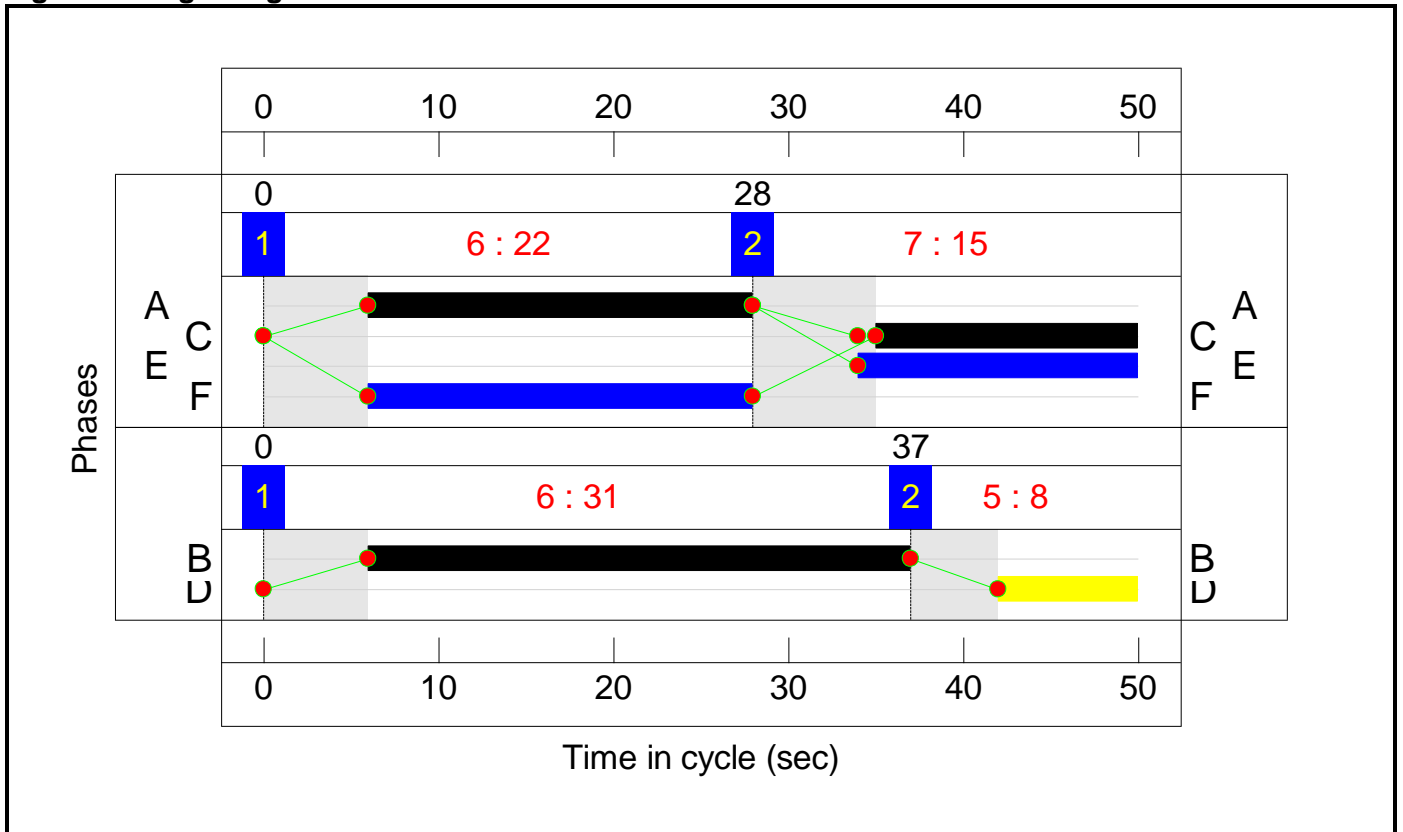
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram

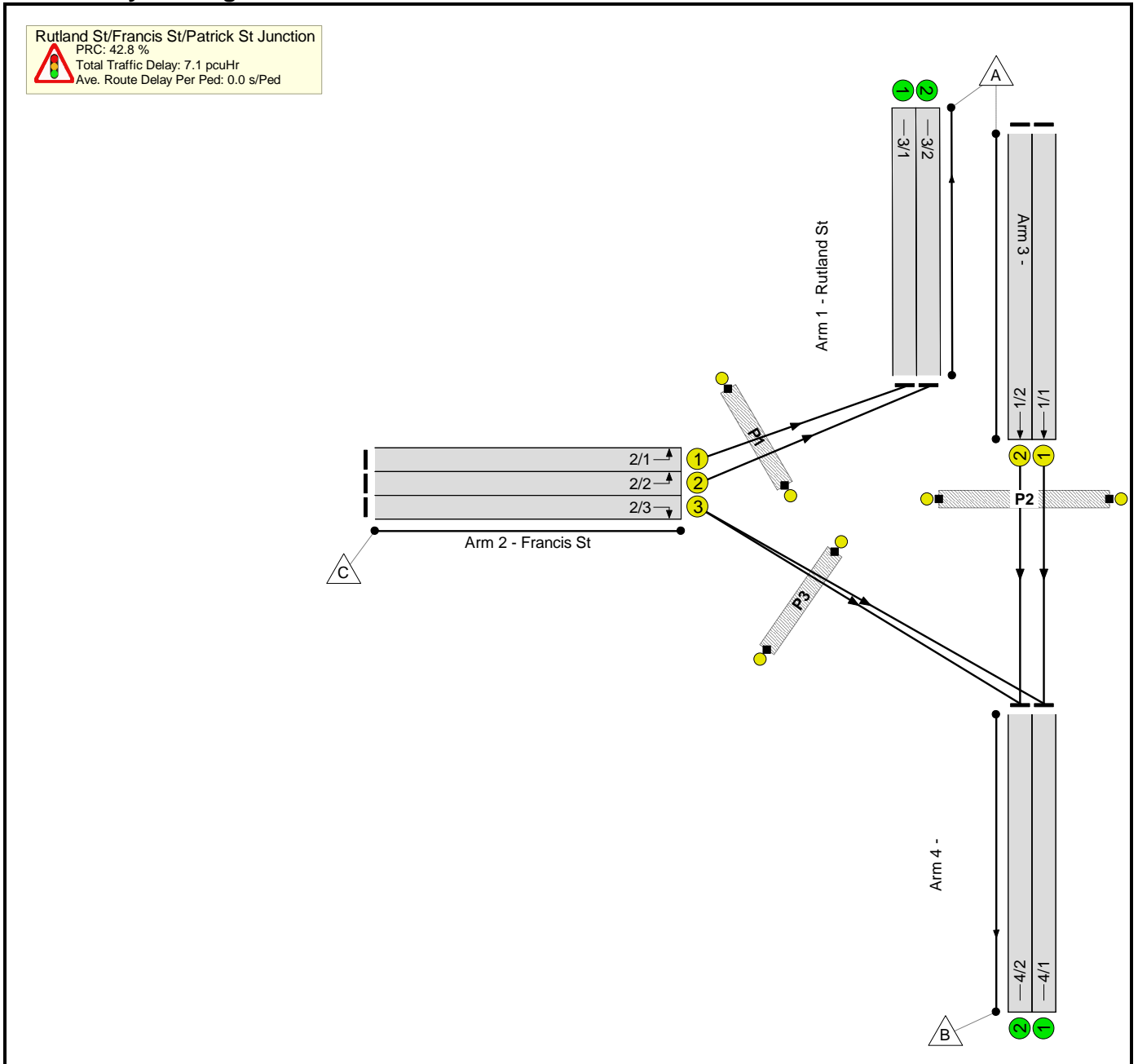


Basic Results Summary Rev1

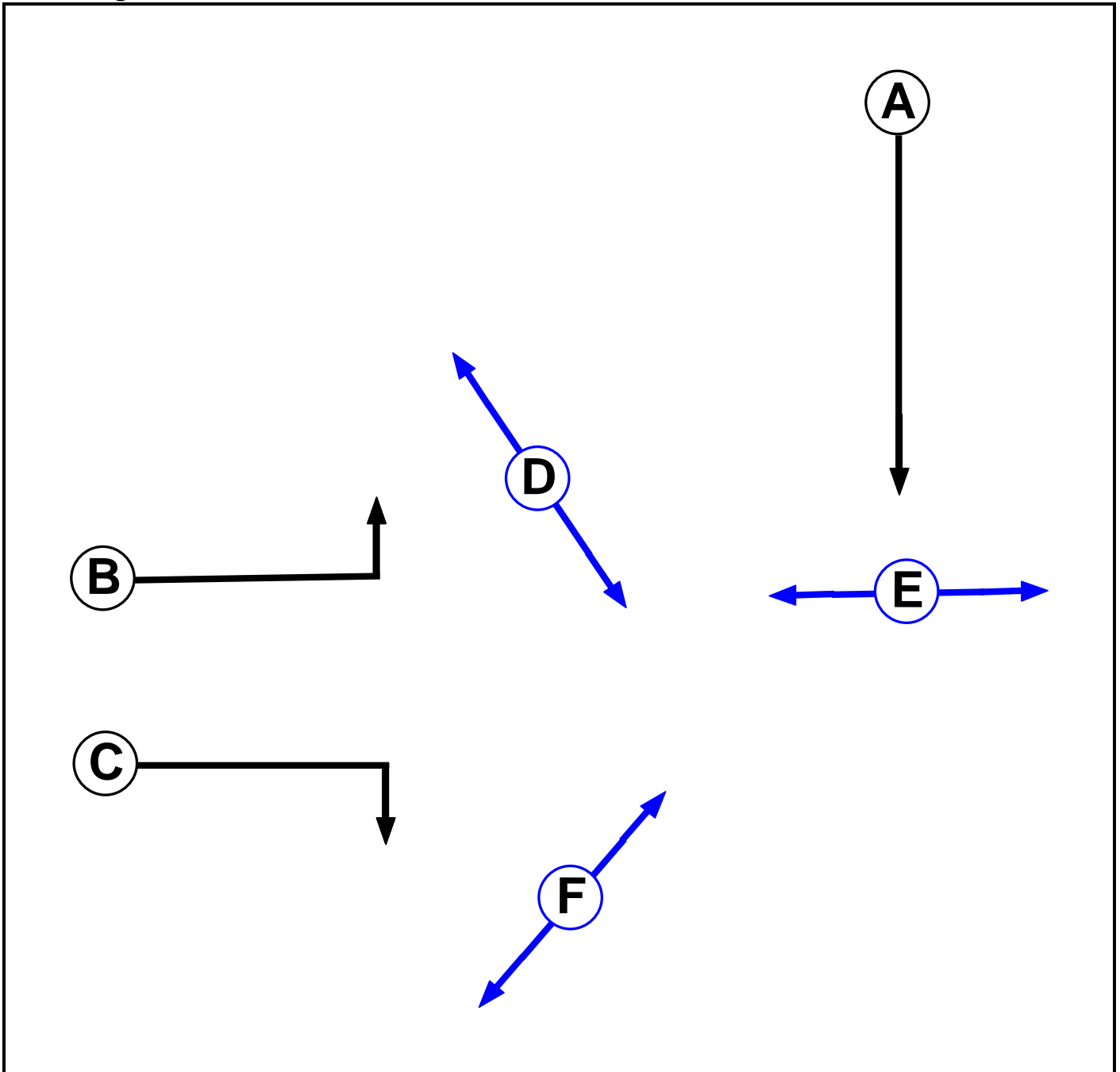
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	58.4%	0	0	0	6.3	-	-
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	58.4%	0	0	0	6.3	-	-
1/1	Rutland St Ahead	U	A		1	22	-	377	1915	881	42.8%	-	-	-	1.3	12.7	3.8
1/2	Rutland St Ahead	U	A		1	22	-	401	1985	913	43.9%	-	-	-	1.4	12.7	4.1
2/1	Francis St Left	U	B		1	31	-	411	1714	1097	37.5%	-	-	-	0.8	6.9	2.9
2/2	Francis St Left	U	B		1	31	-	424	1741	1114	38.1%	-	-	-	0.8	6.9	3.0
2/3	Francis St Right	U	C		1	15	-	314	1681	538	58.4%	-	-	-	1.9	22.2	4.3
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	E		1	16	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	F		1	22	-	0	-	0	0.0%	-	-	-	-	-	-
					C1	Stream: 1 PRC for Signalled Lanes (%):		54.2	Total Delay for Signalled Lanes (pcuHr):			4.67	Cycle Time (s):		50		
					C1	Stream: 2 PRC for Signalled Lanes (%):		136.5	Total Delay for Signalled Lanes (pcuHr):			1.60	Cycle Time (s):		50		
						PRC Over All Lanes (%):		54.2	Total Delay Over All Lanes(pcuHr):			6.27					

Network Layout Diagram

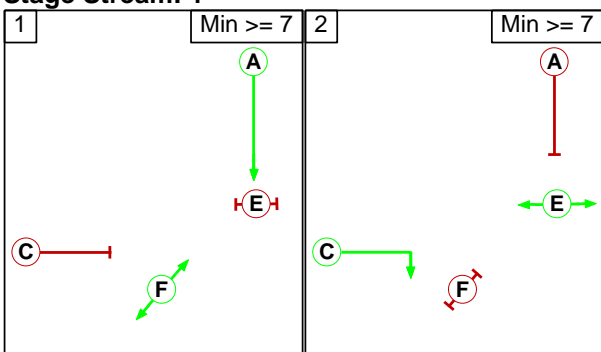


Phase Diagram



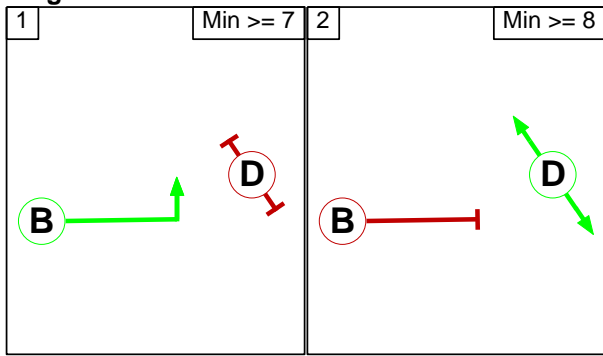
Stage Diagram

Stage Stream: 1



Basic Results Summary Rev1

Stage Stream: 2



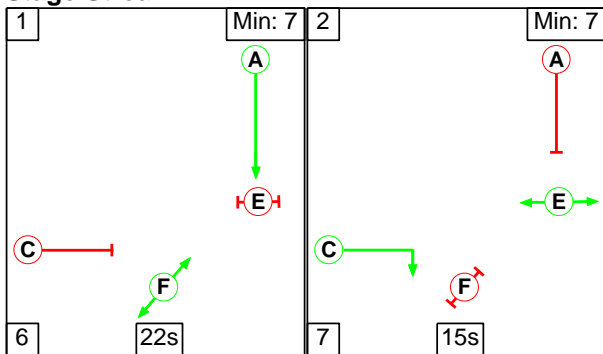
Traffic Flows, Actual

Actual Flow :

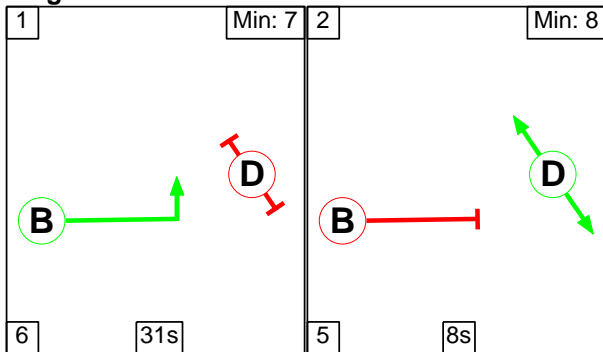
	Destination				
	A	B	C	Tot.	
Origin	A	0	845	0	845
B	0	0	0	0	
C	910	339	0	1249	
Tot.	910	1184	0	2094	

Stage Sequence Diagram

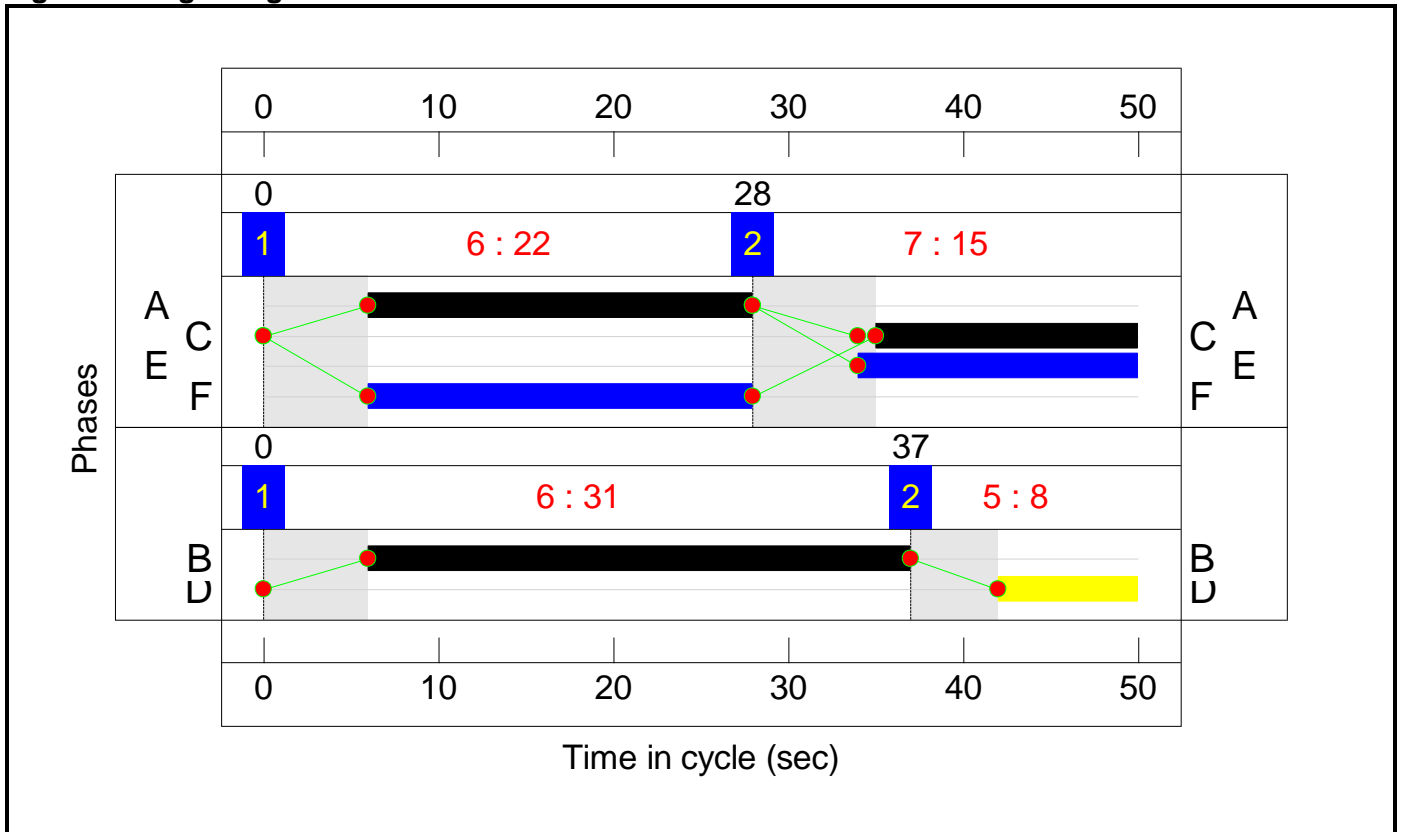
Stage Stream: 1



Stage Stream: 2



Signal Timings Diagram



Basic Results Summary Rev1

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	63.0%	0	0	0	7.1	-	-	
Rutland St/Francis St/Patrick St Junction	-	-	-		-	-	-	-	-	-	63.0%	0	0	0	7.1	-	-	
1/1	Rutland St Ahead	U	A		1	22	-	410	1915	881	46.5%	-	-	-	1.5	13.1	4.3	
1/2	Rutland St Ahead	U	A		1	22	-	435	1985	913	47.6%	-	-	-	1.6	13.1	4.6	
2/1	Francis St Left	U	B		1	31	-	449	1714	1097	40.9%	-	-	-	0.9	7.2	3.3	
2/2	Francis St Left	U	B		1	31	-	461	1741	1114	41.4%	-	-	-	0.9	7.2	3.4	
2/3	Francis St Right	U	C		1	15	-	339	1681	538	63.0%	-	-	-	2.2	23.5	4.8	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	E		1	16	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	F		1	22	-	0	-	0	0.0%	-	-	-	-	-	-	
							C1 Stream: 1 PRC for Signalled Lanes (%):	42.8	Total Delay for Signalled Lanes (pcuHr):			5.28	Cycle Time (s):		50			
							C1 Stream: 2 PRC for Signalled Lanes (%):	117.5	Total Delay for Signalled Lanes (pcuHr):			1.81	Cycle Time (s):		50			
							PRC Over All Lanes (%):	42.8	Total Delay Over All Lanes(pcuHr):			7.10						

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.0.2.5947 © Copyright TRL Limited, 2017
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Filename: Junction 1 ; Patrick St_Ellen St.j9

Path: F:\Admin\Admin_General_Dub\000_Projects\Project Opera\Analysis\PICADY

Report generation date: 18/12/2018 16:30:35

-
- »Patrick Street/ Ellen Street - 2017 Base, AM
 - »Patrick Street/ Ellen Street - 2017 Base, PM
 - »Patrick Street/ Ellen Street - 2022 Base, AM
 - »Patrick Street/ Ellen Street - 2022 Base, PM
 - »Patrick Street/ Ellen Street - 2027 Base, AM
 - »Patrick Street/ Ellen Street - 2027 Base, PM
 - »Patrick Street/ Ellen Street - 2037 Base, AM
 - »Patrick Street/ Ellen Street - 2037 Base, PM
 - »Patrick Street/ Ellen Street - 2022 Base + Dev, AM
 - »Patrick Street/ Ellen Street - 2022 Base + Dev, PM
 - »Patrick Street/ Ellen Street - 2027 Base + Dev, AM
 - »Patrick Street/ Ellen Street - 2027 Base + Dev, PM
 - »Patrick Street/ Ellen Street - 2037 Base + Dev, AM
 - »Patrick Street/ Ellen Street - 2037 Base + Dev, PM

Summary of junction performance

	AM		PM	
	Queue (PCU)	RFC	Queue (PCU)	RFC
Patrick Street/ Ellen Street - 2017 Base				
Stream B-AC	0.5	0.34	0.8	0.44
Stream C-AB	0.0	0.00	0.0	0.00
Patrick Street/ Ellen Street - 2022 Base				
Stream B-AC	0.6	0.36	0.9	0.48
Stream C-AB	0.0	0.00	0.0	0.00
Patrick Street/ Ellen Street - 2027 Base				
Stream B-AC	0.7	0.39	1.1	0.51
Stream C-AB	0.0	0.00	0.0	0.00
Patrick Street/ Ellen Street - 2037 Base				
Stream B-AC	0.8	0.44	1.4	0.58
Stream C-AB	0.0	0.00	0.0	0.00
Patrick Street/ Ellen Street - 2022 Base + Dev				
Stream B-AC	0.7	0.40	1.7	0.63
Stream C-AB	0.0	0.00	0.0	0.00
Patrick Street/ Ellen Street - 2027 Base + Dev				
Stream B-AC	0.8	0.43	2.1	0.67
Stream C-AB	0.0	0.00	0.0	0.00
Patrick Street/ Ellen Street - 2037 Base + Dev				
Stream B-AC	0.9	0.48	2.9	0.74
Stream C-AB	0.0	0.00	0.0	0.00

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	24/05/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\manniona
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2017 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2017 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.067
D4	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.067
D5	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.131
D6	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.131
D7	2037 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.236
D8	2037 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.236
D11	2022 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓		
D12	2022 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓		
D13	2027 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓		
D14	2027 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓		
D15	2037 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓		
D16	2037 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓		

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Patrick Street/ Ellen Street	✓	100.000	100.000

Patrick Street/ Ellen Street - 2017 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	1.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Patrick St (Northern Arm)		Major
B	Ellen St		Minor
C	Patrick St (Southern Arm)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Patrick St (Southern Arm)	7.70				✓	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ellen St	One lane	2.60	69	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	513	0.055	0.140	0.088	0.200
1	B-C	641	0.058	0.147	-	-
1	C-B	574	0.131	0.131	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	843	100.000
B - Ellen St		ONE HOUR	✓	155	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	42	801
	B - Ellen St	0	0	155
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	5	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.34	11.17	0.5	B	142	213
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					39	58
A-C					735	1103

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	117	29	551	0.212	116	0.0	0.3	8.663	A
C-AB	0	0	491	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	32	8			32				
A-C	603	151			603				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	139	35	533	0.261	139	0.3	0.4	9.577	A
C-AB	0	0	474	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	38	9			38				
A-C	720	180			720				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	171	43	509	0.335	170	0.4	0.5	11.130	B
C-AB	0	0	452	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	46	12			46				
A-C	882	220			882				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	171	43	509	0.335	171	0.5	0.5	11.167	B
C-AB	0	0	452	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	46	12			46				
A-C	882	220			882				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	139	35	533	0.261	140	0.5	0.4	9.623	A
C-AB	0	0	474	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	38	9			38				
A-C	720	180			720				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	117	29	551	0.212	117	0.4	0.3	8.722	A
C-AB	0	0	491	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	32	8			32				
A-C	603	151			603				

Patrick Street/ Ellen Street - 2017 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	2.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2017 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	883	100.000
B - Ellen St		ONE HOUR	✓	201	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	76	807
	B - Ellen St	0	0	201
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	5	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.44	13.27	0.8	B	184	277
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					70	105
A-C					741	1111

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	151	38	549	0.276	150	0.0	0.4	9.439	A
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	57	14			57				
A-C	608	152			608				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	181	45	531	0.340	180	0.4	0.5	10.764	B
C-AB	0	0	470	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	68	17			68				
A-C	725	181			725				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	221	55	506	0.437	220	0.5	0.8	13.182	B
C-AB	0	0	446	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	84	21			84				
A-C	889	222			889				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	221	55	506	0.437	221	0.8	0.8	13.275	B
C-AB	0	0	446	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	84	21			84				
A-C	889	222			889				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	181	45	531	0.340	182	0.8	0.6	10.861	B
C-AB	0	0	470	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	68	17			68				
A-C	725	181			725				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	151	38	549	0.276	152	0.6	0.4	9.541	A
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	57	14			57				
A-C	608	152			608				

Patrick Street/ Ellen Street - 2022 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	1.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.067

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	899	100.000
B - Ellen St		ONE HOUR	✓	165	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	45	855
	B - Ellen St	0	0	165
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.36	11.88	0.6	B	152	228
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					41	62
A-C					784	1176

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	125	31	545	0.229	123	0.0	0.3	8.942	A
C-AB	0	0	485	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	34	8			34				
A-C	643	161			643				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	149	37	526	0.283	148	0.3	0.4	9.993	A
C-AB	0	0	468	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	40	10			40				
A-C	768	192			768				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	182	46	500	0.364	181	0.4	0.6	11.828	B
C-AB	0	0	444	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	49	12			49				
A-C	941	235			941				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	182	46	500	0.364	182	0.6	0.6	11.879	B
C-AB	0	0	444	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	49	12			49				
A-C	941	235			941				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	149	37	526	0.283	149	0.6	0.4	10.054	B
C-AB	0	0	468	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	40	10			40				
A-C	768	192			768				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	125	31	545	0.229	125	0.4	0.3	9.013	A
C-AB	0	0	485	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	34	8			34				
A-C	643	161			643				

Patrick Street/ Ellen Street - 2022 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	2.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.067

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	942	100.000
B - Ellen St		ONE HOUR	✓	214	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	81	861
	B - Ellen St	0	0	214
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.48	14.49	0.9	B	197	295
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					74	112
A-C					790	1185

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	161	40	543	0.298	160	0.0	0.4	9.833	A
C-AB	0	0	481	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	61	15			61				
A-C	648	162			648				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	193	48	523	0.368	192	0.4	0.6	11.390	B
C-AB	0	0	463	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	73	18			73				
A-C	774	194			774				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	236	59	497	0.475	235	0.6	0.9	14.353	B
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	89	22			89				
A-C	948	237			948				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	236	59	497	0.475	236	0.9	0.9	14.493	B
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	89	22			89				
A-C	948	237			948				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	193	48	523	0.368	194	0.9	0.6	11.522	B
C-AB	0	0	463	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	73	18			73				
A-C	774	194			774				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	161	40	543	0.298	162	0.6	0.5	9.955	A
C-AB	0	0	481	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	61	15			61				
A-C	648	162			648				

Patrick Street/ Ellen Street - 2027 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	1.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D5	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.131

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	953	100.000
B - Ellen St		ONE HOUR	✓	175	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	48	906
	B - Ellen St	0	0	175
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.39	12.65	0.7	B	161	241
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					44	65
A-C					831	1247

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	132	33	539	0.245	131	0.0	0.3	9.226	A
C-AB	0	0	480	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	36	9			36				
A-C	682	171			682				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	158	39	519	0.304	157	0.3	0.5	10.427	B
C-AB	0	0	461	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	43	11			43				
A-C	814	204			814				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	193	48	492	0.393	192	0.5	0.7	12.581	B
C-AB	0	0	436	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	52	13			52				
A-C	997	249			997				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	193	48	492	0.393	193	0.7	0.7	12.650	B
C-AB	0	0	436	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	52	13			52				
A-C	997	249			997				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	158	39	519	0.304	158	0.7	0.5	10.501	B
C-AB	0	0	461	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	43	11			43				
A-C	814	204			814				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	132	33	539	0.245	132	0.5	0.3	9.308	A
C-AB	0	0	480	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	36	9			36				
A-C	682	171			682				

Patrick Street/ Ellen Street - 2027 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	2.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D6	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.131

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	999	100.000
B - Ellen St		ONE HOUR	✓	227	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	86	913
	B - Ellen St	0	0	227
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.51	15.87	1.1	C	209	313
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					79	118
A-C					838	1256

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	171	43	537	0.319	169	0.0	0.5	10.238	B
C-AB	0	0	475	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	65	16			65				
A-C	687	172			687				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	204	51	516	0.396	204	0.5	0.7	12.059	B
C-AB	0	0	456	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	77	19			77				
A-C	821	205			821				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	250	63	488	0.513	249	0.7	1.1	15.678	C
C-AB	0	0	429	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	95	24			95				
A-C	1005	251			1005				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	250	63	488	0.513	250	1.1	1.1	15.872	C
C-AB	0	0	429	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	95	24			95				
A-C	1005	251			1005				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	204	51	516	0.396	206	1.1	0.7	12.240	B
C-AB	0	0	456	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	77	19			77				
A-C	821	205			821				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	171	43	537	0.319	172	0.7	0.5	10.391	B
C-AB	0	0	475	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	65	16			65				
A-C	687	172			687				

Patrick Street/ Ellen Street - 2037 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	2.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D7	2037 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.236

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	1042	100.000
B - Ellen St		ONE HOUR	✓	192	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	52	990
	B - Ellen St	0	0	192
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.44	14.15	0.8	B	176	264
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					48	71
A-C					908	1363

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	144	36	530	0.272	143	0.0	0.4	9.733	A
C-AB	0	0	471	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	39	10			39				
A-C	745	186			745				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	172	43	508	0.339	172	0.4	0.5	11.224	B
C-AB	0	0	451	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	47	12			47				
A-C	890	223			890				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	211	53	478	0.441	210	0.5	0.8	14.041	B
C-AB	0	0	423	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	57	14			57				
A-C	1090	273			1090				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	211	53	478	0.441	211	0.8	0.8	14.152	B
C-AB	0	0	423	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	57	14			57				
A-C	1090	273			1090				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	172	43	508	0.339	173	0.8	0.5	11.335	B
C-AB	0	0	451	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	47	12			47				
A-C	890	223			890				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	144	36	530	0.272	145	0.5	0.4	9.842	A
C-AB	0	0	471	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	39	10			39				
A-C	745	186			745				

Patrick Street/ Ellen Street - 2037 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	3.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D8	2037 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.236

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	1091	100.000
B - Ellen St		ONE HOUR	✓	248	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	94	997
	B - Ellen St	0	0	248
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.58	18.82	1.4	C	228	342
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					86	129
A-C					915	1373

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	187	47	527	0.355	185	0.0	0.6	10.979	B
C-AB	0	0	466	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	71	18			71				
A-C	751	188			751				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	223	56	505	0.443	222	0.6	0.8	13.340	B
C-AB	0	0	445	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	84	21			84				
A-C	897	224			897				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	274	68	474	0.577	271	0.8	1.4	18.443	C
C-AB	0	0	416	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	103	26			103				
A-C	1098	275			1098				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	274	68	474	0.577	273	1.4	1.4	18.815	C
C-AB	0	0	416	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	103	26			103				
A-C	1098	275			1098				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	223	56	505	0.443	226	1.4	0.9	13.646	B
C-AB	0	0	445	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	84	21			84				
A-C	897	224			897				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	187	47	527	0.355	188	0.9	0.6	11.194	B
C-AB	0	0	466	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	71	18			71				
A-C	751	188			751				

Patrick Street/ Ellen Street - 2022 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	1.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2022 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	972	100.000
B - Ellen St		ONE HOUR	✓	177	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	52	920
	B - Ellen St	0	0	177
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.40	12.84	0.7	B	162	244
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					48	72
A-C					844	1266

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	133	33	537	0.248	132	0.0	0.3	9.296	A
C-AB	0	0	478	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	39	10			39				
A-C	693	173			693				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	159	40	517	0.308	159	0.3	0.5	10.532	B
C-AB	0	0	459	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	47	12			47				
A-C	827	207			827				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	195	49	489	0.398	194	0.5	0.7	12.765	B
C-AB	0	0	433	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	57	14			57				
A-C	1013	253			1013				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	195	49	489	0.398	195	0.7	0.7	12.837	B
C-AB	0	0	433	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	57	14			57				
A-C	1013	253			1013				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	159	40	517	0.308	160	0.7	0.5	10.609	B
C-AB	0	0	459	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	47	12			47				
A-C	827	207			827				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	133	33	537	0.248	134	0.5	0.4	9.378	A
C-AB	0	0	478	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	39	10			39				
A-C	693	173			693				

Patrick Street/ Ellen Street - 2022 Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	4.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2022 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	1033	100.000
B - Ellen St		ONE HOUR	✓	276	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	75	958
	B - Ellen St	0	0	276
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.63	21.19	1.7	C	253	380
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					69	103
A-C					879	1319

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	208	52	532	0.391	205	0.0	0.7	11.474	B
C-AB	0	0	472	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	56	14			56				
A-C	721	180			721				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	248	62	511	0.486	247	0.7	1.0	14.250	B
C-AB	0	0	452	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	67	17			67				
A-C	861	215			861				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	304	76	482	0.631	301	1.0	1.7	20.587	C
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	83	21			83				
A-C	1055	264			1055				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	304	76	482	0.631	304	1.7	1.7	21.190	C
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	83	21			83				
A-C	1055	264			1055				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	248	62	511	0.486	251	1.7	1.0	14.701	B
C-AB	0	0	452	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	67	17			67				
A-C	861	215			861				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	208	52	532	0.391	209	1.0	0.7	11.752	B
C-AB	0	0	472	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	56	14			56				
A-C	721	180			721				

Patrick Street/ Ellen Street - 2027 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	2.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	994	100.000
B - Ellen St		ONE HOUR	✓	187	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	22	972
	B - Ellen St	0	0	187
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.43	13.65	0.8	B	172	257
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					20	30
A-C					892	1338

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	141	35	533	0.264	139	0.0	0.4	9.568	A
C-AB	0	0	476	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	17	4			17				
A-C	732	183			732				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	168	42	512	0.328	168	0.4	0.5	10.963	B
C-AB	0	0	457	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	20	5			20				
A-C	874	218			874				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	206	51	483	0.427	205	0.5	0.8	13.553	B
C-AB	0	0	430	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	24	6			24				
A-C	1070	268			1070				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	206	51	483	0.427	206	0.8	0.8	13.649	B
C-AB	0	0	430	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	24	6			24				
A-C	1070	268			1070				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	168	42	512	0.328	169	0.8	0.5	11.064	B
C-AB	0	0	457	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	20	5			20				
A-C	874	218			874				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	141	35	533	0.264	141	0.5	0.4	9.671	A
C-AB	0	0	476	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	17	4			17				
A-C	732	183			732				

Patrick Street/ Ellen Street - 2027 Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	5.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	1090	100.000
B - Ellen St		ONE HOUR	✓	289	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	80	1010
	B - Ellen St	0	0	289
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.67	24.28	2.1	C	265	398
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					73	110
A-C					927	1390

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	218	54	526	0.414	215	0.0	0.7	12.031	B
C-AB	0	0	466	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	60	15			60				
A-C	760	190			760				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	260	65	504	0.516	258	0.7	1.1	15.311	C
C-AB	0	0	445	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	72	18			72				
A-C	908	227			908				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	318	80	473	0.673	314	1.1	2.0	23.321	C
C-AB	0	0	416	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	88	22			88				
A-C	1112	278			1112				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	318	80	473	0.673	318	2.0	2.1	24.280	C
C-AB	0	0	416	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	88	22			88				
A-C	1112	278			1112				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	260	65	504	0.516	263	2.1	1.2	15.965	C
C-AB	0	0	445	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	72	18			72				
A-C	908	227			908				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	218	54	526	0.414	219	1.2	0.8	12.381	B
C-AB	0	0	466	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	60	15			60				
A-C	760	190			760				

Patrick Street/ Ellen Street - 2037 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	2.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2037 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	1115	100.000
B - Ellen St		ONE HOUR	✓	203	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	59	1056
	B - Ellen St	0	0	203
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.48	15.53	0.9	C	186	279
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					54	81
A-C					969	1454

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	153	38	522	0.293	151	0.0	0.4	10.148	B
C-AB	0	0	464	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	44	11			44				
A-C	795	199			795				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	182	46	499	0.366	182	0.4	0.6	11.898	B
C-AB	0	0	442	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	53	13			53				
A-C	949	237			949				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	224	56	467	0.479	222	0.6	0.9	15.368	C
C-AB	0	0	413	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	65	16			65				
A-C	1163	291			1163				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	224	56	467	0.479	223	0.9	0.9	15.526	C
C-AB	0	0	413	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	65	16			65				
A-C	1163	291			1163				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	182	46	499	0.366	184	0.9	0.6	12.051	B
C-AB	0	0	442	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	53	13			53				
A-C	949	237			949				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	153	38	522	0.293	154	0.6	0.4	10.280	B
C-AB	0	0	464	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	44	11			44				
A-C	795	199			795				

Patrick Street/ Ellen Street - 2037 Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1		T-Junction	One-way from A to C	6.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2037 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Patrick St (Northern Arm)		ONE HOUR	✓	1183	100.000
B - Ellen St		ONE HOUR	✓	310	100.000
C - Patrick St (Southern Arm)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	88	1095
	B - Ellen St	0	0	310
	C - Patrick St (Southern Arm)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Patrick St (Northern Arm)	B - Ellen St	C - Patrick St (Southern Arm)
From	A - Patrick St (Northern Arm)	0	5	5
	B - Ellen St	0	0	5
	C - Patrick St (Southern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.74	31.67	2.9	D	284	427
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					81	121
A-C					1005	1507

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	233	58	516	0.452	230	0.0	0.8	13.055	B
C-AB	0	0	457	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	66	17			66				
A-C	824	206			824				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	279	70	492	0.566	277	0.8	1.3	17.396	C
C-AB	0	0	434	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	79	20			79				
A-C	984	246			984				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	341	85	459	0.744	336	1.3	2.7	29.451	D
C-AB	0	0	403	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	97	24			97				
A-C	1206	301			1206				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	341	85	459	0.744	341	2.7	2.9	31.674	D
C-AB	0	0	403	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	97	24			97				
A-C	1206	301			1206				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	279	70	492	0.566	284	2.9	1.4	18.670	C
C-AB	0	0	434	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	79	20			79				
A-C	984	246			984				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	233	58	516	0.452	236	1.4	0.9	13.562	B
C-AB	0	0	457	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	66	17			66				
A-C	824	206			824				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.2.5947 © Copyright TRL Limited, 2017
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Filename: Junction 4; R445_Michael St + Dev.j9
Path: F:\Admin\Admin_General_Dub\000_Projects\Project Opera\Analysis\PICADY
Report generation date: 19/12/2018 14:25:32

- »2022 Base + Dev, AM
- »2022 Base + Dev, PM
- »2027 Base + Dev, AM
- »2027 Base + Dev, PM
- »2037 Base + Dev, AM
- »2037 Base + Dev, PM

Summary of junction performance

	AM		PM	
	Queue (PCU)	RFC	Queue (PCU)	RFC
2022 Base + Dev				
Stream B-AC	0.1	0.10	0.8	0.46
Stream C-AB	0.8	0.35	1.0	0.40
2027 Base + Dev				
Stream B-AC	0.1	0.11	1.0	0.49
Stream C-AB	1.0	0.38	1.1	0.44
2037 Base + Dev				
Stream B-AC	0.1	0.13	1.2	0.56
Stream C-AB	1.2	0.42	1.5	0.50

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	24/05/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\manniona
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2022 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D12	2022 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D13	2027 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D14	2027 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D15	2037 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D16	2037 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2022 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	2.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R445 (Eastern Arm)		Major
B	Michael Street		Minor
C	R445 (Western Arm)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - R445 (Western Arm)	7.00			150.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Michael Street	One lane	3.67	69	18

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
4	B-A	543	0.095	0.239	0.150	0.341
4	B-C	678	0.099	0.251	-	-
4	C-B	661	0.245	0.245	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2022 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	433	100.000
B - Michael Street		ONE HOUR	✓	33	100.000
C - R445 (Western Arm)		ONE HOUR	✓	479	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	94	339
	B - Michael Street	26	0	7
	C - R445 (Western Arm)	341	138	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	0	0
	B - Michael Street	0	0	0
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	10.88	0.1	B	30	45
C-AB	0.35	6.94	0.8	A	217	325
C-A					223	334
A-B					86	129
A-C					311	467

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	25	6	432	0.058	25	0.0	0.1	8.828	A
C-AB	157	39	755	0.209	156	0.0	0.4	6.006	A
C-A	203	51			203				
A-B	71	18			71				
A-C	255	64			255				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	30	7	405	0.073	30	0.1	0.1	9.591	A
C-AB	206	51	776	0.265	205	0.4	0.5	6.314	A
C-A	225	56			225				
A-B	85	21			85				
A-C	305	76			305				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	36	9	367	0.099	36	0.1	0.1	10.868	B
C-AB	286	71	807	0.354	284	0.5	0.8	6.908	A
C-A	242	60			242				
A-B	103	26			103				
A-C	373	93			373				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	36	9	367	0.099	36	0.1	0.1	10.883	B
C-AB	286	72	807	0.354	286	0.8	0.8	6.938	A
C-A	241	60			241				
A-B	103	26			103				
A-C	373	93			373				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	30	7	405	0.073	30	0.1	0.1	9.610	A
C-AB	206	52	777	0.266	208	0.8	0.5	6.351	A
C-A	224	56			224				
A-B	85	21			85				
A-C	305	76			305				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	25	6	432	0.058	25	0.1	0.1	8.854	A
C-AB	158	40	755	0.209	159	0.5	0.4	6.050	A
C-A	202	51			202				
A-B	71	18			71				
A-C	255	64			255				

2022 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	4.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2022 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	360	100.000
B - Michael Street		ONE HOUR	✓	175	100.000
C - R445 (Western Arm)		ONE HOUR	✓	471	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	56	304
	B - Michael Street	97	0	78
	C - R445 (Western Arm)	304	167	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	0	0
	B - Michael Street	0	0	0
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.46	15.75	0.8	C	161	241
C-AB	0.40	7.61	1.0	A	245	368
C-A					187	281
A-B					51	77
A-C					279	418

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	132	33	479	0.275	130	0.0	0.4	10.270	B
C-AB	181	45	748	0.242	179	0.0	0.4	6.326	A
C-A	173	43			173				
A-B	42	11			42				
A-C	229	57			229				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	157	39	455	0.346	157	0.4	0.5	12.037	B
C-AB	234	58	767	0.305	233	0.4	0.6	6.754	A
C-A	189	47			189				
A-B	50	13			50				
A-C	273	68			273				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	193	48	421	0.457	191	0.5	0.8	15.579	C
C-AB	319	80	794	0.402	318	0.6	0.9	7.568	A
C-A	199	50			199				
A-B	62	15			62				
A-C	335	84			335				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	193	48	421	0.458	193	0.8	0.8	15.752	C
C-AB	320	80	795	0.402	320	0.9	1.0	7.611	A
C-A	199	50			199				
A-B	62	15			62				
A-C	335	84			335				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	157	39	455	0.346	158	0.8	0.5	12.196	B
C-AB	235	59	768	0.306	236	1.0	0.6	6.804	A
C-A	189	47			189				
A-B	50	13			50				
A-C	273	68			273				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	132	33	479	0.275	132	0.5	0.4	10.408	B
C-AB	182	45	748	0.243	183	0.6	0.4	6.383	A
C-A	173	43			173				
A-B	42	11			42				
A-C	229	57			229				

2027 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	2.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	456	100.000
B - Michael Street		ONE HOUR	✓	36	100.000
C - R445 (Western Arm)		ONE HOUR	✓	505	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	98	358
	B - Michael Street	29	0	7
	C - R445 (Western Arm)	361	144	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	0	0
	B - Michael Street	0	0	0
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	11.48	0.1	B	33	50
C-AB	0.38	7.14	1.0	A	234	351
C-A					230	344
A-B					90	135
A-C					329	493

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	27	7	422	0.064	27	0.0	0.1	9.105	A
C-AB	169	42	761	0.221	167	0.0	0.4	6.050	A
C-A	212	53			212				
A-B	74	18			74				
A-C	270	67			270				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	32	8	393	0.082	32	0.1	0.1	9.971	A
C-AB	222	55	784	0.283	221	0.4	0.6	6.400	A
C-A	232	58			232				
A-B	88	22			88				
A-C	322	80			322				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	40	10	353	0.112	39	0.1	0.1	11.463	B
C-AB	310	78	817	0.380	309	0.6	0.9	7.097	A
C-A	246	61			246				
A-B	108	27			108				
A-C	394	99			394				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	40	10	353	0.112	40	0.1	0.1	11.484	B
C-AB	311	78	818	0.380	311	0.9	1.0	7.139	A
C-A	245	61			245				
A-B	108	27			108				
A-C	394	99			394				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	32	8	393	0.082	33	0.1	0.1	9.998	A
C-AB	222	56	785	0.283	224	1.0	0.6	6.445	A
C-A	232	58			232				
A-B	88	22			88				
A-C	322	80			322				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	27	7	421	0.064	27	0.1	0.1	9.133	A
C-AB	169	42	762	0.222	170	0.6	0.4	6.100	A
C-A	211	53			211				
A-B	74	18			74				
A-C	270	67			270				

2027 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	5.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	381	100.000
B - Michael Street		ONE HOUR	✓	183	100.000
C - R445 (Western Arm)		ONE HOUR	✓	498	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	60	321
	B - Michael Street	102	0	81
	C - R445 (Western Arm)	321	177	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	0	0
	B - Michael Street	0	0	0
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.49	17.29	1.0	C	168	252
C-AB	0.44	8.00	1.1	A	267	401
C-A					190	284
A-B					55	83
A-C					295	442

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	138	34	472	0.292	136	0.0	0.4	10.676	B
C-AB	196	49	753	0.261	194	0.0	0.5	6.435	A
C-A	179	45			179				
A-B	45	11			45				
A-C	242	60			242				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	165	41	446	0.369	164	0.4	0.6	12.729	B
C-AB	255	64	773	0.329	254	0.5	0.7	6.939	A
C-A	193	48			193				
A-B	54	13			54				
A-C	289	72			289				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	201	50	410	0.492	200	0.6	0.9	17.044	C
C-AB	350	87	803	0.436	348	0.7	1.1	7.938	A
C-A	198	50			198				
A-B	66	17			66				
A-C	353	88			353				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	201	50	409	0.492	201	0.9	1.0	17.292	C
C-AB	351	88	803	0.436	351	1.1	1.1	7.997	A
C-A	198	49			198				
A-B	66	17			66				
A-C	353	88			353				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	165	41	445	0.369	166	1.0	0.6	12.943	B
C-AB	256	64	774	0.330	257	1.1	0.7	7.002	A
C-A	192	48			192				
A-B	54	13			54				
A-C	289	72			289				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	138	34	471	0.292	138	0.6	0.4	10.843	B
C-AB	197	49	754	0.262	198	0.7	0.5	6.501	A
C-A	178	44			178				
A-B	45	11			45				
A-C	242	60			242				

2037 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	2.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2037 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	492	100.000
B - Michael Street		ONE HOUR	✓	39	100.000
C - R445 (Western Arm)		ONE HOUR	✓	547	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	104	388
	B - Michael Street	31	0	8
	C - R445 (Western Arm)	394	153	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	0	0
	B - Michael Street	0	0	0
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.13	12.23	0.1	B	36	54
C-AB	0.42	7.51	1.2	A	263	395
C-A					239	358
A-B					95	143
A-C					356	534

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	29	7	412	0.071	29	0.0	0.1	9.384	A
C-AB	187	47	773	0.242	185	0.0	0.5	6.120	A
C-A	225	56			225				
A-B	78	20			78				
A-C	292	73			292				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	35	9	381	0.092	35	0.1	0.1	10.403	B
C-AB	248	62	798	0.311	247	0.5	0.7	6.543	A
C-A	243	61			243				
A-B	93	23			93				
A-C	349	87			349				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	43	11	338	0.127	43	0.1	0.1	12.197	B
C-AB	353	88	836	0.422	351	0.7	1.1	7.446	A
C-A	250	62			250				
A-B	115	29			115				
A-C	427	107			427				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	43	11	337	0.127	43	0.1	0.1	12.228	B
C-AB	353	88	836	0.423	353	1.1	1.2	7.506	A
C-A	249	62			249				
A-B	115	29			115				
A-C	427	107			427				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	35	9	380	0.092	35	0.1	0.1	10.435	B
C-AB	249	62	800	0.312	251	1.2	0.7	6.609	A
C-A	242	61			242				
A-B	93	23			93				
A-C	349	87			349				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	29	7	411	0.071	29	0.1	0.1	9.428	A
C-AB	188	47	774	0.243	189	0.7	0.5	6.180	A
C-A	224	56			224				
A-B	78	20			78				
A-C	292	73			292				

2037 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	6.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2037 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	416	100.000
B - Michael Street		ONE HOUR	✓	197	100.000
C - R445 (Western Arm)		ONE HOUR	✓	543	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	66	350
	B - Michael Street	111	0	86
	C - R445 (Western Arm)	348	195	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	0	0
	B - Michael Street	0	0	0
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.56	20.85	1.2	C	181	271
C-AB	0.50	8.88	1.5	A	309	463
C-A					190	285
A-B					61	91
A-C					321	482

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	148	37	459	0.323	146	0.0	0.5	11.467	B
C-AB	224	56	761	0.294	222	0.0	0.6	6.660	A
C-A	185	46			185				
A-B	50	12			50				
A-C	263	66			263				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	177	44	430	0.412	176	0.5	0.7	14.139	B
C-AB	293	73	784	0.374	292	0.6	0.8	7.332	A
C-A	195	49			195				
A-B	59	15			59				
A-C	315	79			315				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	217	54	390	0.557	215	0.7	1.2	20.354	C
C-AB	407	102	816	0.499	405	0.8	1.4	8.792	A
C-A	191	48			191				
A-B	73	18			73				
A-C	385	96			385				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	217	54	389	0.557	217	1.2	1.2	20.849	C
C-AB	408	102	817	0.500	408	1.4	1.5	8.882	A
C-A	190	47			190				
A-B	73	18			73				
A-C	385	96			385				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	177	44	429	0.413	179	1.2	0.7	14.505	B
C-AB	294	74	785	0.375	297	1.5	0.9	7.433	A
C-A	194	48			194				
A-B	59	15			59				
A-C	315	79			315				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	148	37	458	0.324	149	0.7	0.5	11.703	B
C-AB	225	56	762	0.295	226	0.9	0.6	6.749	A
C-A	184	46			184				
A-B	50	12			50				
A-C	263	66			263				

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
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Filename: Junction 4; R445_Michael St.j9
Path: F:\Admin\Admin_General_Dub\000_Projects\Project Opera\Analysis\PICADY
Report generation date: 19/12/2018 14:17:56

- »2017 Base, AM
- »2017 Base, PM
- »2022 Base, AM
- »2022 Base, PM
- »2027 Base, AM
- »2027 Base, PM
- »2037 Base, AM
- »2037 Base, PM

Summary of junction performance

	AM		PM	
	Queue (PCU)	RFC	Queue (PCU)	RFC
2017 Base				
Stream B-AC	0.1	0.06	0.5	0.32
Stream C-AB	0.2	0.14	0.4	0.27
2022 Base				
Stream B-AC	0.1	0.07	0.5	0.35
Stream C-AB	0.2	0.15	0.4	0.29
2027 Base				
Stream B-AC	0.1	0.08	0.6	0.38
Stream C-AB	0.2	0.16	0.5	0.31
2037 Base				
Stream B-AC	0.1	0.09	0.7	0.43
Stream C-AB	0.2	0.18	0.5	0.35

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	24/05/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\manniona
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2017 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2017 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.067
D4	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.067
D5	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.131
D6	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.131
D7	2037 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.236
D8	2037 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.236

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2017 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	0.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R445 (Eastern Arm)		Major
B	Michael Street		Minor
C	R445 (Western Arm)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - R445 (Western Arm)	10.90		✓	3.70	150.0	✓	8.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Michael Street	One lane	3.67	69	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
4	B-A	541	0.078	0.196	0.123	0.280
4	B-C	676	0.082	0.206	-	-
4	C-B	769	0.234	0.234	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	351	100.000
B - Michael Street		ONE HOUR	✓	25	100.000
C - R445 (Western Arm)		ONE HOUR	✓	403	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	61	290
	B - Michael Street	21	0	4
	C - R445 (Western Arm)	318	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	5	5
	B - Michael Street	0	5	5
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	9.09	0.1	A	23	34
C-AB	0.14	6.16	0.2	A	78	117
C-A					292	438
A-B					56	84
A-C					266	399

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19	5	469	0.040	19	0.0	0.0	8.055	A
C-AB	64	16	707	0.091	64	0.0	0.1	5.593	A
C-A	239	60			239				
A-B	46	11			46				
A-C	218	55			218				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	22	6	451	0.050	22	0.0	0.1	8.461	A
C-AB	76	19	695	0.110	76	0.1	0.1	5.821	A
C-A	286	71			286				
A-B	55	14			55				
A-C	261	65			261				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	28	7	427	0.065	27	0.1	0.1	9.090	A
C-AB	94	23	678	0.138	93	0.1	0.2	6.155	A
C-A	350	88			350				
A-B	67	17			67				
A-C	319	80			319				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	28	7	426	0.065	28	0.1	0.1	9.092	A
C-AB	94	23	678	0.138	94	0.2	0.2	6.157	A
C-A	350	88			350				
A-B	67	17			67				
A-C	319	80			319				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	22	6	451	0.050	23	0.1	0.1	8.467	A
C-AB	76	19	695	0.110	77	0.2	0.1	5.826	A
C-A	286	71			286				
A-B	55	14			55				
A-C	261	65			261				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19	5	469	0.040	19	0.1	0.0	8.064	A
C-AB	64	16	707	0.091	64	0.1	0.1	5.603	A
C-A	239	60			239				
A-B	46	11			46				
A-C	218	55			218				

2017 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	3.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2017 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	330	100.000
B - Michael Street		ONE HOUR	✓	131	100.000
C - R445 (Western Arm)		ONE HOUR	✓	433	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	56	274
	B - Michael Street	81	0	50
	C - R445 (Western Arm)	263	170	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	5	5
	B - Michael Street	0	5	5
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.32	11.95	0.5	B	120	180
C-AB	0.27	7.25	0.4	A	156	234
C-A					241	362
A-B					51	77
A-C					251	377

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	99	25	495	0.199	98	0.0	0.3	9.204	A
C-AB	128	32	710	0.180	127	0.0	0.2	6.162	A
C-A	198	50			198				
A-B	42	11			42				
A-C	206	52			206				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	118	29	477	0.247	117	0.3	0.3	10.199	B
C-AB	153	38	699	0.219	153	0.2	0.3	6.583	A
C-A	236	59			236				
A-B	50	13			50				
A-C	246	62			246				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	144	36	451	0.320	144	0.3	0.5	11.907	B
C-AB	187	47	684	0.274	187	0.3	0.4	7.235	A
C-A	290	72			290				
A-B	62	15			62				
A-C	302	75			302				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	144	36	451	0.320	144	0.5	0.5	11.953	B
C-AB	187	47	684	0.274	187	0.4	0.4	7.251	A
C-A	290	72			290				
A-B	62	15			62				
A-C	302	75			302				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	118	29	476	0.247	118	0.5	0.3	10.254	B
C-AB	153	38	699	0.219	153	0.4	0.3	6.597	A
C-A	236	59			236				
A-B	50	13			50				
A-C	246	62			246				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	99	25	495	0.199	99	0.3	0.3	9.271	A
C-AB	128	32	710	0.180	128	0.3	0.2	6.184	A
C-A	198	50			198				
A-B	42	11			42				
A-C	206	52			206				

2022 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	0.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.067

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	375	100.000
B - Michael Street		ONE HOUR	✓	27	100.000
C - R445 (Western Arm)		ONE HOUR	✓	430	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	65	309
	B - Michael Street	22	0	4
	C - R445 (Western Arm)	339	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	5	5
	B - Michael Street	0	0	5
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.07	9.35	0.1	A	24	37
C-AB	0.15	6.29	0.2	A	83	125
C-A					311	467
A-B					60	90
A-C					284	426

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	20	5	463	0.043	20	0.0	0.0	8.187	A
C-AB	68	17	703	0.097	68	0.0	0.1	5.667	A
C-A	255	64			255				
A-B	49	12			49				
A-C	233	58			233				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	24	6	444	0.054	24	0.0	0.1	8.639	A
C-AB	82	20	690	0.118	81	0.1	0.1	5.917	A
C-A	305	76			305				
A-B	59	15			59				
A-C	278	70			278				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	29	7	417	0.070	29	0.1	0.1	9.345	A
C-AB	100	25	672	0.149	100	0.1	0.2	6.288	A
C-A	374	93			374				
A-B	72	18			72				
A-C	341	85			341				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	29	7	417	0.070	29	0.1	0.1	9.347	A
C-AB	100	25	672	0.149	100	0.2	0.2	6.290	A
C-A	374	93			374				
A-B	72	18			72				
A-C	341	85			341				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	24	6	444	0.054	24	0.1	0.1	8.645	A
C-AB	82	20	690	0.118	82	0.2	0.1	5.923	A
C-A	305	76			305				
A-B	59	15			59				
A-C	278	70			278				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	20	5	463	0.043	20	0.1	0.0	8.200	A
C-AB	68	17	703	0.097	68	0.1	0.1	5.678	A
C-A	255	64			255				
A-B	49	12			49				
A-C	233	58			233				

2022 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	3.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.067

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	352	100.000
B - Michael Street		ONE HOUR	✓	140	100.000
C - R445 (Western Arm)		ONE HOUR	✓	462	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	60	292
	B - Michael Street	86	0	53
	C - R445 (Western Arm)	281	181	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	5	5
	B - Michael Street	0	0	5
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.35	12.75	0.5	B	128	192
C-AB	0.29	7.53	0.4	A	166	250
C-A					258	386
A-B					55	82
A-C					268	402

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	105	26	489	0.215	104	0.0	0.3	9.507	A
C-AB	137	34	707	0.193	136	0.0	0.2	6.294	A
C-A	211	53			211				
A-B	45	11			45				
A-C	220	55			220				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	126	31	469	0.268	125	0.3	0.4	10.655	B
C-AB	163	41	695	0.235	163	0.2	0.3	6.767	A
C-A	252	63			252				
A-B	54	13			54				
A-C	263	66			263				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	154	38	442	0.349	153	0.4	0.5	12.687	B
C-AB	200	50	678	0.295	199	0.3	0.4	7.516	A
C-A	309	77			309				
A-B	66	16			66				
A-C	322	80			322				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	154	38	441	0.349	154	0.5	0.5	12.749	B
C-AB	200	50	678	0.295	200	0.4	0.4	7.527	A
C-A	309	77			309				
A-B	66	16			66				
A-C	322	80			322				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	126	31	469	0.268	126	0.5	0.4	10.725	B
C-AB	163	41	695	0.235	163	0.4	0.3	6.786	A
C-A	252	63			252				
A-B	54	13			54				
A-C	263	66			263				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	105	26	488	0.215	106	0.4	0.3	9.588	A
C-AB	137	34	707	0.193	137	0.3	0.2	6.323	A
C-A	211	53			211				
A-B	45	11			45				
A-C	220	55			220				

2027 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	1.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D5	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.131

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	397	100.000
B - Michael Street		ONE HOUR	✓	28	100.000
C - R445 (Western Arm)		ONE HOUR	✓	456	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	69	328
	B - Michael Street	24	0	5
	C - R445 (Western Arm)	360	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	5	5
	B - Michael Street	0	0	5
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	9.60	0.1	A	26	39
C-AB	0.16	6.42	0.2	A	88	132
C-A					330	495
A-B					63	95
A-C					301	451

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	21	5	457	0.047	21	0.0	0.0	8.319	A
C-AB	72	18	699	0.104	72	0.0	0.1	5.740	A
C-A	271	68			271				
A-B	52	13			52				
A-C	247	62			247				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	25	6	437	0.058	25	0.0	0.1	8.816	A
C-AB	86	22	685	0.126	86	0.1	0.1	6.012	A
C-A	323	81			323				
A-B	62	16			62				
A-C	295	74			295				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	31	8	409	0.076	31	0.1	0.1	9.599	A
C-AB	106	26	666	0.159	106	0.1	0.2	6.420	A
C-A	396	99			396				
A-B	76	19			76				
A-C	361	90			361				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	31	8	409	0.076	31	0.1	0.1	9.604	A
C-AB	106	26	666	0.159	106	0.2	0.2	6.422	A
C-A	396	99			396				
A-B	76	19			76				
A-C	361	90			361				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	25	6	437	0.058	25	0.1	0.1	8.823	A
C-AB	86	22	685	0.126	87	0.2	0.1	6.018	A
C-A	323	81			323				
A-B	62	16			62				
A-C	295	74			295				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	21	5	457	0.047	21	0.1	0.0	8.333	A
C-AB	72	18	699	0.104	72	0.1	0.1	5.749	A
C-A	271	68			271				
A-B	52	13			52				
A-C	247	62			247				

2027 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	3.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D6	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.131

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	373	100.000
B - Michael Street		ONE HOUR	✓	148	100.000
C - R445 (Western Arm)		ONE HOUR	✓	490	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	63	310
	B - Michael Street	92	0	57
	C - R445 (Western Arm)	297	192	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	5	5
	B - Michael Street	0	0	5
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.38	13.62	0.6	B	136	204
C-AB	0.31	7.81	0.5	A	176	265
C-A					273	409
A-B					58	87
A-C					284	427

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	112	28	483	0.231	110	0.0	0.3	9.815	A
C-AB	145	36	703	0.206	144	0.0	0.3	6.426	A
C-A	224	56			224				
A-B	48	12			48				
A-C	233	58			233				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	133	33	462	0.288	133	0.3	0.4	11.131	B
C-AB	173	43	690	0.250	173	0.3	0.3	6.953	A
C-A	267	67			267				
A-B	57	14			57				
A-C	279	70			279				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	163	41	432	0.377	162	0.4	0.6	13.536	B
C-AB	212	53	672	0.315	211	0.3	0.5	7.796	A
C-A	327	82			327				
A-B	70	17			70				
A-C	341	85			341				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	163	41	432	0.377	163	0.6	0.6	13.616	B
C-AB	212	53	672	0.315	212	0.5	0.5	7.813	A
C-A	327	82			327				
A-B	70	17			70				
A-C	341	85			341				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	133	33	462	0.289	134	0.6	0.4	11.218	B
C-AB	173	43	690	0.250	173	0.5	0.3	6.972	A
C-A	267	67			267				
A-B	57	14			57				
A-C	279	70			279				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	112	28	482	0.231	112	0.4	0.3	9.908	A
C-AB	145	36	703	0.206	145	0.3	0.3	6.459	A
C-A	224	56			224				
A-B	48	12			48				
A-C	233	58			233				

2037 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	1.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D7	2037 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.236

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	434	100.000
B - Michael Street		ONE HOUR	✓	31	100.000
C - R445 (Western Arm)		ONE HOUR	✓	498	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	75	358
	B - Michael Street	26	0	5
	C - R445 (Western Arm)	393	105	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	5	5
	B - Michael Street	0	0	5
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	10.06	0.1	B	28	43
C-AB	0.18	6.65	0.2	A	96	145
C-A					361	541
A-B					69	104
A-C					329	493

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23	6	447	0.052	23	0.0	0.1	8.544	A
C-AB	79	20	692	0.114	79	0.0	0.1	5.862	A
C-A	296	74			296				
A-B	57	14			57				
A-C	270	67			270				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	28	7	425	0.065	28	0.1	0.1	9.124	A
C-AB	94	24	677	0.139	94	0.1	0.2	6.173	A
C-A	353	88			353				
A-B	68	17			68				
A-C	322	81			322				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	34	9	395	0.086	34	0.1	0.1	10.054	B
C-AB	116	29	657	0.176	115	0.2	0.2	6.651	A
C-A	433	108			433				
A-B	83	21			83				
A-C	395	99			395				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	34	9	395	0.086	34	0.1	0.1	10.059	B
C-AB	116	29	657	0.176	116	0.2	0.2	6.652	A
C-A	433	108			433				
A-B	83	21			83				
A-C	395	99			395				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	28	7	425	0.065	28	0.1	0.1	9.134	A
C-AB	94	24	677	0.139	95	0.2	0.2	6.179	A
C-A	353	88			353				
A-B	68	17			68				
A-C	322	81			322				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23	6	447	0.052	23	0.1	0.1	8.559	A
C-AB	79	20	692	0.114	79	0.2	0.1	5.876	A
C-A	296	74			296				
A-B	57	14			57				
A-C	270	67			270				

2037 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	untitled	T-Junction	Two-way	3.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D8	2037 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.236

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R445 (Eastern Arm)		ONE HOUR	✓	408	100.000
B - Michael Street		ONE HOUR	✓	162	100.000
C - R445 (Western Arm)		ONE HOUR	✓	535	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	69	339
	B - Michael Street	100	0	62
	C - R445 (Western Arm)	325	210	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R445 (Eastern Arm)	B - Michael Street	C - R445 (Western Arm)
From	A - R445 (Eastern Arm)	0	5	5
	B - Michael Street	0	0	5
	C - R445 (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.43	15.34	0.7	C	149	223
C-AB	0.35	8.33	0.5	A	193	289
C-A					298	447
A-B					64	95
A-C					311	466

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	122	30	473	0.258	121	0.0	0.3	10.367	B
C-AB	158	40	697	0.227	157	0.0	0.3	6.657	A
C-A	245	61			245				
A-B	52	13			52				
A-C	255	64			255				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	146	36	450	0.324	145	0.3	0.5	12.016	B
C-AB	189	47	683	0.277	189	0.3	0.4	7.279	A
C-A	292	73			292				
A-B	62	16			62				
A-C	304	76			304				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	178	45	417	0.427	177	0.5	0.7	15.203	C
C-AB	231	58	664	0.349	231	0.4	0.5	8.306	A
C-A	358	89			358				
A-B	76	19			76				
A-C	373	93			373				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	178	45	417	0.427	178	0.7	0.7	15.339	C
C-AB	231	58	664	0.349	231	0.5	0.5	8.329	A
C-A	358	89			358				
A-B	76	19			76				
A-C	373	93			373				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	146	36	449	0.324	147	0.7	0.5	12.144	B
C-AB	189	47	683	0.277	189	0.5	0.4	7.308	A
C-A	292	73			292				
A-B	62	16			62				
A-C	304	76			304				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	122	30	472	0.258	122	0.5	0.4	10.491	B
C-AB	158	40	697	0.227	159	0.4	0.3	6.695	A
C-A	245	61			245				
A-B	52	13			52				
A-C	255	64			255				

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
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Filename: Junction 5; Ellen St_Michael St.j9

Path: F:\Admin\Admin_General_Dub\000_Projects\Project Opera\Analysis\PICADY

Report generation date: 18/12/2018 17:46:19

- »2017 Base, AM
- »2017 Base, PM
- »2022 Base, AM
- »2022 Base, PM
- »2027 Base, AM
- »2027 Base, PM
- »2037 Base, AM
- »2037 Base, PM
- »2022 Base + Dev, AM
- »2022 Base + Dev, PM
- »2027 Base + Dev, AM
- »2027 Base + Dev, PM
- »2037 Base + Dev, AM
- »2037 Base + Dev, PM

Summary of junction performance

	AM		PM	
	Queue (PCU)	RFC	Queue (PCU)	RFC
2017 Base				
Stream B-AC	0.2	0.17	0.9	0.46
Stream C-AB	0.1	0.08	0.1	0.11
2022 Base				
Stream B-AC	0.2	0.18	1.0	0.50
Stream C-AB	0.1	0.09	0.1	0.12
2027 Base				
Stream B-AC	0.2	0.19	1.2	0.53
Stream C-AB	0.1	0.09	0.2	0.13
2037 Base				
Stream B-AC	0.3	0.21	1.4	0.58
Stream C-AB	0.1	0.10	0.2	0.14
2022 Base + Dev				
Stream B-AC	0.2	0.20	1.2	0.55
Stream C-AB	0.2	0.15	0.1	0.10
2027 Base + Dev				
Stream B-AC	0.3	0.21	1.4	0.59
Stream C-AB	0.2	0.15	0.1	0.10
2037 Base + Dev				
Stream B-AC	0.3	0.23	1.7	0.64
Stream C-AB	0.2	0.16	0.1	0.11

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

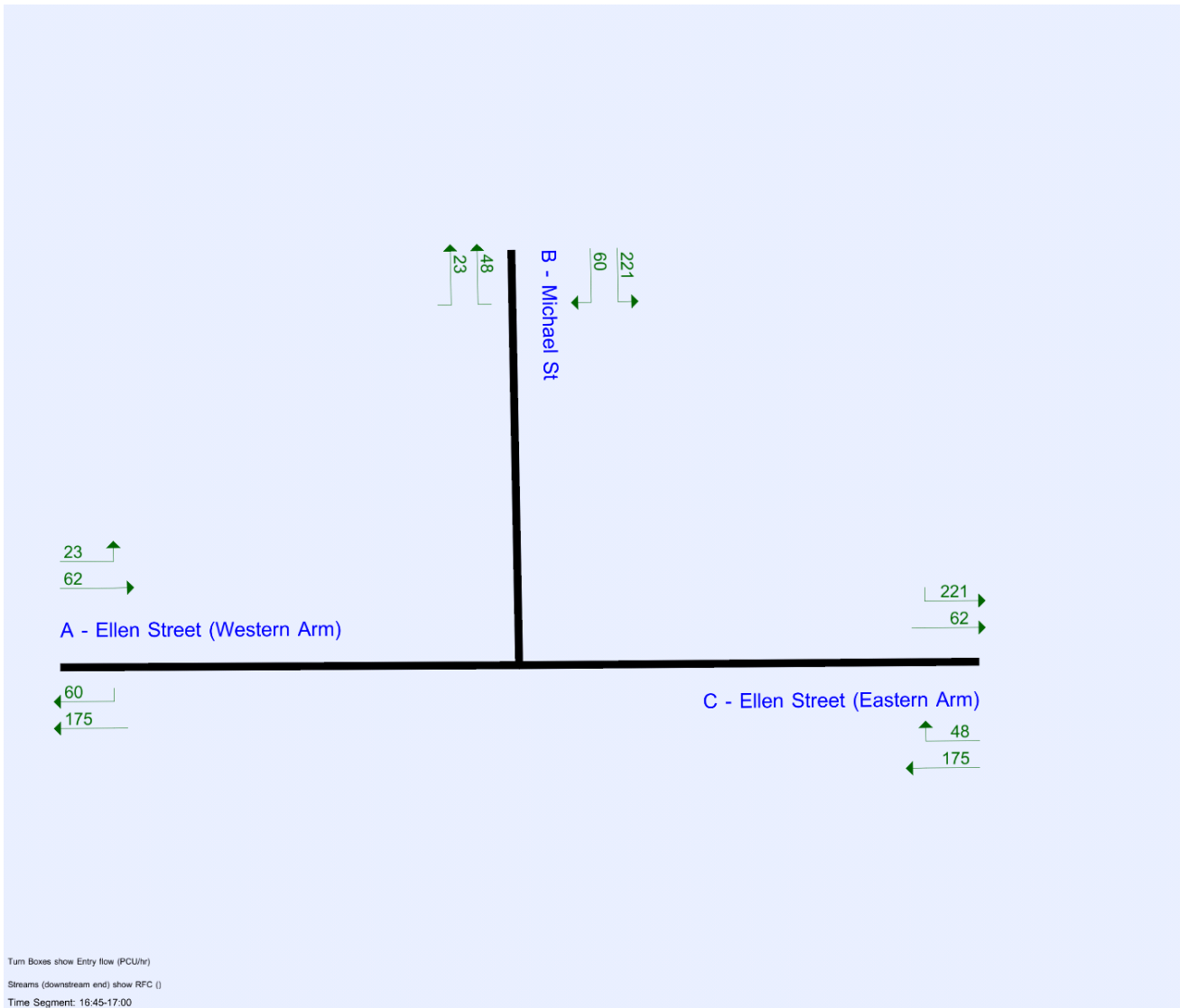
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	24/05/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\manniona
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2017 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2017 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.067
D4	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.067
D5	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.131
D6	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.131
D7	2037 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.236
D8	2037 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.236
D11	2022 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓		
D12	2022 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓		
D13	2027 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓		
D14	2027 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓		
D15	2037 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓		
D16	2037 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓		

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2017 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	2.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Ellen Street (Western Arm)		Major
B	Michael St		Minor
C	Ellen Street (Eastern Arm)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Ellen Street (Eastern Arm)	6.60			120.0	✓	2.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Michael St	One lane	4.15	64	63

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
5	B-A	591	0.105	0.265	0.167	0.378
5	B-C	740	0.110	0.279	-	-
5	C-B	643	0.243	0.243	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	34	100.000
B - Michael St		ONE HOUR	✓	101	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	212	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	7	27
	B - Michael St	30	0	71
	C - Ellen Street (Eastern Arm)	166	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	5	5	5
	B - Michael St	5	5	5
	C - Ellen Street (Eastern Arm)	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.17	6.91	0.2	A	93	139
C-AB	0.08	6.46	0.1	A	42	63
C-A					152	228
A-B					6	10
A-C					25	37

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	76	19	668	0.114	76	0.0	0.1	6.376	A
C-AB	35	9	638	0.054	34	0.0	0.1	6.261	A
C-A	125	31			125				
A-B	5	1			5				
A-C	20	5			20				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	91	23	664	0.137	91	0.1	0.2	6.594	A
C-AB	41	10	637	0.065	41	0.1	0.1	6.347	A
C-A	149	37			149				
A-B	6	2			6				
A-C	24	6			24				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	111	28	658	0.169	111	0.2	0.2	6.910	A
C-AB	51	13	636	0.080	51	0.1	0.1	6.459	A
C-A	183	46			183				
A-B	8	2			8				
A-C	30	7			30				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	111	28	658	0.169	111	0.2	0.2	6.913	A
C-AB	51	13	636	0.080	51	0.1	0.1	6.459	A
C-A	183	46			183				
A-B	8	2			8				
A-C	30	7			30				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	91	23	664	0.137	91	0.2	0.2	6.601	A
C-AB	41	10	637	0.065	41	0.1	0.1	6.351	A
C-A	149	37			149				
A-B	6	2			6				
A-C	24	6			24				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	76	19	668	0.114	76	0.2	0.1	6.392	A
C-AB	35	9	638	0.054	35	0.1	0.1	6.268	A
C-A	125	31			125				
A-B	5	1			5				
A-C	20	5			20				

2017 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	5.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2017 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	96	100.000
B - Michael St		ONE HOUR	✓	278	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	209	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	30	66
	B - Michael St	58	0	220
	C - Ellen Street (Eastern Arm)	146	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	5	5	5
	B - Michael St	5	5	5
	C - Ellen Street (Eastern Arm)	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.46	10.61	0.9	B	255	383
C-AB	0.11	6.86	0.1	A	58	87
C-A					134	201
A-B					28	41
A-C					61	91

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	209	52	675	0.310	207	0.0	0.5	8.047	A
C-AB	47	12	627	0.076	47	0.0	0.1	6.520	A
C-A	110	27			110				
A-B	23	6			23				
A-C	50	12			50				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	250	62	670	0.373	249	0.5	0.6	8.976	A
C-AB	57	14	624	0.091	57	0.1	0.1	6.664	A
C-A	131	33			131				
A-B	27	7			27				
A-C	59	15			59				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	306	77	662	0.462	305	0.6	0.9	10.554	B
C-AB	70	17	620	0.112	70	0.1	0.1	6.861	A
C-A	160	40			160				
A-B	33	8			33				
A-C	73	18			73				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	306	77	662	0.462	306	0.9	0.9	10.613	B
C-AB	70	17	620	0.112	70	0.1	0.1	6.863	A
C-A	160	40			160				
A-B	33	8			33				
A-C	73	18			73				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	250	62	670	0.373	251	0.9	0.6	9.049	A
C-AB	57	14	624	0.091	57	0.1	0.1	6.667	A
C-A	131	33			131				
A-B	27	7			27				
A-C	59	15			59				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	209	52	675	0.310	210	0.6	0.5	8.135	A
C-AB	47	12	627	0.076	48	0.1	0.1	6.529	A
C-A	110	27			110				
A-B	23	6			23				
A-C	50	12			50				

2022 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	2.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.067

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	36	100.000
B - Michael St		ONE HOUR	✓	108	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	226	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	7	29
	B - Michael St	32	0	76
	C - Ellen Street (Eastern Arm)	177	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	5	5
	B - Michael St	5	0	5
	C - Ellen Street (Eastern Arm)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.18	7.04	0.2	A	99	148
C-AB	0.09	6.50	0.1	A	45	68
C-A					162	244
A-B					7	10
A-C					26	40

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	81	20	666	0.122	81	0.0	0.1	6.444	A
C-AB	37	9	637	0.058	37	0.0	0.1	6.289	A
C-A	133	33			133				
A-B	6	1			6				
A-C	22	5			22				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	97	24	662	0.146	97	0.1	0.2	6.685	A
C-AB	44	11	637	0.069	44	0.1	0.1	6.380	A
C-A	159	40			159				
A-B	7	2			7				
A-C	26	6			26				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	119	30	656	0.181	118	0.2	0.2	7.029	A
C-AB	54	14	636	0.085	54	0.1	0.1	6.501	A
C-A	195	49			195				
A-B	8	2			8				
A-C	32	8			32				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	119	30	656	0.181	119	0.2	0.2	7.036	A
C-AB	54	14	636	0.085	54	0.1	0.1	6.501	A
C-A	195	49			195				
A-B	8	2			8				
A-C	32	8			32				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	97	24	662	0.146	97	0.2	0.2	6.693	A
C-AB	44	11	637	0.069	44	0.1	0.1	6.384	A
C-A	159	40			159				
A-B	7	2			7				
A-C	26	6			26				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	81	20	666	0.122	81	0.2	0.1	6.461	A
C-AB	37	9	637	0.058	37	0.1	0.1	6.298	A
C-A	133	33			133				
A-B	6	1			6				
A-C	22	5			22				

2022 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	6.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.067

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	102	100.000
B - Michael St		ONE HOUR	✓	297	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	223	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	32	70
	B - Michael St	62	0	235
	C - Ellen Street (Eastern Arm)	156	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	5	5
	B - Michael St	5	0	5
	C - Ellen Street (Eastern Arm)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.50	11.36	1.0	B	272	408
C-AB	0.12	6.94	0.1	A	62	93
C-A					143	214
A-B					29	44
A-C					65	97

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	223	56	673	0.332	221	0.0	0.5	8.323	A
C-AB	51	13	626	0.081	50	0.0	0.1	6.565	A
C-A	117	29			117				
A-B	24	6			24				
A-C	53	13			53				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	267	67	667	0.400	266	0.5	0.7	9.397	A
C-AB	61	15	623	0.097	61	0.1	0.1	6.723	A
C-A	140	35			140				
A-B	29	7			29				
A-C	63	16			63				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	327	82	659	0.495	325	0.7	1.0	11.267	B
C-AB	74	19	619	0.120	74	0.1	0.1	6.935	A
C-A	171	43			171				
A-B	35	9			35				
A-C	78	19			78				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	327	82	659	0.495	327	1.0	1.0	11.360	B
C-AB	74	19	619	0.120	74	0.1	0.1	6.938	A
C-A	171	43			171				
A-B	35	9			35				
A-C	78	19			78				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	267	67	667	0.400	268	1.0	0.7	9.489	A
C-AB	61	15	623	0.097	61	0.1	0.1	6.728	A
C-A	140	35			140				
A-B	29	7			29				
A-C	63	16			63				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	223	56	673	0.332	224	0.7	0.5	8.426	A
C-AB	51	13	626	0.081	51	0.1	0.1	6.577	A
C-A	117	29			117				
A-B	24	6			24				
A-C	53	13			53				

2027 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	2.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D5	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.131

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	38	100.000
B - Michael St		ONE HOUR	✓	114	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	240	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	8	31
	B - Michael St	34	0	80
	C - Ellen Street (Eastern Arm)	188	52	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	5	5
	B - Michael St	5	0	5
	C - Ellen Street (Eastern Arm)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.19	7.16	0.2	A	105	157
C-AB	0.09	6.54	0.1	A	48	72
C-A					172	258
A-B					7	11
A-C					28	42

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	86	21	665	0.129	85	0.0	0.2	6.514	A
C-AB	39	10	637	0.062	39	0.0	0.1	6.316	A
C-A	141	35			141				
A-B	6	1			6				
A-C	23	6			23				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	103	26	660	0.156	103	0.2	0.2	6.774	A
C-AB	47	12	636	0.074	47	0.1	0.1	6.412	A
C-A	169	42			169				
A-B	7	2			7				
A-C	27	7			27				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	126	31	654	0.192	126	0.2	0.2	7.152	A
C-AB	57	14	635	0.090	57	0.1	0.1	6.540	A
C-A	207	52			207				
A-B	9	2			9				
A-C	34	8			34				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	126	31	654	0.192	126	0.2	0.2	7.158	A
C-AB	57	14	635	0.090	57	0.1	0.1	6.540	A
C-A	207	52			207				
A-B	9	2			9				
A-C	34	8			34				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	103	26	660	0.156	103	0.2	0.2	6.785	A
C-AB	47	12	636	0.074	47	0.1	0.1	6.417	A
C-A	169	42			169				
A-B	7	2			7				
A-C	27	7			27				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	86	21	665	0.129	86	0.2	0.2	6.533	A
C-AB	39	10	637	0.062	39	0.1	0.1	6.324	A
C-A	141	35			141				
A-B	6	1			6				
A-C	23	6			23				

2027 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	6.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D6	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.131

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	109	100.000
B - Michael St		ONE HOUR	✓	314	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	236	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	34	75
	B - Michael St	66	0	249
	C - Ellen Street (Eastern Arm)	165	71	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	5	5
	B - Michael St	5	0	5
	C - Ellen Street (Eastern Arm)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.53	12.17	1.2	B	289	433
C-AB	0.13	7.01	0.2	A	66	98
C-A					151	227
A-B					31	47
A-C					68	103

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	237	59	672	0.352	234	0.0	0.6	8.604	A
C-AB	54	13	625	0.086	53	0.0	0.1	6.611	A
C-A	124	31			124				
A-B	26	6			26				
A-C	56	14			56				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	283	71	665	0.425	282	0.6	0.8	9.838	A
C-AB	64	16	622	0.103	64	0.1	0.1	6.779	A
C-A	148	37			148				
A-B	31	8			31				
A-C	67	17			67				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	346	87	656	0.527	345	0.8	1.1	12.062	B
C-AB	79	20	618	0.128	79	0.1	0.2	7.007	A
C-A	181	45			181				
A-B	37	9			37				
A-C	82	21			82				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	346	87	656	0.527	346	1.1	1.2	12.175	B
C-AB	79	20	618	0.128	79	0.2	0.2	7.010	A
C-A	181	45			181				
A-B	37	9			37				
A-C	82	21			82				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	283	71	665	0.425	284	1.2	0.8	9.955	A
C-AB	64	16	622	0.103	64	0.2	0.1	6.785	A
C-A	148	37			148				
A-B	31	8			31				
A-C	67	17			67				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	237	59	672	0.352	238	0.8	0.6	8.728	A
C-AB	54	13	625	0.086	54	0.1	0.1	6.623	A
C-A	124	31			124				
A-B	26	6			26				
A-C	56	14			56				

2037 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	3.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D7	2037 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.236

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	42	100.000
B - Michael St		ONE HOUR	✓	125	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	262	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	9	33
	B - Michael St	37	0	88
	C - Ellen Street (Eastern Arm)	205	57	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	5	5
	B - Michael St	5	0	5
	C - Ellen Street (Eastern Arm)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.21	7.37	0.3	A	115	172
C-AB	0.10	6.61	0.1	A	52	78
C-A					188	282
A-B					8	12
A-C					31	46

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	94	23	663	0.142	93	0.0	0.2	6.628	A
C-AB	43	11	637	0.067	43	0.0	0.1	6.359	A
C-A	154	39			154				
A-B	7	2			7				
A-C	25	6			25				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	112	28	658	0.171	112	0.2	0.2	6.926	A
C-AB	51	13	636	0.081	51	0.1	0.1	6.465	A
C-A	184	46			184				
A-B	8	2			8				
A-C	30	8			30				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	137	34	650	0.211	137	0.2	0.3	7.362	A
C-AB	63	16	635	0.099	63	0.1	0.1	6.606	A
C-A	226	56			226				
A-B	10	2			10				
A-C	37	9			37				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	137	34	650	0.211	137	0.3	0.3	7.368	A
C-AB	63	16	635	0.099	63	0.1	0.1	6.606	A
C-A	226	56			226				
A-B	10	2			10				
A-C	37	9			37				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	112	28	658	0.171	112	0.3	0.2	6.936	A
C-AB	51	13	636	0.081	51	0.1	0.1	6.470	A
C-A	184	46			184				
A-B	8	2			8				
A-C	30	8			30				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	94	23	663	0.142	94	0.2	0.2	6.651	A
C-AB	43	11	637	0.067	43	0.1	0.1	6.368	A
C-A	154	39			154				
A-B	7	2			7				
A-C	25	6			25				

2037 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	7.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D8	2037 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.236

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	119	100.000
B - Michael St		ONE HOUR	✓	344	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	258	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	37	82
	B - Michael St	72	0	272
	C - Ellen Street (Eastern Arm)	180	78	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	5	5
	B - Michael St	5	0	5
	C - Ellen Street (Eastern Arm)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.58	13.80	1.4	B	315	473
C-AB	0.14	7.13	0.2	A	72	108
C-A					165	248
A-B					34	51
A-C					75	112

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	259	65	669	0.387	256	0.0	0.7	9.107	A
C-AB	59	15	623	0.094	58	0.0	0.1	6.687	A
C-A	136	34			136				
A-B	28	7			28				
A-C	61	15			61				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	309	77	662	0.467	308	0.7	0.9	10.654	B
C-AB	70	18	620	0.113	70	0.1	0.1	6.874	A
C-A	162	40			162				
A-B	33	8			33				
A-C	73	18			73				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	378	95	652	0.580	376	0.9	1.4	13.611	B
C-AB	86	22	616	0.140	86	0.1	0.2	7.127	A
C-A	198	50			198				
A-B	41	10			41				
A-C	90	22			90				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	378	95	652	0.580	378	1.4	1.4	13.798	B
C-AB	86	22	616	0.140	86	0.2	0.2	7.130	A
C-A	198	50			198				
A-B	41	10			41				
A-C	90	22			90				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	309	77	662	0.467	311	1.4	0.9	10.837	B
C-AB	70	18	620	0.113	70	0.2	0.1	6.880	A
C-A	162	40			162				
A-B	33	8			33				
A-C	73	18			73				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	259	65	669	0.387	260	0.9	0.7	9.272	A
C-AB	59	15	623	0.094	59	0.1	0.1	6.697	A
C-A	136	34			136				
A-B	28	7			28				
A-C	61	15			61				

2022 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2022 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	43	100.000
B - Michael St		ONE HOUR	✓	116	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	268	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	10	33
	B - Michael St	38	0	78
	C - Ellen Street (Eastern Arm)	183	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	0	0
	B - Michael St	0	0	0
	C - Ellen Street (Eastern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.20	7.04	0.2	A	106	160
C-AB	0.15	6.64	0.2	A	78	118
C-A					168	251
A-B					9	14
A-C					30	45

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	87	22	654	0.134	87	0.0	0.2	6.341	A
C-AB	64	16	637	0.101	64	0.0	0.1	6.276	A
C-A	138	34			138				
A-B	8	2			8				
A-C	25	6			25				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	104	26	648	0.161	104	0.2	0.2	6.620	A
C-AB	77	19	636	0.121	77	0.1	0.1	6.430	A
C-A	164	41			164				
A-B	9	2			9				
A-C	30	7			30				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	128	32	639	0.200	127	0.2	0.2	7.031	A
C-AB	94	24	636	0.148	94	0.1	0.2	6.636	A
C-A	201	50			201				
A-B	11	3			11				
A-C	36	9			36				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	128	32	639	0.200	128	0.2	0.2	7.036	A
C-AB	94	24	636	0.148	94	0.2	0.2	6.639	A
C-A	201	50			201				
A-B	11	3			11				
A-C	36	9			36				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	104	26	648	0.161	105	0.2	0.2	6.631	A
C-AB	77	19	636	0.121	77	0.2	0.1	6.436	A
C-A	164	41			164				
A-B	9	2			9				
A-C	30	7			30				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	87	22	654	0.134	87	0.2	0.2	6.358	A
C-AB	64	16	637	0.101	64	0.1	0.1	6.288	A
C-A	138	34			138				
A-B	8	2			8				
A-C	25	6			25				

2022 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	6.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2022 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	96	100.000
B - Michael St		ONE HOUR	✓	330	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	262	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	25	71
	B - Michael St	71	0	259
	C - Ellen Street (Eastern Arm)	208	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	0	0
	B - Michael St	0	0	0
	C - Ellen Street (Eastern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.55	12.26	1.2	B	303	454
C-AB	0.10	6.42	0.1	A	50	74
C-A					191	286
A-B					23	34
A-C					65	98

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	248	62	672	0.370	246	0.0	0.6	8.419	A
C-AB	41	10	627	0.065	40	0.0	0.1	6.139	A
C-A	157	39			157				
A-B	19	5			19				
A-C	53	13			53				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	297	74	665	0.446	296	0.6	0.8	9.710	A
C-AB	49	12	624	0.078	49	0.1	0.1	6.260	A
C-A	187	47			187				
A-B	22	6			22				
A-C	64	16			64				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	363	91	657	0.553	362	0.8	1.2	12.125	B
C-AB	60	15	620	0.096	60	0.1	0.1	6.424	A
C-A	229	57			229				
A-B	28	7			28				
A-C	78	20			78				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	363	91	657	0.553	363	1.2	1.2	12.255	B
C-AB	60	15	620	0.096	60	0.1	0.1	6.424	A
C-A	229	57			229				
A-B	28	7			28				
A-C	78	20			78				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	297	74	665	0.446	298	1.2	0.8	9.848	A
C-AB	49	12	624	0.078	49	0.1	0.1	6.264	A
C-A	187	47			187				
A-B	22	6			22				
A-C	64	16			64				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	248	62	671	0.370	249	0.8	0.6	8.547	A
C-AB	41	10	627	0.065	41	0.1	0.1	6.147	A
C-A	157	39			157				
A-B	19	5			19				
A-C	53	13			53				

2027 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	3.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	45	100.000
B - Michael St		ONE HOUR	✓	123	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	282	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	11	34
	B - Michael St	40	0	83
	C - Ellen Street (Eastern Arm)	194	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	0	0
	B - Michael St	0	0	0
	C - Ellen Street (Eastern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.21	7.17	0.3	A	113	169
C-AB	0.15	6.68	0.2	A	81	122
C-A					178	266
A-B					10	15
A-C					31	47

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	93	23	653	0.142	92	0.0	0.2	6.410	A
C-AB	66	17	637	0.104	66	0.0	0.1	6.300	A
C-A	146	36			146				
A-B	8	2			8				
A-C	26	6			26				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	111	28	647	0.171	110	0.2	0.2	6.712	A
C-AB	79	20	636	0.125	79	0.1	0.1	6.463	A
C-A	174	44			174				
A-B	10	2			10				
A-C	31	8			31				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	135	34	638	0.212	135	0.2	0.3	7.160	A
C-AB	98	24	636	0.153	98	0.1	0.2	6.678	A
C-A	213	53			213				
A-B	12	3			12				
A-C	37	9			37				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	135	34	638	0.212	135	0.3	0.3	7.166	A
C-AB	98	24	636	0.153	98	0.2	0.2	6.680	A
C-A	213	53			213				
A-B	12	3			12				
A-C	37	9			37				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	111	28	647	0.171	111	0.3	0.2	6.721	A
C-AB	79	20	636	0.125	80	0.2	0.1	6.467	A
C-A	174	44			174				
A-B	10	2			10				
A-C	31	8			31				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	93	23	653	0.142	93	0.2	0.2	6.430	A
C-AB	66	17	637	0.104	67	0.1	0.1	6.313	A
C-A	146	36			146				
A-B	8	2			8				
A-C	26	6			26				

2027 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	6.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	102	100.000
B - Michael St		ONE HOUR	✓	348	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	27	75
	B - Michael St	75	0	273
	C - Ellen Street (Eastern Arm)	217	58	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	0	0
	B - Michael St	0	0	0
	C - Ellen Street (Eastern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.59	13.27	1.4	B	319	479
C-AB	0.10	6.49	0.1	A	53	80
C-A					199	298
A-B					25	37
A-C					69	103

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	262	65	670	0.391	259	0.0	0.6	8.725	A
C-AB	44	11	626	0.070	43	0.0	0.1	6.181	A
C-A	163	41			163				
A-B	20	5			20				
A-C	56	14			56				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	313	78	663	0.472	312	0.6	0.9	10.218	B
C-AB	52	13	623	0.084	52	0.1	0.1	6.311	A
C-A	195	49			195				
A-B	24	6			24				
A-C	67	17			67				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	383	96	654	0.586	381	0.9	1.4	13.093	B
C-AB	64	16	619	0.104	64	0.1	0.1	6.490	A
C-A	239	60			239				
A-B	30	7			30				
A-C	83	21			83				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	383	96	654	0.586	383	1.4	1.4	13.273	B
C-AB	64	16	619	0.104	64	0.1	0.1	6.490	A
C-A	239	60			239				
A-B	30	7			30				
A-C	83	21			83				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	313	78	663	0.472	315	1.4	0.9	10.392	B
C-AB	52	13	623	0.084	52	0.1	0.1	6.313	A
C-A	195	49			195				
A-B	24	6			24				
A-C	67	17			67				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	262	65	670	0.391	263	0.9	0.7	8.877	A
C-AB	44	11	626	0.070	44	0.1	0.1	6.189	A
C-A	163	41			163				
A-B	20	5			20				
A-C	56	14			56				

2037 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	3.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2037 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	49	100.000
B - Michael St		ONE HOUR	✓	133	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	304	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	12	37
	B - Michael St	43	0	90
	C - Ellen Street (Eastern Arm)	211	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	0	0
	B - Michael St	0	0	0
	C - Ellen Street (Eastern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.23	7.38	0.3	A	122	183
C-AB	0.16	6.75	0.2	A	86	129
C-A					193	290
A-B					11	17
A-C					34	51

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	100	25	651	0.154	99	0.0	0.2	6.519	A
C-AB	70	18	636	0.110	70	0.0	0.1	6.347	A
C-A	159	40			159				
A-B	9	2			9				
A-C	28	7			28				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	120	30	644	0.186	119	0.2	0.2	6.859	A
C-AB	84	21	636	0.132	84	0.1	0.2	6.518	A
C-A	189	47			189				
A-B	11	3			11				
A-C	33	8			33				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	146	37	634	0.231	146	0.2	0.3	7.367	A
C-AB	103	26	636	0.162	103	0.2	0.2	6.749	A
C-A	231	58			231				
A-B	13	3			13				
A-C	41	10			41				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	146	37	634	0.231	146	0.3	0.3	7.376	A
C-AB	103	26	636	0.162	103	0.2	0.2	6.754	A
C-A	231	58			231				
A-B	13	3			13				
A-C	41	10			41				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	120	30	644	0.186	120	0.3	0.2	6.873	A
C-AB	84	21	636	0.132	84	0.2	0.2	6.527	A
C-A	189	47			189				
A-B	11	3			11				
A-C	33	8			33				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	100	25	651	0.154	100	0.2	0.2	6.543	A
C-AB	70	18	636	0.110	70	0.2	0.1	6.362	A
C-A	159	40			159				
A-B	9	2			9				
A-C	28	7			28				

2037 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
5	Michael Street/ Ellen Street	T-Junction	Two-way	7.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2037 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ellen Street (Western Arm)		ONE HOUR	✓	112	100.000
B - Michael St		ONE HOUR	✓	377	100.000
C - Ellen Street (Eastern Arm)		ONE HOUR	✓	297	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	30	82
	B - Michael St	81	0	296
	C - Ellen Street (Eastern Arm)	233	64	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ellen Street (Western Arm)	B - Michael St	C - Ellen Street (Eastern Arm)
From	A - Ellen Street (Western Arm)	0	0	0
	B - Michael St	0	0	0
	C - Ellen Street (Eastern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.64	15.31	1.7	C	346	519
C-AB	0.11	6.59	0.1	A	59	88
C-A					214	320
A-B					28	41
A-C					75	113

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	284	71	667	0.426	281	0.0	0.7	9.262	A
C-AB	48	12	624	0.077	48	0.0	0.1	6.246	A
C-A	175	44			175				
A-B	23	6			23				
A-C	62	15			62				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	339	85	660	0.514	338	0.7	1.0	11.137	B
C-AB	58	14	621	0.093	58	0.1	0.1	6.392	A
C-A	209	52			209				
A-B	27	7			27				
A-C	74	18			74				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	415	104	650	0.639	412	1.0	1.7	15.000	B
C-AB	71	18	617	0.115	71	0.1	0.1	6.589	A
C-A	256	64			256				
A-B	33	8			33				
A-C	90	23			90				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	415	104	650	0.639	415	1.7	1.7	15.312	C
C-AB	71	18	617	0.115	71	0.1	0.1	6.592	A
C-A	256	64			256				
A-B	33	8			33				
A-C	90	23			90				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	339	85	660	0.514	342	1.7	1.1	11.408	B
C-AB	58	14	621	0.093	58	0.1	0.1	6.394	A
C-A	209	52			209				
A-B	27	7			27				
A-C	74	18			74				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	284	71	667	0.426	285	1.1	0.8	9.466	A
C-AB	48	12	624	0.077	48	0.1	0.1	6.253	A
C-A	175	44			175				
A-B	23	6			23				
A-C	62	15			62				

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
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Filename: Junction 6; Michael St_Site Access.j9

Path: F:\Admin\Admin_General_Dub\000_Projects\Project Opera\Analysis\PICADY

Report generation date: 19/12/2018 12:58:37

- »2017 Base, AM
- »2017 Base, PM
- »2022 Base, AM
- »2022 Base, PM
- »2027 Base, AM
- »2027 Base, PM
- »2037 Base, AM
- »2037 Base, PM
- »2022 Base + Dev, AM
- »2022 Base + Dev, PM
- »2027 Base + Dev, AM
- »2027 Base + Dev, PM
- »2037 Base + Dev, AM
- »2037 Base + Dev, PM

Summary of junction performance

	AM		PM	
	Queue (PCU)	RFC	Queue (PCU)	RFC
2017 Base				
Stream B-AC	0.0	0.00	0.1	0.10
Stream C-AB	0.0	0.01	0.1	0.06
2022 Base				
Stream B-AC	0.0	0.00	0.1	0.11
Stream C-AB	0.0	0.01	0.1	0.06
2027 Base				
Stream B-AC	0.0	0.00	0.1	0.11
Stream C-AB	0.0	0.01	0.1	0.06
2037 Base				
Stream B-AC	0.0	0.00	0.1	0.13
Stream C-AB	0.0	0.02	0.1	0.07
2022 Base + Dev				
Stream B-AC	0.0	0.01	0.2	0.16
Stream C-AB	0.1	0.11	0.0	0.01
2027 Base + Dev				
Stream B-AC	0.0	0.02	0.2	0.17
Stream C-AB	0.1	0.11	0.0	0.02
2037 Base + Dev				
Stream B-AC	0.0	0.02	0.2	0.18
Stream C-AB	0.1	0.11	0.0	0.02

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	24/05/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\manniona
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2017 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2017 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.067
D4	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.067
D5	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.131
D6	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.131
D7	2037 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.236
D8	2037 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.236
D11	2022 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓		
D12	2022 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓		
D13	2027 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓		
D14	2027 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓		
D15	2037 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓		
D16	2037 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓		

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2017 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	0.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Michael Street (Southern Arm)		Major
B	Site Access		Minor
C	Michael Street (Northern Arm)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Michael Street (Northern Arm)	8.20			120.0	✓	2.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	3.67	54	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
6	B-A	555	0.091	0.231	0.145	0.330
6	B-C	699	0.097	0.245	-	-
6	C-B	643	0.225	0.225	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	47	100.000
B - Site Access		ONE HOUR	✓	3	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	108	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	3	44
	B - Site Access	0	0	3
	C - Michael Street (Northern Arm)	101	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	5	5	5
	B - Site Access	5	5	5
	C - Michael Street (Northern Arm)	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.01	6.06	0.0	A	6	10
C-A					93	139
A-B					3	4
A-C					40	61

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	602	0.000	0	0.0	0.0	0.000	A
C-AB	5	1	635	0.008	5	0.0	0.0	5.997	A
C-A	76	19			76				
A-B	2	0.56			2				
A-C	33	8			33				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	599	0.000	0	0.0	0.0	0.000	A
C-AB	6	2	634	0.010	6	0.0	0.0	6.021	A
C-A	91	23			91				
A-B	3	0.67			3				
A-C	40	10			40				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	595	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	632	0.012	8	0.0	0.0	6.055	A
C-A	111	28			111				
A-B	3	0.83			3				
A-C	48	12			48				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	595	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	632	0.012	8	0.0	0.0	6.055	A
C-A	111	28			111				
A-B	3	0.83			3				
A-C	48	12			48				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	599	0.000	0	0.0	0.0	0.000	A
C-AB	6	2	634	0.010	6	0.0	0.0	6.024	A
C-A	91	23			91				
A-B	3	0.67			3				
A-C	40	10			40				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	602	0.000	0	0.0	0.0	0.000	A
C-AB	5	1	635	0.008	5	0.0	0.0	5.997	A
C-A	76	19			76				
A-B	2	0.56			2				
A-C	33	8			33				

2017 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	1.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2017 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	109	100.000
B - Site Access		ONE HOUR	✓	52	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	280	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	30	79
	B - Site Access	22	0	30
	C - Michael Street (Northern Arm)	249	31	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	5	5
	B - Site Access	0	5	5
	C - Michael Street (Northern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	7.13	0.1	A	48	72
C-AB	0.06	6.17	0.1	A	28	43
C-A					228	343
A-B					28	41
A-C					72	109

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	39	10	594	0.066	39	0.0	0.1	6.670	A
C-AB	23	6	625	0.037	23	0.0	0.0	5.978	A
C-A	187	47			187				
A-B	23	6			23				
A-C	59	15			59				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	47	12	586	0.080	47	0.1	0.1	6.859	A
C-AB	28	7	622	0.045	28	0.0	0.0	6.060	A
C-A	224	56			224				
A-B	27	7			27				
A-C	71	18			71				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	57	14	576	0.099	57	0.1	0.1	7.132	A
C-AB	34	9	617	0.055	34	0.0	0.1	6.173	A
C-A	274	69			274				
A-B	33	8			33				
A-C	87	22			87				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	57	14	576	0.099	57	0.1	0.1	7.132	A
C-AB	34	9	617	0.055	34	0.1	0.1	6.173	A
C-A	274	69			274				
A-B	33	8			33				
A-C	87	22			87				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	47	12	586	0.080	47	0.1	0.1	6.864	A
C-AB	28	7	622	0.045	28	0.1	0.0	6.063	A
C-A	224	56			224				
A-B	27	7			27				
A-C	71	18			71				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	39	10	594	0.066	39	0.1	0.1	6.680	A
C-AB	23	6	625	0.037	23	0.0	0.0	5.983	A
C-A	187	47			187				
A-B	23	6			23				
A-C	59	15			59				

2022 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	0.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.067

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	50	100.000
B - Site Access		ONE HOUR	✓	3	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	115	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	3	47
	B - Site Access	0	0	3
	C - Michael Street (Northern Arm)	108	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	5	5
	B - Site Access	0	0	5
	C - Michael Street (Northern Arm)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.01	6.07	0.0	A	7	10
C-A					99	148
A-B					3	4
A-C					43	65

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	601	0.000	0	0.0	0.0	0.000	A
C-AB	6	1	635	0.009	6	0.0	0.0	6.005	A
C-A	81	20			81				
A-B	2	0.60			2				
A-C	35	9			35				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	598	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	633	0.011	7	0.0	0.0	6.031	A
C-A	97	24			97				
A-B	3	0.72			3				
A-C	42	11			42				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	593	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	631	0.013	8	0.0	0.0	6.068	A
C-A	119	30			119				
A-B	4	0.88			4				
A-C	52	13			52				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	593	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	631	0.013	8	0.0	0.0	6.068	A
C-A	119	30			119				
A-B	4	0.88			4				
A-C	52	13			52				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	598	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	633	0.011	7	0.0	0.0	6.032	A
C-A	97	24			97				
A-B	3	0.72			3				
A-C	42	11			42				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	601	0.000	0	0.0	0.0	0.000	A
C-AB	6	1	635	0.009	6	0.0	0.0	6.008	A
C-A	81	20			81				
A-B	2	0.60			2				
A-C	35	9			35				

2022 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	1.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.067

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	116	100.000
B - Site Access		ONE HOUR	✓	55	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	299	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	32	84
	B - Site Access	23	0	32
	C - Michael Street (Northern Arm)	266	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	5	5
	B - Site Access	0	0	5
	C - Michael Street (Northern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	7.24	0.1	A	51	76
C-AB	0.06	6.21	0.1	A	30	46
C-A					244	366
A-B					29	44
A-C					77	116

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	42	10	591	0.071	41	0.0	0.1	6.732	A
C-AB	25	6	624	0.040	25	0.0	0.0	6.005	A
C-A	200	50			200				
A-B	24	6			24				
A-C	63	16			63				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	50	12	583	0.086	50	0.1	0.1	6.938	A
C-AB	30	7	620	0.048	30	0.0	0.1	6.094	A
C-A	239	60			239				
A-B	29	7			29				
A-C	76	19			76				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	61	15	572	0.107	61	0.1	0.1	7.234	A
C-AB	36	9	616	0.059	36	0.1	0.1	6.215	A
C-A	292	73			292				
A-B	35	9			35				
A-C	93	23			93				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	61	15	572	0.107	61	0.1	0.1	7.237	A
C-AB	36	9	616	0.059	36	0.1	0.1	6.215	A
C-A	292	73			292				
A-B	35	9			35				
A-C	93	23			93				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	50	12	583	0.086	50	0.1	0.1	6.943	A
C-AB	30	7	620	0.048	30	0.1	0.1	6.095	A
C-A	239	60			239				
A-B	29	7			29				
A-C	76	19			76				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	42	10	591	0.071	42	0.1	0.1	6.742	A
C-AB	25	6	624	0.040	25	0.1	0.0	6.011	A
C-A	200	50			200				
A-B	24	6			24				
A-C	63	16			63				

2027 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	0.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D5	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.131

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	53	100.000
B - Site Access		ONE HOUR	✓	3	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	122	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
A - Michael Street (Southern Arm)	0	3	50
B - Site Access	0	0	3
C - Michael Street (Northern Arm)	114	8	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
A - Michael Street (Southern Arm)	0	5	5
B - Site Access	0	0	5
C - Michael Street (Northern Arm)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.01	6.08	0.0	A	7	11
C-A					105	157
A-B					3	5
A-C					46	68

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	600	0.000	0	0.0	0.0	0.000	A
C-AB	6	1	634	0.009	6	0.0	0.0	6.013	A
C-A	86	21			86				
A-B	3	0.64			3				
A-C	37	9			37				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	597	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	633	0.011	7	0.0	0.0	6.041	A
C-A	103	26			103				
A-B	3	0.76			3				
A-C	45	11			45				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	592	0.000	0	0.0	0.0	0.000	A
C-AB	9	2	630	0.014	9	0.0	0.0	6.080	A
C-A	126	31			126				
A-B	4	0.93			4				
A-C	55	14			55				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	592	0.000	0	0.0	0.0	0.000	A
C-AB	9	2	630	0.014	9	0.0	0.0	6.080	A
C-A	126	31			126				
A-B	4	0.93			4				
A-C	55	14			55				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	597	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	633	0.011	7	0.0	0.0	6.041	A
C-A	103	26			103				
A-B	3	0.76			3				
A-C	45	11			45				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	600	0.000	0	0.0	0.0	0.000	A
C-AB	6	1	634	0.009	6	0.0	0.0	6.016	A
C-A	86	21			86				
A-B	3	0.64			3				
A-C	37	9			37				

2027 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	1.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D6	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.131

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	123	100.000
B - Site Access		ONE HOUR	✓	59	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	317	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)	
A - Michael Street (Southern Arm)	0	34	89	
B - Site Access	25	0	34	
C - Michael Street (Northern Arm)	282	35	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)	
A - Michael Street (Southern Arm)	0	5	5	
B - Site Access	0	0	5	
C - Michael Street (Northern Arm)	0	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	7.34	0.1	A	54	81
C-AB	0.06	6.26	0.1	A	32	48
C-A					258	388
A-B					31	47
A-C					82	123

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	44	11	589	0.075	44	0.0	0.1	6.790	A
C-AB	26	7	623	0.042	26	0.0	0.0	6.032	A
C-A	212	53			212				
A-B	26	6			26				
A-C	67	17			67				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	53	13	580	0.091	53	0.1	0.1	7.015	A
C-AB	32	8	619	0.051	32	0.0	0.1	6.126	A
C-A	253	63			253				
A-B	31	8			31				
A-C	80	20			80				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	65	16	569	0.114	65	0.1	0.1	7.338	A
C-AB	39	10	614	0.063	39	0.1	0.1	6.255	A
C-A	310	77			310				
A-B	37	9			37				
A-C	98	25			98				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	65	16	569	0.114	65	0.1	0.1	7.341	A
C-AB	39	10	614	0.063	39	0.1	0.1	6.255	A
C-A	310	77			310				
A-B	37	9			37				
A-C	98	25			98				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	53	13	580	0.091	53	0.1	0.1	7.021	A
C-AB	32	8	619	0.051	32	0.1	0.1	6.127	A
C-A	253	63			253				
A-B	31	8			31				
A-C	80	20			80				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	44	11	589	0.075	44	0.1	0.1	6.800	A
C-AB	26	7	623	0.042	26	0.1	0.0	6.037	A
C-A	212	53			212				
A-B	26	6			26				
A-C	67	17			67				

2037 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	0.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D7	2037 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.236

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	58	100.000
B - Site Access		ONE HOUR	✓	4	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	133	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
A - Michael Street (Southern Arm)	0	4	54
B - Site Access	0	0	4
C - Michael Street (Northern Arm)	125	9	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
A - Michael Street (Southern Arm)	0	5	5
B - Site Access	0	0	5
C - Michael Street (Northern Arm)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.02	6.10	0.0	A	8	12
C-A					115	172
A-B					3	5
A-C					50	75

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	599	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	634	0.010	6	0.0	0.0	6.027	A
C-A	94	23			94				
A-B	3	0.70			3				
A-C	41	10			41				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	595	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	632	0.012	8	0.0	0.0	6.057	A
C-A	112	28			112				
A-B	3	0.83			3				
A-C	49	12			49				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	589	0.000	0	0.0	0.0	0.000	A
C-AB	10	2	629	0.015	10	0.0	0.0	6.100	A
C-A	137	34			137				
A-B	4	1			4				
A-C	60	15			60				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	589	0.000	0	0.0	0.0	0.000	A
C-AB	10	2	629	0.015	10	0.0	0.0	6.100	A
C-A	137	34			137				
A-B	4	1			4				
A-C	60	15			60				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	595	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	632	0.012	8	0.0	0.0	6.060	A
C-A	112	28			112				
A-B	3	0.83			3				
A-C	49	12			49				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	599	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	634	0.010	7	0.0	0.0	6.029	A
C-A	94	23			94				
A-B	3	0.70			3				
A-C	41	10			41				

2037 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	1.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D8	2037 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.236

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	135	100.000
B - Site Access		ONE HOUR	✓	64	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
A - Michael Street (Southern Arm)	0	37	98
B - Site Access	27	0	37
C - Michael Street (Northern Arm)	308	38	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
A - Michael Street (Southern Arm)	0	5	5
B - Site Access	0	0	5
C - Michael Street (Northern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.13	7.52	0.1	A	59	88
C-AB	0.07	6.32	0.1	A	35	53
C-A					282	424
A-B					34	51
A-C					90	134

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	48	12	585	0.083	48	0.0	0.1	6.892	A
C-AB	29	7	621	0.046	29	0.0	0.0	6.075	A
C-A	232	58			232				
A-B	28	7			28				
A-C	74	18			74				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	58	14	576	0.100	58	0.1	0.1	7.146	A
C-AB	34	9	617	0.056	34	0.0	0.1	6.179	A
C-A	277	69			277				
A-B	33	8			33				
A-C	88	22			88				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	71	18	563	0.126	71	0.1	0.1	7.516	A
C-AB	42	11	612	0.069	42	0.1	0.1	6.322	A
C-A	339	85			339				
A-B	41	10			41				
A-C	108	27			108				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	71	18	563	0.126	71	0.1	0.1	7.519	A
C-AB	42	11	612	0.069	42	0.1	0.1	6.322	A
C-A	339	85			339				
A-B	41	10			41				
A-C	108	27			108				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	58	14	576	0.100	58	0.1	0.1	7.150	A
C-AB	34	9	617	0.056	35	0.1	0.1	6.180	A
C-A	277	69			277				
A-B	33	8			33				
A-C	88	22			88				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	48	12	585	0.083	48	0.1	0.1	6.903	A
C-AB	29	7	621	0.046	29	0.1	0.0	6.079	A
C-A	232	58			232				
A-B	28	7			28				
A-C	74	18			74				

2022 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	1.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2022 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	89	100.000
B - Site Access		ONE HOUR	✓	9	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	169	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	26	63
	B - Site Access	0	0	9
	C - Michael Street (Northern Arm)	108	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	0	0
	B - Site Access	0	0	0
	C - Michael Street (Northern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.01	5.37	0.0	A	8	12
C-AB	0.11	6.48	0.1	A	56	84
C-A					99	149
A-B					24	36
A-C					58	87

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	7	2	686	0.010	7	0.0	0.0	5.300	A
C-AB	46	11	629	0.073	46	0.0	0.1	6.171	A
C-A	81	20			81				
A-B	20	5			20				
A-C	47	12			47				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	8	2	683	0.012	8	0.0	0.0	5.331	A
C-AB	55	14	626	0.088	55	0.1	0.1	6.301	A
C-A	97	24			97				
A-B	23	6			23				
A-C	57	14			57				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	10	2	680	0.015	10	0.0	0.0	5.375	A
C-AB	67	17	623	0.108	67	0.1	0.1	6.480	A
C-A	119	30			119				
A-B	29	7			29				
A-C	69	17			69				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	10	2	680	0.015	10	0.0	0.0	5.375	A
C-AB	67	17	623	0.108	67	0.1	0.1	6.480	A
C-A	119	30			119				
A-B	29	7			29				
A-C	69	17			69				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	8	2	683	0.012	8	0.0	0.0	5.333	A
C-AB	55	14	626	0.088	55	0.1	0.1	6.303	A
C-A	97	24			97				
A-B	23	6			23				
A-C	57	14			57				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	7	2	686	0.010	7	0.0	0.0	5.300	A
C-AB	46	11	629	0.073	46	0.1	0.1	6.179	A
C-A	81	20			81				
A-B	20	5			20				
A-C	47	12			47				

2022 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	1.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2022 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	96	100.000
B - Site Access		ONE HOUR	✓	86	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	292	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	8	88
	B - Site Access	36	0	50
	C - Michael Street (Northern Arm)	284	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	0	0
	B - Site Access	0	0	0
	C - Michael Street (Northern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.16	7.44	0.2	A	79	118
C-AB	0.01	5.89	0.0	A	7	11
C-A					261	391
A-B					7	11
A-C					81	121

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	65	16	595	0.109	64	0.0	0.1	6.771	A
C-AB	6	2	627	0.010	6	0.0	0.0	5.794	A
C-A	214	53			214				
A-B	6	2			6				
A-C	66	17			66				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	77	19	588	0.131	77	0.1	0.1	7.039	A
C-AB	7	2	624	0.012	7	0.0	0.0	5.835	A
C-A	255	64			255				
A-B	7	2			7				
A-C	79	20			79				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	95	24	579	0.164	95	0.1	0.2	7.433	A
C-AB	9	2	620	0.014	9	0.0	0.0	5.892	A
C-A	313	78			313				
A-B	9	2			9				
A-C	97	24			97				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	95	24	579	0.164	95	0.2	0.2	7.436	A
C-AB	9	2	620	0.014	9	0.0	0.0	5.892	A
C-A	313	78			313				
A-B	9	2			9				
A-C	97	24			97				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	77	19	588	0.131	77	0.2	0.2	7.049	A
C-AB	7	2	624	0.012	7	0.0	0.0	5.838	A
C-A	255	64			255				
A-B	7	2			7				
A-C	79	20			79				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	65	16	595	0.109	65	0.2	0.1	6.788	A
C-AB	6	2	627	0.010	6	0.0	0.0	5.795	A
C-A	214	53			214				
A-B	6	2			6				
A-C	66	17			66				

2027 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	1.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	127	100.000
B - Site Access		ONE HOUR	✓	10	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	175	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	61	66
	B - Site Access	0	0	10
	C - Michael Street (Northern Arm)	114	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	0	0
	B - Site Access	0	0	0
	C - Michael Street (Northern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.02	5.42	0.0	A	9	14
C-AB	0.11	6.59	0.1	A	56	84
C-A					105	157
A-B					56	84
A-C					61	91

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	8	2	683	0.011	7	0.0	0.0	5.331	A
C-AB	46	11	622	0.074	46	0.0	0.1	6.239	A
C-A	86	21			86				
A-B	46	11			46				
A-C	50	12			50				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	9	2	680	0.013	9	0.0	0.0	5.368	A
C-AB	55	14	619	0.089	55	0.1	0.1	6.386	A
C-A	102	26			102				
A-B	55	14			55				
A-C	59	15			59				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	11	3	675	0.016	11	0.0	0.0	5.420	A
C-AB	67	17	613	0.110	67	0.1	0.1	6.591	A
C-A	125	31			125				
A-B	67	17			67				
A-C	73	18			73				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	11	3	675	0.016	11	0.0	0.0	5.420	A
C-AB	67	17	613	0.110	67	0.1	0.1	6.591	A
C-A	125	31			125				
A-B	67	17			67				
A-C	73	18			73				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	9	2	680	0.013	9	0.0	0.0	5.370	A
C-AB	55	14	619	0.089	55	0.1	0.1	6.391	A
C-A	102	26			102				
A-B	55	14			55				
A-C	59	15			59				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	8	2	683	0.011	8	0.0	0.0	5.331	A
C-AB	46	11	622	0.074	46	0.1	0.1	6.248	A
C-A	86	21			86				
A-B	46	11			46				
A-C	50	12			50				

2027 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	1.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	103	100.000
B - Site Access		ONE HOUR	✓	90	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	10	93
	B - Site Access	38	0	52
	C - Michael Street (Northern Arm)	300	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	0	0
	B - Site Access	0	0	0
	C - Michael Street (Northern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.17	7.57	0.2	A	83	124
C-AB	0.02	5.93	0.0	A	9	14
C-A					275	413
A-B					9	14
A-C					85	128

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	68	17	592	0.114	67	0.0	0.1	6.849	A
C-AB	8	2	626	0.012	7	0.0	0.0	5.820	A
C-A	226	56			226				
A-B	8	2			8				
A-C	70	18			70				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	81	20	585	0.138	81	0.1	0.2	7.138	A
C-AB	9	2	623	0.014	9	0.0	0.0	5.865	A
C-A	270	67			270				
A-B	9	2			9				
A-C	84	21			84				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	99	25	574	0.173	99	0.2	0.2	7.566	A
C-AB	11	3	618	0.018	11	0.0	0.0	5.930	A
C-A	330	83			330				
A-B	11	3			11				
A-C	102	26			102				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	99	25	574	0.173	99	0.2	0.2	7.572	A
C-AB	11	3	618	0.018	11	0.0	0.0	5.930	A
C-A	330	83			330				
A-B	11	3			11				
A-C	102	26			102				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	81	20	585	0.138	81	0.2	0.2	7.149	A
C-AB	9	2	623	0.014	9	0.0	0.0	5.868	A
C-A	270	67			270				
A-B	9	2			9				
A-C	84	21			84				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	68	17	592	0.114	68	0.2	0.1	6.864	A
C-AB	8	2	626	0.012	8	0.0	0.0	5.822	A
C-A	226	56			226				
A-B	8	2			8				
A-C	70	18			70				

2037 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	1.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2037 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	98	100.000
B - Site Access		ONE HOUR	✓	10	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	187	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	27	71
	B - Site Access	0	0	10
	C - Michael Street (Northern Arm)	125	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	0	0
	B - Site Access	0	0	0
	C - Michael Street (Northern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.02	5.40	0.0	A	9	14
C-AB	0.11	6.52	0.1	A	57	85
C-A					115	172
A-B					25	37
A-C					65	98

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	8	2	684	0.011	7	0.0	0.0	5.318	A
C-AB	47	12	627	0.074	46	0.0	0.1	6.194	A
C-A	94	24			94				
A-B	20	5			20				
A-C	53	13			53				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	9	2	681	0.013	9	0.0	0.0	5.353	A
C-AB	56	14	624	0.089	56	0.1	0.1	6.329	A
C-A	112	28			112				
A-B	24	6			24				
A-C	64	16			64				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	11	3	677	0.016	11	0.0	0.0	5.402	A
C-AB	68	17	621	0.110	68	0.1	0.1	6.516	A
C-A	137	34			137				
A-B	30	7			30				
A-C	78	20			78				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	11	3	677	0.016	11	0.0	0.0	5.402	A
C-AB	68	17	621	0.110	68	0.1	0.1	6.516	A
C-A	137	34			137				
A-B	30	7			30				
A-C	78	20			78				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	9	2	681	0.013	9	0.0	0.0	5.353	A
C-AB	56	14	624	0.089	56	0.1	0.1	6.334	A
C-A	112	28			112				
A-B	24	6			24				
A-C	64	16			64				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	8	2	684	0.011	8	0.0	0.0	5.318	A
C-AB	47	12	627	0.074	47	0.1	0.1	6.203	A
C-A	94	24			94				
A-B	20	5			20				
A-C	53	13			53				

2037 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
6	untitled	T-Junction	Two-way	1.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2037 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Michael Street (Southern Arm)		ONE HOUR	✓	115	100.000
B - Site Access		ONE HOUR	✓	95	100.000
C - Michael Street (Northern Arm)		ONE HOUR	✓	339	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	13	102
	B - Site Access	40	0	55
	C - Michael Street (Northern Arm)	326	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Michael Street (Southern Arm)	B - Site Access	C - Michael Street (Northern Arm)
From	A - Michael Street (Southern Arm)	0	0	0
	B - Site Access	0	0	0
	C - Michael Street (Northern Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.18	7.76	0.2	A	87	131
C-AB	0.02	5.99	0.0	A	12	18
C-A					299	449
A-B					12	18
A-C					94	140

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	72	18	589	0.122	71	0.0	0.1	6.946	A
C-AB	10	2	624	0.016	10	0.0	0.0	5.860	A
C-A	245	61			245				
A-B	10	2			10				
A-C	77	19			77				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	85	21	580	0.147	85	0.1	0.2	7.269	A
C-AB	12	3	620	0.019	12	0.0	0.0	5.914	A
C-A	293	73			293				
A-B	12	3			12				
A-C	92	23			92				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	105	26	569	0.184	104	0.2	0.2	7.749	A
C-AB	14	4	615	0.023	14	0.0	0.0	5.991	A
C-A	359	90			359				
A-B	14	4			14				
A-C	112	28			112				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	105	26	569	0.184	105	0.2	0.2	7.756	A
C-AB	14	4	615	0.023	14	0.0	0.0	5.991	A
C-A	359	90			359				
A-B	14	4			14				
A-C	112	28			112				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	85	21	580	0.147	86	0.2	0.2	7.278	A
C-AB	12	3	620	0.019	12	0.0	0.0	5.915	A
C-A	293	73			293				
A-B	12	3			12				
A-C	92	23			92				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	72	18	589	0.122	72	0.2	0.1	6.964	A
C-AB	10	2	624	0.016	10	0.0	0.0	5.863	A
C-A	245	61			245				
A-B	10	2			10				
A-C	77	19			77				

Appendix 13.G

1. Construction Traffic Management Plan

This Construction Traffic Management Plan (CTMP) deals directly with the anticipated impacts of demolition and construction of the Project Opera development.

It should be noted that planning for demolition and construction is necessarily broad at this stage (as Demolition and Construction Method and specifications have not yet been prepared and a contractor not yet appointed and so may be subject to modification during any future detailed demolition and construction planning. For this reason, the following assessment is based on reasonable assumptions in the demolition and construction programme, and the collective experience of the Applicant and those preparing the document with similar projects.

This chapter also describes the management controls and framework that would be implemented to avoid, minimise and where not possible to avoid, mitigate the magnitude of potential environmental impacts. The management controls and framework will form the basis of the CTMP and demolition and Construction Environmental Management Plan (CEMP) that will be implemented over the duration of the works. The CEMP will likely comprise a number of supporting management plans / documents including those dealing with noise, air and waste. It is anticipated that the implementation of these method statements and the management plans will be secured through an appropriately worded planning condition and or legal agreement.

As with any construction project, the appointed contractor will be required to prepare a comprehensive traffic management plan for the construction phase. The purpose of such a plan is to outline measures to manage the expected construction traffic activity during the construction period.

This chapter will provide an overview of the likely routing of construction vehicles, based on a most likely scenario of construction. It should be noted that the impacts of the construction will be temporary and it will be the contractor's responsibility to prepare a Traffic Management Plan for the approval of Limerick City and County Council in advance of any works.

1.1 Policy Guidance

Guidance for the temporary control of traffic at road works to facilitate the safety of the public during the works is provided below:

- Traffic Signs Manual Chapter 8 Temporary Traffic Measures and Sign Roadworks (2008);
- Addendum Transport Chapter 8, Temporary Traffic Measures and Sign Roadworks (2008);
- Traffic Management Guidelines, Department of Transport (2003);
- Requirements of Limerick City & County Council.

1.2 Likely Construction Programme & Phasing

The construction programme is expected to require 54 months (approximately) to complete from occupation of the site. The proposed phasing methodology is set out in Table 1 below.

Table 1 – Indicative Construction Programme

Indicative Construction Programme

Enabling Works (Demolitions & Site Clearance)	Start by Q3 2019
Phase 1 Northern Site Development (Parcel 3A, 3B, 4, 5 & 6)	Completion by Q2 2022
Phase 2 Southern Site Development (Parcel 1, 2A & 2B)]	Completion by Q1 2024

The majority of the demolition and construction activity, including construction traffic is likely to take place during the enabling and Phase 1 period.

The phasing plan for the demolition and construction program is shown in **Figure 13.8** below.

Figure 1– Plan showing the phased construction of the development



1.3 Construction Access

It is envisaged that access to the site during the construction phase will vary according to construction requirements. The location of the access from the public highway will be agreed with Limerick City & County Council as and when required. The location of any access will be informed by appropriate policy guidance and highway safety criteria. Nevertheless, in the interest of minimising the impact of construction vehicles on the more sensitive roads surrounding the site it is intended that construction access will occur from Michael Street for both Phase 1 and 2.

1.4 Construction Route

Demolition and construction vehicles will remain on the strategic road network for as long as possible and the “last mile” will be undertaken on local roads. This results in the following construction routing plan.

Construction vehicles arriving from the south will access the site via the following route:

- M7 exit at junction 29 before continuing northwest on the R527 Ballysimon Road;
- From the R527 onto the R509 Childers Road;
- R509 onto the R445 Dublin Road;
- R445 onto Michael Street; and
- Michael Street into the development site.

Construction vehicles arriving from the north will access the site via the following route:

- M18 exit at junction 4 before continuing southeast onto the R445 Ennis Road;
- R445 Ennis Road to R445 Northern Ring Road;
- Across Thomond Bridge
- R445 Castle Street to Island Road onto Straid Seamus O Cinneide;
- Across Abbey Bridge onto the R445 Charlotte’s Quay
- Charlotte’s Quay onto Michael Street; and
- Michael Street into the development site.

The above routing plans can be seen in attached images and also in **Appendix 13D**.

Figure 2 Construction Route to and from development site - closer context

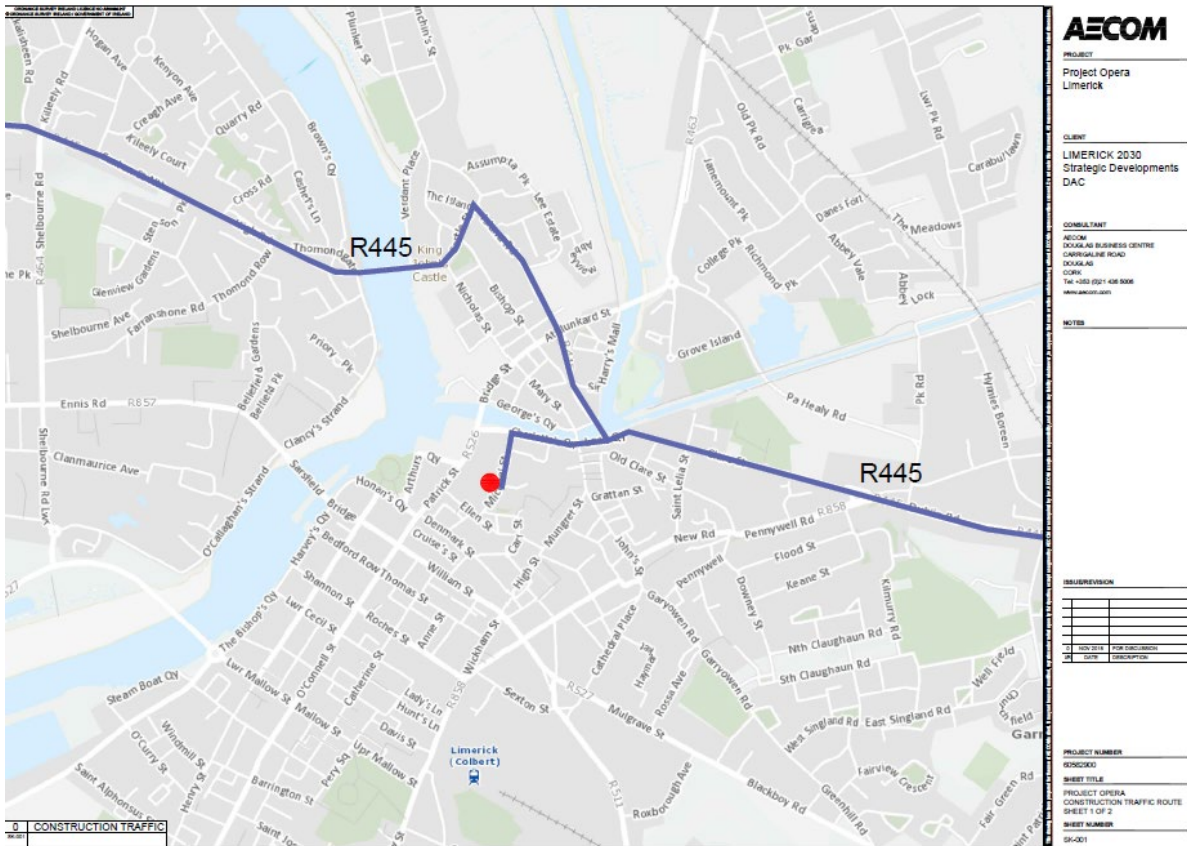
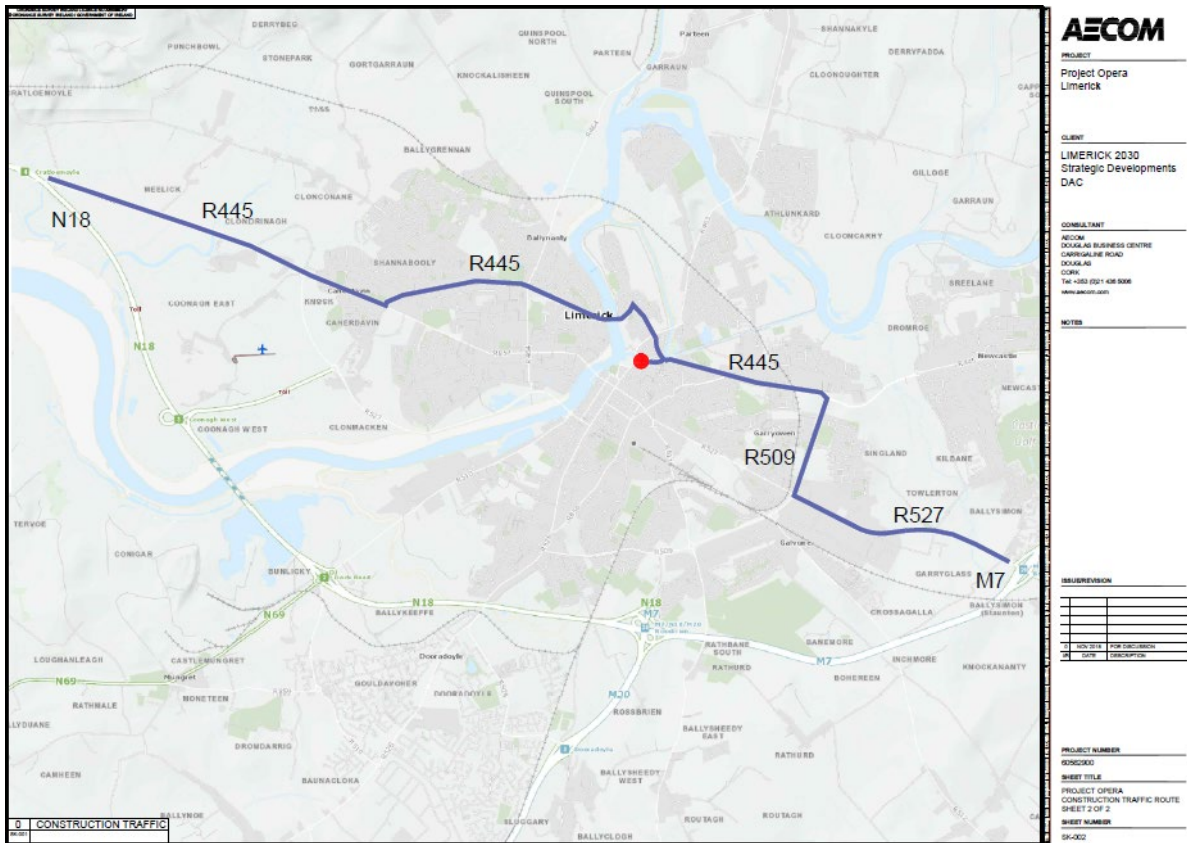


Figure 3 Construction Route to and from development site - wider context



1.5 Construction Traffic Generation

Construction traffic would be generated from a number of sources during the construction of the project Opera development, primarily attributable to:

- Removal of spoil;
- Materials delivery; and
- Equipment delivery.

In terms of construction staff it is envisaged that during the peak construction period (Enabling and Phase 1) maximum of (200) construction personnel will be employed on site. During other phases the number of employees on site will be significantly lower, in the region of (A – B).

Given the construction operating hours of 0800 -1800 Monday to Friday it is likely that most of the workers will arrive on site prior to the AM network peak period of 0800-0900.

The removal of spoil from the site will occur during the early stage of the construction. Spoil removal would be undertaken by rigid HGVs, similar in size to the concrete delivery vehicles. For the purposes of the below calculations it has been assumed that 4 axle rigid trucks (30 tonne) will be used to remove spoil.

Table 2: Anticipated Traffic for Spoil Removal

Parameter	Unit	Assumptions
Volume of spoil from Basement	35,000m ³ (84,228 metric tonnes)	
Number of months	6 from start in Q3 2019	
Metric tonnes per month	14,038	6 month programme
Number of trucks per month	467	30 tonne 4 axle rigid trucks
Number of trucks per day one way	24	20 working days per month
Number of trucks per hour on way	2.4	10 hour working days
Number of truck movements per hour	4.8	Arrives empty leaves full

As shown above there is a forecast that there will be a maximum of 24 daily deliveries to the site during the Enabling and Phase 1 construction period. This will result in 48 two-way HGV trips over the construction working day on the surrounding highway network. The Enabling and Phase 1 is considered to be the worst case impact of the construction phases.

The Phase 2 construction period is forecast to have a significantly lower impact on the local road network because the substantial demolition, excavation, basement and foundation work will be completed.

1.6 Parking

All contractors' vehicles will park within the development site area in a designated parking area on the hard standing. Contractor parking on adjoining roads will be actively discouraged. A Mobility Management Plan (MMP) for construction personnel will be developed to promote car sharing and travel by sustainable transport to further reduce parking issues.

1.7 Mitigation Measures

A construction management plan will be developed by the contractor prior to the commencement of work on site, and will be prepared in consultation with Limerick City & County Council -

Construction debris particularly site clearance, spoil removal and dirty water run off can have a significant impact on footpaths and roads adjoining a construction site, if not adequately dealt with.

1.8 Hours of Operation

The site construction hours will need to be agreed with LC&CC and will depend on a number of factors including proximity to sensitive noise receptors. It is envisioned that site working hours are likely to be 0800-1800 Monday to Friday and 0800-1300 on Saturdays. No working on Sundays or Bank Holidays except for emergency works is anticipated.

1.9 Construction Traffic Management Measures

Below is a list of the proposed traffic management measures to be adopted during the construction works. Please note that this is not an exhaustive list, and that it will be the appointed contractor's responsibility to prepare a detailed construction management plan.

- Location of site and materials compound;
- Location of areas for construction site offices and staff facilities;
- Details of site hoarding and security;
- Construction traffic will be limited to certain routes and times of the day, with the aim of keeping disruption to pedestrians, cyclist, general traffic and public transport to a minimum;
- During peak network hours (0800 – 0900 and 1700-1800) construction traffic movements will be discouraged;
- The contractor will give further consideration to the potential use of an off-site Consolidation Centre to limit the number of vehicles delivering directly to site;
- Specific time slots will be allocated to the sub-contractors and suppliers for the use of cranes and hoists, to ensure that the main plant will be utilised efficiently, and that deliveries are not queued;
- Any traffic management plans that may be required for a road closure or pedestrian footpath closure, including appropriate signage advance public notice procedures;

- Details of appropriate monitoring and mitigation measures to minimise noise, dust and vibration impacts on any identified sensitive receptors;
- The contractor will be encouraged to promote sustainable travel to and from the site by its employees
- The daily construction programme will be planned to minimise the number of disruptions to the local highway network by staggering HGV movements to avoid site queueing
- Warning signs / Advanced warning signs will be installed at appropriate locations in advance of the construction access locations;
- Construction and delivery vehicles will be instructed to use only the approved and agreed means of access; and movement of construction vehicles will be restricted to these designated routes;
- Appropriate vehicles will be used to minimise environmental impacts from transporting construction material, for example the use of dust covers on trucks carrying dust producing material;
- Speed limits of construction vehicles to be managed by appropriate signage, to promote low vehicular speeds within the site;
- Parking of site vehicles will be managed and will not be permitted on public road, unless proposed within a designated area that is subject to traffic management measures and agreed with LC&CC;
- A road sweeper will be employed to clean the public roads adjacent to the site of any residual debris that may be deposited on the public roads leading away from the construction works;
- On site wheel washing will be undertaken for construction trucks and vehicles to remove any debris prior to leaving the site, to remove any potential debris on the local roads;
- All vehicles will be suitably serviced and maintained to avoid any leaks or spillage of oil, petrol or diesel. Spill kits will be available on site. All scheduled maintenance carried out off-site will not be carried out on the public highway; and
- Safe and secure pedestrian facilities are to be provided where construction works obscure any existing pedestrian footways. Alternative pedestrian facilities will be provided in these instances, supported by physical barriers to segregate traffic and pedestrian movements, and to be identified by appropriate signage. Pedestrian facilities will cater for vulnerable users including mobility impaired persons.

The mitigation measures will therefore ensure that the presence of construction traffic will not lead to any significant environmental degradation or safety concerns in the vicinity of the proposed works. Furthermore, it is in the interests of the construction programme that deliveries, particularly concrete deliveries are not unduly hampered by traffic congestion, and as a result continuous review of haulage routes, delivery timings and access arrangements will be undertaken as construction progresses to ensure smooth operation.