



Isle of Wight Council

Isle of Wight Junction Assessment and Design

Junction Feasibility Study: Junctions 2-5 (Newport)

A090129-99
August 2018



Document Information

Prepared for	Isle of Wight Council
Project Name	Isle of Wight Junction Assessment and Design
File Reference	Feasibility Study Report - Newport Junctions (Jct 2-5)
Project Number	A090129-99
Publication Date	August 2018

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Document Control

Version	Date	Prepared by	Reviewed by	Approved by	Approver Signature
D1	20.07.2018	AG	GS	NW	
Description	Draft for client review				
I1	23.08.2018	AG	GS	NW	
Description	Revised to include client comments				
Description					
Description					
Description					
Description					

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1 Introduction

General

- 1.1 WYG have been appointed by the Isle of Wight (IOW) Council to undertake a feasibility study for a series of highway junctions located throughout the island, with a particular focus on the towns of Newport, Ryde, Shanklin and Sandown. The study has been carried out to identify traffic management issues impacting on all road users and develop proposals that will form part of a package of schemes **to be progressed as part of the Council's Local Implementation Plan (LIP) process.**
- 1.2 IOW Council has identified 15 highway junctions which currently experience traffic issues such as congestion and queuing. The study considers where the main issues lie in relation to traffic movement, road safety, bus operation, pedestrian and cycle provision, public realm, parking provision and servicing. Each of the 15 highway junctions are to be supplemented by a feasibility study report, with traffic modelling software used to test the various proposals in order to identify a range of measures aimed at improving the behaviour and movement of traffic at each junction.
- 1.3 The 15 key junctions identified are summarised in Table 1.1 below:

Table 1.1 List of Junctions

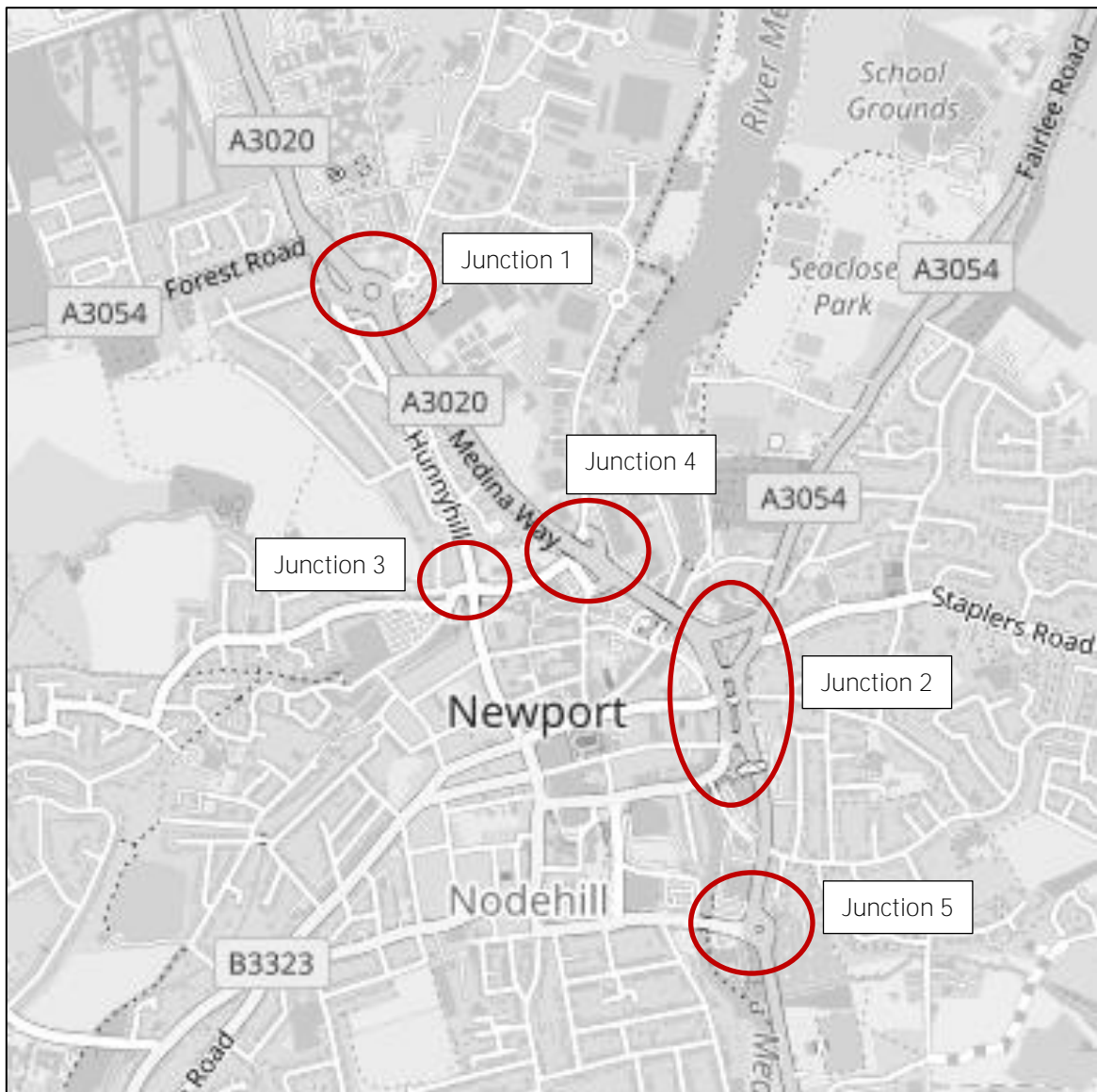
ID Num	Junction Name	Area	Junction Type
1	St Mary's Roundabout	Newport	4 arm Roundabout
2	Coppins Bridge Gyratory	Newport	Gyratory
3	Hunnyhill/Hunnycross Way	Newport	Signalised Crossroads
4	Hunnycross Way/Riverway	Newport	3x Roundabouts
5	Medina Way/Coppins Bridge Roundabout	Newport	Gyratory
6	Queens Road/West Street	Ryde	5-arm Signalised Jct
7	Argyll St/West St	Ryde	Signalised Crossroads
8	Binstead Road/Pelhurst Road	Ryde	3-arm Signalised Jct
9	Quarr Hill/Newnham Road	Ryde	4-arm Roundabout
10	Marlborough Road/Great Preston Road	Ryde	Signalised Crossroads
11	High Street/Victoria Avenue, Shanklin	Shanklin	3-arm Signalised Jct
12	Newport Road/Industrial Way	Shanklin	4-arm Roundabout
13	Newport Road/Sandown Road	Shanklin	3-arm Signalised Jct
14	Lake Hill/The Fairway	Shanklin	Triangular 3x Priority Jcts
15	Morton Common/Perowne Way	Sandown	3-arm Signalised Jct

Site Location & Background

- 1.4 The Isle of Wight is an island located in the English Channel, approximately 6km off the Hampshire coast. The towns of Newport, Ryde, Shanklin and Sandown comprise the project study area for this feasibility study.
- 1.5 The town of Newport is the largest town on the IOW and is located in the centre of the island; the town of Ryde is located approximately 10km to the east of Newport, on the north-eastern coast of the island; whilst Shanklin and Sandown are located approximately 9km to the south of Ryde and 10km to the south east of Newport.

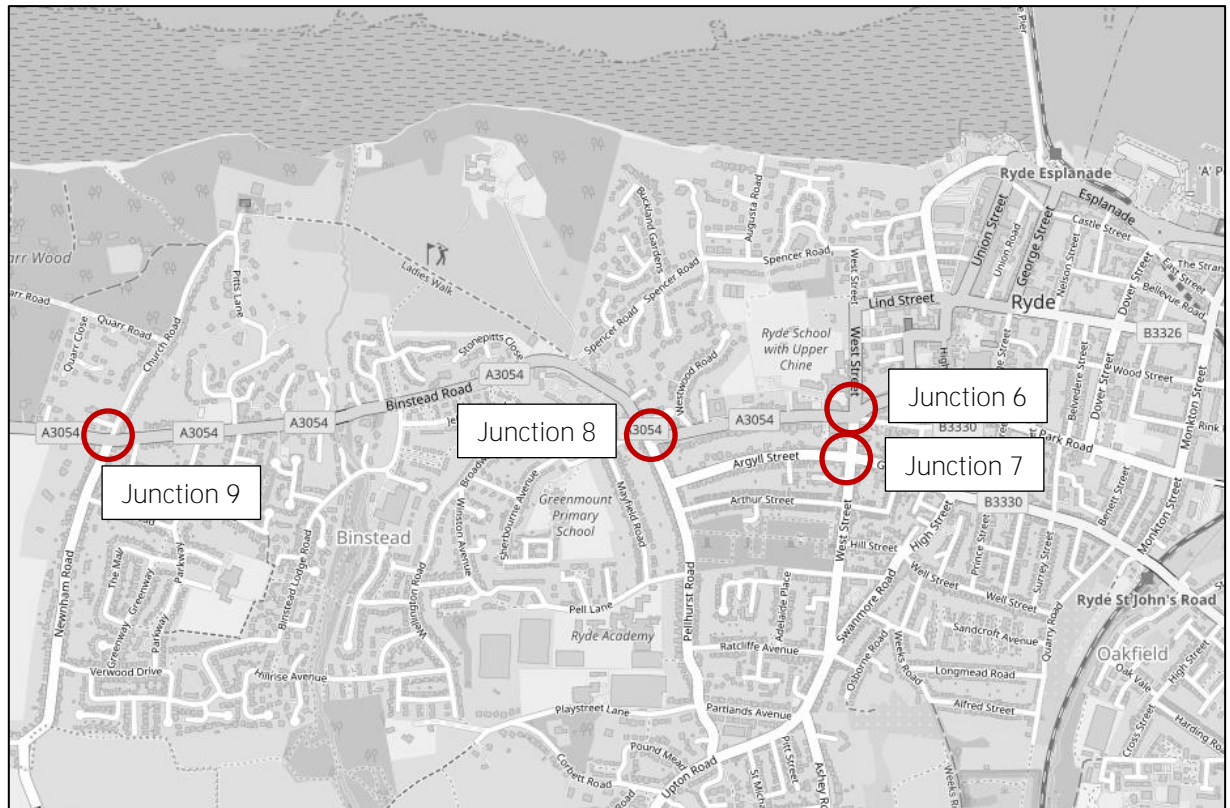
- 1.6 The IOW as a whole is characterised by high car ownership levels, with 77.5% of households on the island owning a car or van, as indicated by the 2011 Census. Thus, the private vehicle remains the most convenient and fastest way to travel around the island.
- 1.7 Figures 1.1 – 1.3 presents the locations of all 15 junctions within Newport, Ryde and Shanklin & Sandown, which comprise the feasibility study area.

Figure 1.1 Feasibility Study Area – Newport Junctions



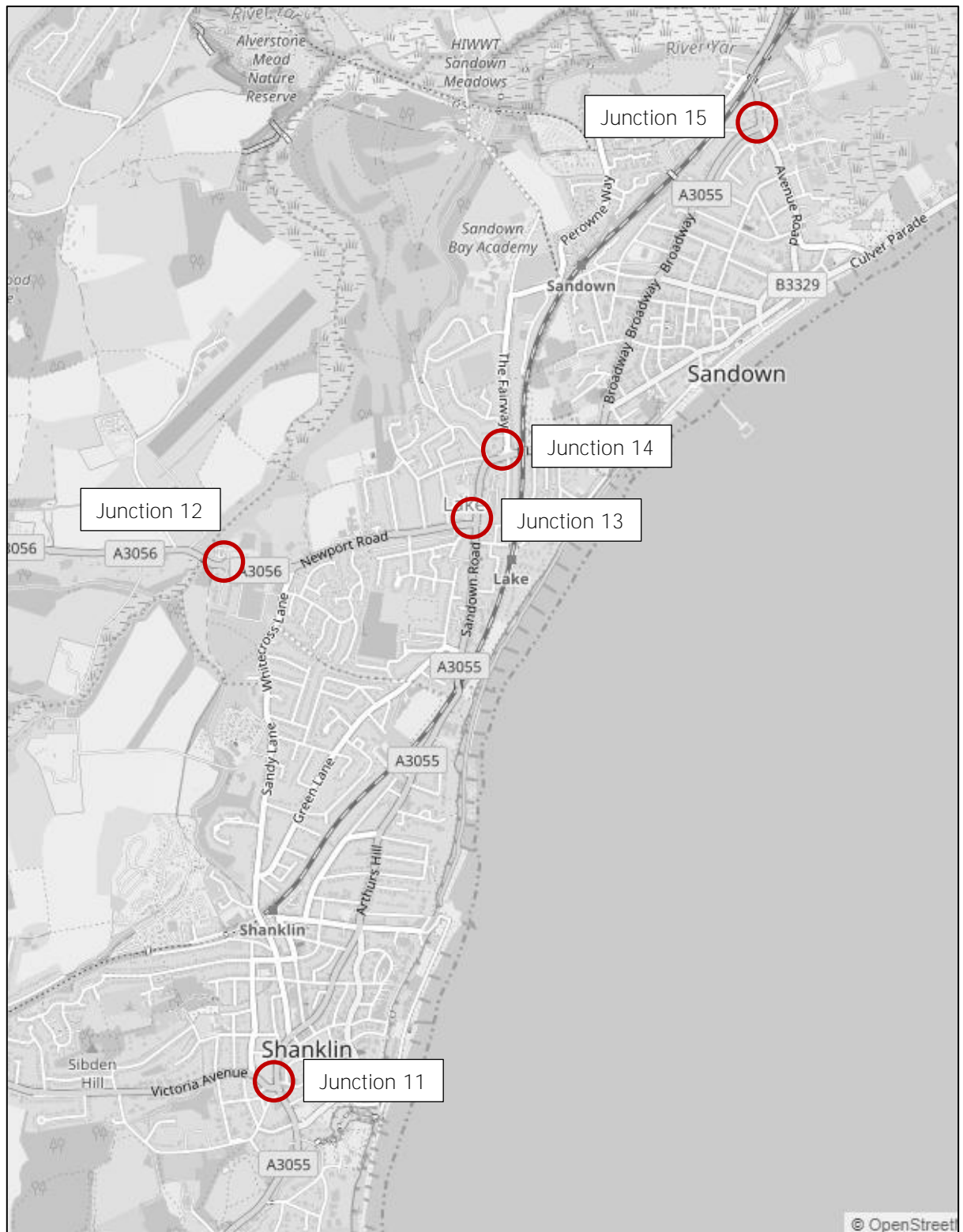
Source: OpenStreetMap with WYG Annotations, September 2017

Figure 1.2 Feasibility Study Area – Ryde Junctions



Source: OpenStreetMap, September 2017

Figure 1.3 Feasibility Study Area – Sandown & Shanklin Junctions



Source: OpenStreetMap, September 2017

- 1.8 This report focuses on Junctions 2, 3, 4 and 5.
- 1.9 Junction 2 is the Medina Way / Coppins Bridge gyratory in Newport.
- 1.10 Figure 1.4 presents a site location plan of the gyratory.

Figure 1.4 Junction Location Plan



Source: Google Satellite Image, October 2017

- 1.11 Junction 3 is the highway junction of Foxes Road / Hunnyhill / Hunnycross Way and St James Street which comprises a four-arm signalised crossroad junction in Newport.
- 1.12 Figure 1.5 presents a site location plan of the four-arm signalised crossroads junction.

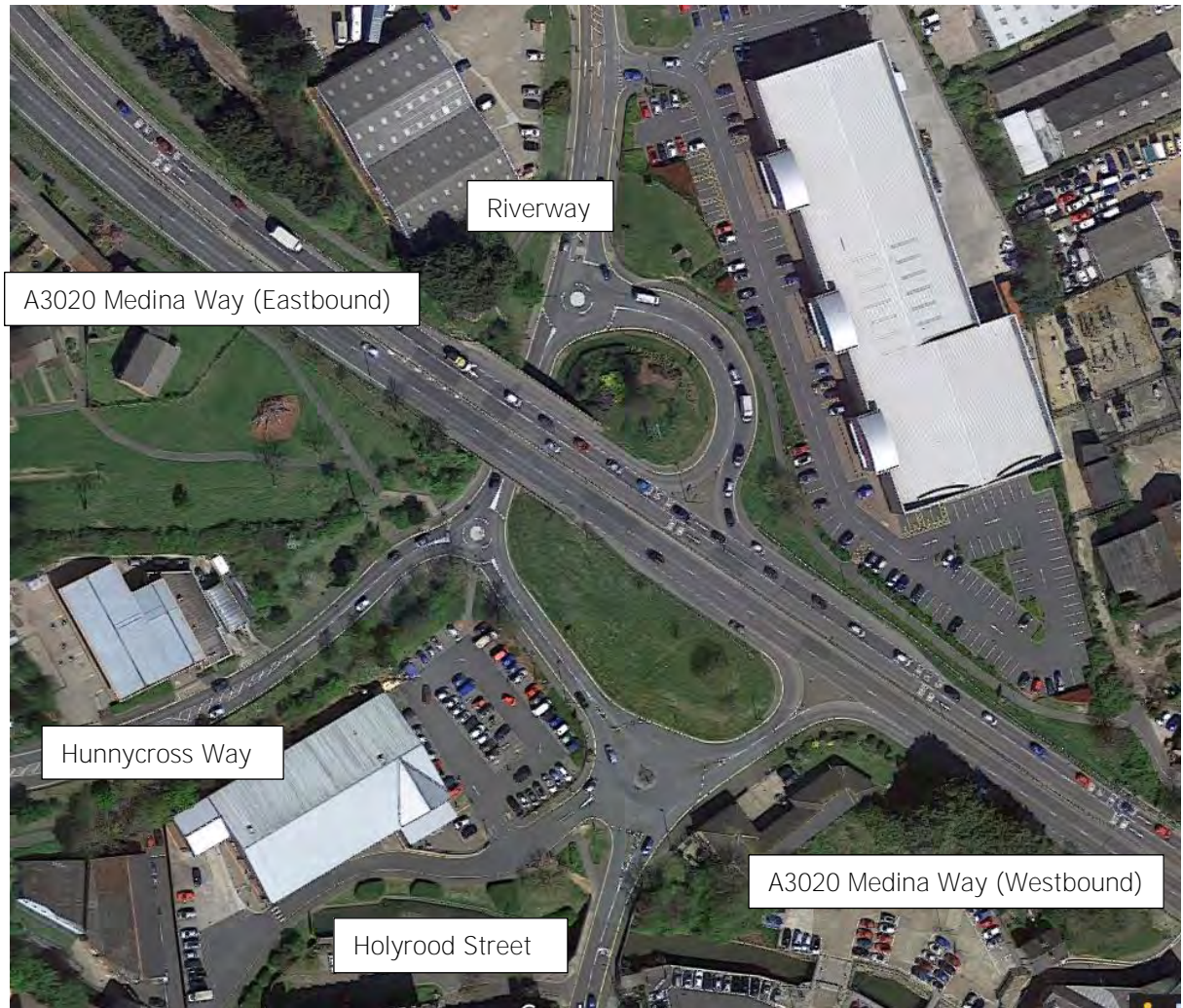
Figure 1.5 Junction Location Plan



Source: Google Satellite Image, August 2017

- 1.13 Junction 4 is the highway junction of Hunnycross Way / Holyrood Street and Riverway which comprises of three roundabout junctions in Newport.
- 1.14 Figure 1.6 presents a site location plan of the three roundabout junctions.

Figure 1.6 Junction Location Plan



Source: Google Satellite Image, October 2017

- 1.15 Junction 5 is the highway junction of The A3020 / **St George's Approach / St George's Way** which comprises a three-arm roundabout junction in Newport.
- 1.16 Figure 1.6 presents a site location plan of the three-arm roundabout junction.

Figure 1.7 Junction Location Plan



Source: Google Satellite Image, August 2017

Scope/Purpose of Study

- 1.17 The purpose of the study is to identify, through the use of traffic modelling software, where the main issues lie in terms of capacity, congestion and queuing at the junctions; the traffic modelling will inform the type of highway improvements and design required at each junction.

Report Structure

- 1.18 The remainder of this document is structured as follows:
- Chapter 2: Existing Conditions - summarising the existing conditions at the junction, providing background to the junction, local highway network and detailing the current traffic issues experienced at the junction;
 - Chapter 3: Base Modelling Methodology - setting-out details of tasks undertaken to build traffic models of the study area using specialist software;
 - Chapter 4: Base Modelling – setting out the baseline model results for all four junctions
 - Chapter 5: Future Modelling Methodology - setting-out details of tasks undertaken to build traffic models of the study area using specialist software;
 - Chapter 6: Future Modelling – 2034 modelling for Junction 2
 - Chapter 7: Future Modelling – 2034 modelling for Junction 3
 - Chapter 8: Future Modelling – 2034 modelling for Junction 4
 - Chapter 9: Future Modelling – 2034 modelling for Junction 5
 - Chapter 10: Cumulative Impact - summarising the cumulative impact of the options assessed.



- Chapter 11: Non-Technical Summary – providing an overview of the report and its findings.
- 1.19 All Appendices are included at the end of this report for information.



2 Existing Conditions

General

- 2.1 **This chapter establishes the existing, or 'baseline',** highway conditions which prevail in the area surrounding the junction. It describes the existing local highway network and any traffic issues present at the junction.
- 2.2 Baseline studies have been informed by detailed site visits and desk-based research carried out between August and September 2017.
- 2.3 This report focuses on Junctions 2, 3, 4 and 5.

Data Collection

- 2.4 Traffic flow surveys were undertaken by MHC Traffic Ltd on Thursday 20th July 2017 to establish the baseline traffic conditions for the local highway network on the IOW. A range of surveys were undertaken including:
 - Manual Classified Counts (MCC) for turning flow information at 15 key junctions on the IOW;
 - Automatic Traffic Counts (ATCs) were placed at strategic locations on the network allowing the speeds to be obtained at each of these junctions;
 - Queue length surveys at stop lines of all 15 junctions; and
 - Traffic video surveys at each of the 15 junctions.
- 2.5 The surveys allowed for the identification of turning movements at all key junctions as well as routing within the IOW. Signal timing data was additionally supplied by the IOW Council for use for the correct modelling of signal timing data.
- 2.6 The data collected as part of the surveys was used directly for calibrating and validating the base scenario for both the Junctions 9 and LinSig models. Video footage of the surveyed junctions was additionally reviewed to ensure that the base models reflect the on-street road conditions as closely as possible.

Junction 2 - Study Area/Junction Background

- 2.7 The Medina Way / Coppins Bridge gyratory is located within the centre of Newport. Isle of Wight Council and Hampshire Police buildings are located within 50m of the gyratory, the Medina river runs through the centre of the gyratory, whilst Newport Quay is situated approximately 200m to the north.
- 2.8 There is a large retail estate located approximately 250m to the north, and Morrisons and Marks and Spencer are situated approximately 300m to the southwest. There is a Matalan 320m to the south, whilst a Maplin and Cineworld Cinema are situated in the immediate vicinity of the junction.
- 2.9 The junction forms the major route to Cowes in the north and Ryde to the northeast and is a key junction within the network around Newport. A location plan of the junction is provided in Figure 2.1.

Figure 2.1 Junction Location Plan



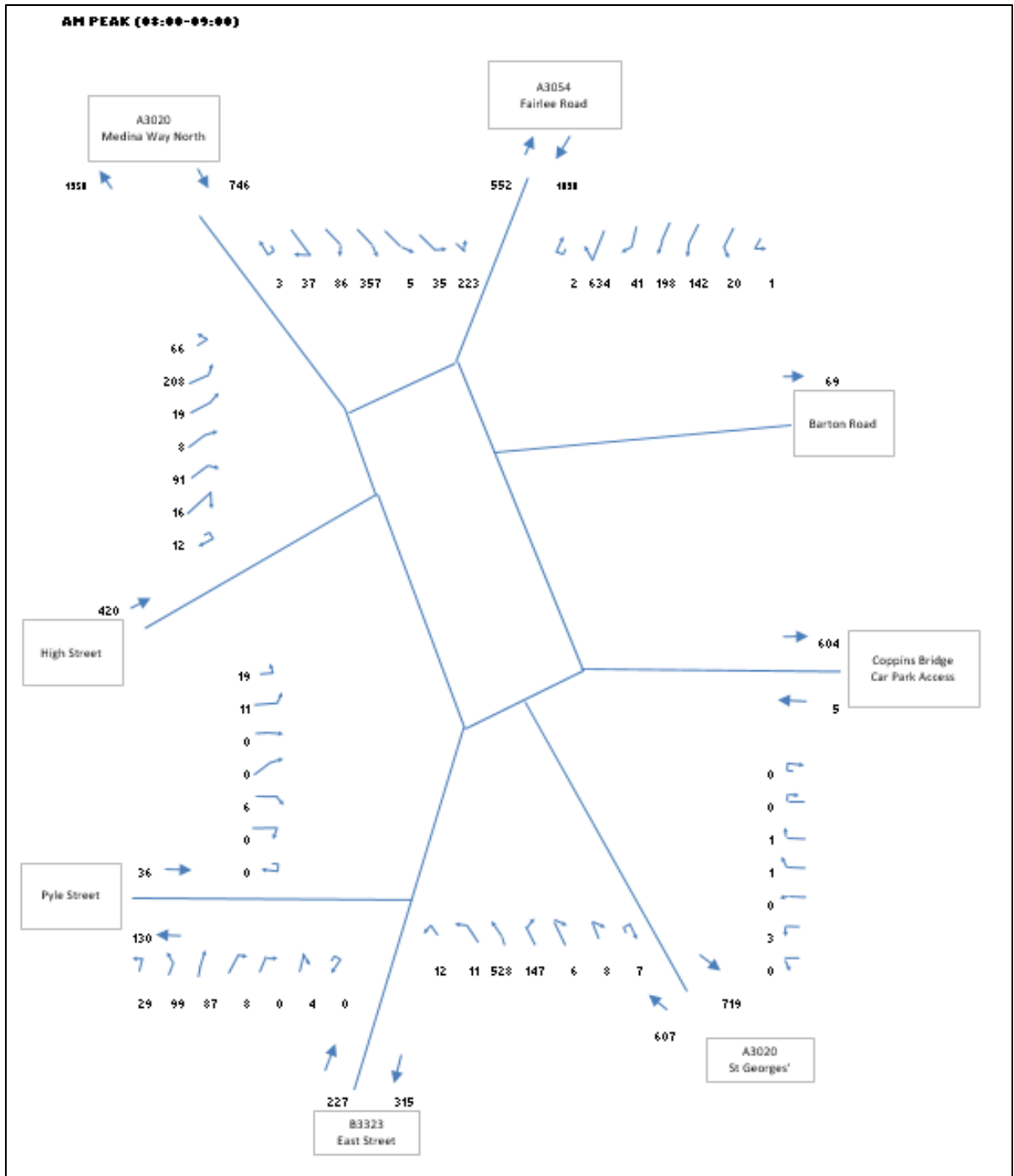
Source: Google Image, October 2017

Junction 2 - Base Traffic Flows

- 2.10 This section details the current traffic flows and queuing at the junction, as recorded by the survey data. These are shown in Figures 2.2 and 2.3.



Figure 2.2 AM Traffic Flows (PCUs)



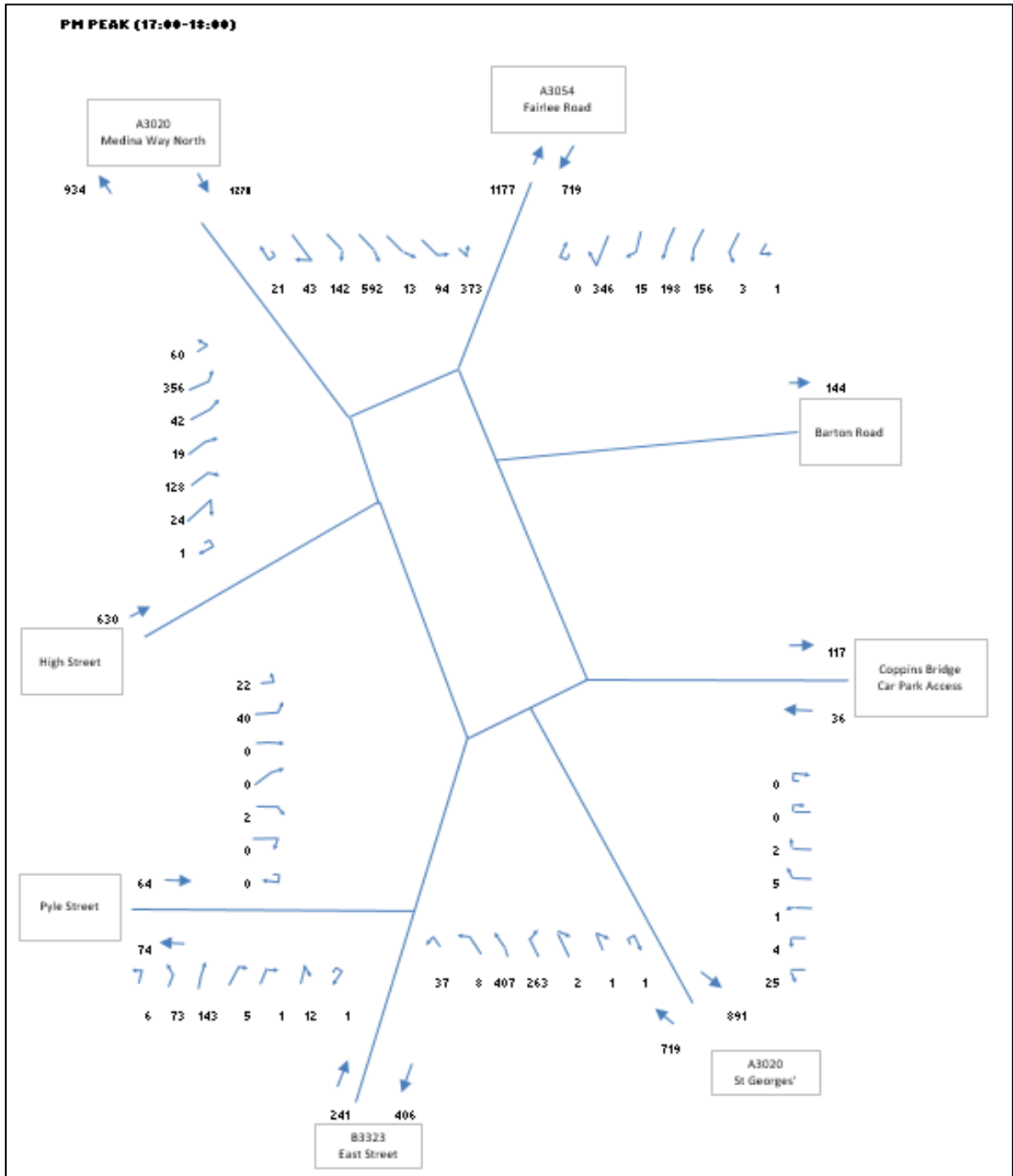
- 2.11 As shown in Figure 2.2, the highest traffic flows are those travelling to and from the A3020 Medina Way and St George’s Way during the AM peak (08:00-09:00), with 528 PCUs travelling northbound and 357 PCUs travelling southbound.
- 2.12 It was also observed that there are a high number of right-turners from A3054 – Fairlee Road into A3020 – Medina Way (North), and also a high number travelling from A3020 – St Georges’ Way into A3020 – Medina Way (North).
- 2.13 The majority of queuing occurs northbound on A3020 – St Georges’ Way with a moderately fast-moving queue observed throughout much of the peak hour. The maximum observed queue recorded on St Georges’ Way was thirteen vehicles. Queuing occurs on A3054 – Fairlee Road with a maximum



queue of ten vehicles, and also on A3020 Medina Way (North) with a maximum queue of eight vehicles, again, there was a moderately fast-moving queue observed throughout much of the peak hour.

2.14 Figure 2.3 below shows the traffic flows for the PM peak (17:00-18:00).

Figure 2.3 PM Traffic Flows (PCUs)



2.15 As shown in Figure 2.3, the highest traffic flows are those travelling to and from the A3020 Medina Way and St George’s Way during the PM peak (17:00-18:00), with 407 PCUs travelling northbound and 592 PCUs travelling southbound.

2.16 The majority of queuing occurs eastbound on High Street with a moderately fast-moving queue observed throughout much of the peak hour. The maximum observed queue recorded on High Street



was eleven vehicles. Queuing also occurs **on St George's Way with a maximum queue** of ten vehicles recorded and on A3054 Fairlee Road with a maximum queue of nine vehicles, again, there was a moderately fast-moving queue observed throughout much of the peak hour.

Junction 2 - Existing Traffic Conditions

A3020 – Medina Way (North)

- 2.17 A3020 – Medina Way (North) forms the northern arm of the gyratory. On the northern arm, there is a high number of vehicles travelling northbound into Medina Way in the AM and PM peak, whilst southbound flows are also high in both peaks.

A3054 - Fairlee Road

- 2.18 Fairlee Road forms the northeastern arm of the gyratory. On the northeastern arm, the majority of vehicles are travelling southbound in the AM peak and northbound in the PM peak, the majority of southbound vehicles, during the AM peak, are travelling to Medina Way (North).

Barton Road

- 2.19 Barton Road forms the eastern arm of the gyratory. This is a one-way street with very little traffic; the number of movements recorded on this arm was 69 PCUs in the AM peak and 145 PCUs in the PM peak.

Coppins Bridge Car Park Access

- 2.20 This is an access exclusively for the Coppins Bridge car park facility. There is a substantial number of vehicles travelling eastbound, with the number of vehicles recorded in the AM peak at 604 PCUs and the volume travelling eastbound in the PM peak was recorded at 117 PCUs. Westbound traffic was minimal, with a total of 41 PCUs travelling westbound across both the AM and PM peak.

A3020 – St Georges' Way

- 2.21 **St Georges' Way forms the southeastern arm of the gyratory. The majority of traffic travelling from St Georges' Way is heading northbound into Medina Way (North), with 528 PCUs recorded in the AM peak and 407 in the PM peak.** There is a moderate number of vehicles travelling northeast into Fairlee Road, 147 in the AM peak and 263 in the PM peak. The **majority of vehicles travelling into St Georges' Way** are travelling southbound from Medina Way (North) with an observed total of 357 PCUs in the AM peak and 592 in the PM peak. There is also a moderate number of PCUs travelling southbound from Fairlee Road; 142 were recorded in the AM peak and 156 in the PM peak.

A3323 – East Street

- 2.22 East Street forms the southwestern arm of the gyratory. The majority of traffic was observed to be travelling northbound from East Street into Medina Way (North) and Fairlee Road with AM peak recordings of 87 and 99 PCUs respectively. In the PM peak, this was observed to be 73 and 143 PCUs respectively.
- 2.23 There are a moderate number of vehicles travelling southbound into East Street, the majority of which are travelling from Fairlee Road and Medina Way (North), in both the AM and PM peaks.



Pyle Street

- 2.24 Pyle Street forms one of the western arms of the gyratory. This is a relatively quiet street with a total of 74 PCUs observed travelling westbound during the AM and PM peaks, and a total of 100 vehicles travelling eastbound in the AM and PM peaks.

High Street

- 2.25 High Street forms one of the western arms of the gyratory. This is a one-way street with a moderate number of vehicles travelling eastbound during the AM and PM peak, with recordings of 420 and 636 PCUs respectively.

Junction 2 - Collisions

- 2.26 A collision data review for the most recent five years was undertaken at the junctions, using the website crashmap.co.uk. It was found that twelve **'slight'** and one **'serious'** collisions were recorded within the vicinity of the gyratory during this time period. It is therefore concluded that there are no significant highway safety issues in relation to the junctions.

Junction 2 - Local Highway Network

A3020 – Medina Way (North)

- 2.27 Medina Way (North) is a two-lane approach and two-lane exit dual carriageway with a central reservation. This provides a link to the nearby Riverside Centre and Newport Harbour, forming one of the main routes into Cowes, to the north of the junction. The road is subject to a 30mph speed limit from Coppins Bridge for approximately 150m; past this point, the speed limit increases to 60mph. There is a footway on both sides of Coppins Bridge; the northern footway runs approximately 6m into Medina Way (North) where it terminates. There is a dropped kerb and an informal crossing at this point. There are no footways on either side of the carriageway further north.

A3054 - Fairlee Road

- 2.28 Fairlee Road is a two-way single carriageway road with a two-lane approach and exit approximately 60m in length, and forms one of the main routes into Cowes to the north. The road is subject to a 30mph speed limit. A footway is provided on the western side of the carriageway on the approach to the gyratory.

Barton Road

- 2.29 Barton Road is a one-way street (eastbound) for approximately 100m, up until the junction of Highfield Road, at which point it becomes a two-way single carriageway. There are footways on both sides of the carriageway and the road is subject to a 20mph speed limit.

Coppins Bridge Car Park Access

- 2.30 This is a two-way single carriageway access road that leads to the retail park car park, with a selection of retail and fast food outlets. Footways are provided on both sides of the carriageway, and the road is subject to a 30mph speed limit.

A3020 – **St Georges' Way**

- 2.31 **St George's Way** is a two-way single carriageway road with a two-lane approach. There is a footway on the western side of the carriageway for approximately 160m. The road is subject to a 30mph speed limit and it provides a direct route to Blackwater.



A3323 – East Street

- 2.32 The A3323 East Street is a two-way single lane carriageway with footways on both sides. There is a shared cycle/footway on the western side that runs northbound to Coppins Bridge, which also continues southbound approximately 80m into East Street. The road is subject to a 30mph speed limit.

Pyle Street

- 2.33 Pyle Street is a two-way single lane carriageway with footways on both sides. There is a right-turn only restriction at the junction with Town Lane, at which stage Pyle Street becomes a one-way street, running eastbound **until the junction with St James' Street and westbound until the junction with B3323 – Carisbrooke Road**. The road is subject to a 20mph speed limit.

High Street

- 2.34 This is a one-way street with footways on both sides, which forms the main shopping street in Newport. The road is subject to a 20mph speed limit.

Junction 3 Study Area/Junction Background

- 2.35 The highway junction of Foxes Road / Hunnyhill / Hunnycross Way and St James Street junction is located within the centre of Newport. Isle of Wight College sits approximately 1km to the North, a retail estate is located approximately 250m to the south, as well as many large retail outlets situated within Newport town centre, and a Travelodge can be found 500m southwest of the junction.
- 2.36 The junction provides access to **Sainsbury's** supermarket to the southwest, Brantano Shoes to the south and forms one of the main routes to Cowes to the north. A location plan of the junction is provided in Figure 2.4.

Figure 2.4 Junction Location Plan

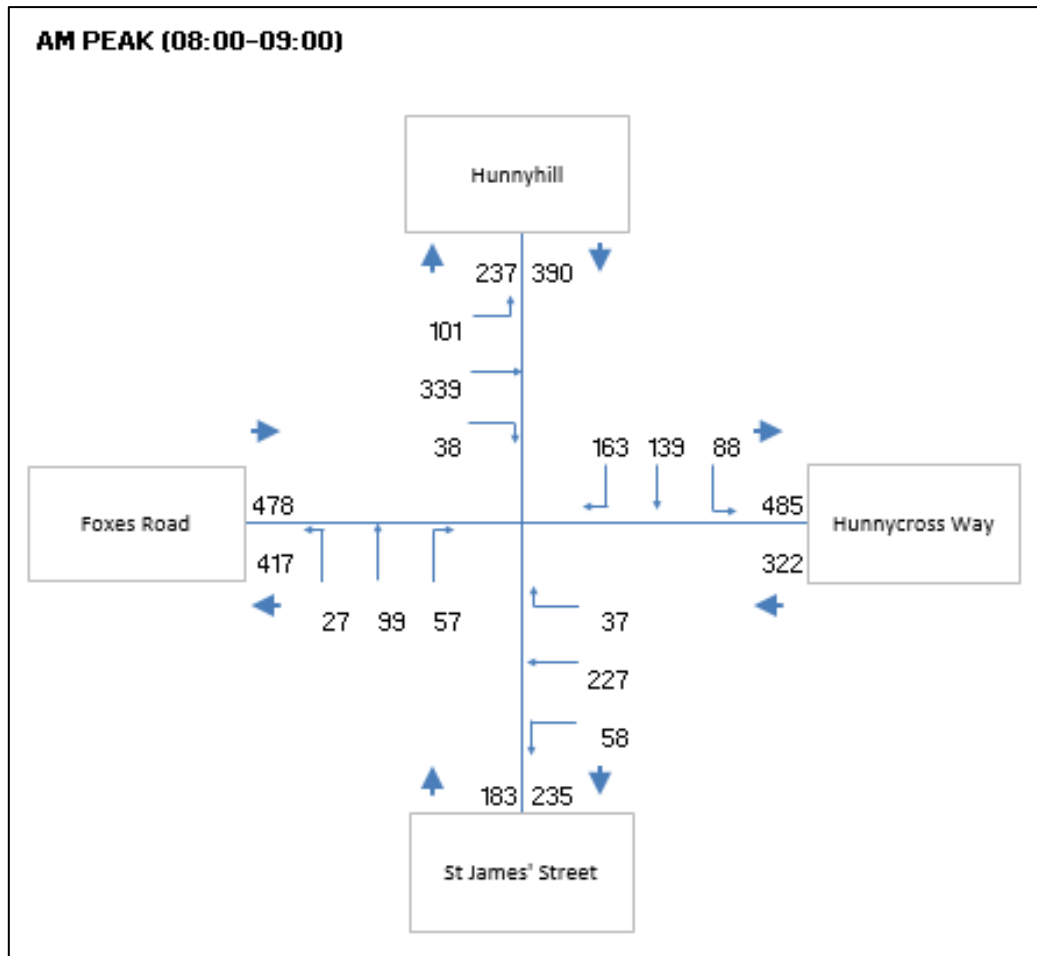


Source: Google Image, August 2017

Base Traffic Flows

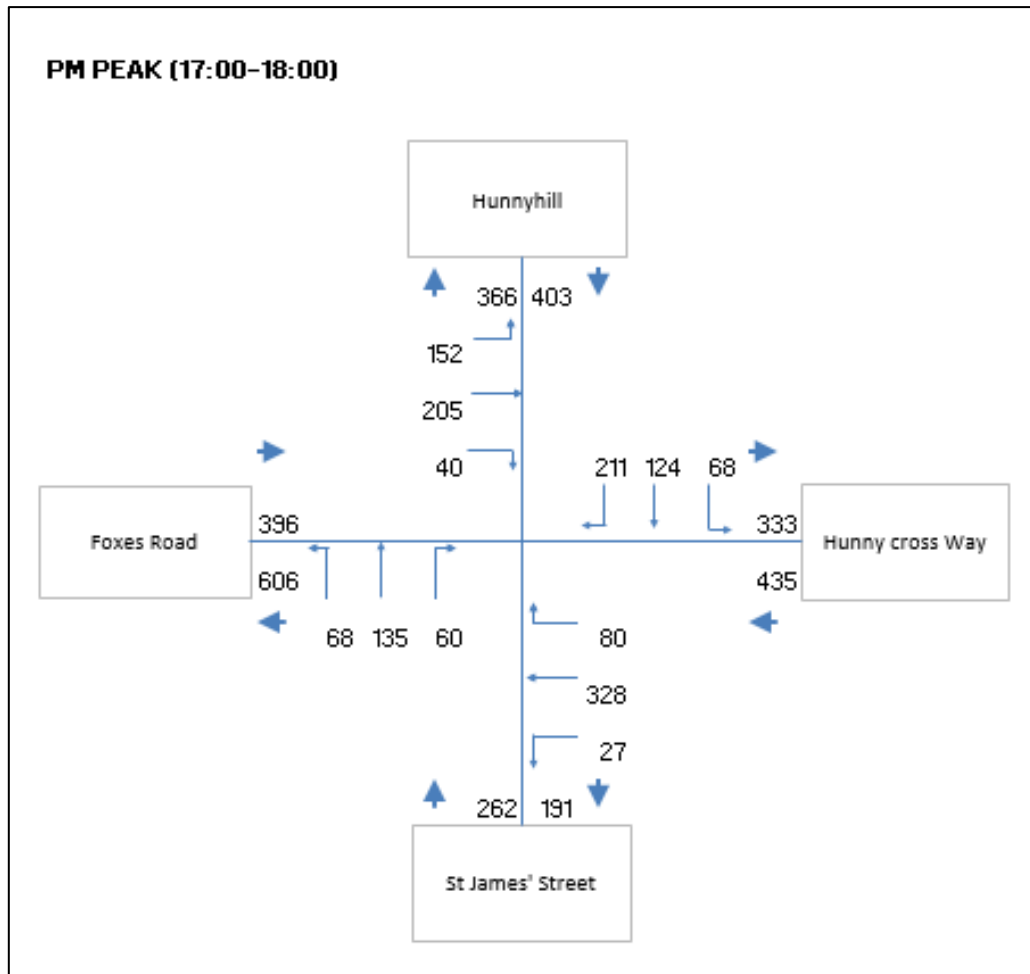
- 2.37 This section details the current traffic flows and queuing at the junction, as recorded by the survey data. These are shown in Figures 2.5 and 2.6.

Figure 2.5 AM Traffic Flows (PCUs)



- 2.38 As shown in Figure 2.5, the highest traffic flows are those travelling eastbound in the AM Peak (08:00-09:00) with 339 PCUs undertaking this movement.
- 2.39 Westbound traffic is also moderately high, with 227 PCUs recorded. It was also observed that there is a high number of right-turners from Hunnyhill to Foxes Road, with 163 PCUs recorded.
- 2.40 The longest queues occur on Hunnyhill and Hunnycross Way with fast-moving queue observed throughout much of the peak hour. The maximum observed queue recorded on Hunnyhill (southbound) and Hunnycross Way (westbound) was five vehicles, some queuing occurs on Foxes Road (northbound) with a maximum queue of four vehicles.
- 2.41 Figure 2.6 below shows the traffic flows for the PM Peak (17:00-18:00).

Figure 2.6 PM Traffic Flows (PCUs)



- 2.42 As shown in Figure 2.6, the highest traffic flows are those travelling westbound in the PM Peak (17:00-18:00), with 328 PCUs undertaking this movement. Thus, this is the reverse situation compared to the AM Peak (08:00-09:00).
- 2.43 Eastbound flows are moderately high, with 205 PCUs recorded. Again, there are a high number of right-turners from Hunnyhill into Foxes Road and left-turners from Foxes Road into Hunnyhill in the PM Peak, with 211 and 152 PCUs recorded respectively.
- 2.44 The longest queues occur on Hunnycross Way (westbound). The highest maximum queues were recorded, comprising seven vehicles. Whilst, on Hunnyhill (southbound) maximum queues of six vehicles were observed.

Existing Traffic Issues

- 2.45 As detailed above, the junction is known to experience moderate levels of congestion and queuing, particularly on the Hunnyhill and Hunnycross Way arms. This has been observed during site visits and traffic video surveys at the junction.

Collisions

- 2.46 A collision data review for the most recent five years was undertaken at the junction, using the website crashmap.co.uk. It was found that five 'slight' collisions were recorded within the vicinity of the junction during this time period. It is therefore concluded that there are no significant highway safety issues in relation to the highway junction.



Junction 3 - Local Highway Network

- 2.47 This signalised crossroads junction comprises Hunnyhill, Hunnycross Way, St **James' Street** and **Foxes Road**.

Hunnyhill

- 2.48 Hunnyhill is a two-way single carriageway road with a two-lane approach with an approximate taper length of 18m, and forms a strategic road on the island, providing a link to Parkhurst, Northwood and Cowes. The road is subject to a 30mph speed limit. Footways are provided on both sides of the carriageway.

Hunnycross Way

- 2.49 Hunnycross Way is a two-way single carriageway road and provides a link to nearby retail estates. **There is a Sainsbury's petrol station** and British Red Cross located within 100m of the junction. The road is subject to a 30mph speed limit, and there is an advisory cycle lane approximately 30m in length on the approach to the junction. Footways are provided on both sides of the carriageway.

St James' Street

- 2.50 **St James' Street** is a two-way single carriageway road that leads to the main shopping area in Newport. The road is subject to a 30mph speed limit. Footways are provided on both sides of the carriageway. A bridge is located at the northern end of this **St James' which is subject to** a weight restriction of 17 tonnes.

Foxes Road

- 2.51 Foxes Road is a two-way single carriageway road that serves as the principal access **to the Sainsbury's** superstore and residential estate. The road is subject to a 30mph speed limit, footways are provided on both sides of the carriageway.

Junction 4 - Study Area/Junction Background

- 2.52 The highway junctions of Hunnycross Way / Holyrood Street and River Way are located within the centre of Newport. Isle of Wight College sits approximately 500m to the North; there is also a large retail estate located approximately 200m to the North; a supermarket accessible via an access road situated on the Holyrood Street junction; approximately 300m to the Southwest is Halfords; and **approximately 50m to the West is a Sainsbury's petrol station.**
- 2.53 The junctions form the major route to Cowes to the North, and Ryde to the Northeast. A location plan of these junctions is provided in Figure 2.7.

Figure 2.7 Junction Location Plan



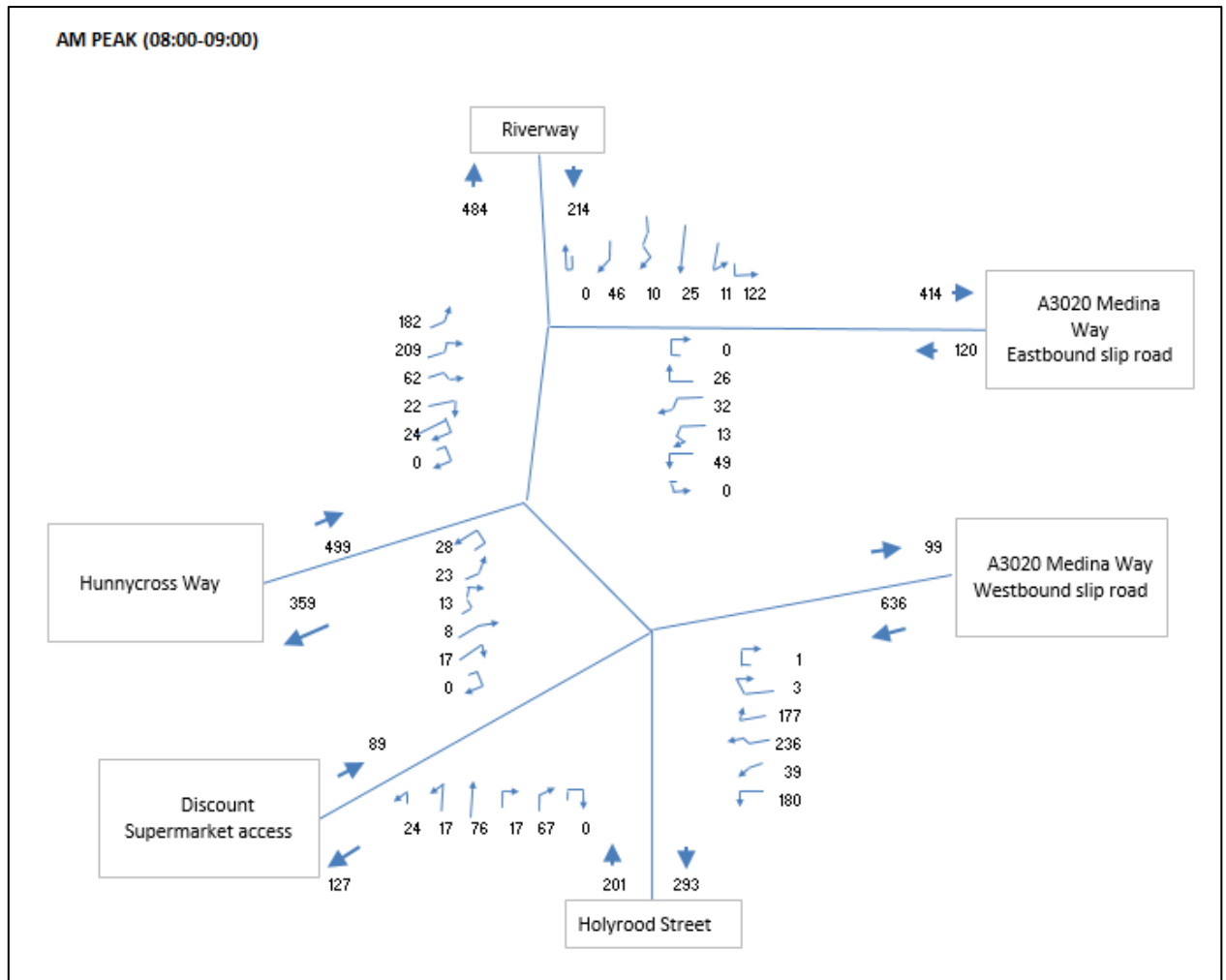
Source: Google Image, October 2017

Junction 4 - Base Traffic Flows

- 2.54 This section details the current traffic flows and queuing at the junction, as recorded by the survey data. These are shown in Figures 2.8 and 2.9.



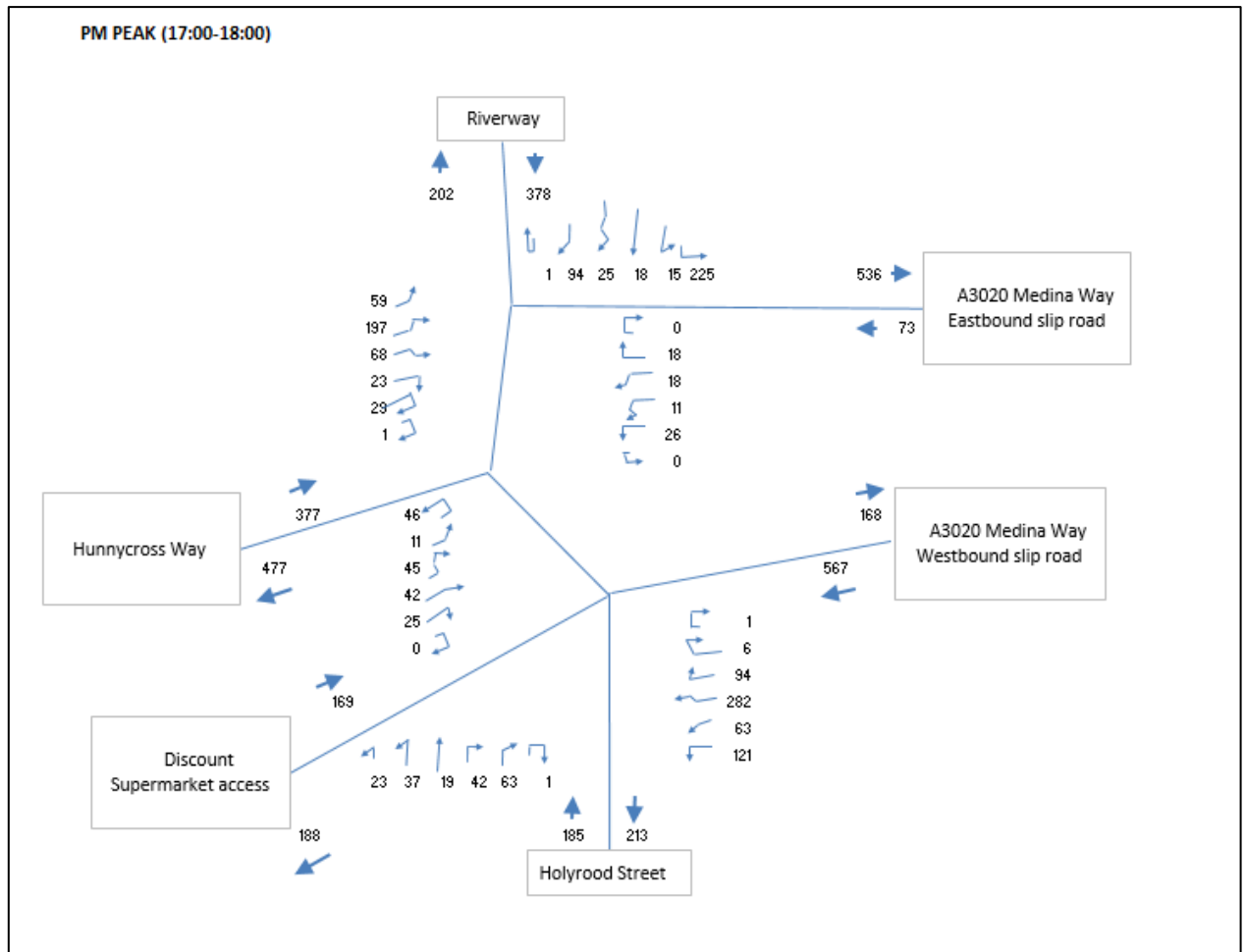
Figure 2.8 AM Traffic Flows (PCUs)



- 2.55 As shown in Figure 2.8, in the AM Peak (08:00-09:00), the highest traffic flows are those to and from the A3020 Medina Way and Hunnycross Way, with 236 PCUs travelling from the A3020 to Hunnycross Way (westbound), and 209 PCUs eastbound.
- 2.56 The most significant queuing occurs on Hunnycross Way with a fast-moving queue observed throughout much of the peak hour. The maximum observed queue recorded on Hunnycross Way was three vehicles, some queuing occurs on A3020 – Medina Way (Westbound slip road) with a maximum queue of two vehicles.
- 2.57 Figure 2.9 below shows the traffic flows for the PM Peak (17:00-18:00).



Figure 2.9 PM Traffic Flows (PCUs)



2.58 As shown in Figure 2.9, in the PM Peak (17:00-18:00), the highest traffic flows are those to and from the A3020 Medina Way and Hunnycross Way, with 282 PCUs travelling from the A3020 to Hunnycross Way (westbound), and 197 PCUs eastbound.

2.59 Some queuing occurs on A3020 Medina Way (Westbound slip road) with a fast-moving queue observed throughout much of the PM peak hour. The highest maximum queues were recorded on this arm, comprising three vehicles.

Riverway

2.60 Riverway forms the northern arm of the three junctions. On the northern arm, the dominant movement in the PM peak hour is a left turn onto Medina Way. A moderately high number of vehicles turn left into Riverway from Hunnycross Way and turning right from A3020 Medina Way (Westbound) into Riverway in the AM and PM peaks.

A3020 – Medina Way (Eastbound slip road)

2.61 A3020 Medina Way (eastbound slip road) forms the eastern arm of these junctions. On this arm, there is a moderate number of vehicles travelling eastbound from Hunnycross Way and Riverway in the peak hours.

A3020 – Medina Way (Westbound slip road)

2.62 A3020 Medina Way (westbound slip road) forms the southeastern arm of these junctions. On the southeastern arm, the majority of vehicles are travelling westbound with a considerable number of



vehicles travelling to Hunnycross Way, and a moderate number travelling northbound to Riverway and southbound to Holyrood Street, in the AM peak.

- 2.63 This same applies for the PM peak, with a high number of vehicles travelling westbound, with the majority travelling to Hunnycross Way and Riverway. There is also a moderate number of vehicles travelling left to Holyrood Street.

Holyrood Street

- 2.64 Holyrood Street forms the southern arm of these junctions. On the southern arm, the majority of vehicles are travelling to Medina Way (Eastern slip road) and Riverway, in the AM peak. In the PM peak, the majority of vehicles are travelling to Medina Way.

Lidl Supermarket Access

- 2.65 The access road is for the access of Lidl superstore only, and forms the southwestern arm of these junctions. On the southwestern arm, there are a small number of vehicles turning into and out of this junction during AM peak.

- 2.66 There are a moderate number of vehicles accessing Lidl via this access road in the PM peak, with the majority travelling from Riverway.

Hunnycross Way

- 2.67 Hunnycross Way forms the western arm of these junctions. On the western arm, the majority of vehicles are travelling eastbound with a considerable number of vehicles travelling to Medina Way (eastern slip road) and a moderate number travelling northbound to Riverway in the AM peak. There are a substantial number of vehicles travelling westbound into Hunnycross Way from Medina Way (western slip road) in the AM peak.

- 2.68 There are a high number of vehicles travelling westbound in the PM peak, the majority travelling westbound from Medina Way (western slip road) and a moderate number travelling westbound from Riverway to Hunnycross Way. There are also a moderate number of vehicles travelling eastbound from Hunnycross Way, the majority of vehicles travelling to Medina Way (eastern slip road) and a moderate number travelling to Medina Way (western slip road) in the PM peak.

Collisions

- 2.69 A collision data review for the most recent five years was undertaken at the junctions, using the **website crashmap.co.uk**. **It was found that four 'slight' collisions were recorded within** the vicinity of the junctions during this time period. It is therefore concluded that there are no significant highway safety issues in relation to the three highway junctions.

Local Highway Network

- 2.70 These three roundabout junctions comprise of Riverway / Hunnycross Way / Medina Way (Eastern slip road) / Medina Way (Western slip road) / Holyrood Street and Lidl Access Road.

Riverway

- 2.71 Riverway is a two-way single carriageway road and provides a link to nearby retail estate. The road is subject to a 30mph speed limit. Footways are provided on both sides of the carriageway.

Hunnycross Way

- 2.72 Hunnycross Way is a **two-way single carriageway road and provides a link to Sainsbury's petrol station and British Red Cross** which are situated within 100m of the junction. The road is subject to a 30mph speed limit, and there is an advisory cycle lane approximately 30m in length. Footways are provided on both sides of the carriageway.



A3020 – Medina Way (Eastbound slip road)

- 2.73 Medina Way (eastern slip road) is a two-way single carriageway slip road that leads to Medina Way dual carriageway (eastbound). The road is subject to a 30mph speed limit. Footways are provided on eastern side of the carriageway.

A3020 – Medina Way (Westbound slip road)

- 2.74 Medina Way (western slip road) is a two-way single carriageway slip road that leads to Medina Way dual carriageway (westbound). The road is subject to a 30mph speed limit. Footways are provided on eastern side of the carriageway. The access to Hamilton & Marshall Funeral Directors is located on this slip road.

Holyrood Street

- 2.75 Holyrood Street is a two-way single carriageway road; there is a bridge situated at the northern end where it crosses the Medina River. The road is subject to a 30mph speed limit and is a direct route to the centre of Newport. Footways are provided on both sides of the carriageway.

Lidl Superstore Access Road

- 2.76 **This access road is solely for the access to the Lidl's superstore, this is also a 30mph speed limit with footways on both sides of carriageway.**

Junction 5 - Study Area/Junction Background

- 2.77 **The highway junction of the A3020 / St George's Way / St George's Approach** is located just south of the centre of Newport. Morrisons, Marks and Spencer, Matalan are all situated approximately within 500m of the junction, Cineworld Cinema is approximately 250m to the north **and St George's Park** is 200m to the south. **The A3020 (St George's Way) forms the northern and southern arms of this roundabout junction, whilst St George's Approach forms the western arm.**
- 2.78 The junction provides access to numerous retail outlets and forms the major route to Cowes to the north. A location plan of the junction is provided in Figure 2.10.

Figure 2.10 Junction Location Plan

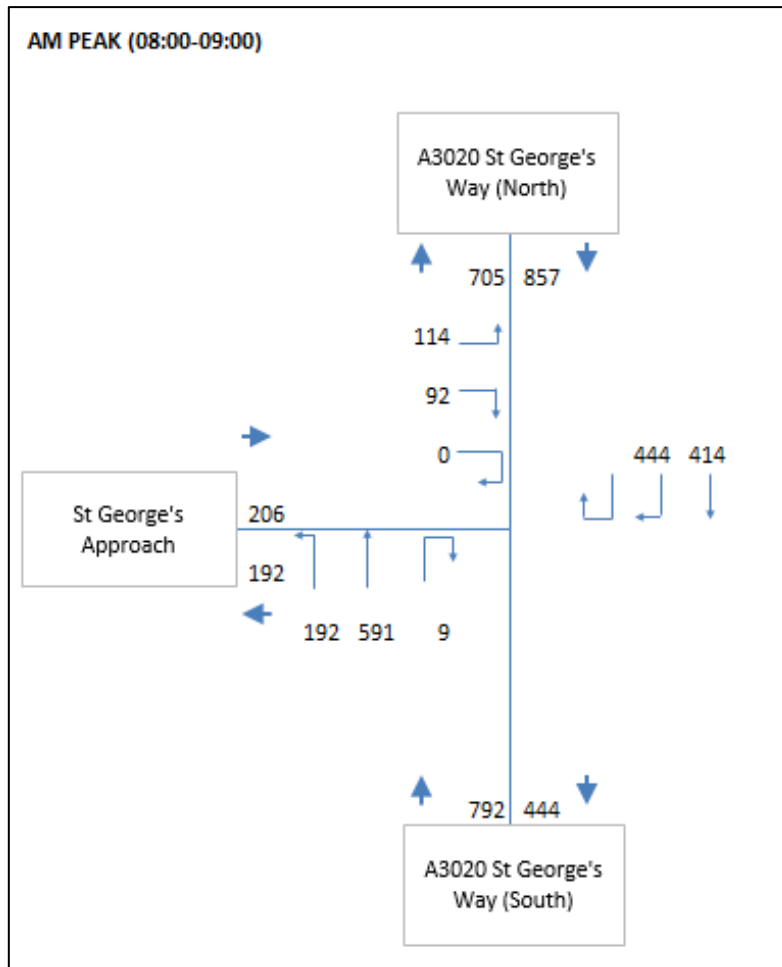


Source: Google Image, August 2017

Junction 5 - Base Traffic Flows

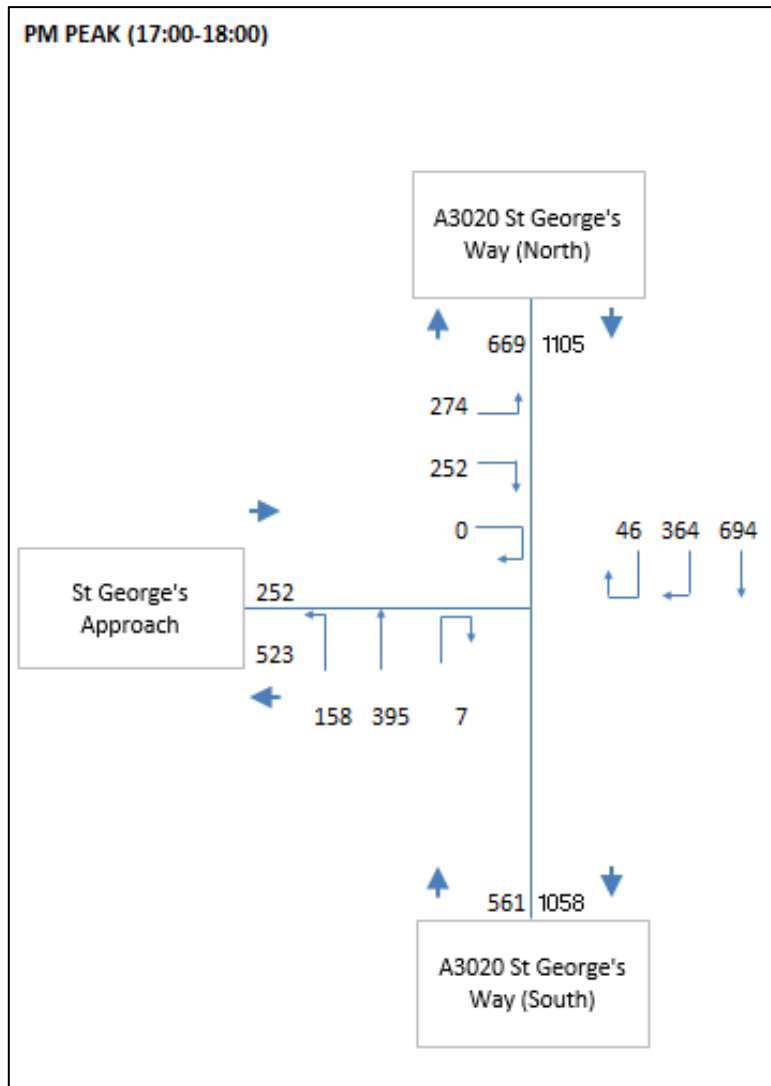
- 2.79 This section details the current traffic flows and queuing at the junction, as recorded by the survey data. These are shown in Figures 2.11 and 2.12.

Figure 2.11 AM Traffic Flows (PCUs)



- 2.80 As shown in Figure 2.11, the highest traffic flows are those travelling northbound in the AM peak (08:00-09:00) with 591 PCUs undertaking this movement.
- 2.81 Similarly, southbound traffic flows are also high, with 414 PCUs recorded. It was also observed that there is a high number of right-turners from St George's Way (North) to St George's Approach, with 444 PCUs recorded.
- 2.82 Few queues were observed at the junction; the highest number of vehicles recorded were on St George's Way (N) (southbound), with a total queue of two vehicles in the AM peak (08:00-09:00).
- 2.83 Figure 2.12 below shows the traffic flows for the PM peak (17:00-18:00).

Figure 2.12 PM Traffic Flows (PCUs)



- 2.84 As shown in Figure 2.12, the highest traffic flows are those travelling southbound in the PM peak (17:00-18:00), with 694 PCUs undertaking this movement.
- 2.85 Northbound flows are also high, with 395 PCUs recorded. Again, there is a high number of right-turners from St George's Way (North) into St George's Approach, with 364 PCUs recorded and left-turners from St George's Approach into St George's Way (North) in the PM Peak, with 274 PCUs recorded.
- 2.86 The majority of queuing occurs on St George's Approach, with maximum queues of five vehicles recorded on this arm.

Junction 5 - Existing Traffic Issues

- 2.87 By means of the video surveys, it has been observed that this junction is relatively clear from queues on all approaches. Although some queues and congestion have been observed on the St George's Way exit, southbound direction, this does not seem to be a regular occurrence at present.



St George's Approach

- 2.88 **St George's Approach forms** the western arm of the junction. On the western arm, there are a high number of vehicles turning left and right **onto St George's Approach in the AM and PM** peak. This junction provides access to Marks and Spencer and Morrisons.

A 3020 St George's Way (North)

- 2.89 **St George's Way (North) forms** the northern arm of the junction. On the northern arm, there are a high number of vehicles turning left into **St George's Approach in the AM and PM** peak. There are a high number of vehicles turning right into **St George's Way (North) from St George's Approach** in the PM peak.

A 3020 St George's Way (South)

- 2.90 **St George's Way (South) forms the** southern arm of the junction. On the southern arm, there are a high number of vehicles travelling Southbound from **St George's Way (North) in the AM and PM Peak**. There is **also a high number of vehicles turning left from St George's Approach**.

Collisions

- 2.91 A collision data review for the most recent five years was undertaken at the junction, using the website crashmap.co.uk. It was found that **two 'slight' collisions** were recorded within the vicinity of the junction during this time period. It is therefore concluded that there are no significant highway safety issues in relation to the highway junction.

Local Highway Network

- 2.92 The highway junction of **The A3020 St George's Approach and St George's Way (North and South)** comprises of a three-arm roundabout junction in Newport.

St George's Way (North)

- 2.93 **St George's Way (North) is a two-way** single carriageway road with a two-lane approach and forms a strategic road on the island, providing a link to Northwood and Cowes. The road is subject to a 30mph speed limit. Footways are provided on the eastern side of the carriageway, whilst there is a grass verge on the western side of the carriageway.

St George's Way (South)

- 2.94 **St George's Way (South) is a two-way** single carriageway road with a two-lane approach and forms a strategic road on the island, providing a link to Blackwater. The road is subject to a 30mph speed limit. Footways are provided on both sides of the carriageway.



3 Modelling Methodology

Introduction

- 3.1 Traffic modelling has been undertaken as part of the feasibility study, identifying how the local highway network operates and how it might operate following the proposed improvements to the junction. Junctions 9 and LinSig v3 are the latest version of the industry-standard software for modelling roundabouts and signalised junctions and urban road networks and have therefore been used to model these junctions.
- 3.2 The modelling has been undertaken for two weekday periods determined to be the network peaks in terms of traffic volumes, with the AM peak between 08:00 and 09:00 and the PM peak between 17:00 and 18:00. These peaks were identified through analysis of traffic count data. Initially, Base Year modelling was using survey data collected in July 2017. Future Year modelling was subsequently carried out in order to test the proposed changes to the network and assess the scale of impact on road traffic.

Explanation of Results

- 3.3 Roundabouts capacity results are usually expressed in terms of '**Ratio of Flow to Capacity**' (RFC) for priority junctions. An existing junction is considered to have reached its theoretical capacity when it has an RFC of 1.00 or greater. However, an RFC of less than 0.85 is preferred, as a value above either of this figure is considered too close to the theoretical capacity for the junction to perform satisfactorily. Where junction improvements or a new junction are proposed, an RFC of significantly less than 0.85 is desirable, although this may not always be possible in instances of a junction already operating at capacity.
- 3.4 **Queue lengths at junction approaches are usually expressed in terms of 'Passenger Car Equivalent' (PCE) or 'Passenger Car Unit' (PCU). A standard car typically has a PCE/PCU value of 1.0; larger vehicles, such as goods vehicles, typically have PCE/PCU values greater than 1.0 and smaller vehicles, such as motorcycles, typically have PCE/PCU values less than 1.0.**
- 3.5 For signalised junctions the Degree of Saturation (DoS) is a ratio of demand to capacity on each approach to a signalised junction, with a value of 100% meaning that demand and capacity are equal and no further traffic is able to progress through the junction. Values over 85% are typically regarded as suffering from traffic congestion, with queues of vehicles beginning to form. The term Practical Reserve Capacity (PRC) is often used to refer to the available spare capacity at a junction. A negative PRC indicates that the junction is over capacity.
- 3.6 It is noted that a DoS of 90% or over recorded on an approach to the junction is deemed as approaching capacity and therefore a DoS of under 90% is considered acceptable.



4 Base Year Modelling

Junction 2 - Base Year Modelling

- 4.1 Data was collected as part of the surveys was compared to the base year outputs to match modelled flows and queue patterns to those observed, within acceptable variations. The results for Medina Way / Coppins Bridge gyratory in Newport. Due to the size of the gyratory junction, the results have been split into four separate junctions. These are shown in Table 4.1 – 4.4, with full output results included in Appendix A.

LinSig Modelling Results – St George’s Way Signalised Junction – 2017 Base Year

Table 4.1 **St George’s Way Signalised Junction** - 2017 Base Year Junction Assessment

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Coppins Bridge South Entry Ahead Left	36.8%	4.6	4.8	55.5%	4.4	8.1
1/2 Coppins Bridge South Entry Right	62.0%	7.0	6.0	51.3%	8.8	11.6
2/1 East St Exit - Pyle St Ahead	8.6%	0.0	1.7	5.8%	0.0	1.6
6/1 Pyle St Entry Left	4.8%	0.0	2.5	8.2%	0.0	2.5
7/1 East St Entry Ahead	7.3%	0.0	2.5	9.1%	0.1	2.4
7/2 East St Entry Ahead	22.6%	0.1	2.9	25.7%	0.2	2.8
9/2 + 9/1 A3020 Entry Left Left2 Ahead	60.2 : 60.2%	8.6	28.3	48.0 : 48.0%	6.4	16.4
PRC	45.3%			62.0%		
Total Delay (pcu/hr)	7.25			5.47		

- 4.2 For the St George’s Way signalised junction (located at the southern end of the gyratory), the base year results as shown in Table 4.1 indicate that this section of the gyratory operates with a PRC of 45.3% in the AM peak and a PRC of 62.0% in the PM peak. The highest queues are experienced on the A3020 Entry (Lanes 9/2 & 9/1) arm, which provides access to Pyle Street and East Street, with 9-6 PCUs recorded in the AM and PM peaks. Overall, this junction generally performs well in the 2017 Base Year.



Table 4.2 Coppins Bridge Signalised Junction - 2017 Base Year Junction Assessment

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Ahead	71.6%	1.6	6.7	72.2%	1.5	8.5
1/2 Ahead Right	68.4%	3.4	5.8	80.9%	3.8	11.3
1/3 Right	4.0%	0.0	2.5	3.2%	0.0	3.7
2/1 Circulatory NB Three Ahead	69.0%	15.5	19.2	68.9%	11.4	24.3
2/2 Circulatory NB Three Ahead	66.6%	15.1	20.1	77.9%	17.2	32.1
2/3 Circulatory NB Three Ahead	3.7%	0.7	11.1	2.9%	0.4	16.7
3/1 Coppins Bridge North Circulatory Ahead	38.2%	6.2	13.7	83.3%	23.3	28.8
3/2 Coppins Bridge North Circulatory Right	17.4%	4.2	20.2	27.8%	6.3	27.3
4/2 + 4/1 High St Entry Left Ahead	44.3 : 44.3%	8.2	9.6	51.9 : 51.9%	10.5	8.8
4/3 High St Entry Ahead	27.1%	3.4	51.5	28.2%	3.2	26.2
5/1 Coppins Bridge North Entry Left Ahead	73.7%	12.5	42.7	81.9%	11.2	35.6
5/2 Coppins Bridge North Entry Ahead	53.9%	9.1	34.9	79.0%	9.9	28.9
6/2 + 6/1 Ahead Left Left2	42.5 : 42.5%	12.8	20.4	61.8 : 61.8%	16.5	29.8
6/3 Right	47.8%	14.9	20.1	87.3%	27.5	43.6
6/4 Right	53.4%	1.8	5.6	38.6%	1.5	6.8
8/1 Coppins Bridge North Circulatory Right	55.0%	6.0	29.8	50.9%	7.0	23.7
8/2 Coppins Bridge North Circulatory Right	61.3%	2.0	14.4	87.8%	14.1	24.2
9/1 Coppins Bridge North Entry Ahead	35.0%	7.3	11.3	40.1%	8.8	26.3
9/2 Coppins Bridge North Entry Ahead	55.2%	5.4	11.9	38.3%	6.4	13.6
10/1 Ahead	39.4%	5.8	27.5	45.4%	7.8	20.8
10/2 Ahead	21.0%	2.8	24.9	23.2%	3.5	17.8
11/1 + 11/2 Entry Coppins Bridge Car Park Ahead Left	0.0 : 0.9%	0.1	11.3	3.0 : 3.0%	0.2	5.0
PRC	22.1%			2.5%		
Total Delay (pcu/hr)	42.88			68.42		

4.3 The Base Year results for the Coppins Bridge signalised junction are shown above in Table 4.2. This junction performs worse than the St George's Way junction, operating with a PRC of 22.1% in the AM and 2.5% PM peak.



Table 4.3 A3020 Medina Way Signalised Junction - 2017 Base Year Junction Assessment

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Medina Way North Entry Ahead	66.0%	1.2	4.8	49.2%	8.6	15.3
1/2 Medina Way North Entry Ahead	49.5%	4.5	6.3	23.2%	5.0	13.9
2/1 A3054 Circulatory Right	61.9%	8.7	29.9	78.9%	10.0	46.9
2/2 A3054 Circulatory Right	70.0%	11.8	48.0	75.6%	9.5	41.2
4/2 + 4/1 Medina Way Entry Left Ahead	67.8 : 67.8%	8.7	8.5	85.9 : 85.9%	21.5	13.7
4/3 Medina Way Entry Ahead	27.2%	4.4	11.5	48.2%	8.9	10.4
PRC	28.6%			4.7%		
Total Delay (pcu/hr)	13.61			18.85		

4.4 At the Medina Way Signalised Junction, the results of the modelling in Table 4.3 show that this junction is to perform within capacity in both the AM and PM peaks, with a PRC of 28.6% recorded in the AM and 4.7% in the PM. The worst performing arms are the Circulatory Right (Lane 2/2) and Medina Way Entry Left Ahead (Lanes 4/2 + 4/1), as these arms record a DoS of 70% or 67.8% in both the AM and PM peaks.



Table 4.4 Fairlee Road Signalised Junction - 2017 Base Year Junction Assessment

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 A3054 Circulatory Left	41.6%	6.4	8.5	57.4%	10.2	11.3
2/2 + 2/1 Coppins Bridge North Exit Ahead Ahead2	43.2 : 43.2%	14.5	7.7	82.4 : 82.4%	33.9	13.3
3/2 + 3/1 Staplers Road Entry Left	61.2 : 61.2%	9.8	8.5	40.6 : 40.6%	4.5	8.4
5/1 Circulatory (CW) One Left Ahead	58.1%	5.6	48.3	46.4%	5.4	38.1
6/1 Circulatory (ACW) One Ahead	73.8%	8.0	74.6	84.0%	12.8	52.0
7/2 + 7/1 Fairlee Road Entry Ahead Right	73.7 : 73.7%	13.0	11.6	72.6 : 72.6%	12.7	13.4
PRC	21.9%			7.1%		
Total Delay (pcu/hr)	15.66			18.89		

4.5 For the Fairlee Road Signalised Junction, Table 3.4 shows that this junction is to operate within capacity in the AM peak, with a PRC of 21.9% recorded, whilst in the PM peak a PRC of 7.1% is recorded. In the PM peak, the Coppins Bridge North arm records a DoS of 82.4%.

Junction 3 - Base Year Modelling

4.6 Data was collected as part of the surveys was compared to the base year outputs to match modelled flows and queue patterns to those observed, within acceptable variations. The results for Foxes Road / Hunnyhill / Hunnycross Way / St James' Street junction are summarised in Table 4.5, with full output results included in Appendix B.



LinSig Modelling Results – 2017 Base Year

Table 4.5 Base Year Assessment: Existing Junction

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 + 1/2– Hunnyhill	66.8%	4.3	30.3	64.8%	4.0	27.7
2/1 + 2/2 – Hunnycross Way	44.2%	3.9	19.5	63.7%	5.9	26.6
3/1 – St James St	40.5%	2.8	26.9	45.0%	3.8	22.5
4/1 + 4/2 – Vicarage Walk	68.2%	7.2	24.1	69.1%	6.3	28.9
PRC	31.9%			30.3%		
Total Delay (pcu/hr)	9.53			11.09		

- 4.7 The base year results as shown in Table 4.5, indicate that the junction currently operates within capacity during the AM and PM Peaks, with a PRC of 31.9% recorded in the AM Peak and 30.3% recorded in the PM Peak. The modelled queues have been calibrated against the observed queues at the junction. It appears that the junction does not exhibit any significant capacity issues at present.

Junction 4 - Base Year Modelling

- 4.8 Data was collected as part of the surveys was compared to the base year outputs to match modelled flows and queue patterns to those observed, within acceptable variations. The results for Riverway / Hunnycross Way / Medina Way (Eastern slip road) / Medina Way (Western slip road) / Holyrood Street / Lidl Access Road junctions are summarised in Table 4.6, with full output results included in Appendix C.



Junction 4 – 2017 Base Year

Table 4.6 2017 Base Year Junction Assessment

Approach	2017 Base Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Riverway Roundabout				
A3020 Eastbound slip road	0.16	0.2	0.10	0.1
Link from Hunnycross Way Junction	0.79	3.6	0.53	1.1
Riverway	0.34	0.5	0.62	1.6
Hunnycross Way Roundabout				
Link from Holyrood Street Junction	0.76	3.1	0.77	3.2
Hunnycross Way	0.76	3.1	0.53	1.1
Link from Riverway Junction	0.26	0.3	0.29	0.4
Holyrood Street Roundabout				
A3020 Westbound Slip Road	0.62	1.6	0.55	1.2
Holyrood Street Junction	0.33	0.5	0.30	0.4
Access to Lidl Supermarket	0.13	0.1	0.24	0.3
Link from Hunnycross Way Junction	0.24	0.3	0.24	0.3

- 4.9 The base year results as shown in Table 4.6, indicate that the junctions operate within recommended capacity during the AM and PM Peaks. The arm with the highest recorded queues is the Hunnycross Way junction link with 4 PCUs shown in the AM Peak. Similar queues are recorded on the Holyrood Street link with 3 PCUs shown in the AM and PM Peaks. The modelled queues are representative of those observed at the roundabout junctions.

Junction 5 - Base Year Modelling

- 4.10 Data collected as part of the surveys was compared to the base year outputs to match modelled flows and queue patterns to those observed, within acceptable variations. The results for the A3020 (St George's Way) and St George's Approach roundabout are summarised in Table 4.7, with full output results included in Appendix D.



Junctions 9 Modelling Results – 2017 Base Year

Table 4.7 2017 Base Year Junction Assessment

Approach	2017 Base Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Arm 1 – St George’s Way (S)	0.55	1.2	0.38	0.6
Arm 2 – St George’s Approach	0.17	0.2	0.40	0.7
Arm 3 – St George’s Way (N)	0.53	1.2	0.72	2.6

4.11 The base year results, as shown in Table 4.7, indicate that the junction operates within recommended capacity during the AM and PM Peaks. The arm with the highest RFC is St George’s Way (S), with 0.55 recorded in the AM Peak, whilst St George’s Way (N) records an RFC of 0.72 in the PM Peak. Queues of 1.2 PCUs are recorded on both St George’s Way (N) and (S) in the AM Peak, whilst queues of 2.6 PCUs are recorded on St George’s Way (N) in the PM Peak. Modelled queues have been calibrated against observed queues.



5 Future Year Modelling

- 5.1 The Future Year 2034 was assessed as part of this scenario and thus TEMPRO growth factors were applied to the 2017 traffic survey data in order to calculate the 2034 traffic flows. A comparison of TEMPRO growth factors was undertaken for each of the three study areas; Newport, Ryde, Shanklin and Sandown, using local Super Output Areas. It was found that the TEMPRO growth factors for each of the study areas were broadly similar to the TEMPRO growth factors for the Isle of Wight as a whole. **As a result, the 'Isle of Wight' as a whole was selected as the geographical area.** Also, as all highway junctions within the study area are located in urban areas, it has therefore been deemed more robust **that only 'Urban Road Types' were selected as part of this assessment.**
- 5.2 These TEMPRO growth factors are shown in Table 5.1.

Table 5.1 2017-2034 TEMPRO Growth Factors – All Urban Road Types

Time Period	TEMPRO Growth Factors (2017-2034)
AM Peak	1.2229
PM Peak	1.2188

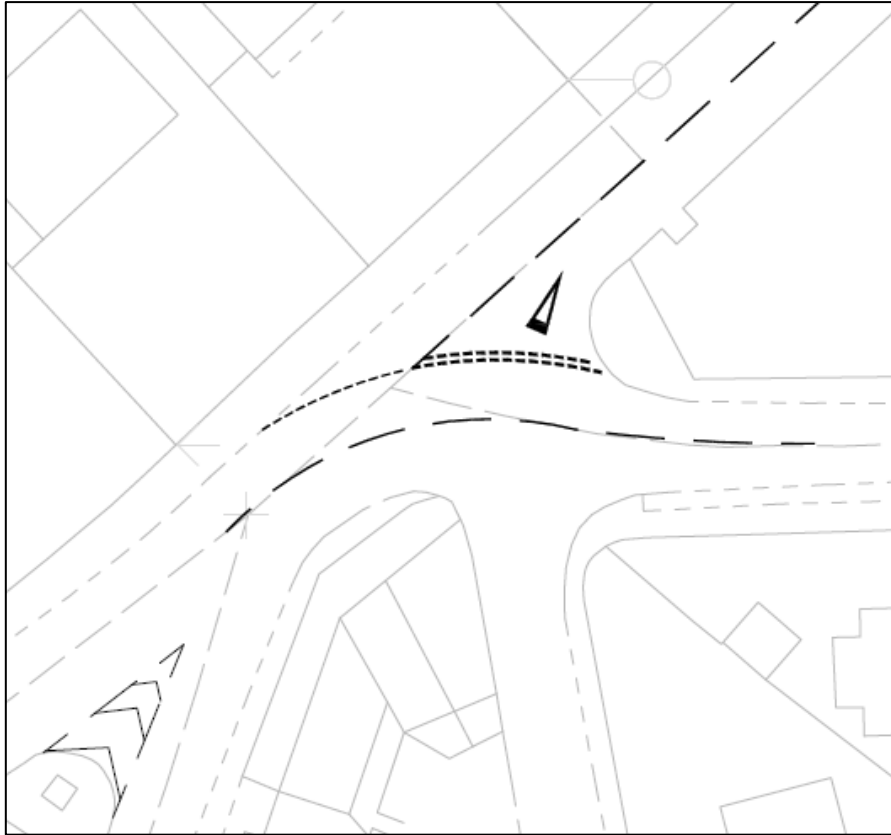
Local Plan Allocations

- 5.3 The TEMPRO growth factors for Newport allow for an increase of 2132 households within Newport. Across the 15-year local plan period, it is expected that a total of 1313 dwellings will be allocated within the local plan, with an additional 550 coming forward beyond 2034.
- 5.4 Therefore, it is considered that the TEMPRO growth factors represent an accurate assessment of the likely trip generation in 2034 and beyond.

Trafalgar Road Link

- 5.5 The scenarios set out in the future modelling in Chapter 6 include reference to a link road along Trafalgar Road, to the south of the town centre. This will include a new link through the current Jewson site, providing a direct link from Carisbrooke Road to the south-west to the St George's Roundabout to the south east.
- 5.6 The junction of Trafalgar Road and Carisbrooke Road will be reprioritised; an illustrative layout is included as Figure 5.1 and a detailed drawing is included at Appendix E, as well as a plan showing the route of the link road.

Figure 5.1 Carisbrooke Road/Trafalgar Road Amended Junction



5.7 Table 5.2 sets out a summary of the indicative estimated costs for the proposed link road, including the re-prioritisation of the Trafalgar Road/Carisbrooke Road junction and the new highway construction. It does not include third party land purchase costs. These costs are approximate, based on an initial scheme, and should be reviewed as part of any detailed design.

Table 5.2 Cost Estimate of Proposals – Junction 3

Proposal	Cost Estimate
Construction Estimate	£299,500
Risk Variables (Statutory Undertakers, Safety Audit requirements, TRO)	£50,000
Design Administration and Land Costs	£29,950
Total	£379,450

5.8 The Trafalgar Road link would provide an improved route for traffic travelling across Newport. It would predominantly accommodate traffic travelling from the north and north-east to the south-west, as an alternative route across the south of Newport is already available using the B3401 Whitepit Lane. It would therefore primarily benefit traffic travelling between Ryde/Cowes and the south-west of the island, and consequently would not remove a significant amount of traffic on the Coppins Bridge gyratory.

5.9 **Traffic movements from Carisbrooke Road to St George’s Way are small, with 29 and 84 PCUs forecast to travel eastbound between the two in the AM and PM peak hours respectively in 2034, and 8 and 16 PCUs forecast for the equivalent westbound movements.** Between south-west Newport and key attractors such as Morrisons, Marks and Spencer and Cineworld, movements total 12 PCUs in the AM peak hour and 32 PCUs in the PM peak hour.



- 5.10 The future year junction capacity assessments will consider the provision of the link, and the effect of the removal and redistribution of flows on the Coppins Bridge gyratory.



6 Junction 2 – Future Year

6.1 The existing gyratory junction has been tested in the 2034 Future Year as to determine how it would operate in its current form. As previously presented, the results have been split into four separate junctions below, shown in Tables 6.1 – 6.4, with full output results included in Appendix A.

Table 6.1 **St George’s Way Signalised Junction – 2034 Future Year Assessment**

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Coppins Bridge South Entry Ahead Left	43.3%	11.2	12.6	61.4%	14.3	18.7
1/2 Coppins Bridge South Entry Right	73.0%	12.4	9.7	55.3%	8.6	9.6
2/1 East St Exit - Pyle St Ahead	10.8%	0.1	1.8	7.4%	0.0	1.7
6/1 Pyle St Entry Left	5.5%	0.0	2.4	10.5%	0.1	2.7
7/1 East St Entry Ahead	12.9%	0.1	2.8	12.4%	0.1	2.7
7/2 East St Entry Ahead	25.6%	0.2	3.3	31.6%	0.2	3.1
9/2 + 9/1 A3020 Entry Left Left2 Ahead	82.3%	14.0	36.9	62.6%	9.3	20.9
PRC	9.3%			43.7%		
Total Delay (pcuhr)	12.80			9.01		

6.2 For the St George’s Way Signalised Junction (located at the southern end of the gyratory), the Future Year results as shown in Table 5.2 indicate that this section of the gyratory will operate with a PRC of 9.3% in the AM peak and a PRC of 43.7% in the PM peak. The arms/lanes that experience the main capacity issues are Lane 1/2: Coppins Bridge South Entry Right and the A3020 arm (Lanes 9/2 + 9/1); these arms record a DoS of 82.3% in the AM peak, whilst in the PM peak, a DoS of 62.6% is recorded on these arms. The highest queues are also experienced on these arms.



Table 6.2 Coppins Bridge Signalised Junction - 2034 Future Year Assessment

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Ahead	83.5%	3.9	11.4	88.5%	4.1	18.1
1/2 Ahead Right	84.3%	19.7	10.6	88.5%	5.9	16.6
1/3 Right	4.5%	0.0	2.5	3.6%	0.0	3.5
2/1 Circulatory NB Three Ahead	80.5%	18.7	21.5	84.7%	17.6	29.6
2/2 Circulatory NB Three Ahead	82.0%	23.9	25.4	85.5%	23.2	37.2
2/3 Circulatory NB Three Ahead	4.1%	0.6	7.6	3.2%	0.4	15.2
3/1 Coppins Bridge North Circulatory Ahead	45.8%	7.9	13.8	97.2%	36.0	56.3
3/2 Coppins Bridge North Circulatory Right	20.6%	5.4	21.1	32.3%	7.7	27.8
4/2 + 4/1 High St Entry Left Ahead	55.8%	10.1	11.2	66.6%	13.7	11.4
4/3 High St Entry Ahead	34.3%	4.6	58.3	36.2%	4.4	31.2
5/1 Coppins Bridge North Entry Left Ahead	80.9%	13.9	49.8	101.2%	35.9	100.5
5/2 Coppins Bridge North Entry Ahead	26.3%	4.0	32.0	32.1%	5.1	19.9
6/2 + 6/1 Ahead Left Left2	46.2%	13.7	20.5	73.7%	21.2	35.7
6/3 Right	36.5%	5.6	12.4	47.4%	9.3	19.6
6/4 Right	64.2%	2.5	6.6	44.0%	1.9	7.4
8/1 Coppins Bridge North Circulatory Right	61.1%	7.8	38.1	70.7%	12.2	33.7
8/2 Coppins Bridge North Circulatory Right	31.9%	1.1	14.5	35.9%	1.1	8.5
9/1 Coppins Bridge North Entry Ahead	40.6%	8.3	9.2	44.5%	9.3	16.4
9/2 Coppins Bridge North Entry Ahead	66.3%	8.1	14.2	43.5%	4.1	15.1
10/1 Ahead	49.4%	7.4	30.2	57.9%	10.7	24.6
10/2 Ahead	26.4%	3.6	26.4	29.5%	4.6	19.8
11/1 + 11/2 Entry Coppins Bridge Car Park Ahead Left	1.3%	0.1	11.6	3.5%	0.2	4.1
PRC	6.8%			-12.4%		
Total Delay (pcu/hr)	52.10			91.87		

6.3 The Future Year results for the Coppins Bridge Signalised Junction are shown above in Table 6.2. This junction was recorded as operating with capacity issues in the 2017 Base Year, and the junction performs much worse in the Future Year. In the AM peak, a PRC of 6.8% is forecast, whilst in the PM peak, this is forecast as -12.4%. Several arms are expected to experience a DoS of over 90% in the



PM peak. The most affected arms/lanes include the circulatory carriageway and Coppins Bridge North, which all experience a DoS of over 90%.

Table 6.3 A3020 Medina Way Signalised Junction – 2034 Future Year Assessment

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Medina Way North Entry Ahead	82.9%	4.1	10.4	62.0%	2.0	4.1
1/2 Medina Way North Entry Ahead	66.0%	7.2	8.5	24.2%	1.0	3.2
2/1 A3054 Circulatory Right	55.9%	7.7	24.5	100.7%	21.7	124.0
2/2 A3054 Circulatory Right	89.7%	19.0	54.3	100.2%	21.2	136.2
4/2 + 4/1 Medina Way Entry Left Ahead	79.4%	14.3	11.9	103.0%	108.4	93.3
4/3 Medina Way Entry Ahead	13.6%	2.0	11.8	18.4%	2.6	7.3
PRC	0.4%			-14.5%		
Total Delay (pcu/hr)	19.49			72.71		

6.4 For the Medina Way Signalised Junction, Table 6.3 shows that this junction is to perform over capacity in the PM peak. A PRC of 3.6% is recorded in the AM and -14.5% recorded in the PM. The worst performing arms are the Circulatory Right (Lane 2/2) and Medina Way Entry Left Ahead (Lanes 4/2 + 4/1), as these arms record a DoS of over 90% in the PM peak.



Table 6.4 Fairlee Road Signalised Junction – 2034 Future Year Assessment

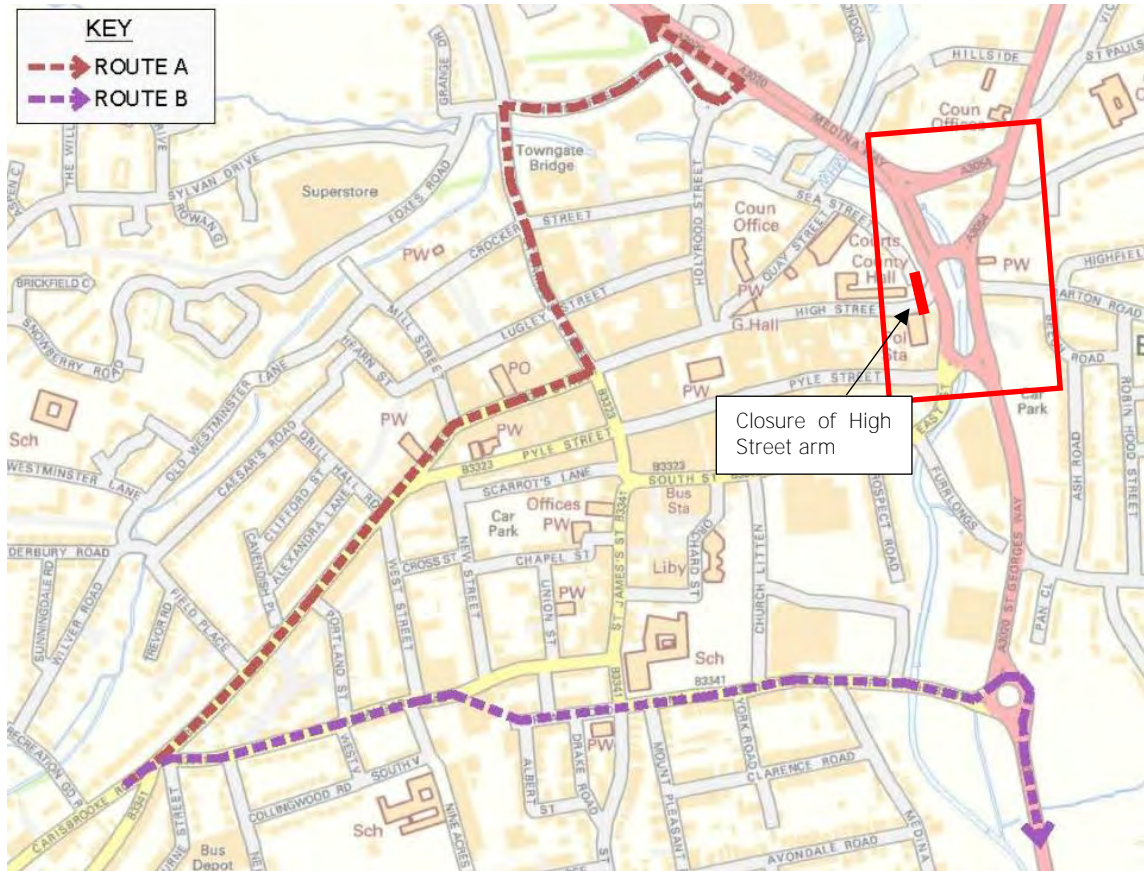
Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 A3054 Circulatory Left	50.8%	7.7	9.4	66.8%	12.5	17.6
2/2 + 2/1 Coppins Bridge North Exit Ahead Ahead2	52.8%	13.0	7.7	99.0%	55.6	61.7
3/2 + 3/1 Staplers Road Entry Left	74.7%	15.5	11.5	47.2%	6.1	8.7
5/1 Circulatory (CW) One Left Ahead	0.0%	6.7	49.6	56.4%	6.5	39.5
6/1 Circulatory (ACW) One Ahead	66.5%	11.8	104.2	98.0%	20.0	106.2
7/2 + 7/1 Fairlee Road Entry Ahead Right	90.2%	25.1	21.2	87.7%	22.5	21.4
PRC	-0.2%			-10.0%		
Total Delay (pcu/hr)	25.50			51.57		

- 6.5 For the Fairlee Road Signalised Junction, Table 6.4 shows that this junction is to operate over capacity in both the AM and PM peaks, with a PRC of -0.2% recorded in the AM and -10.0% in the PM. For instance, there is a 32.1% decrease in capacity in the AM and a 40.9 decrease in the PM in comparison to the 2017 Base Year. The worst performing arm are the Coppins Bridge North Exit Ahead (Lane 2/2 + 2/1), Circulatory (CW) (Lane 6/1) and Fairlee Road Entry Ahead (Lanes 7/2 + 7/1), as these arms record a DoS of over 90%.
- 6.6 Given the junction’s baseline residual capacity of 2.5% in the PM peak hour, it would be expected that the junction would exceed capacity in approximately 2020-2021, assuming a linear growth in traffic.

Scenarios A & B - Traffic Reassignment (High Street)

- 6.7 Scenarios A and B involve the closure of the High Street arm (one-way entry only) at the gyratory for eastbound traffic, which is part of an indicative proposal currently being considered. The consequence of this is that northbound and southbound traffic from the High Street is expected to use alternative routes away from the gyratory. For instance, it has been assumed that northbound traffic would travel **via St James’s Street and Hunnycross Way, then onto Medina Way (Scenario A), whilst southbound traffic would travel via St George’s Approach (via the new Trafalgar Road link) through St George’s roundabout, turning right and heading south along St George’s Way (Scenario B). Therefore, with the reassignment of this traffic, it is anticipated that this might alleviate some of the existing capacity issues, by taking traffic away from the gyratory. A route map of Scenarios A and B is shown in Figure 6.1 below, and the results of these scenarios are presented in Tables 6.5 – 6.8.**

Figure 6.1 Scenarios A & B – Diagram



Source: Ordnance Survey Mapping with WYG Annotations, March 2018

Table 6.5 **St George’s Way Signalled Junction – 2034 Scenarios A & B**

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Coppins Bridge South Entry Ahead Left	46.9%	5.3	20.0	54.8%	5.5	8.4
1/2 Coppins Bridge South Entry Right	85.1%	12.1	28.6	55.9%	9.7	14.4
2/1 East St Exit - Pyle St Ahead	9.6%	0.1	1.8	7.3%	0.0	1.7
6/1 Pyle St Entry Left	5.4%	0.0	2.4	10.7%	0.1	2.8
7/1 East St Entry Ahead	13.9%	0.1	2.9	11.6%	0.1	2.7
7/2 East St Entry Ahead	24.7%	0.2	3.2	33.0%	0.2	3.2
9/2 + 9/1 A3020 Entry Left Left2 Ahead	81.3 : 81.3%	14.3	29.6	76.8 : 76.8%	13.2	25.7
PRC	5.7%			17.2%		
Total Delay (pcu/hr)	17.14			10.06		



- 6.8 **For the St George’s Way Signalised Junction** (located at the southern end of the gyratory), the Future Year proposals with the High Street arm closed off indicate that this section of the gyratory is likely to operate with a PRC of 5.7% in the AM peak and a PRC of 17.2% in the PM peak.
- 6.9 The arms/lanes that experience the most significant capacity issues in comparison to the Base Year are Lane 1/2: Coppins Bridge South Entry Right and the A3020 arm (Lanes 9/2 + 9/1). These arms are forecast to have a DoS of 81.3% in the AM peak, whilst in the PM peak, a DoS of 76.8% is forecast on these arms. The longest queues are also experienced on these arms. This demonstrates that this junction is expected to perform worse than with the High Street arm operating at the junction, which is due to the reassignment of the eastbound High Street traffic travelling from the south instead (towards Fairlee Road / Staplers Road).

Table 6.6 Coppins Bridge Signalised Junction - 2034 Scenarios A & B

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Circulatory NB Three Ahead	80.4%	13.2	20.0	95.1%	24.9	51.3
1/2 Circulatory NB Three Ahead Right	88.8%	18.1	28.6	95.3%	30.8	56.2
1/3 Circulatory NB Three Right	6.9%	0.9	1.8	5.6%	0.8	12.9
2/1 Coppins Bridge North Circulatory Ahead	33.5%	2.0	2.4	65.4%	1.7	7.6
2/2 Coppins Bridge North Circulatory Right	6.9%	0.4	2.9	5.6%	0.1	3.6
3/1 Coppins Bridge North Entry Left Ahead	88.7%	16.1	3.2	96.5%	28.1	58.7
3/2 Coppins Bridge North Entry Ahead	81.1%	14.3	29.6	96.7%	29.9	61.1
4/2 + 4/1 Ahead Left Left2	36.4 : 36.4%	7.4	-	54.9 : 53.9%	10.2	19.7
4/3 Right	58.1%	16.4	16.2	100.5%	45.8	91.2
4/4 Right	63.1%	3.4	22.8	48.6%	2.4	9.2
6/1 Coppins Bridge North Circulatory Right	46.6%	3.1	14.1	42.4%	2.1	10.4
6/2 Coppins Bridge North Circulatory Right	83.5%	2.4	7.7	98.6%	12.3	54.4
7/1 Coppins Bridge North Entry Ahead	41.3%	3.4	7.1	49.2%	3.7	10.8
7/2 Coppins Bridge North Entry Ahead	65.2%	11.5	54.6	48.3%	7.0	19.2
8/1 + 8/2 Entry Coppins Bridge Car Park Ahead Left	0.0 : 1.2%	0.1	44.1	4.0 : 4.0%	0.2	5.9
PRC	5.7%			-11.7%		
Total Delay (pcu/hr)	17.14			100.35		

- 6.10 The Future Year results for the Coppins Bridge Signalised Junction are shown above in Table 6.6. This junction is forecast to operating within capacity issues in the 2034 Future Year with the existing junction design. With the High Street arm closed off at the junction, it appears that some arms/lanes



perform worse whilst others perform better, however overall there is generally a worsening in DoS and mean maximum queues, particularly on the Circulatory NB Lanes 1/1 and 1/2, and the Coppins Bridge North Entry Left Ahead (Lane 3/1).

- 6.11 Overall, there is a decrease in the PRC for the junction in the AM peak, whilst there is an improvement in the PM peak, in comparison to the existing junction. Despite there being a further decrease in PRC in the AM, this is considered not to be a significant decrease. However, mean maximum queues are expected to worsen compared to the existing junction. Queues are expected to worsen due to the reassignment of eastbound traffic (traffic to Fairlee Road / Staplers Road) from the High Street, instead travelling through the gyratory from the south.

Table 6.7 A3020 Medina Way Signalised Junction – 2034 Scenarios A & B

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Medina Way North Entry Ahead	85.6%	17.5	15.2	62.8%	3.0	3.7
1/2 Medina Way North Entry Ahead	59.1%	3.1	5.0	18.6%	0.4	1.7
2/1 A3054 Circulatory Right	54.1%	7.3	25.2	99.0%	18.8	113.3
2/2 A3054 Circulatory Right	86.9%	17.5	42.0	105.4%	28.2	186.3
4/2 + 4/1 Medina Way Entry Left Ahead	86.4 : 86.4%	19.7	16.2	105.5 : 105.5%	171.9	129.8
4/3 Medina Way Entry Ahead	41.3%	7.4	15.2	57.2%	11.5	10.8
PRC	3.6%			-17.2%		
Total Delay (pcu/hr)	21.17			96.60		

- 6.12 For the Medina Way Signalised Junction, Table 6.7 shows that there is not expected to be significant impact on this section of the gyratory as a result of the change at High Street. For instance, the overall PRC in the AM peak is forecast to be 3.5%, whilst in the PM peak, the PRC is forecast to be at -17.2%.

Table 6.8 Fairlee Road Signalised Junction – 2034 Scenarios A & B

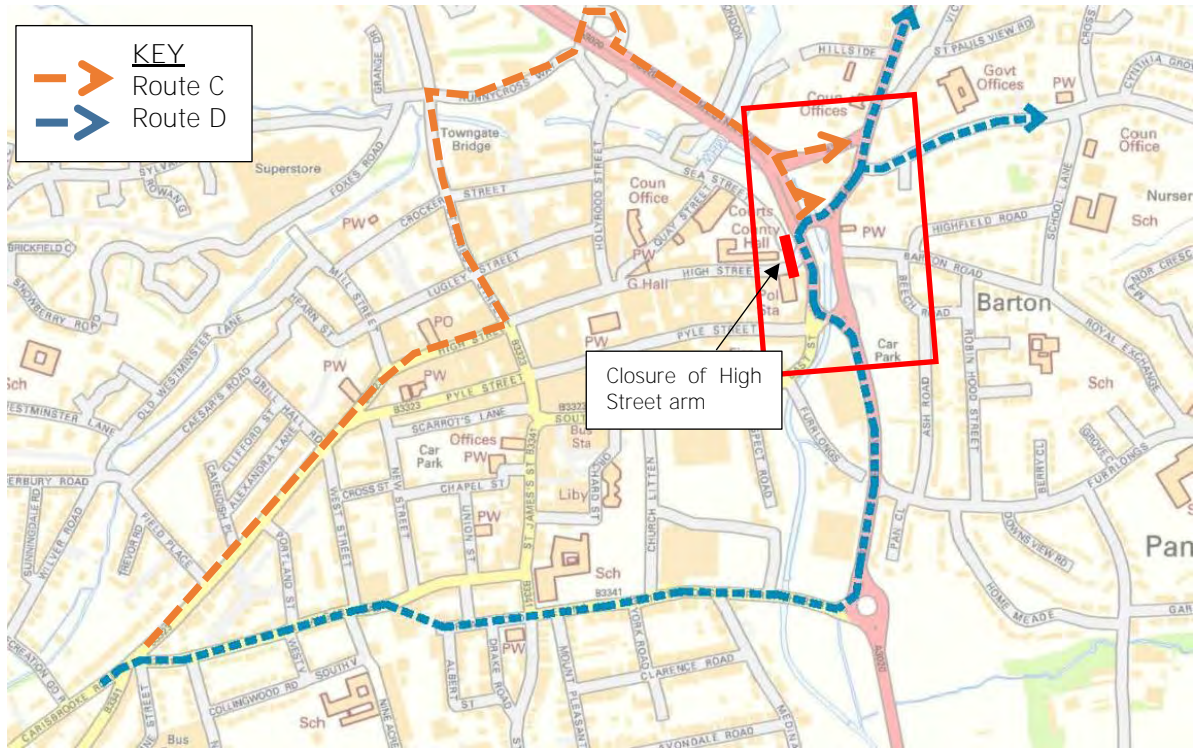
Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 A3054 Circulatory Left	53.8%	6.0	8.1	65.7%	8.9	11.9
2/2 + 2/1 Coppins Bridge North Exit Ahead Ahead2	45.0 : 45.0%	12.5	4.8	73.0 : 75.3%	11.8	8.2
3/2 + 3/1 Staplers Road Entry Left	72.8 : 72.8%	14.3	9.9	46.9 : 46.9%	5.5	7.4
5/1 Circulatory (CW) One Left Ahead	80.6%	8.2	65.8	72.2%	8.2	51.3
6/1 Circulatory (ACW) One Ahead	76.6%	7.6	84.3	82.3%	10.5	85.9
7/2 + 7/1 Fairlee Road Entry Ahead Right	87.8 : 87.8%	23.2	18.0	82.9 : 82.9%	18.2	15.4
PRC	2.5%			8.5%		
Total Delay (pcu/hr)	21.0			22.51		

- 6.13 For the Fairlee Road Signalised Junction, Table 6.8 shows that there forecast to be a further a slight improvement in PRC in the AM peak in comparison to the existing, whilst a more significant improvement in the PRC is forecast in the PM peak. This is forecast to be 2.5% in the AM and 8.5% in the PM, equivalent to a 2.7% improvement in the AM and a 18.5% improvement in the PM compared to the existing junction. There is also a general reduction in mean maximum queues across most arms.

Scenarios C & D - Traffic Reassignment (East Cowes / Ryde Traffic)

- 6.14 Scenarios C and D contemplate the reassignment of traffic going east towards East Cowes and Ryde, resulting from the closure of the High Street. This scenario assumes that 50% of traffic would travel east along Trafalgar Road, which is expected to use the new Trafalgar Road link leading to St Georges Way junction via Medina Avenue, but turn left to enter the Coppins gyratory, to access Fairlee Road and Staplers Road (in the direction of East Cowes and Ryde). This also takes into account 50% of East Cowes / Ryde traffic travelling north via St James' Street, and then south along Medina Way to access Fairlee Road and Staplers Road. A diagram of Scenario D is shown in Figure 6.2 below, whilst the results of this assessment are summarised in Table 6.9-6.12, with full output results included in Appendix A.
- 6.15 It is noted that Scenarios C and D, consider the full traffic reassignment resulting from the closure of the High Street, which includes Scenarios A and B, and thus this section considers the cumulative impact of the High Street proposals.

Figure 6.2 Scenarios C & D – Diagram



Source: Ordnance Survey Mapping with WYG Annotations, March 2018

Table 6.9 **St George’s Way Signalised Junction – 2034 Scenarios C & D**

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Coppins Bridge South Entry Ahead Left	57.1%	10.3	11.8	69.8%	5.4	13.0
1/2 Coppins Bridge South Entry Right	103.5%	42.5	119.4	75.4%	10.9	21.8
2/1 East St Exit - Pyle St Ahead	9.6%	0.1	1.8	6.9%	0.0	1.7
6/1 Pyle St Entry Left	5.0%	0.0	2.2	10.2%	0.1	2.6
7/1 East St Entry Ahead	19.4%	0.1	3.0	15.6%	0.1	2.9
7/2 East St Entry Ahead	19.1%	0.1	3.0	29.7%	0.2	3.1
9/2 + 9/1 A3020 Entry Left Left2 Ahead	102.0 : 102.0%	49.8	100.2	83.1 : 83.1%	16.4	21.0
PRC	-15.0%			8.3		
Total Delay (pcu/hr)	57.36			11.33		

6.16 For the St George’s Way Signalised Junction (located at the southern end of the gyratory), with the reassignment of traffic onto the gyratory via the A3020 from the south and Medina Way from the north, this section of the gyratory is likely to operate with a PRC of 15% in the AM peak and 8.3% in the PM peak.



6.17 The arms/lanes that experience the most significant capacity issues in comparison to the 2034 Base Year are Lane 1/2: Coppins Bridge South Entry Right and the A3020 arm (Lanes 9/2 + 9/1). These arms are forecast to have a DoS of 103.5% and 102.0%% in the AM peak, whilst in the PM peak, a DoS of 69.8%% and 83.1% is forecast on these arms. The longest queues are also experienced on these arms. This demonstrates that this junction is expected to perform slightly worse than in its current form.

Table 6.10 Coppins Bridge Signalised Junction - 2034 Scenarios C & D

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Circulatory NB Three Ahead	87.7%	14.2	26.6	101.8%	42.7	98.7
1/2 Circulatory NB Three Ahead Right	90.4%	30.2	39.8	102.0%	45.9	111.6
1/3 Circulatory NB Three Right	6.7%	0.9	8.4	6.5%	1.0	14.2
2/1 Coppins Bridge North Circulatory Ahead	38.8%	0.8	3.9	76.8%	4.2	13.8
2/2 Coppins Bridge North Circulatory Right	6.7%	0.1	2.5	6.5%	0.1	3.3
3/1 Coppins Bridge North Entry Left Ahead	90.2%	16.7	52.4	100.3%	32.8	86.3
3/2 Coppins Bridge North Entry Ahead	82.1%	14.5	40.0	107.9%	60.0	187.8
4/2 + 4/1 Ahead Left Left2	37.1 : 36.9%	5.5	10.3	52.4 : 49.8%	8.1	15.6
4/3 Right	61.9%	18.7	19.7	94.3%	31.7	51.9
4/4 Right	65.5%	2.9	7.6	48.6%	2.8	10.3
6/1 Coppins Bridge North Circulatory Right	39.4%	2.5	18.5	38.4%	2.5	13.5
6/2 Coppins Bridge North Circulatory Right	84.6%	2.6	19.0	102.2%	39.3	94.4
7/1 Coppins Bridge North Entry Ahead	43.2%	3.2	7.4	48.2%	3.4	10.1
7/2 Coppins Bridge North Entry Ahead	68.0%	9.8	16.1	48.7%	6.6	17.5
8/1 + 8/2 Entry Coppins Bridge Car Park Ahead Left	0.0 : 1.3%	0.1	12.3	4.0 : 4.0%	0.2	5.8
PRC	-0.4%			-19.9		
Total Delay (pcu/hr)	47.65			164.01		

6.18 With all High Street traffic reassigned, it appears that particular arms perform far worse than others with a significant increase in queueing and average delays. These arms/lanes include the Circulatory NB Three Ahead, Coppins Bridge North Entry Left and Coppins Bridge North Entry Ahead (Lanes 1/1, 1/2, 3/1 and 7/2). Overall, there is also a significant worsening in the PRC in both peak periods, in comparison to the existing junction.



Table 6.11 A3020 Medina Way Signalised Junction – 2034 Scenarios C & D

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Medina Way North Entry Ahead	85.1%	12.5	12.2	67.0%	3.2	4.2
1/2 Medina Way North Entry Ahead	50.0%	2.3	3.4	13.9%	0.1	1.5
2/1 A3054 Circulatory Right	87.6%	15.2	45.3	105.6%	26.4	186.2
2/2 A3054 Circulatory Right	69.4%	11.0	34.8	105.1%	25.9	180.3
4/2 + 4/1 Medina Way Entry Left Ahead	87.5 : 87.5%	19.9	15.6	111.7 : 111.7%	214.5	225.0
4/3 Medina Way Entry Ahead	42.6%	7.3	13.3	61.5%	12.2	10.9
PRC	2.7%			-24.1%		
Total Delay (pcu/hr)	21.46			155.21		

6.19 For the Medina Way Signalised Junction, as shown in Table 6.11, there is expected to be a worsening in the DoS and queueing, particularly in the PM peak, on the A3054 Circulatory Right and Medina Way Entry Left Ahead lanes. The PRC further decreases in both peak periods to 2.7% in the AM and -24.1% in the PM.

Table 6.12 Fairlee Road Signalised Junction – 2034 Scenarios C & D

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 A3054 Circulatory Left	56.4%	7.9	9.1	71.0%	11.3	14.8
2/2 + 2/1 Coppins Bridge North Exit Ahead Ahead2	51.8 : 51.3%	4.3	5.5	86.3 : 91.0%	17.8	16.1
3/2 + 3/1 Staplers Road Entry Left	73.1 : 73.1%	13.4	9.8	48.7 : 48.7%	5.9	8.3
5/1 Circulatory (CW) One Left Ahead	81.0%	7.9	64.2	67.3%	7.7	43.2
6/1 Circulatory (ACW) One Ahead	85.7%	8.9	87.8	89.5%	13.2	90.8
7/2 + 7/1 Fairlee Road Entry Ahead Right	88.2 : 88.2%	22.3	18.2	85.5 : 85.5%	18.7	17.8
PRC	2%			-1.1%		
Total Delay (pcu/hr)	22.32			29.05		

6.20 For the Fairlee Road Signalised Junction, as shown in Table 6.12, there is expected to be a slight improvement in the DoS across the majority of lanes, during the AM and PM peaks, in comparison to the existing junction.



Future Year – High Street (Westbound)

- 6.21 In terms of junction improvements, a scenario has been tested whereby the High Street arm would become an exit only arm for westbound traffic, which is the reverse of its current configuration. As part of this scenario, it has been assumed that 75% of the traffic currently exiting the gyratory via Pyle Street would be reassigned to the westbound only High Street arm, whilst 25% of East Street traffic and 10% of Medina Way would also be reassigned to this exit arm. It is hoped that this improvement will provide more capacity on the gyratory, by taking some traffic away from it. For robustness, this scenario also considers the traffic reassignment as modelled in Scenarios C and D.
- 6.22 Other improvements include changing the lane configuration on the gyratory to improve lane discipline of traffic travelling through the gyratory, for instance, on the eastern circulatory arm (Lanes 5/2 and 5/3) allowing two lanes of traffic to travel ahead. This lane configuration has been modelled alongside the westbound High Street scenario. As previously shown, the results have been split into four separate junctions shown in Tables 6.13 – 6.16.

Table 6.13 **St George’s Way Signalised Junction – 2034 Scenarios C & D**

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Coppins Bridge South Entry Ahead Left	23.8%	2.4	8.5	31.5%	2.0	0.4
1/2 Coppins Bridge South Entry Right	88.6%	17.4	27.6	69.1%	15.3	2.5
2/1 East St Exit - Pyle St Ahead	2.4%	0.0	1.6	1.6%	0.0	0.0
6/1 Pyle St Entry Left	5.8%	0.0	2.6	11.0%	0.1	0.1
7/1 East St Entry Ahead	15.0%	0.1	3.1	10.4%	0.1	0.1
7/2 East St Entry Ahead	31.8%	0.2	4.0	38.2%	0.3	0.3
9/2 + 9/1 A3020 Entry Left Left2 Ahead	86.4 : 86.4%	14.8	44.4	79.8 : 79.8%	13.8	7.9
PRC	1.6%			12.8%		
Total Delay (pcu/hr)	19.47			10.70		

- 6.23 For the St George’s Way Signalised Junction (located at the southern end of the gyratory), the standalone junction improvements for the Future Year as shown in Table 6.13 indicate that this section of the gyratory is likely to operate with a PRC of 1.6% in the AM peak and a PRC of 12.8% in the PM peak. In comparison to the existing Future Year scenario, the proposed High Street scenario and lane reconfiguration causes this section of the gyratory to perform worse, in particular on Lane 1/2 Coppins Bridge South Entry Right and Lanes 9/2 + 9/1 A3020 Entry Left / Ahead, recording a DoS of 88.6% and 86.4% respectively. However, some of the other lanes do perform better than the existing scenario, recording lower DoS.
- 6.24 In comparison to the 2034 Future Year (Existing Junction), there is quite a substantial reduction in the PRC, with a 10.5% decrease in the AM and a 27.7% decrease in the PM.



Table 6.14 Coppins Bridge Signalised Junction - 2034 Scenarios C & D

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Ahead Left	94.4%	24.8	35.7	103.6%	49.9	121.8
1/2 Ahead Right	93.6%	22.3	29.8	103.0%	50.3	122.1
1/3 Right	4.4%	0.5	11.6	3.4%	0.5	15.9
2/1 Circulatory NB Three Ahead	23.7%	1.5	7.2	52.3%	1.6	6.8
2/2 Circulatory NB Three Ahead	4.2%	0.2	6.6	3.2%	0.1	4.2
2/3 Circulatory NB Three Ahead	93.0%	17.4	68.9	103.9%	42.7	132.4
3/1 Coppins Bridge North Circulatory Ahead	85.9%	14.9	51.1	104.2%	46.1	137.7
3/2 Coppins Bridge North Circulatory Right	33.6 : 33.6%	7.1	11.3	49.3 : 47.9%	9.4	18.1
4/1 Coppins Bridge North Entry Left Ahead	43.9%	13.0	15.4	76.8%	23.3	32.8
4/2 Coppins Bridge North Entry Ahead	80.9%	6.5	11.2	65.5%	5.2	11.7
5/2+5/1 Ahead Left Left2	46.0%	2.1	16.2	42.6%	1.8	11.0
5/3 Right	88.7%	3.6	28.4	102.2%	39.2	95.4
5/4 Right	31.8%	2.5	6.1	38.3%	2.9	9.0
7/1 Coppins Bridge North Circulatory Right	78.6%	14.4	16.2	58.4%	8.3	16.3
7/2 Coppins Bridge North Circulatory Right	0.0 : 1.4%	0.1	12.9	3.8 : 3.8%	0.2	4.3
8/1 Coppins Bridge North Entry Ahead	94.4%	24.8	35.7	103.6%	49.9	121.8
8/2 Coppins Bridge North Entry Ahead	93.6%	22.3	29.8	103.0%	50.3	122.1
9/1 + 9/2 Entry Coppins Bridge Car Park Ahead Left	4.4%	0.5	11.6	3.4%	0.5	15.9
PRC	-4.9%			-15.7%		
Total Delay (pcu/hr)	52.51			1593.35		

6.25 The results at the Coppins Bridge Signalised Junction are shown above in Table 6.14. In the AM peak, a PRC of -4.9% is forecast, whilst in the PM peak, this is forecast as -15.7%. This equates to a decrease in the PRC of 11.2% in the AM peak and a decrease of 2% in the PM peak, in comparison to the existing junction. There is also a reduction in the total delay across this section of the gyratory.



Table 6.15 A3020 Medina Way Signalised Junction – 2034 Scenarios C & D

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Medina Way North Entry Ahead	53.6%	1.9	4.5	41.1%	0.5	2.3
1/2 Medina Way North Entry Ahead	68.7%	3.9	5.6	29.0%	0.5	1.9
2/1 A3054 Circulatory Right	59.7%	8.1	27.1	80.4%	10.1	49.1
2/2 A3054 Circulatory Right	80.4%	14.6	42.3	100.2%	21.2	122.3
4/2 + 4/1 Medina Way Entry Left Ahead	78.8 : 78.8%	14.0	11.2	103.2 : 103.2%	109.5	95.7
4/3 Medina Way Entry Ahead	38.5%	6.7	13.2	58.1%	11.9	11.4
PRC	12.0%			-14.7%		
Total Delay (pcu/hr)	15.41			64.01		

6.26 For the Medina Way Signalised Junction, Table 6.15 shows that there is a slight improvement in the DoS on some of the lanes, however there is a more substantial improvement in the queuing in comparison to the existing junction. The PRC is recorded as 12% in the AM peak and -14.7% in the PM peak, which equates to an increase of 8.4% in the PRC in the AM and a decrease of 0.2% in the PM, when compared to the existing junction.

Table 6.16 Fairlee Road Signalised Junction – 2034 Scenarios C & D

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 A3054 Circulatory Left	52.5%	7.5	10.3	64.6%	8.4	12.2
2/2 + 2/1 Coppins Bridge North Exit Ahead Ahead2	39.2 : 39.2%	10.8	7.5	66.6 : 68.8%	11.5	7.6
3/2 + 3/1 Stappers Road Entry Left	77.3 : 77.3%	17.7	13.6	47.8 : 47.8%	6.3	8.0
5/1 Circulatory (CW) One Left Ahead	87.1%	11.7	67.5	81.8%	10.5	58.6
6/1 Circulatory (ACW) One Ahead	43.4%	4.8	57.5	65.0%	7.8	71.1
7/2 + 7/1 Fairlee Road Entry Ahead Right	88.9 : 88.9%	23.2	19.6	81.6 : 81.6%	16.2	14.2
PRC	1.3%			10.0%		
Total Delay (pcu/hr)	22.31			20.92		

6.27 For the Fairlee Road Signalised Junction, Table 6.16 shows that there is a significant improvement in the DoS across all lanes, with recordings below the 90% threshold. This section of the gyratory is expected to operate with a PRC of 1.3% in the AM and a PRC of 10.0% in the PM, which equates to an increase of 1.5% in capacity in the AM and 20% in the PM, compared to the existing junction. It is



noted that this section of the gyratory is expected to perform better due to the removal of some eastbound traffic flows from the High Street arm to the Fairlee Road arm.

Existing Junction – Proposed Amendments

- 6.28 In the absence of any benefit gained from closing High Street to eastbound traffic, it is believed that some improvements in capacity could be gained by improvements to lane discipline on the junction, which would lead to a more efficient use of the space available.
- 6.29 A revised model has been run that includes the following improvements:
- Alterations to Medina Way approach to junction to allow vehicles to use both lanes to head **south towards St George’s Way** by changing on-lane directional markings;
 - Widening the outside lane across the bridge on the gyratory (across the northern bridge) from 2.7m to 3m to facilitate flow for two straight ahead lanes, using the existing paved section of the verge; and
 - **Two-lane exit, merging into one lane, onto St George’s Way, to allow two lanes of through traffic.**
- 6.30 This would allow a more efficient use of Medina Way on the approach to the junction, as traffic heading south would be able to use both lanes to do so.

Table 6.17 **St George’s Way Signalised Junction – 2034 Future Year Assessment**

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Coppins Bridge South Entry Ahead Left	43.3%	6.2	6.2	65.0%	5.8	10.1
1/2 Coppins Bridge South Entry Right	73.0%	12.4	9.7	59.4%	9.1	10.7
2/1 East St Exit - Pyle St Ahead	10.8%	0.1	1.8	7.3%	0.0	1.7
6/1 Pyle St Entry Left	5.6%	0.0	2.5	10.5%	0.1	2.7
7/1 East St Entry Ahead	11.5%	0.1	2.8	12.3%	0.1	2.7
7/2 East St Entry Ahead	27.1%	0.2	3.3	31.7%	0.2	3.1
9/2 + 9/1 A3020 Entry Left Left2 Ahead	82.8%	13.9	36.6	59.5%	8.6	18.5
PRC	10.0%			38.5%		
Total Delay (pcuhr)	12.03			7.28		

- 6.31 **For the St George’s Way Signalised Junction (located at the southern end of the gyratory), the Future Year results indicate that this section of the gyratory will operate with a PRC of 10.0% in the AM peak and a PRC of .5% in the PM peak. This represents an improvement in the AM peak hour and a slight reduction in capacity in the PM peak hour, although it is still operating comfortably within capacity.**



Table 6.18 Coppins Bridge Signalised Junction - 2034 Future Year Assessment

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Ahead	83.5%	3.9	11.4	90.5%	5.6	21.5
1/2 Ahead Right	84.3%	19.7	10.6	90.7%	8.4	20.1
1/3 Right	4.8%	0.0	2.4	3.7%	0.0	3.6
2/1 Circulatory NB Three Ahead	80.5%	18.7	21.6	86.4%	18.1	32.7
2/2 Circulatory NB Three Ahead	82.0%	23.9	25.4	87.5%	23.9	40.8
2/3 Circulatory NB Three Ahead	4.4%	0.6	7.5	3.3%	0.5	16.0
3/1 Coppins Bridge North Circulatory Ahead	45.8%	7.9	13.8	99.2%	39.9	70.7
3/2 Coppins Bridge North Circulatory Right	21.0%	5.4	20.9	33.0%	7.7	28.3
4/2 + 4/1 High St Entry Left Ahead	55.8%	10.1	11.2	64.9%	13.5	10.8
4/3 High St Entry Ahead	34.5%	4.6	58.4	35.2%	4.2	29.2
5/1 Coppins Bridge North Entry Left Ahead	80.9%	13.9	50.3	99.8%	33.2	84.9
5/2 Coppins Bridge North Entry Ahead	79.9%	14.4	48.4	99.1%	33.5	80.3
6/2 + 6/1 Ahead Left Left2	46.2%	13.7	20.4	76.2%	21.6	37.2
6/3 Right	62.1%	20.6	22.0	100.7%	47.4	94.2
6/4 Right	64.2%	2.5	6.6	44.9%	1.8	7.1
8/1 Coppins Bridge North Circulatory Right	61.1%	7.8	38.1	69.8%	12.2	32.4
8/2 Coppins Bridge North Circulatory Right	84.6%	3.6	22.6	100.8%	38.1	76.3
9/1 Coppins Bridge North Entry Ahead	42.1%	8.8	9.3	48.1%	9.9	17.2
9/2 Coppins Bridge North Entry Ahead	66.3%	8.1	14.2	44.4%	4.3	15.8
10/1 Ahead	49.4%	7.4	30.2	56.6%	10.6	23.6
10/2 Ahead	26.5%	3.6	26.4	28.9%	4.5	19.0
11/1 + 11/2 Entry Coppins Bridge Car Park Ahead Left	1.3%	0.1	21.6	4.0%	0.2	6.3
PRC	6.3%			-11.9%		
Total Delay (pcu/hr)	62.66			154.44		

6.32 The central section of the junction operates at the same level of capacity as the existing junction in 2034; however, in the PM, the PRC is reduced from -12.4% to -11.9% so that although it operates over capacity, there is an improvement when compared with the existing arrangement.



Table 6.19 A3020 Medina Way Signalised Junction – 2034 Future Year Assessment

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 Medina Way North Entry Ahead	82.9%	4.1	10.4	62.9%	2.0	4.3
1/2 Medina Way North Entry Ahead	66.0%	7.2	8.5	24.6%	1.0	3.3
2/1 A3054 Circulatory Right	55.9%	7.7	24.5	95.9%	17.3	84.9
2/2 A3054 Circulatory Right	89.7%	19.0	54.2	95.4%	17.2	100.1
4/2 + 4/1 Medina Way Entry Left Ahead	76.5%	10.7	10.1	102.0%	73.3	77.3
4/3 Medina Way Entry Ahead	41.3%	7.4	14.7	59.0%	12.2	12.1
PRC	0.4%			-13.3%		
Total Delay (pcu/hr)	20.41			59.30		

6.33 The northern section of the junction operates at the same level of capacity as the existing junction in 2034; however, in the PM, the PRC is reduced from -14.5% to -13.3% so that although it operates over capacity, there is an improvement when compared with the existing arrangement.



Table 6.20 Fairlee Road Signalised Junction – 2034 Future Year Assessment

Arm Cycle time 97 secs	AM peak			PM peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 A3054 Circulatory Left	50.8%	8.6	9.6	67.5%	13.3	18.1
2/2 + 2/1 Coppins Bridge North Exit Ahead Ahead2	52.8%	13.0	7.7	99.0%	57.8	66.3
3/2 + 3/1 Staplers Road Entry Left	74.8%	15.5	11.5	49.0%	6.4	8.8
5/1 Circulatory (CW) One Left Ahead	71.1%	7.4	52.2	56.4%	6.5	39.5
6/1 Circulatory (ACW) One Ahead	90.2%	11.8	104.2	97.4%	19.3	101.9
7/2 + 7/1 Fairlee Road Entry Ahead Right	90.2%	26.0	21.9	87.7%	22.5	21.4
PRC	-0.2%			-10.0%		
Total Delay (pcu/hr)	26.29			53.17		

- 6.34 There is no change to the operation of the Fairlee Road section of the junction with the proposed amendments.
- 6.35 **Consequently, overall the junction’s PRC reduces from -14.5% to -13.3%**, with the improvements to capacity coming in the Medina Way sector and in the central area of the gyratory. It is therefore considered beneficial to reconfigure the lanes to allow two lanes of traffic to proceed straight ahead **from Medina Way to St George’s Way**.

Alternative Options

- 6.36 A number of alternative options have been tested for the junction to determine whether they would have a beneficial impact on the capacity of the junction. These included:
- Removal of all signals at the junction;
 - Closure of link in both directions between Staplers Road and Fairlee Road, diverting Fairlee Road traffic to a new all-movements junction with Medina Way;
 - Closure of link to southbound traffic between Staplers Road and Fairlee Road, diverting southbound traffic to the junction of Fairlee Road and Medina Way, with a left-turn introduced; and
 - The removal of pedestrian signals around High Street and Barton Road.
- 6.37 The scheme which tested the removal of all signals at the junctions showed that there would be significant increases in queue lengths and delays on all arms of the junction, and consequently this proposal has been rejected.
- 6.38 Both schemes which tested a closure of the link between Staplers Road and Fairlee Road, either closing it completely or allowing northbound traffic only, led to an overall decrease in performance of the junction. The resulting increase in traffic at the Medina Way/Fairlee Road junction and the need for additional turning movements to be made possible would lead to significantly greater queuing on Medina Way on the approach to Coppins Bridge gyratory.
- 6.39 The removal of the pedestrian crossings has a minor beneficial effect local to the central section of the gyratory. However, the capacity issues at the northern end of the junction remain (particularly around Medina Way and Fairlee Road) and it is not considered that the benefits of the removal of the



crossing would be worth the impact on pedestrians and other non-motorised users. Therefore, this option has not been considered further.

Outcome / Conclusions – Junction 2

- 6.40 The outcome of the traffic modelling for the gyratory indicates that at present, sections of the gyratory already operate over maximum capacity in one peak or even both peak periods. Therefore, as indicated by the 2034 Future Year scenario, the situation further exacerbates as a result of the predicted traffic growth. For the Future Year scenario, the existing junction layout was tested as well as a potential design option whereby the High Street arm no longer operates at the junction and is closed off. The likely impact of this is that the traffic that would normally use the High Street would travel along **St George's Approach, then through the** gyratory in order to travel northbound, onto Medina Way.
- 6.41 It has also been assumed that 50% of traffic travelling to East Cowes and Ryde would travel along **St George's Approach onto the gyratory to access Fairlee Road and Staplers, whilst the other 50% would travel via St James' Street, onto Medina Way travelling south onto the gyratory. With this traffic** reassigned onto the gyratory as well, the gyratory as a whole performs much worse than in comparison with the existing junction. It is noted that the impact resulting from the closure of the High Street arm should be treated as a worst-case scenario. An alternative design option was also tested to determine whether this may alleviate capacity issues on the gyratory. This design option involved changing the configuration of the High Street arm, to an exit only arm for westbound traffic as well as changing the lane configuration on the gyratory. It was found that with this design option, the gyratory system performed better than the existing junction by taking some traffic away from the gyratory. Therefore, this option is the better scenario in comparison to the other design scenarios tested, as it provides a general improvement in capacity across the gyratory.
- 6.42 Minor adjustments to improve lane discipline have been proposed, with signal times optimised separately for the AM and PM peaks. Whilst the junction would continue to operate over capacity, there would be an improvement when compared with the existing arrangements, with queues on Medina Way and on the gyratory reduced.



7 Junction 3 - Future Year Modelling

7.1 For comparison purposes, the existing junction has been tested in the Future Year 2034 as to determine how the junction would operate without any alterations. The Future Year results for the existing junction are summarised in Table 7.1, with full output results included in Appendix B.

Table 7.1 Future Year Assessment: Existing Junction

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 + 1/2 – Hunnyhill	81.9%	7.3	38.8	84.0%	6.5	38.8
2/1 + 2/2 – Hunnycross Way	54.1%	5.0	21.5	81.6%	8.8	36.4
3/1 – St James St	49.8%	3.7	29.1	52.3%	4.8	22.9
4/1 + 4/2 – Vicarage Walk	83.7%	10.8	32.6	89.3%	10.8	48.6
PRC	7.6%			0.8%		
Total Delay (pcu/hr)	14.56			19.21		

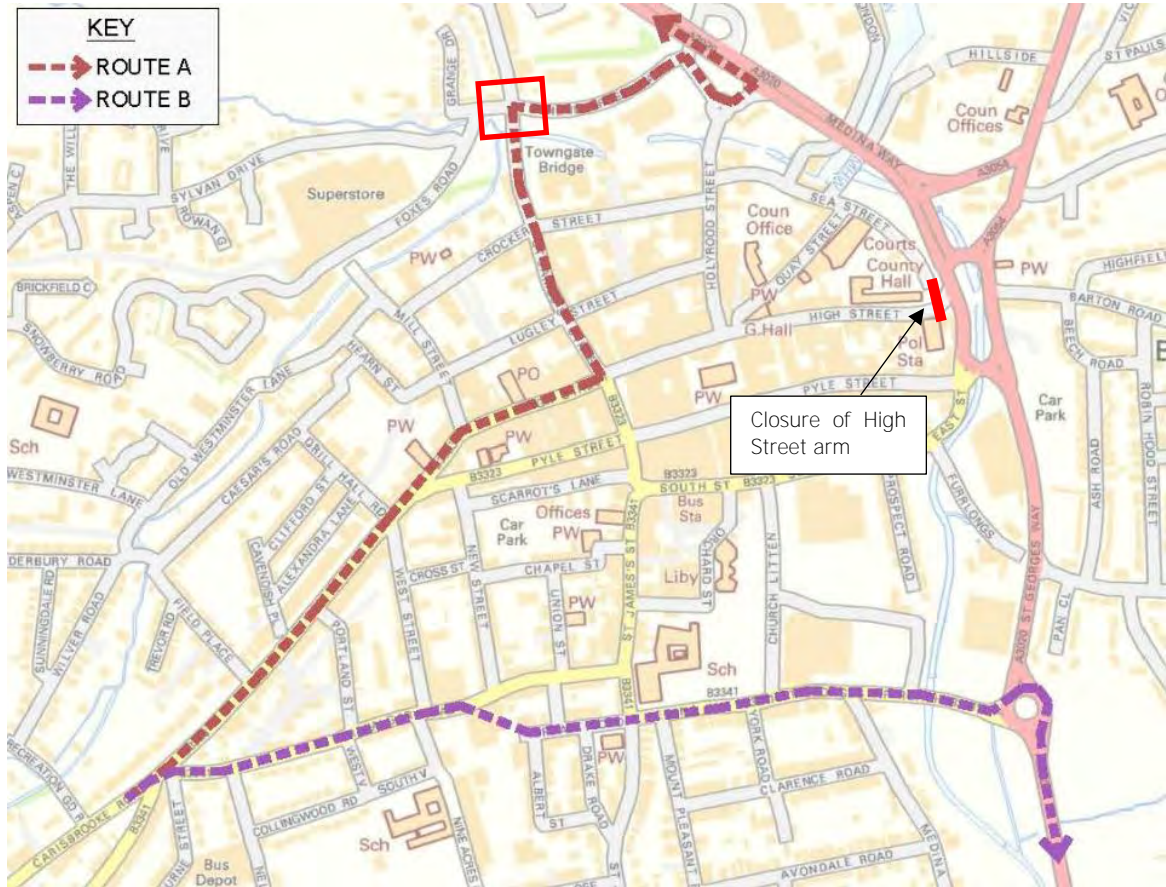
7.2 Without any alterations to the junction, the Future Year assessment shows that the junction would operate with marginal capacity in the AM and PM Peaks, with a PRC of 7.6% recorded in the AM and a PRC of 0.8% recorded in the PM. Some arms are close to reaching a DoS of 90% in both peaks, in particular the Hunnyhill and Vicarage Walk arms. Therefore, it is concluded that the junction would be very close to reaching optimum capacity if the junction remains in its existing form, however the junction would still effectively operate without any major queuing or capacity issues, with all arms performing under the DoS threshold of 90%.

Scenarios A & B - Traffic Reassignment (High Street)

7.3 Scenarios A and B involve the closure of the High Street arm (one-way entry only) at the gyratory for eastbound traffic, which is part of an indicative proposal currently being considered. The consequence of this is that northbound and southbound traffic from the High Street is expected to use alternative routes away from the gyratory. For instance, it has been assumed that northbound traffic would travel **via St James’s Street and Hunnycross Way, then onto Medina Way (Scenario A), whilst southbound traffic would travel via St George’s Approach (via the new Trafalgar Road link) through St George’s roundabout, turning right and heading south along St George’s Way (Scenario B).** It is noted that Scenario A would have an impact on the Hunnyhill / Hunnycross junction. A diagram of Scenario A is shown in Figure 7.1 below, whilst the results of this assessment are summarised in Table 7.2, with full output results included in Appendix B. Scenario B is also shown on Figure 7.1 for information, however this scenario does not have an impact on the junction.



Figure 7.1 Scenario A & B – Diagram



Source: Ordnance Survey Mapping with WYG Annotations, March 2018

Table 7.2 2034 Scenario A: Existing Junction

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 + 1/2 – Hunnyhill	81.9%	7.3	38.5	87.9%	7.4	44.7
2/1 + 2/2 – Hunnycross Way	54.1%	5.0	21.5	81.6%	8.8	36.4
3/1 – St James St	80.1%	6.5	47.2	64.2%	6.2	26.4
4/1 + 4/2 – Vicarage Walk	83.7%	10.8	32.6	89.3%	10.8	48.6
PRC	7.6%			0.8%		
Total Delay (pcu/hr)	16.55			20.80		

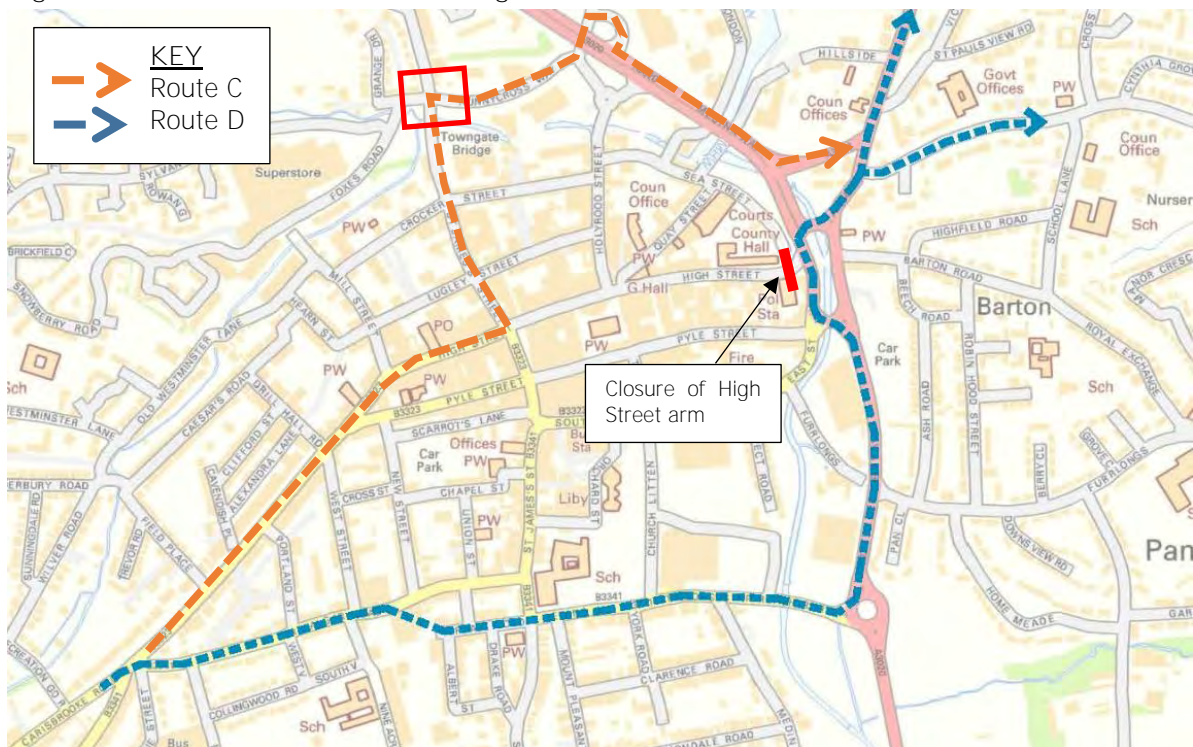
7.4 With the traffic reassignment as part of Scenario A, the existing junction is expected to operate with at the same level of capacity, for instance the PRC for the AM Peak is still recorded at 7.6%, whilst for the PM Peak, the PRC remains at 0.8%, however there is a slight increase in the total delay in both peaks. A proposed junction design has been tested which is expected to provide additional capacity accommodating the extra traffic resulting from the reassignment. The results of this assessment are summarised in Table 7.1 in the following section.



Scenarios C & D – Traffic Reassignment (East Cowes / Ryde Traffic)

- 7.5 Scenarios C and D contemplate the reassignment of traffic going east towards East Cowes and Ryde, resulting from the closure of the High Street. As in Scenario A, this scenario comprises traffic travelling **along Carisbrooke Road and St James’s Street before entering the Hunnyhill / Hunnycross Way junction**. For the purpose of these scenarios, it has been assumed that of the traffic travelling to East Cowes and Ryde, **50% is likely to travel via Carisbrooke Road and St James’s Street as an alternative route**, whilst the other 50% is likely to travel via Trafalgar Road and Medina Avenue, before travelling north towards the gyratory, then onto Fairlee Road / Staplers Road. These two routes have been split into Scenarios C and D, in respect of the Hunnyhill / Hunnycross Way junction, it is Scenario C (Route C) which impacts on the junction.
- 7.6 As opposed to Scenario A, this traffic would use the eastbound slip road to turn left into Medina Way and take the first exit in order to get to Fairlee Road and follow the A3020 northbound. It is noted that this scenario also includes the traffic reassignment in Scenario A. A diagram of Scenario C is shown in Figure 7.2 below, whilst the results of this assessment are summarised in Table 7.3, with full output results included in Appendix B. Scenario D is also shown in Figure 7.2 for information, however this scenario does not have an impact on the junction.

Figure 7.2 Scenarios C & D – Diagram



Source: Ordnance Survey Mapping with WYG Annotations, March 2018



Table 7.3 2034 Scenario C: Existing Junction (100% East)

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 + 1/2– Hunnyhill	65.0%	5.1	23.3	65.9%	4.2	22.1
2/1 + 2/2 – Hunnycross Way	68.6%	6.1	30.2	98.1%	16.4	87.4
3/1 – St James St	106.0%	27.9	175.8	103.7%	30.4	133.9
4/1 + 4/2 – Vicarage Walk	107.5%	36.3	190.0	106.9%	29.5	189.2
PRC	-19.5%			-18.8%		
Total Delay (pcu/hr)	60.24			64.90		

7.7 The impact of Scenario C indicates that the existing junction is expected to operate with worsened capacity, for instance, the PRC for the AM Peak is recorded at -19.5%, whilst for the PM Peak, the PRC is recorded as -18.8%. This is based on the assumption that all reassigned traffic would travel east via Hunnycross Way, to then travel north or south via Medina Way, which is evidently a worse case assessment.

7.8 In realistic conditions, some traffic would also travel north via Hunnyhill, and therefore a scenario has been tested whereby 50% of traffic of northbound traffic travels via Hunnyhill, whilst the other 50% would travel via Hunnycross Way. The results of this assessment are presented in Table 7.4.

Table 7.4 2034 Scenario C: Existing Junction (50% North, 50% East)

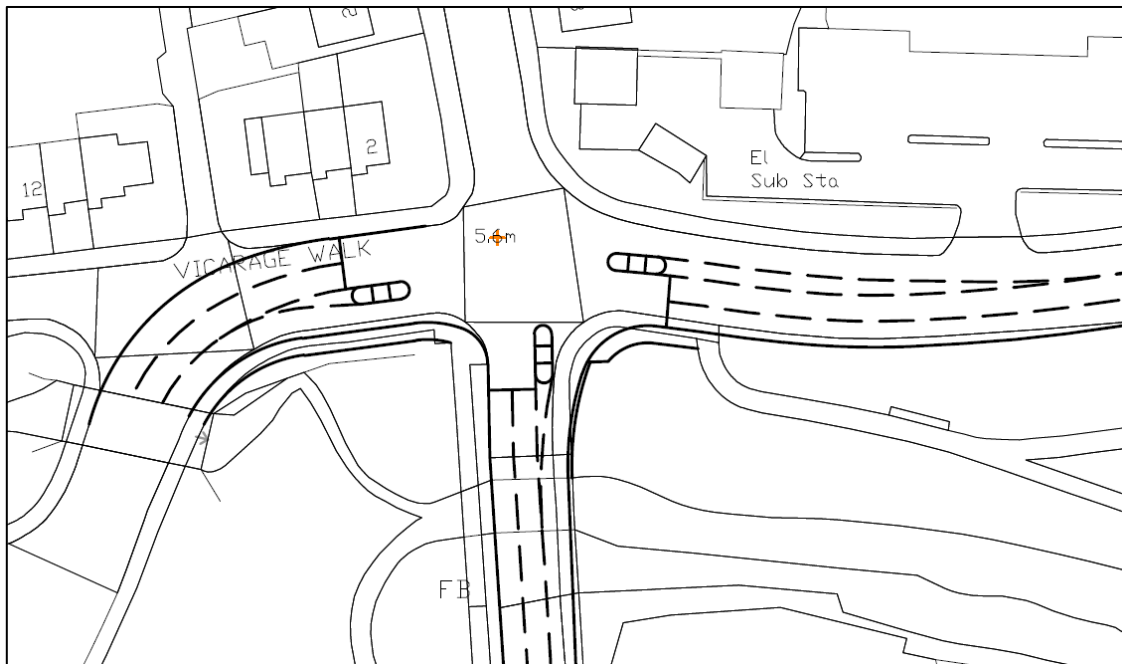
Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 + 1/2– Hunnyhill	67.8%	5.4	25.3	75.3%	4.9	27.7
2/1 + 2/2 – Hunnycross Way	65.1%	5.9	28.0	91.6%	11.6	54.8
3/1 – St James St	102.0%	21.0	128.5	106.4%	36.8	170.1
4/1 + 4/2 – Vicarage Walk	101.7%	24.2	114.6	100.3%	18.9	108.2
PRC	-13.3%			-18.3%		
Total Delay (pcu/hr)	41.33			56.53		

7.9 Table 7.4 indicates that there is a slight improvement in the PRC for this Scenario, with the PRC recorded as -13.3% in the AM peak and -18.3% in the PM peak. However, there is not a significant difference in comparison to the previous Scenario in Table 3.5, with the junction still remaining far over capacity.

Proposed Scheme

- 7.10 A proposed scheme has been considered for the junction. This includes widening the southern arm; **St James' Street** to two lanes, to provide a designated lane for right turners which is expected to alleviate queuing at the junction approach. The arm becomes consistent with all other arms at the junction which currently comprise two-lane approaches. This scheme is based upon the proposed layout shown in Figure 5.3 within the Newport Traffic Model Update. It is hoped that this proposal might help accommodate the additional traffic resulting from the reassignment of traffic from the High Street, as demonstrated in Figures 7.1 and 7.2 (Scenarios A and C).
- 7.11 The scheme is illustrated on Figure 7.3. A detailed drawing is provided at Appendix F.

Figure 7.3 Proposed Scheme – Junction 3



- 7.12 The Future Year results for the proposed junction design are summarised in Table 7.5-7.9, with full output results included in Appendix B. As for the existing junction, as well as the baseline scenario, Scenarios A and C have been tested as to determine how much benefit the proposed scheme provides and whether it can accommodate the additional traffic resulting from the reassignment of traffic.



2034 Baseline Traffic

Table 7.5 2034 Baseline Traffic: Proposed Junction

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 + 1/2– Hunnyhill	81.9%	7.3	36.5	75.9%	5.9	30.5
2/1 + 2/2 – Hunnycross Way	54.1%	5.0	21.5	68.5%	7.1	25.4
3/1 – St James St	34.1%	2.4	24.5	52.2%	4.0	26.7
3/2 – St James St (Right Turn)	36.4%	1.2	40.3	28.7%	1.1	32.6
4/1 + 4/2 – Vicarage Walk	83.7%	10.8	32.6	73.2%	7.6	27.4
PRC	7.6%			18.6%		
Total Delay (pcu/hr)	14.26			14.06		

- 7.13 As shown in Table 7.5, in the Future Year, the proposed junction design is expected to provide greater capacity in the PM Peak in comparison to the existing junction layout, with a PRC of 18.6% recorded which equates to an increase of 17.8% in capacity, whilst capacity is expected to remain the same in the AM peak. As a result, the proposed junction design would provide a significant improvement in junction capacity for the Future Year

Scenario A – Traffic Reassignment (Northbound High Street)

Table 7.6 2034 Scenario A: Proposed Junction (100% East)

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 + 1/2– Hunnyhill	81.9%	7.3	36.5	75.9%	5.9	30.5
2/1 + 2/2 – Hunnycross Way	54.1%	5.0	21.5	68.5%	7.1	25.4
3/1 – St James St	34.1%	2.4	24.5	55.0%	4.3	27.3
3/2 – St James St (Right Turn)	72.8%	3.2	60.5	62.0%	3.1	43.2
4/1 + 4/2 – Vicarage Walk	83.7%	10.8	32.6	73.2%	7.6	27.4
PRC	7.6%			18.6%		
Total Delay (pcu/hr)	15.83			14.91		

- 7.14 As shown in Table 7.6, the junction would be able to accommodate the additional traffic as part of the Scenario A traffic reassignment.
- 7.15 As previously tested for the existing junction, the above scenario assumes that all reassigned traffic would travel via Hunnycross Way then onto Medina Way, which is a worst-case assessment. Realistically, some traffic would also travel north via Hunnyhill, thus the below scenario assumes that



50% of reassigned traffic would travel north via Hunnyhill, whilst the other 50% would travel via Hunnycross Way. The results of this are shown in Table 7.7.

Table 7.7 2034 Scenario A: Proposed Junction (50% North, 50% East)

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 + 1/2– Hunnyhill	81.9%	7.3	36.5	75.9%	5.9	30.5
2/1 + 2/2 – Hunnycross Way	54.1%	5.0	21.5	68.5%	7.1	25.4
3/1 – St James St	40.7%	2.9	25.4	59.4%	4.8	28.5
3/2 – St James St (Right Turn)	58.8%	2.2	49.2	42.4%	1.8	35.8
4/1 + 4/2 – Vicarage Walk	83.7%	10.8	32.6	73.2%	7.6	27.4
PRC	7.6%			18.6%		
Total Delay (pcu/hr)	15.29			14.88		

7.16 As shown in Table 7.7 in the Future Year, the above scenario indicates that the proposed junction would operate with the same level of capacity in both peaks when compared to the worst-case assessment, however there is a slight improvement in the total delay in comparison. Overall, the proposed junction would accommodate the traffic reassignment resulting from Scenario A.

Scenario C – Traffic Reassignment (East Cowes / Ryde Traffic)

Table 7.8 2034 Scenario C: Proposed Junction (100% East)

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 + 1/2– Hunnyhill	65.0%	5.1	22.7	59.3%	4.1	19.6
2/1 + 2/2 – Hunnycross Way	68.6%	6.1	30.2	91.6%	11.6	54.8
3/1 – St James St	25.6%	2.0	18.6	38.0%	3.3	18.5
3/2 – St James St (Right Turn)	103.2%	17.3	159.9	97.6%	14.1	95.2
4/1 + 4/2 – Vicarage Walk	107.5%	36.3	190.0	100.3%	18.9	108.2
PRC	-19.5%			-11.4%		
Total Delay (pcu/hr)	52.02			36.83		

7.17 As shown in Table 7.8, in the Future Year, the impact of Scenario C shows that the proposed junction design is expected to operate over capacity in the AM and PM peaks. The PRC is recorded as -19.5% in the AM peak and -11.4% in the PM peak. Again, this assumes that all traffic travelling north or south via Medina Way, travels east along Hunnycross Way. It is noted that Scenario C also includes the traffic reassignment in Scenario A. A further scenario whereby 50% of northbound traffic travels via Hunnyhill and the other 50% travels via Hunnycross Way has also been tested, which is presented in Table 7.9 below.



Table 7.9 2034 Scenario C: Proposed Junction (50% North, 50% East)

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 + 1/2 – Hunnyhill	67.8%	5.4	24.4	61.5%	4.4	20.9
2/1 + 2/2 – Hunnycross Way	65.1%	5.9	28.0	85.9%	9.7	42.2
3/1 – St James St	31.6%	2.5	20.1	44.9%	4.0	20.3
3/2 – St James St (Right Turn)	96.8%	10.9	108.5	95.5%	11.9	86.1
4/1 + 4/2 – Vicarage Walk	101.7%	24.2	114.6	94.5%	13.2	66.8
PRC	-13.0%			-6.2%		
Total Delay (pcu/hr)	34.19			28.16		

7.18 Table 7.9 indicates that there is an improvement in the PRC for this Scenario, with the PRC recorded as -13.0% in the AM peak and -6.2% in the PM peak. However, there is not a significant difference in comparison to the previous Scenario in Table 7.8, with the junction still remaining far over capacity.

7.19 Table 7.10 sets out a summary of the indicative estimated costs for the proposals within the study area. These costs are approximate, based on an initial scheme, and should be reviewed as part of any detailed design.

Table 7.10 Cost Estimate of Proposals – Junction 3

Proposal	Cost Estimate
Construction Estimate	£185,500
Risk Variables (Statutory Undertakers, Safety Audit requirements, TRO)	£75,000
Design Administration and Land Costs	£18,550
Total	£279,050

Outcome / Conclusions – Junction 3

7.20 The outcome of the traffic modelling at the Hunnyhill / Hunnycross Way junction, indicates that the existing signal junction is expected to operate within capacity but very close to optimum capacity in the PM peak, when tested without the closure of the High Street, however it would effectively still operate without any major issues or queuing. Whereas, with the closure of the High Street going ahead, the junction is expected to be severely impacted by the traffic reassignments, tested as part of Scenarios A & C. Thus, it is predicted that the existing junction would operate over capacity, unable to accommodate the potential traffic reassignments from the High Street.

7.21 **A proposed junction design was tested, whereby St James’s Street was widened to two-lanes** providing a designated lane for right turners, potentially alleviating queues on the approach to the junction. This was tested to determine if this could accommodate the additional traffic resulting from the traffic reassignments. This design was found to offer some improvements in comparison to the existing junction, and would operate with additional capacity compared to the existing junction. Overall, it has been indicated from the traffic modelling that the Hunnyhill / Hunnycross Way junction is unlikely to accommodate the traffic reassignment resulting from the closure of the High Street, with and without alterations.



- 7.22 It is noted that the cumulative traffic impact resulting from the closure of the High Street should be treated as a sensitivity test and a worst-case scenario, as to determine how the junction would operate if this proposal were to go ahead. As a result, without the High Street proposals, it has been shown that the existing junction would still operate within capacity, although with little residual capacity in the PM peak.

8 Junction 4 – Future Year

8.1 The Future Year results for the assessment of Junction 4 are summarised in Table 8.1, with full output results included in Appendix C.

Table 8.1 2034 Base Year Junction Assessment

Approach	2034 Future Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Riverway Roundabout				
A3020 Eastbound slip road	0.20	0.3	0.13	0.2
Link from Hunnycross Way Junction	0.95	12.0	0.65	1.8
Riverway	0.43	0.8	0.80	3.8
Hunnycross Way Roundabout				
Link from Holyrood Street Junction	0.94	10.9	0.96	12.9
Hunnycross Way	0.99	16.5	0.67	2.0
Link from Riverway Junction	0.32	0.5	0.36	0.6
Holyrood Street Roundabout				
A3020 Westbound Slip Road	0.77	3.3	0.68	2.1
Holyrood Street Junction	0.43	0.8	0.40	0.7
Access to Lidl Supermarket	0.18	0.2	0.32	0.5
Link from Hunnycross Way Junction	0.29	0.4	0.30	0.4



Scenarios A & B - Traffic Reassignment (High Street)

8.2 Scenarios A and B involve the closure of the High Street arm (one-way entry only) at the gyratory for eastbound traffic, which is part of an indicative proposal currently being considered. The consequence of this is that northbound and southbound traffic from the High Street is expected to use alternative routes away from the gyratory. For instance, it has been assumed that northbound traffic would travel **via St James's Street and Hunnycross Way, then onto Medina Way (Scenario A)**, whilst southbound traffic would travel **via St George's Approach (via the new Trafalgar Road link) through St George's roundabout, turning right and heading south along St George's Way (Scenario B)**. It is noted that Scenario A would have an impact on the Riverway / Hunnycross Way / Holyrood Street roundabouts. A diagram of Scenario A is shown in Figure 8.1 below, whilst the results of this assessment are summarised in Table 8.2, with full output results included in Appendix C. Scenario B is also shown in Figure 8.1 for information, however this Scenario does not have an impact on the junction.

Figure 8.1 Scenario A & B – Diagram



Source: Ordnance Survey Mapping with WYG Annotations, March 2018



Table 8.2 2034 Future Year Assessment: Traffic Reassignment (High Street)

Approach	2034 Future Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Riverway Roundabout				
A3020 Eastbound slip road	0.20	0.3	0.13	0.2
Link from Hunnycross Way Junction	0.81	3.9	0.52	1.1
Riverway	0.42	0.7	0.75	3.0
Hunnycross Way Roundabout				
Link from Holyrood Street Junction	0.57	1.3	0.53	1.1
Hunnycross Way	0.96	13.0	0.69	2.2
Link from Riverway Junction	0.33	0.5	0.37	0.6
Holyrood Street Roundabout				
A3020 Westbound Slip Road	0.75	3.0	0.68	2.1
Holyrood Street Junction	0.35	0.5	0.32	0.5
Access to Lidl Supermarket	0.14	0.2	0.25	0.3
Link from Hunnycross Way Junction	0.35	0.5	0.37	0.6

8.3 With the traffic reassignment, the Riverway and Hunnycross Way roundabout junctions are expected to operate at maximum capacity or very close to maximum capacity. The Hunnycross Way arm goes over maximum capacity with an RFC of 0.96 recorded and queues of 13.0 PCUs during the AM Peak. The Holyrood Street roundabout is the only junction to still operate within capacity for all scenarios.

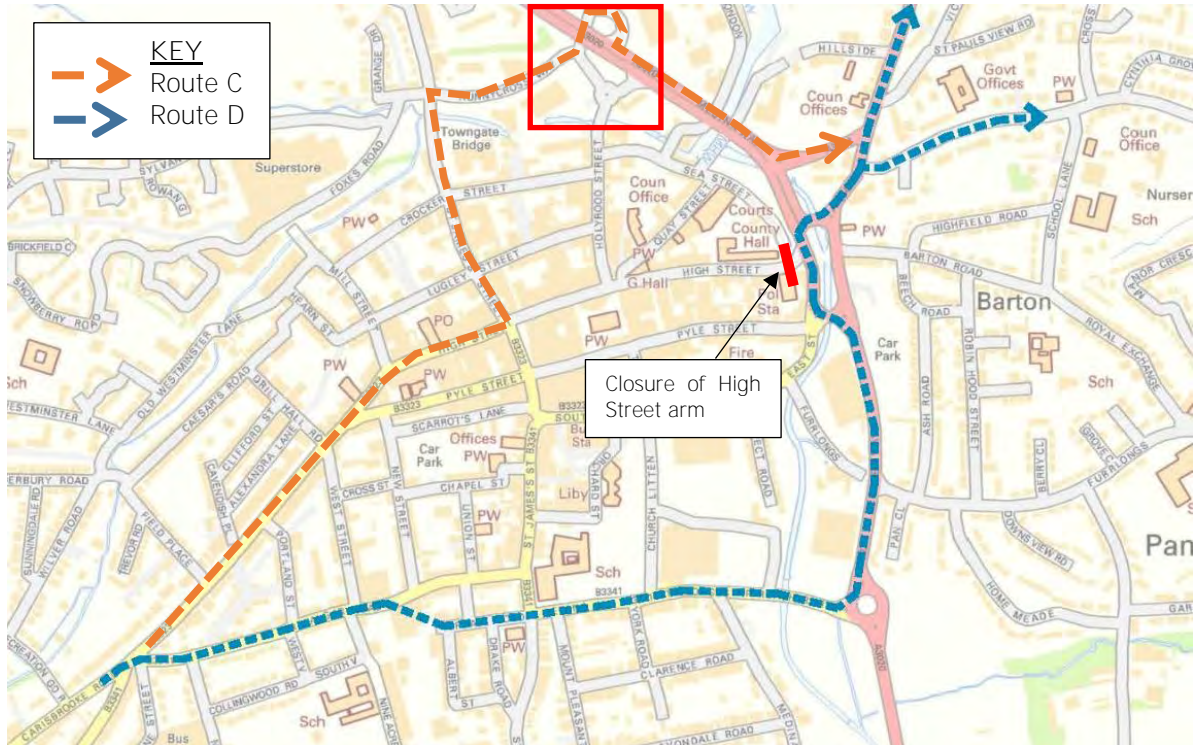
Scenarios C & D – Traffic Reassignment (East Cowes / Ryde Traffic)

8.4 Scenarios C and D contemplate the reassignment of traffic going east towards East Cowes and Ryde, resulting from the closure of the High Street. As in Scenario A, this scenario comprises traffic travelling **along Carisbrooke Road and St James’s Street before entering the Hunnyhill / Hunnycross Way junction**. For the purpose of these scenarios, it has been assumed that of the traffic travelling to East Cowes and Ryde, 50% is **likely to travel via Carisbrooke Road and St James’s Street as an alternative route**, whilst the other 50% is likely to travel via Trafalgar Road and Medina Avenue, before travelling north towards the gyratory, then onto Fairlee Road / Staplers Road. These two routes have been split into Scenarios C and D, in respect of the Riverway / Hunnycross Way / Holyrood Street roundabouts, it is Scenario C (Route C) which has an impact.



8.5 As opposed to Scenario A, this traffic would use the eastbound slip road to turn left into Medina Way, and take the first exit in order to get to Fairlee Road and follow the A3020 northbound. It is noted that this scenario also includes the traffic reassignment in Scenario A. A diagram of Scenario C is shown in Figure 8.2 below, whilst the results of this assessment are summarised in Table 8.3, with full output results included in Appendix C. Scenario D is also shown in Figure 8.2 for information, however this scenario does not have an impact on the junction.

Figure 8.2 Scenario C & D – Diagram



Source: Ordnance Survey Mapping with WYG Annotations, March 2018

Table 8.3 2034 Future Year Assessment: Traffic Reassignment (East Cowes/Ryde)

Approach	2034 Future Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Riverway Roundabout				
A3020 Eastbound slip road	0.20	0.3	0.13	0.2
Link from Hunnycross Way Junction	0.98	18.1	0.88	6.3
Riverway	0.47	0.9	0.98	12.6



Hunnycross Way Roundabout				
Link from Holyrood Street Junction	0.92	9.1	0.95	11.8
Hunnycross Way	1.34	139.9	1.08	39.5
Link from Riverway Junction	0.32	0.5	0.35	0.6
Holyrood Street Roundabout				
A3020 Westbound Slip Road	0.74	2.9	0.67	2.1
Holyrood Street Junction	0.43	0.7	0.40	0.6
Access to Lidl Supermarket	0.18	0.2	0.32	0.5
Link from Hunnycross Way Junction	0.28	0.4	0.32	0.5

8.6 With the traffic reassignment resulting from Scenarios A and C, the Riverway and Hunnycross Way roundabout junctions are expected to operate at maximum capacity or very close to maximum capacity. These roundabouts both experience a further worsening of capacity in comparison to the 2034 Future Year scenario without the traffic reassignment. The Hunnycross Way arm goes over maximum capacity with an RFC of 1.34 recorded and queues of 140 PCUs during the AM peak, and an RFC of 1.08 and queues of 40 PCUs in the PM peak. The Holyrood Street roundabout is the only junction to still operate within capacity for all scenarios.

Signalised Eastbound Slip Lane (Medina Way)

8.7 A design option whereby the eastbound slip lane onto Medina Way from the Riverway roundabout is signalised, which is anticipated to ease the flow of traffic onto Medina Way and therefore reduce congestion. The 2017 Base and 2034 Future Years have been tested as well as the traffic reassignment as part of Scenarios A and C were tested. This is to determine whether there is a benefit, by signalising this slip lane. The results of these assessments are presented in Tables 8.4-8.7 below. A proposed arrangement is shown in Figure 8.3. A detailed drawing is included as Appendix G.

Figure 8.3 Proposed Signalisation of Slip Road

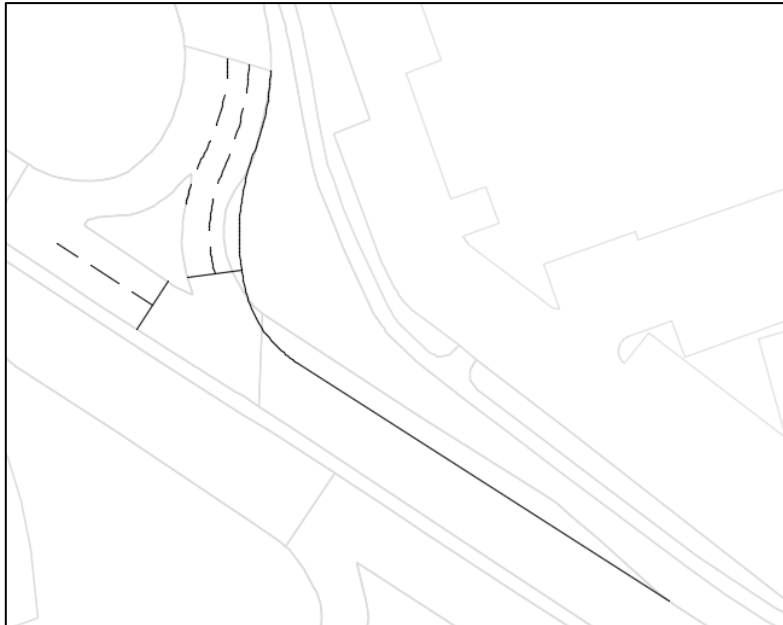


Table 8.4 2017 Base Year Assessment: Signalised Junction (Eastbound Slip Lane)

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 – Eastbound Slip Lane (Medina Way)	47.1%	5.0	18.3	72.8%	8.8	26.3
3/1 – Medina Way (Ahead)	48.7%	5.6	14.2	70.5%	10.1	17.0
3/2 – Medina Way (Ahead)	48.7%	5.6	14.2	70.5%	10.1	17.0
PRC	84.6%			23.6%		
Total Delay (pcu/hr)	5.50			10.52		

Table 8.5 2034 Future Year Assessment: Signalised Junction (Eastbound Slip Lane)

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 – Eastbound Slip Lane (Medina Way)	57.6%	6.5	20.1	88.7%	13.3	39.0
3/1 – Medina Way (Ahead)	59.6%	7.5	15.9	86.0%	15.6	24.8
3/2 – Medina Way (Ahead)	59.6%	7.5	15.9	85.9%	15.5	24.7
PRC	51.0%			1.5%		
Total Delay (pcu/hr)	7.50			18.78		



Scenarios C & D – Traffic Reassignment (East Cowes / Ryde)

Table 8.6 2017 Scenario C & D: Signalised Junction (Eastbound Slip Lane)

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 – Eastbound Slip Lane (Medina Way)	56.4%	6.9	16.7	82.4%	12.7	26.3
3/1 – Medina Way (Ahead)	56.5%	6.4	18.4	84.1%	13.1	28.0
3/2 – Medina Way (Ahead)	56.5%	6.4	18.4	84.1%	13.1	28.0
PRC	59.2%			7.0%		
Total Delay (pcu/hr)	7.11			16.39		

Table 8.7 2034 Scenarios C & D: Signalised Junction (Eastbound Slip Lane)

Arm Cycle time 60 seconds	AM Peak			PM Peak		
	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
1/1 – Eastbound Slip Lane (Medina Way)	69.1%	9.3	19.5	100.4%	30.5	82.0
3/1 – Medina Way (Ahead)	69.1%	8.8	21.4	102.5%	36.0	107.2
3/2 – Medina Way (Ahead)	69.1%	8.8	21.4	102.4%	35.6	105.7
PRC	30.2%			-13.9%		
Total Delay (pcu/hr)	10.14			71.63		

- 8.8 As shown above, a proposed signalised junction at the eastbound slip lane onto Medina Way is expected to operate with very good levels of capacity in the AM and PM peaks, in the 2017 Base Year assessment, with maximum queues of 9-10 PCUs. When tested for the 2034 Future Year assessment, the junction is expected to operate very close to optimum capacity in the PM peak, with a PRC of 1.5% recorded and mean maximum queues of 13 PCUs on the eastbound slip lane. The eastbound slip lane has a queue capacity length of 12 PCUs, and thus the mean maximum queues of 13 PCUs in the Future Year PM peak will overflow onto the Riverway roundabout.
- 8.9 Scenarios C & D were also tested and indicate that the junction would still operate within capacity in the 2017 Base Year, however, the mean maximum queues on the eastbound slip lane increase from 9 PCUs to 12.7 PCUs in the PM peak, due to the additional traffic using the slip lane as part of the traffic reassignment. This situation further exacerbates in the 2034 Future Year, with the arm predicted to go over a 100% degree of saturation in the PM peak, as well as this, there are mean maximum queues of 31 PCUs recorded on the slip lane.
- 8.10 Overall, the signalised junction would operate within capacity during the AM peak, in both the Base and Future Year assessments. However, this is not the case during the PM peak in the Future Year (Scenarios C and D) whereby the PM peak operates over capacity, with high queues recorded on the eastbound slip lane.



- 8.11 It can be considered that signalling the eastbound slip lane does provide some benefit by easing congestion along Medina Way by moderating the flow of traffic onto the dual carriageway, however, this transfers some of the congestion issues onto the eastbound slip lane, in terms of queuing, with the worst capacity recorded in the PM peak (Scenarios C and D).
- 8.12 Table 8.8 sets out a summary of the indicative estimated costs for the proposals within the study area. These costs are approximate, based on an initial scheme, and should be reviewed as part of any detailed design.

Table 8.8 Cost Estimate of Proposals – Junction 4

Proposal	Cost Estimate
Construction Estimate	£136,000
Risk Variables (Statutory Undertakers, Safety Audit requirements)	£23,500
Design Administration and Land Costs	£13,600
Total	£173,100

Outcome / Conclusions – Junction 4

- 8.13 During the Base Year scenario, all three roundabout junctions operate within capacity, whilst for the 2034 Future Year assessment, two of the roundabouts are expected to go over recommended capacity or are operating close to their capacity. It has been demonstrated that the traffic reassignment resulting from closing off the High Street is expected to push the Hunnycross Way arm over maximum capacity in the year 2034. It is recommended that the signalisation of the three roundabouts could provide additional junction capacity, and therefore should be explored as a potential design option.



9 Future Year Modelling – Junction 5

9.1 The Future Year results for the existing junction are summarised in Tables 9.1, with full output results included in Appendix D.

Table 9.1 2034 Future Year Base Junction Assessment

Approach	2034 Future Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Arm 1 – St George’s Way (S)	0.70	2.4	0.48	1.0
Arm 2 – St George’s Approach	0.17	0.2	0.44	0.8
Arm 3 – St George’s Way (N)	0.71	2.5	0.90	8.1

9.2 As shown in Table 9.1, the Future Year Base assessment indicates that the junction would remain within capacity on all arms in the AM Peak. However, during the PM Peak, **St George’s Way (N)** is expected to go over recommended capacity, with an RFC of 0.90 and queues of 8.1 PCUs recorded.

Scenarios A & B - Traffic Reassignment (Blackwater)

9.3 Scenarios A and B involve the closure of the High Street arm (one-way entry only) at the gyratory for eastbound traffic, which is part of an indicative proposal currently being considered. The consequence of this is that northbound and southbound traffic from the High Street is expected to use alternative routes away from the gyratory. For instance, it has been assumed that northbound traffic would travel via **St James’s Street and Hunnycross Way, then onto Medina Way (Scenario A), whilst southbound traffic would travel via St George’s Approach (via the new Trafalgar Road link) through St George’s roundabout, turning right and heading south along St George’s Way (Scenario B)**. It is noted that **Scenario B would have an impact on the St George’s roundabout. Therefore, this scenario considers the impact of this traffic reassignment at the St George’s roundabout, although without the new Trafalgar Road link, the same distribution would be expected at the roundabout, with vehicles travelling along Trafalgar Road, New Street, Chapel Street, St James’s Street and Medina Avenue. A diagram of Scenario B is shown in Figure 9.1 below, whilst the results of this assessment are summarised in Table 9.2, with full output results included in Appendix D. Scenario A is also shown in Figure 9.1 for information, however this scenario does not have an impact on this junction.**

Figure 9.1 Scenarios A & B – Diagram



Source: Ordnance Survey Mapping with WYG Annotations, March 2018



Table 9.2 2034 Future Year Junction Assessment – with new Trafalgar Road link (reassignment of traffic) / without High Street

Approach	2034 Future Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Arm 1 – St George’s Way (S)	0.70	2.3	0.48	0.9
Arm 2 – St George’s Approach	0.37	0.6	0.62	1.7
Arm 3 – St George’s Way (N)	0.64	1.9	0.89	7.9

9.4 With the traffic reassignment resulting from the High Street and Trafalgar Road schemes, it has been found that, as shown in Table 3.4, junction capacity and queues are likely to be similar to the Future Year scenario (without the traffic reassignment), with marginally worse results on the western arm, and slightly better results on the northern and southern arms. **During the PM peak, St George’s Way (N) is expected to operate above the capacity threshold of 0.85, with an RFC of 0.89 and queues of 7.9 PCUs recorded.** This represents a minor decrease when compared with the baseline scenario; therefore, the closure of High Street to eastbound traffic is not expected to have a major impact on **junction capacity at the St George’s roundabout, in comparison to the Future Year base scenario.**

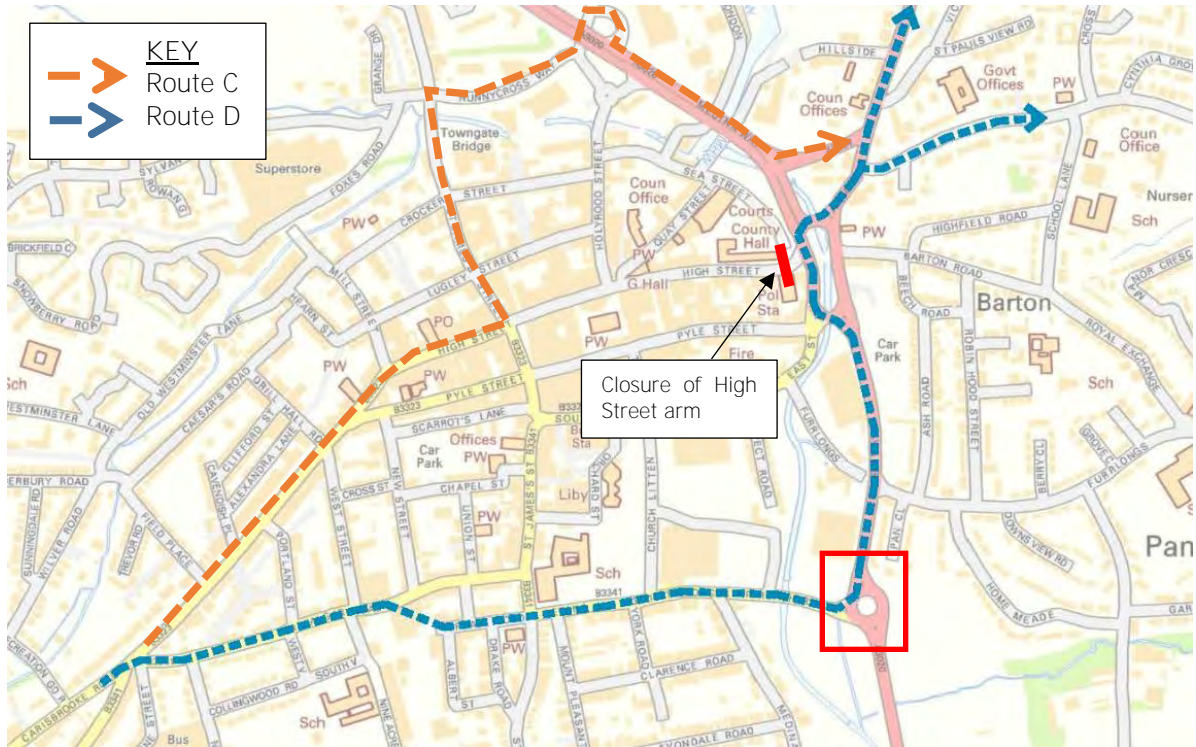
Scenarios C & D - Traffic Reassignment (East Cowes / Ryde)

9.5 Scenarios C and D contemplate the reassignment of traffic going east towards East Cowes and Ryde, resulting from the closure of the High Street. As in Scenario B, this scenario comprises traffic travelling along Trafalgar Road and Medina Avenue before entering the St George’s roundabout. **For the purpose of these scenarios, it has been assumed that of the traffic travelling to East Cowes and Ryde, 50% is likely to travel via Carisbrooke Road and St James’s Street as an alternative route, whilst the other 50% is likely to travel via Trafalgar Road and Medina Avenue, before travelling north towards the gyratory, then onto Fairlee Road / Staplers Road. These two routes have been split into Scenarios C and D, in respect of the St George’s roundabout junction, it is Scenario D (Route D) which impacts on the junction.**

9.6 A diagram of Scenario D is shown in Figure 9.2 below, whilst the results of this assessment are summarised in Table 9.3, with full output results included in Appendix D. Scenario C is also shown in Figure 9.2 for information, however this scenario does not impact on this junction. It is noted that this scenario also includes the traffic reassignment from Scenario B.



Figure 9.2 Scenarios C & D – Diagram



Source: Ordnance Survey Mapping with WYG Annotations, March 2018

Table 9.3 2034 Future Year Junction Assessment: Traffic Reassignment (East Cowes / Ryde)

Approach	2034 Future Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Arm 1 – St George’s Way (S)	0.69	2.3	0.48	0.9
Arm 2 – St George’s Approach	0.42	0.7	0.80	3.8
Arm 3 – St George’s Way (N)	0.64	1.8	0.87	6.4

9.7 With all traffic reassignment considered at the St George’s roundabout, it has been found that, as shown in Table 9.3, junction capacity and queues are not significantly different from the Future Year scenario (without the traffic reassignment), however, there are slight improvements in the RFC and queuing on St George’s Way (N), in comparison. For instance, on St George’s Way (N) the RFC improves from 0.71 to 0.64 in the AM peak, and from 0.90 to 0.87 in the PM peak, whilst queues also reduce from 2.5 to 1.8 PCUs, and from 8.1 to 6.4 PCUs, respectively. This improvement is due to the reassignment of traffic, which would normally have entered the junction via St George’s Way (N), enters the junction via St George’s Approach instead.

9.8 As a result, on St George’s Approach, the RFC and queuing worsens due to the additional traffic assigned onto this arm, however, overall this arm still performs within capacity. To conclude, the junction as a whole is not severely impacted by the traffic reassignment scenarios, and thus overall the junction would still operate within capacity.



Potential Changes to Trafalgar Road / B3323 Junction

- 9.9 The new Trafalgar Road link is anticipated to result in higher traffic flows at the Trafalgar Road/BB323 Junction, to access Trafalgar Road heading towards the A3020 / St George's Way / St George's roundabout. Therefore, it is considered that a potential change in the junction configuration could be required, which at present gives priority to traffic along the B3323. It is recommended that changing the priority configuration whereby east-west traffic (Trafalgar Road) becomes the main priority, whilst north-south traffic (the B3323) would become the minor priority arm. If implemented, this is expected to improve the flow of traffic through the junction onto Trafalgar Road.

Outcome / Conclusions – Junction 5

- 9.10 During the Base Year scenario as per the existing junction layout, all three arms of the junction operate within capacity and do not experience issues with queuing. However, the Future Year modelling indicates that the northern arm is likely to experience issues in terms of capacity and queuing during the PM peak, whilst the AM peak remains within capacity. It has been shown that even with the additional traffic resulting from the closure of the existing High Street and the introduction of a new link at Trafalgar Road, these schemes only have a marginal impact on capacity at the St George's roundabout, and in fact there are some improvements to junction capacity, particularly on the St George's Way (N) arm.



10 Future Year Modelling – Cumulative Impact

- 10.1 A review of the cumulative impact of the different scenarios and proposed schemes has been undertaken, to determine the package of works that would bring the greatest benefit to the wider network in Newport.
- 10.2 Scenarios C and D, which would see the closure of High Street to eastbound traffic, would have a knock-on effect on the other junctions in Newport. Whilst St **George's Roundabout would continue to operate within capacity in 2034 with the redistributed traffic**, the Hunnycross Way/Hunnyhill and River Way/Hunnycross Way junctions would be pushed over capacity. Without the additional redistributed traffic, all three junctions are forecast to operate within capacity in 2034.
- 10.3 In the case of the Hunnycross Way/Hunnyhill junction, an improvement scheme has been proposed that would provide additional capacity in the PM peak hour, increasing the PRC from 0.8% to 18.6%, and reducing maximum queues by around two vehicles on the Vicarage Road arm. However, this mitigation scheme is not sufficient to provide adequate capacity for the redistributed traffic arising from the closure of High Street to eastbound traffic.
- 10.4 The closure of High Street to eastbound traffic also has an overall detrimental impact on the operation of the Coppins Bridge gyratory. Whilst the removal of the signal head at the eastern end of High Street benefits the southern section of the junction, the additional traffic for East Cowes and Ryde that enters the junction from the north adds to capacity issues on Medina Way.
- 10.5 Consequently, it is considered that High Street should remain open to westbound traffic, as this leads to the best performance of all four junctions in the study.
- 10.6 Capacity issues would remain on the Coppins Bridge gyratory, in particular on Medina Way and Fairlee Road. Medina Way is the worst-performing arm in the 2034 scenario, with substantial queues. These are to be caused by a heavy left-turn movement to Fairlee Road which blocks traffic on Medina Way.
- 10.7 There are also heavy movements to Fairlee Road from the south, with queuing forecast on Fairlee Road from the gyratory. A sensitivity test was done to remove the signals at the junction of Staplers Road/Fairlee Road and either remove the link between the two or allow northbound traffic only. However, this caused greater problems at the junction of Fairlee Road and Medina way, due to the requirements for additional movements.
- 10.8 Further investigation should be undertaken into schemes in the wider Newport area that would divert traffic away from Coppins Bridge to the east, to accommodate the volumes of traffic travelling to and from Fairlee Road. This may include a new link across the river to the north, and/or a link from St **George's Way to the south through to Staplers Road and beyond to Fairlee Road**.
- 10.9 A new link along Trafalgar Road would bring limited benefit to Coppins Bridge; whilst it would direct traffic away from Newport town centre (such as High Street), the majority of traffic using such a link would still travel through Coppins Bridge to head north or north-east. The presence of an alternative link across the south of Newport (B3401 Whitepit Lane) means that movements from Carisbrooke Road **to St George's Way (to the south of the roundabout) are limited in number**.
- 10.10 Trips from the west of Newport via High Street and Coppins Bridge to key attractors such as Morrisons, Marks and Spencer and Cineworld are 12 PCUs in the AM peak and 32 PCUs in the PM peak. The volume of traffic using this route is low, as there are several routes available for such trips, and journey time data suggests that the quickest routes take traffic either through the one-way network around Trafalgar Road, New Street, Chapel **Street, St John's Place and Medina Avenue, or further south along the B3401 and St John's Road**. Therefore, the benefit of providing the link along Trafalgar Road is also limited when considering trips within Newport.
- 10.11 The wider benefits of a new link road could be more accurately quantified by a microsimulation model.



11 Non-Technical Summary

- 11.1 WYG have been commissioned by the Isle of Wight Council to review 15 junctions across the island to determine their current and predicted future capacity in 2034, at the end of the forthcoming Local Plan period.
- 11.2 This report relates to four junctions within Newport; the Coppins Bridge gyratory, **Hunnyhill/Hunnycross Way, Hunnycross Way/Riverway and the St George's Roundabout.**
- 11.3 Whilst separate baseline models have been set up for each junction, it has been deemed necessary to look at the four junctions alongside each other, as inevitably changes made on one junction that impact on traffic routing would lead to impacts on the others, given their close proximity.
- 11.4 Baseline models for 2017 determined that all four junctions are currently working within their theoretical capacity. The Coppins Bridge gyratory is operating close to its current capacity, with around 2.5% spare capacity available in the PM peak hour.
- 11.5 The models were then run for a 2034 scenario which forecast background traffic growth from 2,132 additional dwellings around Newport. This figure has been extracted from the National Trip End Model (NTEM) database, a Department for Transport model that forecasts trip growth up to 2051. This figure represents a robust assessment of trip generation, as the Local Plan is expected to allocate around 1,313 dwellings around Newport up to 2034, with another 550 coming forward subsequently.
- 11.6 The modelling shows that Coppins Bridge gyratory will be operating over capacity in 2034. The Hunnycross Way/Hunnyhill junction and Riverway/Hunnycross Way junctions will be operating with **little spare capacity in 2034, and the St George's roundabout will be operating with around 10% of spare capacity.**
- 11.7 A scheme for the Hunnycross Way/Hunnyhill junction has been proposed which would increase capacity in 2034, improving spare capacity from around 1% to 18%.
- 11.8 A scheme for the signalisation of the slip road of Riverway onto Medina Way is proposed and shows that the signals would allow traffic from Riverway to enter Medina Way without a detrimental impact on traffic on Medina Way. The queuing would be limited to the slip road and would not cause queues back beyond the roundabout.
- 11.9 Consideration has been given to potential schemes around the Coppins Bridge gyratory. A range of options have been considered, including changing the direction of traffic on certain roads, relocating pedestrian crossings, and removing traffic signals, however in these cases the junction is forecast to perform worse than the existing arrangement. A detailed study of changing the direction of flow on High Street was undertaken, however the impact on the surrounding junctions is severe and the benefit to Coppins Bridge is not significant enough to warrant the impacts.
- 11.10 A scheme is proposed for Coppins Bridge to allow traffic to use two lanes travelling from Medina Way **south through to St George's Way. Currently, all southbound traffic is filtered into one line, artificially limiting capacity, when a second lane is available and underused for town centre traffic.**
- 11.11 With these amendments, there is an improvement in capacity at Coppins Bridge; however, the junction continues to operate over capacity. It is suggested that microsimulation modelling be undertaken to analyse potential schemes in the wider Newport area which would allow the impact on both Coppins Bridge and the wider network to be analysed.
- 11.12 The improved link along Trafalgar Road does not appear to bring significant benefits to Coppins Bridge, as it does not remove significant volumes of traffic, and instead causes trips to be redistributed through the junction. Again, it is suggested that a microsimulation model be used to determine the wider benefits of a new link along Trafalgar Road.



11.13 A summary of the costings for the proposed improvement schemes is set out in Table 11.1.

Table 11.1 Summary of Approximate Proposed Scheme Costs

Scheme	Works and Design Costs*	TRO/Stats Costs	Estimated Total Cost
Trafalgar Road Link (through Jewson site)	£329,450	£50,000	£379,450
Junction 3 – Widening of southern approach	£204,050	£75,000	£279,050
Junction 4 – Signalisation of slip road	£149,600	£23,500	£173,100

*excluding land costs

11.14 As set out above, the benefits of the Trafalgar Road link appear to be limited relative to the cost of implementation, although the wider impacts could be tested using microsimulation modelling.

11.15 The improvement schemes at Junctions 3 and 4 would lead to capacity improvements at both junctions, allowing each one to operate within capacity in 2034.

11.16 A summary of the optimal mitigation schemes proposed is set out in Table 11.2.

Junction	Proposed Mitigation Scheme
Junction 2 – Coppins Bridge Gyratory	Improved signing and lining to balance queuing across lanes through junction. No changes to High Street arm.
Junction 3 – Hunnycross/Hunnyhill	Widening of southern arm (St James St) to provide a dedicated right-turn lane.
Junction 4 - Riverway	Signalisation of slip road with Medina Way to reduce queuing back to junction.
Junction 5 – St George’s Roundabout	No alterations required.
Trafalgar Road Link	Link road not required. Link would have limited benefit – would remove small number of trips from High Street/Coppins Bridge but would be disproportionate to cost of land and highway works.



Appendix A

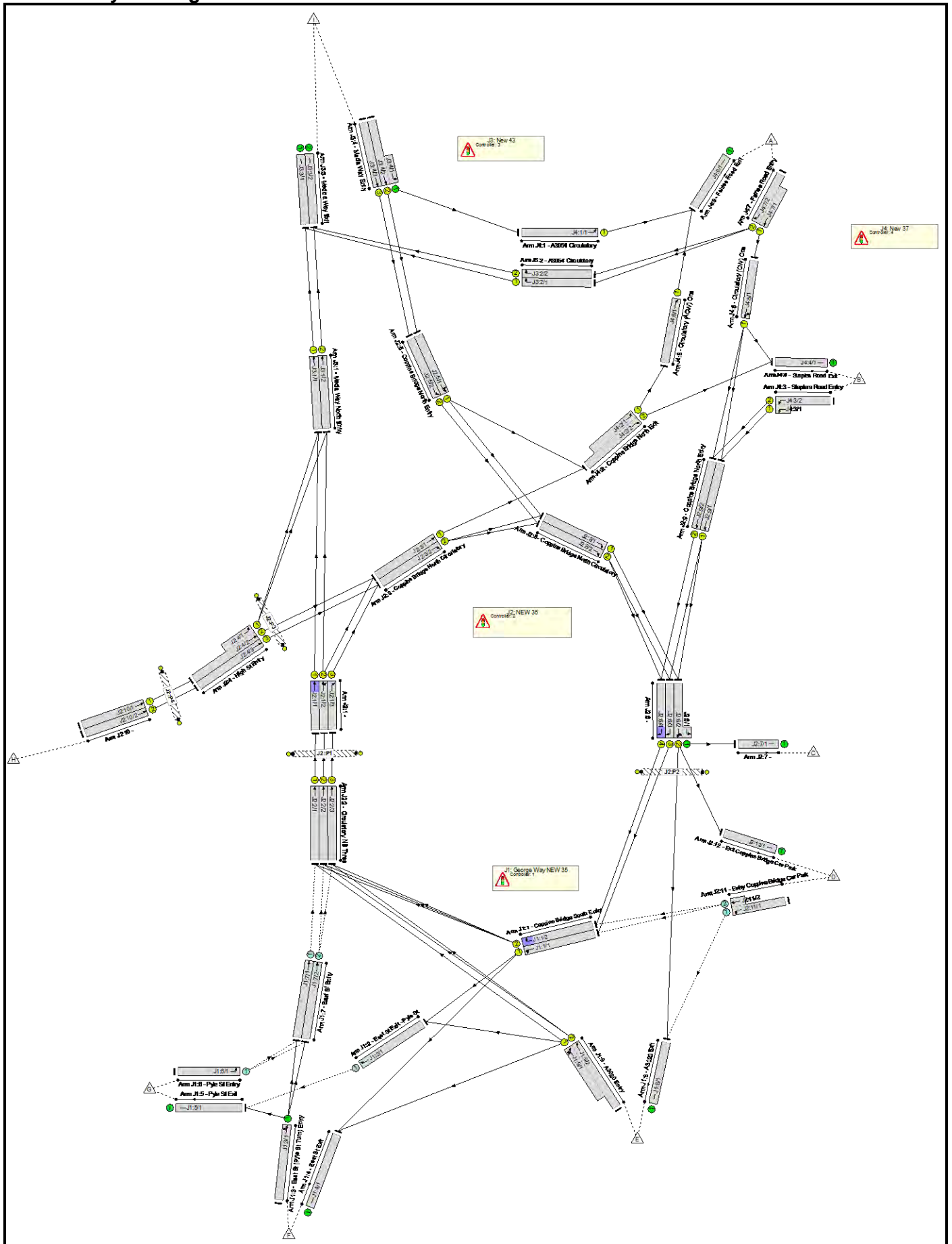
MODELLING OUTPUT RESULTS JUNCTION 2

Full Input Data And Results

User and Project Details

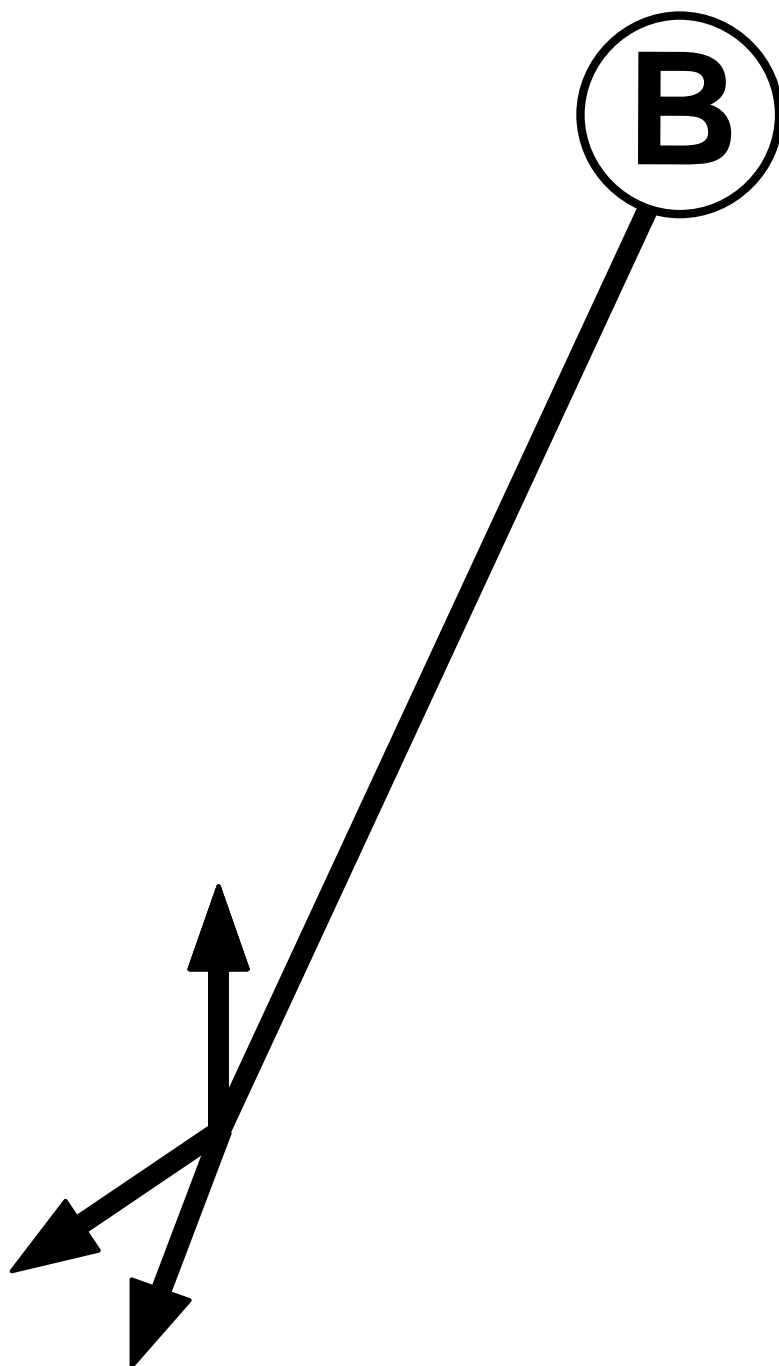
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Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

C1
Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7

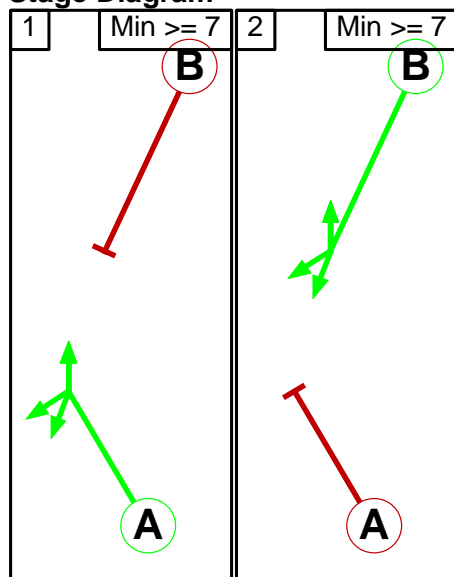
Phase Intergreens Matrix

	Starting Phase		
Terminating Phase		A	B
	A		5
	B	5	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B

Stage Diagram



Phase Delays

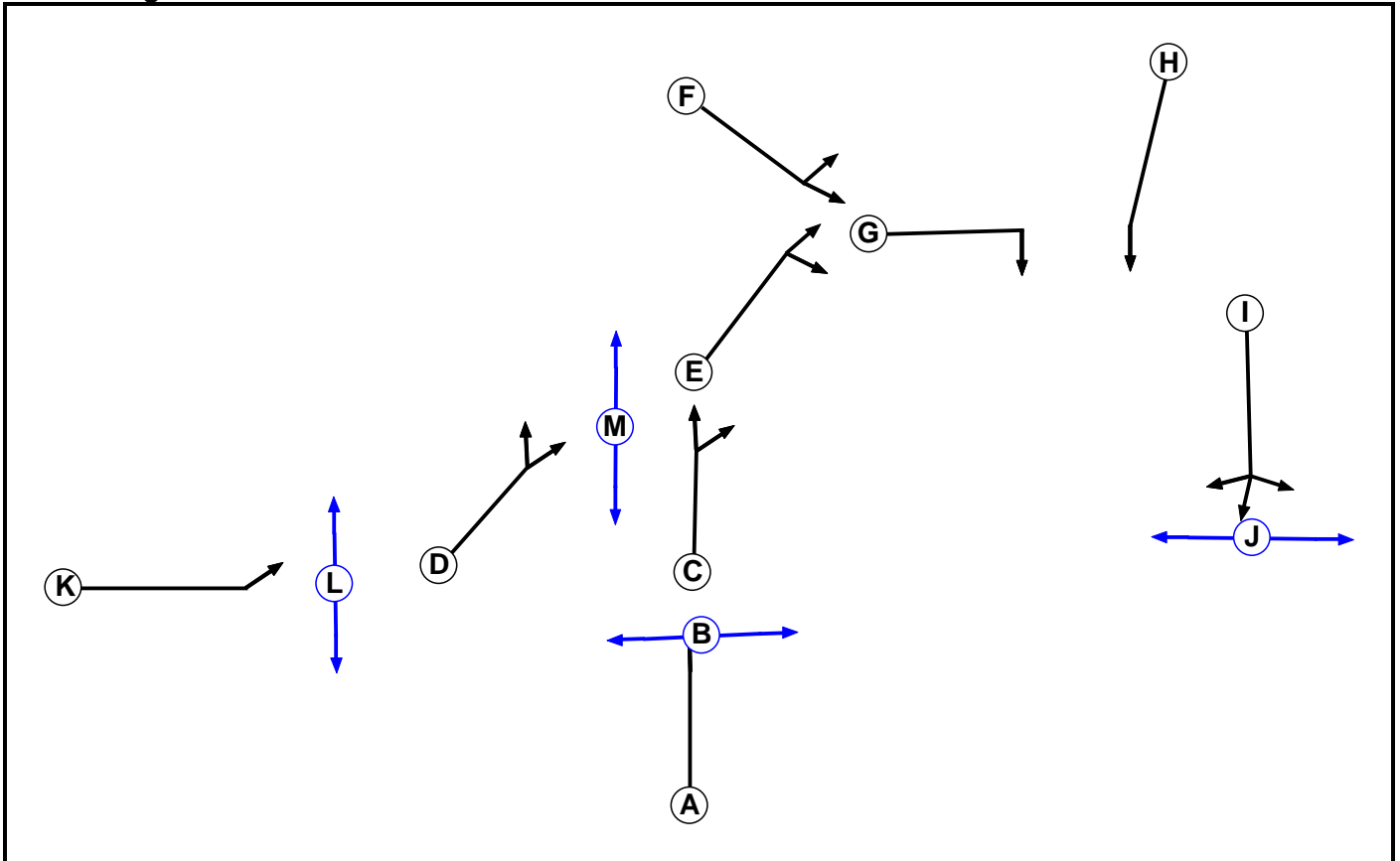
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Prohibited Stage Change

	To Stage		
From Stage		1	2
	1		5
	2	5	

C2

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Pedestrian		6	6
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Pedestrian		7	7
K	Traffic		7	7
L	Pedestrian		5	5
M	Pedestrian		6	6

Full Input Data And Results

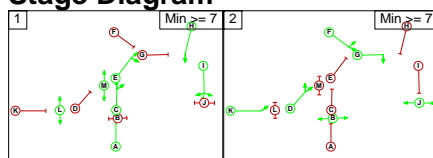
Phase Intergrens Matrix

	Starting Phase												
	A	B	C	D	E	F	G	H	I	J	K	L	M
Terminating Phase	A	5	-	-	-	-	-	-	-	-	-	-	-
B	7		-	-	-	-	-	-	-	-	-	-	-
C	-	-	7	-	-	-	-	-	-	-	-	-	-
D	-	-	9		-	-	-	-	-	-	-	5	-
E	-	-	-	-	5	-	-	-	-	-	-	-	-
F	-	-	-	-	5		-	-	-	-	-	-	-
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H	-	-	-	-	-	5		-	-	-	-	-	-
I	-	-	-	-	-	-	-		5	-	-	-	-
J	-	-	-	-	-	-	-	-		5	-	-	-
K	-	-	-	-	-	-	-	-	-		5	-	-
L	-	-	-	-	-	-	-	-	-	-		5	-
M	-	-	-	9	-	-	-	-	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A C E H I L M
2	B D F G J K

Stage Diagram



Phase Delays

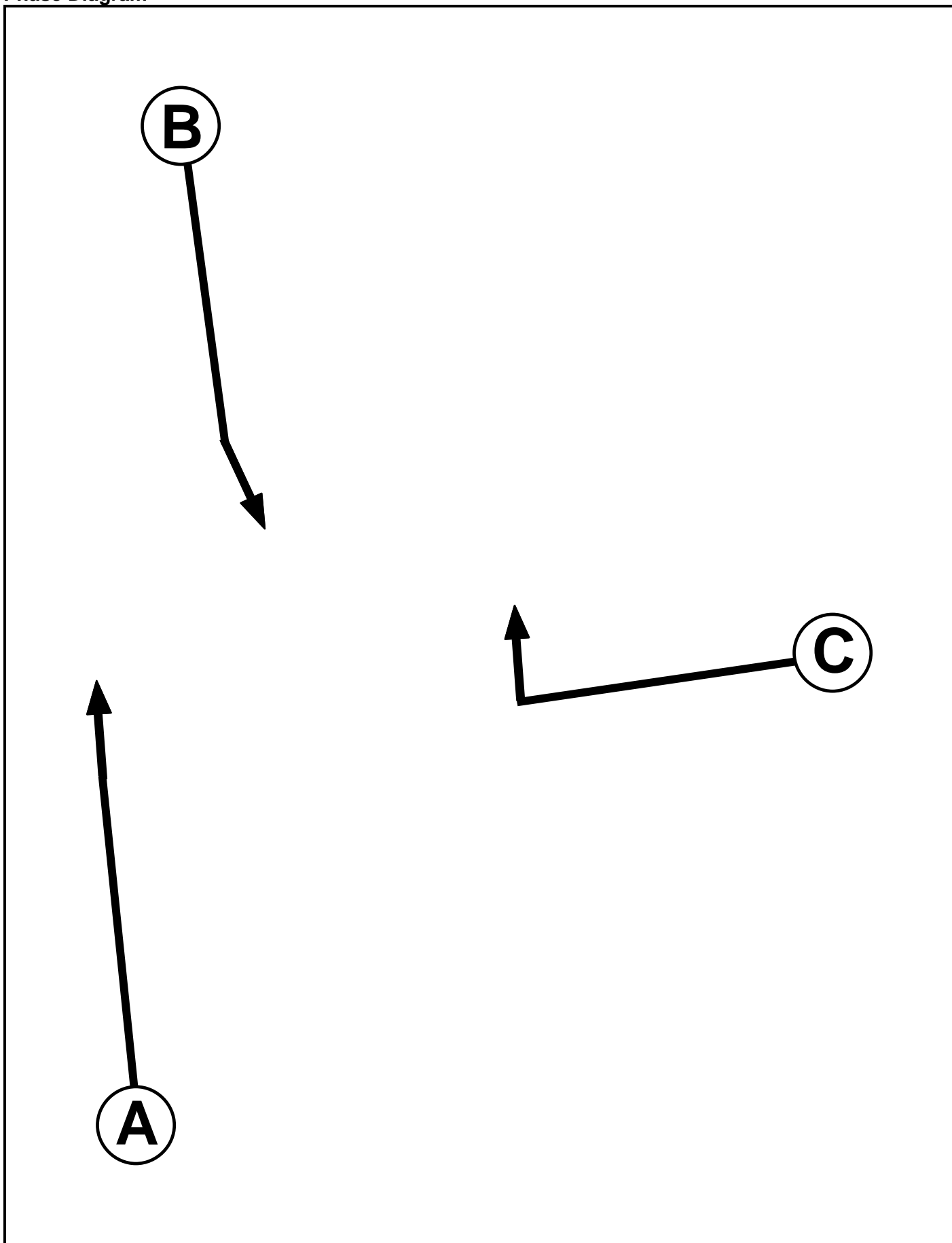
Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage	
	1	2
1		9
2	9	

C3

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
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B	Traffic		7	7
C	Traffic		7	7

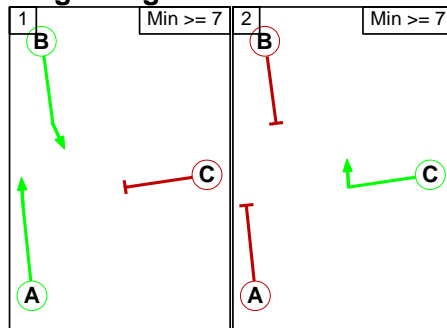
Phase Intergreens Matrix

	Starting Phase		
	A	B	C
Terminating Phase	A	-	5
	B	-	7
	C	6	6

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C

Stage Diagram



Phase Delays

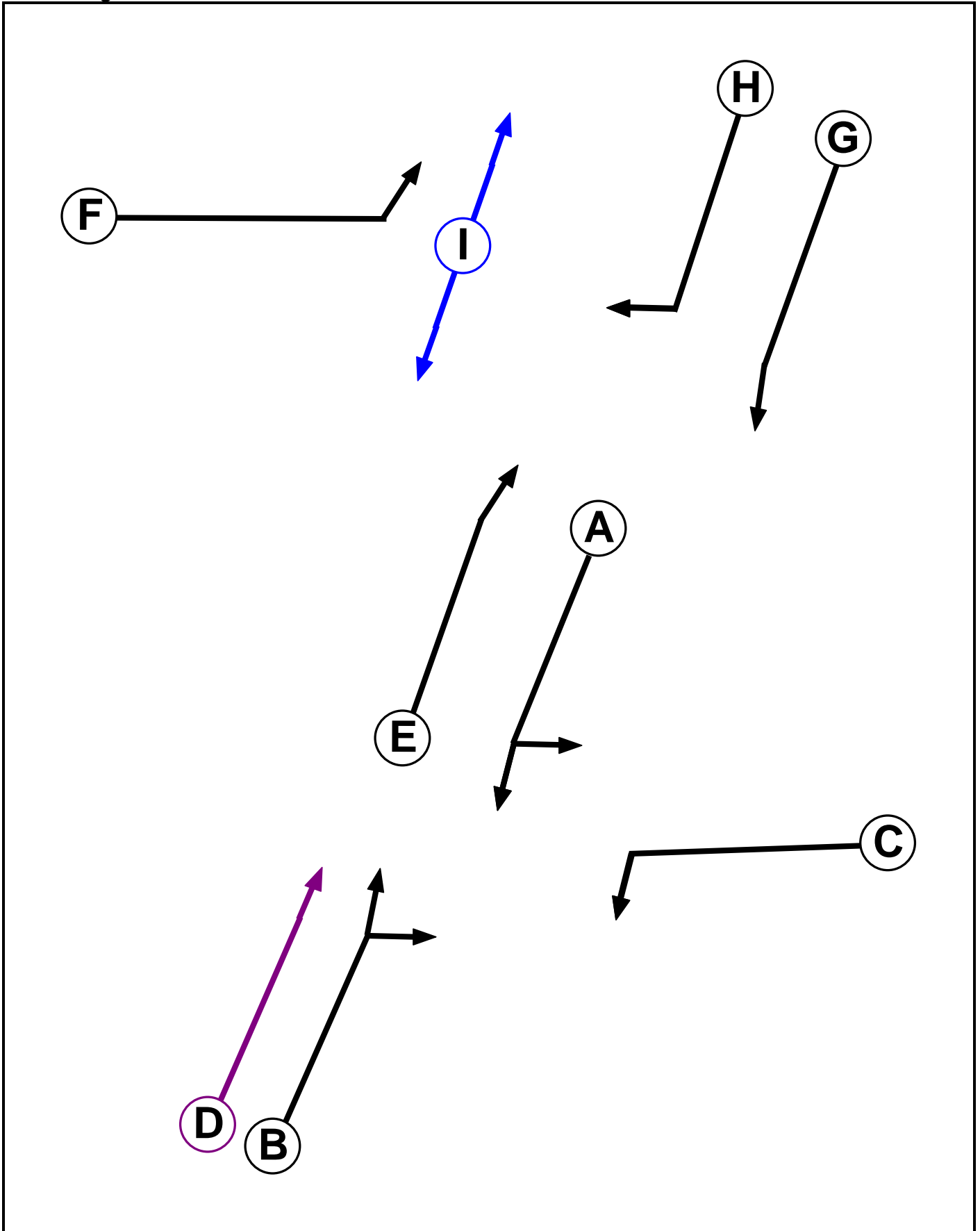
Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

	To Stage	
	1	2
From Stage	1	7
	2	6

C4

Phase Diagram



Full Input Data And Results

Phase Input Data

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

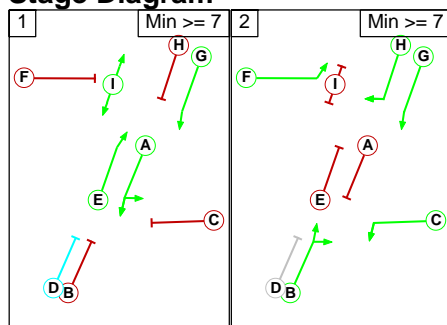
Phase Intergreens Matrix

		Starting Phase								
		A	B	C	D	E	F	G	H	I
Terminating Phase	A		5	5	-	-	-	-	-	-
	B	5		-	-	-	-	-	-	-
	C	5	-		-	-	-	-	-	-
	D	-	-	-		-	-	-	-	-
	E	-	-	-	-		5	-	5	-
	F	-	-	-	-	5		-	-	5
	G	-	-	-	-	-	-		-	-
	H	-	-	-	-	6	-	-		9
	I	-	-	-	-	-	9	-	9	

Phases in Stage

Stage No.	Phases in Stage
1	A E G I
2	B C F G H

Stage Diagram



Phase Delays

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

Full Input Data And Results

Prohibited Stage Change

From Stage	To Stage	
	1	2
1		9
2	9	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: George Way NEW 35											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J1:2/1 (East St Exit - Pyle St)	J1:5/1 (Ahead)	1439	0	J1:3/1	1.09	All	-	-	-	-	-
J1:6/1 (Pyle St Entry)	J1:7/1 (Left)	1439	0	J1:3/1	1.09	To J1:7/1 (Ahead) To J1:7/2 (Ahead)	-	-	-	-	-
	J1:7/2 (Left)	715	0	J1:3/1	0.22	To J1:7/1 (Ahead) To J1:7/2 (Ahead)					
J1:7/1 (East St Entry)	J2:2/1 (Ahead)	1000	0	J1:1/2	0.33	To J2:2/1 (Right)	-	-	-	-	-
				J1:9/1	0.33	To J2:2/1 (Ahead)					
J1:7/2 (East St Entry)	J2:2/2 (Ahead)	1000	0	J1:1/2	0.33	To J2:2/1 (Right) To J2:2/2 (Right)	-	-	-	-	-
	J2:2/3 (Ahead)	1000	0	J1:1/2	0.33	All					

Full Input Data And Results

Junction: J2: NEW 36											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J2:11/1 (Entry Coppins Bridge Car Park)	J1:8/1 (Left)	1439	0	J2:6/2	1.09	To J1:8/1 (Ahead)	-	-	-	-	-
J2:11/2 (Entry Coppins Bridge Car Park)	J1:1/1 (Ahead)	1439	0	J2:6/3	1.09	All	-	-	-	-	-
				J2:6/2	1.09	To J1:8/1 (Ahead)					
	J1:1/2 (Ahead)	1439	0	J2:6/2	1.09	To J1:8/1 (Ahead)					
				J2:6/4	1.09	All					
J2:6/3	1.09	All									

Junction: J3: New 43

There are no Opposed Lanes in this Junction

Junction: J4: New 37

There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: J1: George Way NEW 35												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (Coppins Bridge South Entry)	U	B	2	3	13.9	Geom	-	4.00	0.00	Y	Arm J1:2 Ahead	25.00
											Arm J1:4 Left	25.00
J1:1/2 (Coppins Bridge South Entry)	U	B	2	3	13.0	Geom	-	4.00	0.00	Y	Arm J2:2 Right	16.00
J1:2/1 (East St Exit - Pyle St)	O		2	3	3.5	Geom	-	3.00	0.00	Y	Arm J1:5 Ahead	14.00
J1:3/1 (East St (Pyle St Turn) Entry)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:4/1 (East St Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:5/1 (Pyle St Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:6/1 (Pyle St Entry)	O		2	3	60.0	Geom	-	3.25	0.00	Y	Arm J1:7 Left	7.00
J1:7/1 (East St Entry)	O		2	3	4.5	Geom	-	2.50	0.00	Y	Arm J2:2 Ahead	Inf
J1:7/2 (East St Entry)	O		2	3	4.0	Geom	-	2.50	0.00	Y	Arm J2:2 Ahead	Inf
J1:8/1 (A3020 Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:9/1 (A3020 Entry)	U	A	2	3	13.9	Geom	-	4.00	0.00	Y	Arm J1:2 Left	22.00
											Arm J1:4 Left	25.00
											Arm J2:2 Ahead	80.00
J1:9/2 (A3020 Entry)	U	A	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J2:2 Ahead	80.00

Full Input Data And Results

Junction: J2: NEW 36												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J2:1/1	U	C	2	3	2.1	Geom	-	3.00	0.00	Y	Arm J3:1 Ahead	Inf
J2:1/2	U	C	2	3	2.1	Geom	-	3.00	0.00	N	Arm J3:1 Ahead	Inf
											Arm J2:3 Right	Inf
J2:1/3	U	C	2	3	2.1	Geom	-	3.00	0.00	Y	Arm J2:3 Right	18.20
J2:2/1 (Circulatory NB Three)	U	A	2	3	8.9	Geom	-	3.00	0.00	Y	Arm J2:1 Ahead	Inf
J2:2/2 (Circulatory NB Three)	U	A	2	3	13.9	Geom	-	2.80	0.00	N	Arm J2:1 Ahead	Inf
J2:2/3 (Circulatory NB Three)	U	A	2	3	13.2	Geom	-	2.50	0.00	Y	Arm J2:1 Ahead	Inf
J2:3/1 (Coppins Bridge North Circulatory)	U	E	2	3	4.3	Geom	-	4.00	0.00	Y	Arm J4:2 Ahead	Inf
J2:3/2 (Coppins Bridge North Circulatory)	U	E	2	3	3.5	Geom	-	4.00	0.00	Y	Arm J2:8 Right	12.00
J2:4/1 (High St Entry)	U	D	2	3	6.1	Geom	-	3.00	0.00	Y	Arm J3:1 Left	Inf
J2:4/2 (High St Entry)	U	D	2	3	7.0	Geom	-	3.00	0.00	Y	Arm J2:3 Ahead	Inf
J2:4/3 (High St Entry)	U	D	2	3	7.0	Geom	-	3.00	0.00	Y	Arm J2:3 Ahead	Inf
J2:5/1 (Coppins Bridge North Entry)	U	F	2	3	15.8	Geom	-	4.00	0.00	Y	Arm J4:2 Left	9.00
											Arm J2:8 Ahead	13.00
J2:5/2 (Coppins Bridge North Entry)	U	F	2	3	15.8	Geom	-	4.00	0.00	Y	Arm J2:8 Ahead	20.00
J2:6/1	U		2	3	2.0	Geom	-	3.25	0.00	Y	Arm J2:7 Left	5.00

Full Input Data And Results

J2:6/2	U	I	2	3	5.7	Geom	-	3.00	0.00	Y	Arm J1:8 Ahead	Inf
											Arm J2:12 Left	Inf
J2:6/3	U	I	2	3	5.7	Geom	-	3.00	0.00	N	Arm J1:1 Right	Inf
J2:6/4	U	I	2	3	5.7	Geom	-	3.00	0.00	Y	Arm J1:1 Right	Inf
J2:7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:8/1 (Coppins Bridge North Circulatory)	U	G	2	3	5.0	Geom	-	2.70	0.00	Y	Arm J2:6 Right	Inf
J2:8/2 (Coppins Bridge North Circulatory)	U	G	2	3	4.9	Geom	-	2.70	0.00	Y	Arm J2:6 Right	Inf
J2:9/1 (Coppins Bridge North Entry)	U	H	2	3	10.6	Geom	-	3.25	0.00	Y	Arm J2:6 Ahead	Inf
J2:9/2 (Coppins Bridge North Entry)	U	H	2	3	10.6	Geom	-	3.25	0.00	Y	Arm J2:6 Ahead	Inf
J2:10/1	U	K	2	3	60.0	Geom	-	3.50	0.00	Y	Arm J2:4 Ahead	Inf
J2:10/2	U	K	2	3	60.0	Geom	-	3.50	0.00	Y	Arm J2:4 Ahead	Inf
J2:11/1 (Entry Coppins Bridge Car Park)	O		2	3	15.7	Geom	-	3.25	0.00	Y	Arm J1:8 Left	23.22
J2:11/2 (Entry Coppins Bridge Car Park)	O		2	3	2.6	User	1800	-	-	-	-	-
J2:12/1 (Exit Coppins Bridge Car Park)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J3: New 43												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J3:1/1 (Media Way North Entry)	U	A	2	3	17.4	Geom	-	3.20	0.00	Y	Arm J3:3 Ahead	Inf
J3:1/2 (Media Way North Entry)	U	A	2	3	17.4	Geom	-	4.00	0.00	Y	Arm J3:3 Ahead	Inf
J3:2/1 (A3054 Circulatory)	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm J3:3 Right	Inf
J3:2/2 (A3054 Circulatory)	U	C	2	3	20.0	Geom	-	3.50	0.00	Y	Arm J3:3 Right	Inf
J3:3/1 (Medina Way Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:3/2 (Medina Way Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:4/1 (Media Way Entry)	U		2	3	5.0	Geom	-	4.00	0.00	Y	Arm J4:1 Left	60.00
J3:4/2 (Media Way Entry)	U	B	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J2:5 Ahead	Inf
J3:4/3 (Media Way Entry)	U	B	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J2:5 Ahead	Inf

Full Input Data And Results

Junction: J4: New 37												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J4:1/1 (A3054 Circulatory)	U	F	2	3	24.3	Geom	-	4.00	0.00	Y	Arm J4:8 Left	21.00
J4:2/1 (Coppins Bridge North Exit)	U	B D	2	3	10.4	Geom	-	2.50	0.00	Y	Arm J4:6 Ahead	33.00
J4:2/2 (Coppins Bridge North Exit)	U	B	2	3	15.1	Geom	-	3.00	0.00	Y	Arm J4:4 Ahead	34.00
J4:3/1 (Staplers Road Entry)	U	C	2	3	2.6	Geom	-	2.30	0.00	Y	Arm J2:9 Left	44.00
J4:3/2 (Staplers Road Entry)	U	C	2	3	60.0	Geom	-	2.65	0.00	Y	Arm J2:9 Left	44.00
J4:4/1 (Staples Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J4:5/1 (Circulatory (CW) One)	U	A	2	3	9.0	Geom	-	3.50	0.00	Y	Arm J4:4 Left	10.00
J4:6/1 (Circulatory (ACW) One)	U	E	2	3	9.0	Geom	-	4.00	0.00	Y	Arm J2:9 Ahead	Inf
J4:7/1 (Fairlee Road Entry)	U	G	2	3	8.7	Geom	-	2.75	0.00	Y	Arm J4:8 Ahead	Inf
J4:7/2 (Fairlee Road Entry)	U	H	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J4:5 Ahead	Inf
J4:8/1 (Fairlee Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
											Arm J3:2 Right	10.00

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2017 AM'	08:00	09:00	01:00	
2: '2017 PM'	17:00	18:00	01:00	
3: '2034 - AM - DN'	08:00	09:00	01:00	
4: '2034 - PM - DN'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: '2017 AM' (FG1: '2017 AM', Plan 1: 'Fairlee Rd A3054')

Traffic Flows, Desired

Desired Flow :

		Destination									
		A	B	C	D	E	F	G	H	I	Tot.
Origin	A	1	8	0	10	68	94	20	0	751	952
	B	0	1	1	10	74	104	22	0	634	846
	C	0	0	0	0	0	0	0	0	0	0
	D	1	1	0	0	0	3	0	0	1	6
	E	80	67	6	8	7	12	11	0	528	719
	F	47	40	8	0	4	0	29	0	99	227
	G	6	5	0	0	6	0	0	0	19	36
	H	113	95	19	8	91	16	12	0	66	420
	I	546	223	35	5	357	86	37	0	3	1292
	Tot.	794	440	69	41	607	315	131	0	2101	4498

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2017 AM
Junction: J1: George Way NEW 35	
J1:1/1	394
J1:1/2	642
J1:2/1	102
J1:3/1	226
J1:4/1	315
J1:5/1	131
J1:6/1	33
J1:7/1	55
J1:7/2	175
J1:8/1	385
J1:9/1 (short)	373
J1:9/2 (with short)	717(In) 344(Out)
Junction: J2: NEW 36	
J2:1/1	756
J2:1/2	777
J2:1/3	33
J2:2/1	756
J2:2/2	777
J2:2/3	33
J2:3/1	457
J2:3/2	168
J2:4/1 (short)	66
J2:4/2 (with short)	274(In) 208(Out)
J2:4/3	135
J2:5/1	420
J2:5/2	126
J2:6/1 (short)	69
J2:6/2 (with short)	495(In) 426(Out)
J2:6/3	391
J2:6/4	639
J2:7/1	69
J2:8/1	337
J2:8/2	154
J2:9/1	398
J2:9/2	636
J2:10/1	274
J2:10/2	135

Full Input Data And Results

J2:11/1 (with short)	6(In) 0(Out)
J2:11/2 (short)	6
J2:12/1	41
Junction: J3: New 43	
J3:1/1	756
J3:1/2	594
J3:2/1	350
J3:2/2	401
J3:3/1	1106
J3:3/2	995
J3:4/1 (short)	546
J3:4/2 (with short)	966(In) 420(Out)
J3:4/3	126
Junction: J4: New 37	
J4:1/1	546
J4:2/1 (short)	248
J4:2/2 (with short)	680(In) 432(Out)
J4:3/1 (short)	208
J4:3/2 (with short)	843(In) 635(Out)
J4:4/1	440
J4:5/1	199
J4:6/1	248
J4:7/1 (short)	199
J4:7/2 (with short)	950(In) 751(Out)
J4:8/1	794

Full Input Data And Results

Lane Saturation Flows

Junction: J1: George Way NEW 35											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
J1:1/1 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J1:2 Ahead	25.00	23.1 %	1901	1901			
				Arm J1:4 Left	25.00	76.9 %					
J1:1/2 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J2:2 Right	16.00	100.0 %	1842	1842			
J1:2/1 (East St Exit - Pyle St)	3.00	0.00	Y	Arm J1:5 Ahead	14.00	100.0 %	1730	1730			
J1:3/1 (East St (Pyle St Turn) Entry Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:4/1 (East St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:5/1 (Pyle St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:6/1 (Pyle St Entry)	3.25	0.00	Y	Arm J1:7 Left	7.00	100.0 %	1598	1598			
J1:7/1 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:7/2 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:8/1 (A3020 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
J1:9/1 (A3020 Entry)	4.00	0.00	Y	Arm J1:2 Left	22.00	2.9 %	1973	1973			
				Arm J1:4 Left	25.00	3.2 %					
				Arm J2:2 Ahead	80.00	93.8 %					
J1:9/2 (A3020 Entry)	4.00	0.00	Y	Arm J2:2 Ahead	80.00	100.0 %	1978	1978			

Full Input Data And Results

Junction: J2: NEW 36								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1	3.00	0.00	Y	Arm J3:1 Ahead	Inf	100.0 %	1915	1915
J2:1/2	3.00	0.00	N	Arm J3:1 Ahead Arm J2:3 Right	Inf Inf	68.0 % 32.0 %	2055	2055
J2:1/3	3.00	0.00	Y	Arm J2:3 Right	18.20	100.0 %	1769	1769
J2:2/1 (Circulatory NB Three)	3.00	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1915	1915
J2:2/2 (Circulatory NB Three)	2.80	0.00	N	Arm J2:1 Ahead	Inf	100.0 %	2035	2035
J2:2/3 (Circulatory NB Three)	2.50	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1865	1865
J2:3/1 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	2015	2015
J2:3/2 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J2:8 Right	12.00	100.0 %	1791	1791
J2:4/1 (High St Entry)	3.00	0.00	Y	Arm J3:1 Left	Inf	100.0 %	1915	1915
J2:4/2 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:4/3 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:5/1 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J4:2 Left Arm J2:8 Ahead	9.00 13.00	53.1 % 46.9 %	1764	1764
J2:5/2 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J2:8 Ahead	20.00	100.0 %	1874	1874
J2:6/1	3.25	0.00	Y	Arm J2:7 Left Arm J1:8 Ahead	5.00 Inf	100.0 % 90.4 %	1492	1492
J2:6/2	3.00	0.00	Y	Arm J2:12 Left	Inf	9.6 %	1915	1915
J2:6/3	3.00	0.00	N	Arm J1:1 Right	Inf	100.0 %	2055	2055
J2:6/4	3.00	0.00	Y	Arm J1:1 Right	Inf	100.0 %	1915	1915
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:8/2 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:9/1 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940

Full Input Data And Results

J2:9/2 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:10/1	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:10/2	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:11/1 (Entry Coppins Bridge Car Park)	3.25	0.00	Y	Arm J1:8 Left	23.22	0.0 %	1940	1940
J2:11/2 (Entry Coppins Bridge Car Park Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:12/1 (Exit Coppins Bridge Car Park Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: New 43								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (Media Way North Entry)	3.20	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1935	1935
J3:1/2 (Media Way North Entry)	4.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	2015	2015
J3:2/1 (A3054 Circulatory)	3.25	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1940	1940
J3:2/2 (A3054 Circulatory)	3.50	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1965	1965
J3:3/1 (Medina Way Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (Medina Way Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (Media Way Entry)	4.00	0.00	Y	Arm J4:1 Left	60.00	100.0 %	1966	1966
J3:4/2 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015
J3:4/3 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015

Full Input Data And Results

Junction: J4: New 37								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A3054 Circulatory)	4.00	0.00	Y	Arm J4:8 Left	21.00	100.0 %	1881	1881
J4:2/1 (Coppins Bridge North Exit)	2.50	0.00	Y	Arm J4:6 Ahead	33.00	100.0 %	1784	1784
J4:2/2 (Coppins Bridge North Exit)	3.00	0.00	Y	Arm J4:4 Ahead	34.00	100.0 %	1834	1834
J4:3/1 (Staplers Road Entry)	2.30	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1784	1784
J4:3/2 (Staplers Road Entry)	2.65	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1818	1818
J4:4/1 (Staples Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:5/1 (Circulatory (CW) One)	3.50	0.00	Y	Arm J4:4 Left	10.00	4.0 %	1953	1953
Arm J2:9 Ahead				Inf	96.0 %			
J4:6/1 (Circulatory (ACW) One)	4.00	0.00	Y	Arm J4:8 Ahead	Inf	100.0 %	2015	2015
J4:7/1 (Fairlee Road Entry)	2.75	0.00	Y	Arm J4:5 Ahead	Inf	100.0 %	1890	1890
J4:7/2 (Fairlee Road Entry)	3.00	0.00	Y	Arm J3:2 Right	10.00	100.0 %	1665	1665
J4:8/1 (Fairlee Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2017 PM' (FG2: '2017 PM', Plan 1: 'Fairlee Rd A3054')

Traffic Flows, Desired

Desired Flow :

	Destination										
	A	B	C	D	E	F	G	H	I	Tot.	
Origin	A	0	10	1	2	82	104	8	0	670	877
	B	0	0	0	1	74	94	7	0	346	522
	C	0	0	0	0	0	0	0	0	0	0
	D	1	1	0	0	25	4	1	0	5	37
	E	127	136	2	1	1	37	8	0	407	719
	F	69	74	5	1	12	1	6	0	73	241
	G	19	21	0	0	2	0	0	0	22	64
	H	172	184	42	19	128	24	1	0	62	632
	I	686	373	94	13	592	142	43	0	21	1964
	Tot.	1074	799	144	37	916	406	74	0	1606	5056

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2017 PM
Junction: J1: George Way NEW 35	
J1:1/1	429
J1:1/2	384
J1:2/1	68
J1:3/1	241
J1:4/1	406
J1:5/1	74
J1:6/1	64
J1:7/1	75
J1:7/2	224
J1:8/1	424
J1:9/1 (short)	345
J1:9/2 (with short)	719(In) 374(Out)
Junction: J2: NEW 36	
J2:1/1	606
J2:1/2	726
J2:1/3	25
J2:2/1	606
J2:2/2	726
J2:2/3	25
J2:3/1	804
J2:3/2	189
J2:4/1 (short)	62
J2:4/2 (with short)	418(In) 356(Out)
J2:4/3	164
J2:5/1	630
J2:5/2	206
J2:6/1 (short)	144
J2:6/2 (with short)	580(In) 436(Out)
J2:6/3	424
J2:6/4	377
J2:7/1	144
J2:8/1	420
J2:8/2	232
J2:9/1	373
J2:9/2	356
J2:10/1	418
J2:10/2	164

Full Input Data And Results

J2:11/1 (with short)	37(In) 25(Out)
J2:11/2 (short)	12
J2:12/1	37
Junction: J3: New 43	
J3:1/1	636
J3:1/2	310
J3:2/1	330
J3:2/2	330
J3:3/1	966
J3:3/2	640
J3:4/1 (short)	686
J3:4/2 (with short)	1316(In) 630(Out)
J3:4/3	206
Junction: J4: New 37	
J4:1/1	686
J4:2/1 (short)	388
J4:2/2 (with short)	1177(In) 789(Out)
J4:3/1 (short)	176
J4:3/2 (with short)	522(In) 346(Out)
J4:4/1	799
J4:5/1	217
J4:6/1	388
J4:7/1 (short)	217
J4:7/2 (with short)	877(In) 660(Out)
J4:8/1	1074

Full Input Data And Results

Lane Saturation Flows

Junction: J1: George Way NEW 35											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
J1:1/1 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J1:2 Ahead	25.00	14.0 %	1901	1901			
				Arm J1:4 Left	25.00	86.0 %					
J1:1/2 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J2:2 Right	16.00	100.0 %	1842	1842			
J1:2/1 (East St Exit - Pyle St)	3.00	0.00	Y	Arm J1:5 Ahead	14.00	100.0 %	1730	1730			
J1:3/1 (East St (Pyle St Turn) Entry Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:4/1 (East St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:5/1 (Pyle St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:6/1 (Pyle St Entry)	3.25	0.00	Y	Arm J1:7 Left	7.00	100.0 %	1598	1598			
J1:7/1 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:7/2 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:8/1 (A3020 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
J1:9/1 (A3020 Entry)	4.00	0.00	Y	Arm J1:2 Left	22.00	2.3 %	1967	1967			
				Arm J1:4 Left	25.00	10.7 %					
				Arm J2:2 Ahead	80.00	87.0 %					
J1:9/2 (A3020 Entry)	4.00	0.00	Y	Arm J2:2 Ahead	80.00	100.0 %	1978	1978			

Full Input Data And Results

Junction: J2: NEW 36								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1	3.00	0.00	Y	Arm J3:1 Ahead	Inf	100.0 %	1915	1915
J2:1/2	3.00	0.00	N	Arm J3:1 Ahead Arm J2:3 Right	Inf Inf	38.3 % 61.7 %	2055	2055
J2:1/3	3.00	0.00	Y	Arm J2:3 Right	18.20	100.0 %	1769	1769
J2:2/1 (Circulatory NB Three)	3.00	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1915	1915
J2:2/2 (Circulatory NB Three)	2.80	0.00	N	Arm J2:1 Ahead	Inf	100.0 %	2035	2035
J2:2/3 (Circulatory NB Three)	2.50	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1865	1865
J2:3/1 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	2015	2015
J2:3/2 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J2:8 Right	12.00	100.0 %	1791	1791
J2:4/1 (High St Entry)	3.00	0.00	Y	Arm J3:1 Left	Inf	100.0 %	1915	1915
J2:4/2 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:4/3 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:5/1 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J4:2 Left Arm J2:8 Ahead	9.00 13.00	59.2 % 40.8 %	1759	1759
J2:5/2 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J2:8 Ahead	20.00	100.0 %	1874	1874
J2:6/1	3.25	0.00	Y	Arm J2:7 Left Arm J1:8 Ahead	5.00 Inf	100.0 % 91.5 %	1492	1492
J2:6/2	3.00	0.00	Y	Arm J2:12 Left	Inf	8.5 %	1915	1915
J2:6/3	3.00	0.00	N	Arm J1:1 Right	Inf	100.0 %	2055	2055
J2:6/4	3.00	0.00	Y	Arm J1:1 Right	Inf	100.0 %	1915	1915
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:8/2 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:9/1 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940

Full Input Data And Results

J2:9/2 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:10/1	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:10/2	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:11/1 (Entry Coppins Bridge Car Park)	3.25	0.00	Y	Arm J1:8 Left	23.22	100.0 %	1822	1822
J2:11/2 (Entry Coppins Bridge Car Park Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:12/1 (Exit Coppins Bridge Car Park Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: New 43

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (Media Way North Entry)	3.20	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1935	1935
J3:1/2 (Media Way North Entry)	4.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	2015	2015
J3:2/1 (A3054 Circulatory)	3.25	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1940	1940
J3:2/2 (A3054 Circulatory)	3.50	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1965	1965
J3:3/1 (Medina Way Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (Medina Way Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (Media Way Entry)	4.00	0.00	Y	Arm J4:1 Left	60.00	100.0 %	1966	1966
J3:4/2 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015
J3:4/3 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015

Full Input Data And Results

Junction: J4: New 37								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A3054 Circulatory)	4.00	0.00	Y	Arm J4:8 Left	21.00	100.0 %	1881	1881
J4:2/1 (Coppins Bridge North Exit)	2.50	0.00	Y	Arm J4:6 Ahead	33.00	100.0 %	1784	1784
J4:2/2 (Coppins Bridge North Exit)	3.00	0.00	Y	Arm J4:4 Ahead	34.00	100.0 %	1834	1834
J4:3/1 (Staplers Road Entry)	2.30	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1784	1784
J4:3/2 (Staplers Road Entry)	2.65	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1818	1818
J4:4/1 (Staples Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:5/1 (Circulatory (CW) One)	3.50	0.00	Y	Arm J4:4 Left	10.00	4.6 %	1952	1952
Arm J2:9 Ahead				Inf	95.4 %			
J4:6/1 (Circulatory (ACW) One)	4.00	0.00	Y	Arm J4:8 Ahead	Inf	100.0 %	2015	2015
J4:7/1 (Fairlee Road Entry)	2.75	0.00	Y	Arm J4:5 Ahead	Inf	100.0 %	1890	1890
J4:7/2 (Fairlee Road Entry)	3.00	0.00	Y	Arm J3:2 Right	10.00	100.0 %	1665	1665
J4:8/1 (Fairlee Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2034 AM DN' (FG3: '2034 - AM - DN', Plan 1: 'Fairlee Rd A3054')

Traffic Flows, Desired

Desired Flow :

	Destination										
	A	B	C	D	E	F	G	H	I	Tot.	
Origin	A	1	10	1	12	83	115	24	0	919	1165
	B	0	1	1	13	91	127	26	0	775	1034
	C	0	0	0	0	0	0	0	0	0	0
	D	1	1	0	0	0	4	0	0	1	7
	E	98	82	7	10	9	14	14	0	646	880
	F	58	48	10	0	5	0	35	0	121	277
	G	7	6	0	0	7	0	0	0	23	43
	H	138	116	23	10	112	20	14	0	80	513
	I	667	273	43	6	436	105	45	0	4	1579
	Tot.	970	537	85	51	743	385	158	0	2569	5498

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2034 AM DN
Junction: J1: George Way NEW 35	
J1:1/1	480
J1:1/2	784
J1:2/1	123
J1:3/1	277
J1:4/1	385
J1:5/1	158
J1:6/1	43
J1:7/1	95
J1:7/2	190
J1:8/1	408
J1:9/1 (short)	379
J1:9/2 (with short)	877(In) 498(Out)
Junction: J2: NEW 36	
J2:1/1	899
J2:1/2	974
J2:1/3	45
J2:2/1	899
J2:2/2	974
J2:2/3	45
J2:3/1	557
J2:3/2	223
J2:4/1 (short)	80
J2:4/2 (with short)	334(In) 254(Out)
J2:4/3	178
J2:5/1	444
J2:5/2	154
J2:6/1 (short)	85
J2:6/2 (with short)	544(In) 459(Out)
J2:6/3	476
J2:6/4	781
J2:7/1	85
J2:8/1	360
J2:8/2	188
J2:9/1	476
J2:9/2	777
J2:10/1	334
J2:10/2	178

Full Input Data And Results

J2:11/1 (with short)	7(In) 0(Out)
J2:11/2 (short)	7
J2:12/1	51
Junction: J3: New 43	
J3:1/1	902
J3:1/2	748
J3:2/1	350
J3:2/2	569
J3:3/1	1252
J3:3/2	1317
J3:4/1 (short)	667
J3:4/2 (with short)	1111(In) 444(Out)
J3:4/3	154
Junction: J4: New 37	
J4:1/1	667
J4:2/1 (short)	303
J4:2/2 (with short)	830(In) 527(Out)
J4:3/1 (short)	257
J4:3/2 (with short)	1033(In) 776(Out)
J4:4/1	537
J4:5/1	230
J4:6/1	303
J4:7/1 (short)	230
J4:7/2 (with short)	1149(In) 919(Out)
J4:8/1	970

Full Input Data And Results

Lane Saturation Flows

Junction: J1: George Way NEW 35											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
J1:1/1 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J1:2 Ahead	25.00	22.7 %	1901	1901			
				Arm J1:4 Left	25.00	77.3 %					
J1:1/2 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J2:2 Right	16.00	100.0 %	1842	1842			
J1:2/1 (East St Exit - Pyle St)	3.00	0.00	Y	Arm J1:5 Ahead	14.00	100.0 %	1730	1730			
J1:3/1 (East St (Pyle St Turn) Entry Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:4/1 (East St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:5/1 (Pyle St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:6/1 (Pyle St Entry)	3.25	0.00	Y	Arm J1:7 Left	7.00	100.0 %	1598	1598			
J1:7/1 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:7/2 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:8/1 (A3020 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
J1:9/1 (A3020 Entry)	4.00	0.00	Y	Arm J1:2 Left	22.00	3.7 %	1971	1971			
				Arm J1:4 Left	25.00	3.7 %					
				Arm J2:2 Ahead	80.00	92.6 %					
J1:9/2 (A3020 Entry)	4.00	0.00	Y	Arm J2:2 Ahead	80.00	100.0 %	1978	1978			

Full Input Data And Results

Junction: J2: NEW 36								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1	3.00	0.00	Y	Arm J3:1 Ahead	Inf	100.0 %	1915	1915
J2:1/2	3.00	0.00	N	Arm J3:1 Ahead Arm J2:3 Right	Inf Inf	68.9 % 31.1 %	2055	2055
J2:1/3	3.00	0.00	Y	Arm J2:3 Right	18.20	100.0 %	1769	1769
J2:2/1 (Circulatory NB Three)	3.00	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1915	1915
J2:2/2 (Circulatory NB Three)	2.80	0.00	N	Arm J2:1 Ahead	Inf	100.0 %	2035	2035
J2:2/3 (Circulatory NB Three)	2.50	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1865	1865
J2:3/1 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	2015	2015
J2:3/2 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J2:8 Right	12.00	100.0 %	1791	1791
J2:4/1 (High St Entry)	3.00	0.00	Y	Arm J3:1 Left	Inf	100.0 %	1915	1915
J2:4/2 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:4/3 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:5/1 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J4:2 Left Arm J2:8 Ahead	9.00 13.00	61.5 % 38.5 %	1757	1757
J2:5/2 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J2:8 Ahead	20.00	100.0 %	1874	1874
J2:6/1	3.25	0.00	Y	Arm J2:7 Left Arm J1:8 Ahead	5.00 Inf	100.0 % 88.9 %	1492	1492
J2:6/2	3.00	0.00	Y	Arm J2:12 Left	Inf	11.1 %	1915	1915
J2:6/3	3.00	0.00	N	Arm J1:1 Right	Inf	100.0 %	2055	2055
J2:6/4	3.00	0.00	Y	Arm J1:1 Right	Inf	100.0 %	1915	1915
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:8/2 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:9/1 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940

Full Input Data And Results

J2:9/2 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:10/1	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:10/2	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:11/1 (Entry Coppins Bridge Car Park)	3.25	0.00	Y	Arm J1:8 Left	23.22	0.0 %	1940	1940
J2:11/2 (Entry Coppins Bridge Car Park Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:12/1 (Exit Coppins Bridge Car Park Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: New 43

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (Media Way North Entry)	3.20	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1935	1935
J3:1/2 (Media Way North Entry)	4.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	2015	2015
J3:2/1 (A3054 Circulatory)	3.25	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1940	1940
J3:2/2 (A3054 Circulatory)	3.50	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1965	1965
J3:3/1 (Medina Way Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (Medina Way Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (Media Way Entry)	4.00	0.00	Y	Arm J4:1 Left	60.00	100.0 %	1966	1966
J3:4/2 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015
J3:4/3 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015

Full Input Data And Results

Junction: J4: New 37								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A3054 Circulatory)	4.00	0.00	Y	Arm J4:8 Left	21.00	100.0 %	1881	1881
J4:2/1 (Coppins Bridge North Exit)	2.50	0.00	Y	Arm J4:6 Ahead	33.00	100.0 %	1784	1784
J4:2/2 (Coppins Bridge North Exit)	3.00	0.00	Y	Arm J4:4 Ahead	34.00	100.0 %	1834	1834
J4:3/1 (Staplers Road Entry)	2.30	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1784	1784
J4:3/2 (Staplers Road Entry)	2.65	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1818	1818
J4:4/1 (Staples Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:5/1 (Circulatory (CW) One)	3.50	0.00	Y	Arm J4:4 Left	10.00	4.3 %	1952	1952
Arm J2:9 Ahead				Inf	95.7 %			
J4:6/1 (Circulatory (ACW) One)	4.00	0.00	Y	Arm J4:8 Ahead	Inf	100.0 %	2015	2015
J4:7/1 (Fairlee Road Entry)	2.75	0.00	Y	Arm J4:5 Ahead	Inf	100.0 %	1890	1890
J4:7/2 (Fairlee Road Entry)	3.00	0.00	Y	Arm J3:2 Right	10.00	100.0 %	1665	1665
J4:8/1 (Fairlee Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2034 PM DN' (FG4: '2034 - PM - DN', Plan 1: 'Fairlee Rd A3054')

Traffic Flows, Desired

Desired Flow :

	Destination										
	A	B	C	D	E	F	G	H	I	Tot.	
Origin	A	0	12	1	2	100	127	10	0	817	1069
	B	0	0	1	2	90	115	9	0	422	639
	C	0	0	0	0	0	0	0	0	0	0
	D	1	1	0	0	30	5	1	0	6	44
	E	155	165	2	1	1	45	10	0	496	875
	F	84	90	6	1	15	1	7	0	89	293
	G	24	25	0	0	2	0	0	0	27	78
	H	210	224	52	23	155	29	1	0	76	770
	I	836	454	114	16	722	173	52	0	26	2393
	Tot.	1310	971	176	45	1115	495	90	0	1959	6161

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2034 PM DN
Junction: J1: George Way NEW 35	
J1:1/1	523
J1:1/2	456
J1:2/1	83
J1:3/1	293
J1:4/1	495
J1:5/1	90
J1:6/1	78
J1:7/1	96
J1:7/2	268
J1:8/1	548
J1:9/1 (short)	411
J1:9/2 (with short)	875(In) 464(Out)
Junction: J2: NEW 36	
J2:1/1	777
J2:1/2	834
J2:1/3	29
J2:2/1	777
J2:2/2	834
J2:2/3	29
J2:3/1	979
J2:3/2	289
J2:4/1 (short)	76
J2:4/2 (with short)	510(In) 434(Out)
J2:4/3	260
J2:5/1	764
J2:5/2	251
J2:6/1 (short)	176
J2:6/2 (with short)	739(In) 563(Out)
J2:6/3	517
J2:6/4	448
J2:7/1	176
J2:8/1	568
J2:8/2	282
J2:9/1	432
J2:9/2	422
J2:10/1	510
J2:10/2	260

Full Input Data And Results

J2:11/1 (with short)	44(In) 30(Out)
J2:11/2 (short)	14
J2:12/1	45
Junction: J3: New 43	
J3:1/1	812
J3:1/2	330
J3:2/1	407
J3:2/2	410
J3:3/1	1219
J3:3/2	740
J3:4/1 (short)	836
J3:4/2 (with short)	1600(In) 764(Out)
J3:4/3	251
Junction: J4: New 37	
J4:1/1	836
J4:2/1 (short)	474
J4:2/2 (with short)	1433(In) 959(Out)
J4:3/1 (short)	192
J4:3/2 (with short)	614(In) 422(Out)
J4:4/1	971
J4:5/1	252
J4:6/1	474
J4:7/1 (short)	252
J4:7/2 (with short)	1069(In) 817(Out)
J4:8/1	1310

Full Input Data And Results

Lane Saturation Flows

Junction: J1: George Way NEW 35											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
J1:1/1 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J1:2 Ahead	25.00	14.0 %	1901	1901			
				Arm J1:4 Left	25.00	86.0 %					
J1:1/2 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J2:2 Right	16.00	100.0 %	1842	1842			
J1:2/1 (East St Exit - Pyle St)	3.00	0.00	Y	Arm J1:5 Ahead	14.00	100.0 %	1730	1730			
J1:3/1 (East St (Pyle St Turn) Entry Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:4/1 (East St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:5/1 (Pyle St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:6/1 (Pyle St Entry)	3.25	0.00	Y	Arm J1:7 Left	7.00	100.0 %	1598	1598			
J1:7/1 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:7/2 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:8/1 (A3020 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
J1:9/1 (A3020 Entry)	4.00	0.00	Y	Arm J1:2 Left	22.00	2.4 %	1967	1967			
				Arm J1:4 Left	25.00	10.9 %					
				Arm J2:2 Ahead	80.00	86.6 %					
J1:9/2 (A3020 Entry)	4.00	0.00	Y	Arm J2:2 Ahead	80.00	100.0 %	1978	1978			

Full Input Data And Results

Junction: J2: NEW 36								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1	3.00	0.00	Y	Arm J3:1 Ahead	Inf	100.0 %	1915	1915
J2:1/2	3.00	0.00	N	Arm J3:1 Ahead Arm J2:3 Right	Inf Inf	34.7 % 65.3 %	2055	2055
J2:1/3	3.00	0.00	Y	Arm J2:3 Right	18.20	100.0 %	1769	1769
J2:2/1 (Circulatory NB Three)	3.00	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1915	1915
J2:2/2 (Circulatory NB Three)	2.80	0.00	N	Arm J2:1 Ahead	Inf	100.0 %	2035	2035
J2:2/3 (Circulatory NB Three)	2.50	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1865	1865
J2:3/1 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	2015	2015
J2:3/2 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J2:8 Right	12.00	100.0 %	1791	1791
J2:4/1 (High St Entry)	3.00	0.00	Y	Arm J3:1 Left	Inf	100.0 %	1915	1915
J2:4/2 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:4/3 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:5/1 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J4:2 Left Arm J2:8 Ahead	9.00 13.00	59.4 % 40.6 %	1759	1759
J2:5/2 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J2:8 Ahead	20.00	100.0 %	1874	1874
J2:6/1	3.25	0.00	Y	Arm J2:7 Left Arm J1:8 Ahead	5.00 Inf	100.0 % 92.0 %	1492	1492
J2:6/2	3.00	0.00	Y	Arm J2:12 Left	Inf	8.0 %	1915	1915
J2:6/3	3.00	0.00	N	Arm J1:1 Right	Inf	100.0 %	2055	2055
J2:6/4	3.00	0.00	Y	Arm J1:1 Right	Inf	100.0 %	1915	1915
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:8/2 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:9/1 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940

Full Input Data And Results

J2:9/2 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:10/1	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:10/2	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:11/1 (Entry Coppins Bridge Car Park)	3.25	0.00	Y	Arm J1:8 Left	23.22	100.0 %	1822	1822
J2:11/2 (Entry Coppins Bridge Car Park Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:12/1 (Exit Coppins Bridge Car Park Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: New 43

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (Media Way North Entry)	3.20	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1935	1935
J3:1/2 (Media Way North Entry)	4.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	2015	2015
J3:2/1 (A3054 Circulatory)	3.25	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1940	1940
J3:2/2 (A3054 Circulatory)	3.50	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1965	1965
J3:3/1 (Medina Way Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (Medina Way Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (Media Way Entry)	4.00	0.00	Y	Arm J4:1 Left	60.00	100.0 %	1966	1966
J3:4/2 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015
J3:4/3 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015

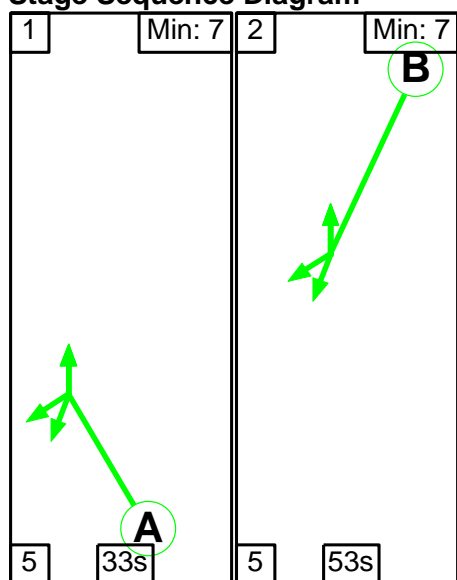
Full Input Data And Results

Junction: J4: New 37								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A3054 Circulatory)	4.00	0.00	Y	Arm J4:8 Left	21.00	100.0 %	1881	1881
J4:2/1 (Coppins Bridge North Exit)	2.50	0.00	Y	Arm J4:6 Ahead	33.00	100.0 %	1784	1784
J4:2/2 (Coppins Bridge North Exit)	3.00	0.00	Y	Arm J4:4 Ahead	34.00	100.0 %	1834	1834
J4:3/1 (Staplers Road Entry)	2.30	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1784	1784
J4:3/2 (Staplers Road Entry)	2.65	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1818	1818
J4:4/1 (Staples Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:5/1 (Circulatory (CW) One)	3.50	0.00	Y	Arm J4:4 Left	10.00	4.8 %	1951	1951
Arm J2:9 Ahead				Inf	95.2 %			
J4:6/1 (Circulatory (ACW) One)	4.00	0.00	Y	Arm J4:8 Ahead	Inf	100.0 %	2015	2015
J4:7/1 (Fairlee Road Entry)	2.75	0.00	Y	Arm J4:5 Ahead	Inf	100.0 %	1890	1890
J4:7/2 (Fairlee Road Entry)	3.00	0.00	Y	Arm J3:2 Right	10.00	100.0 %	1665	1665
J4:8/1 (Fairlee Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2017 AM' (FG1: '2017 AM', Plan 1: 'Fairlee Rd A3054')

C1

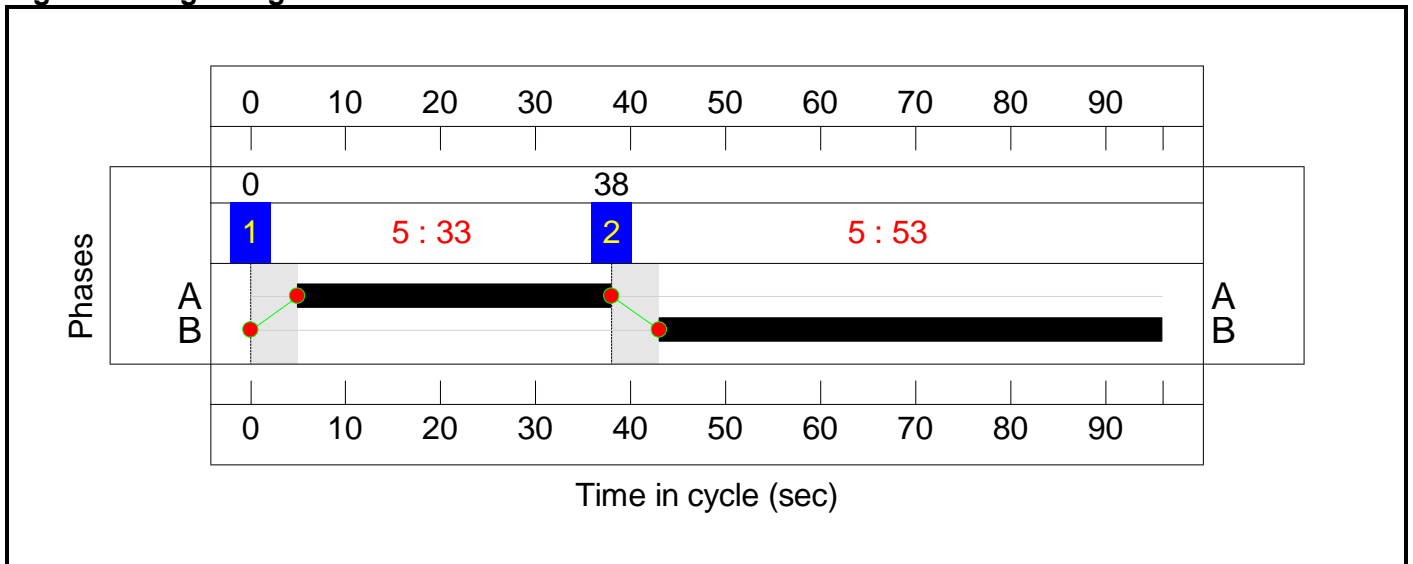
Stage Sequence Diagram



Stage Timings

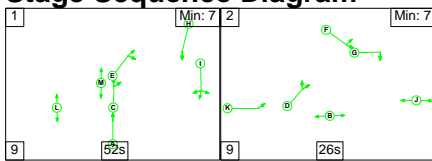
Stage	1	2
Duration	33	53
Change Point	0	38

Signal Timings Diagram



C2

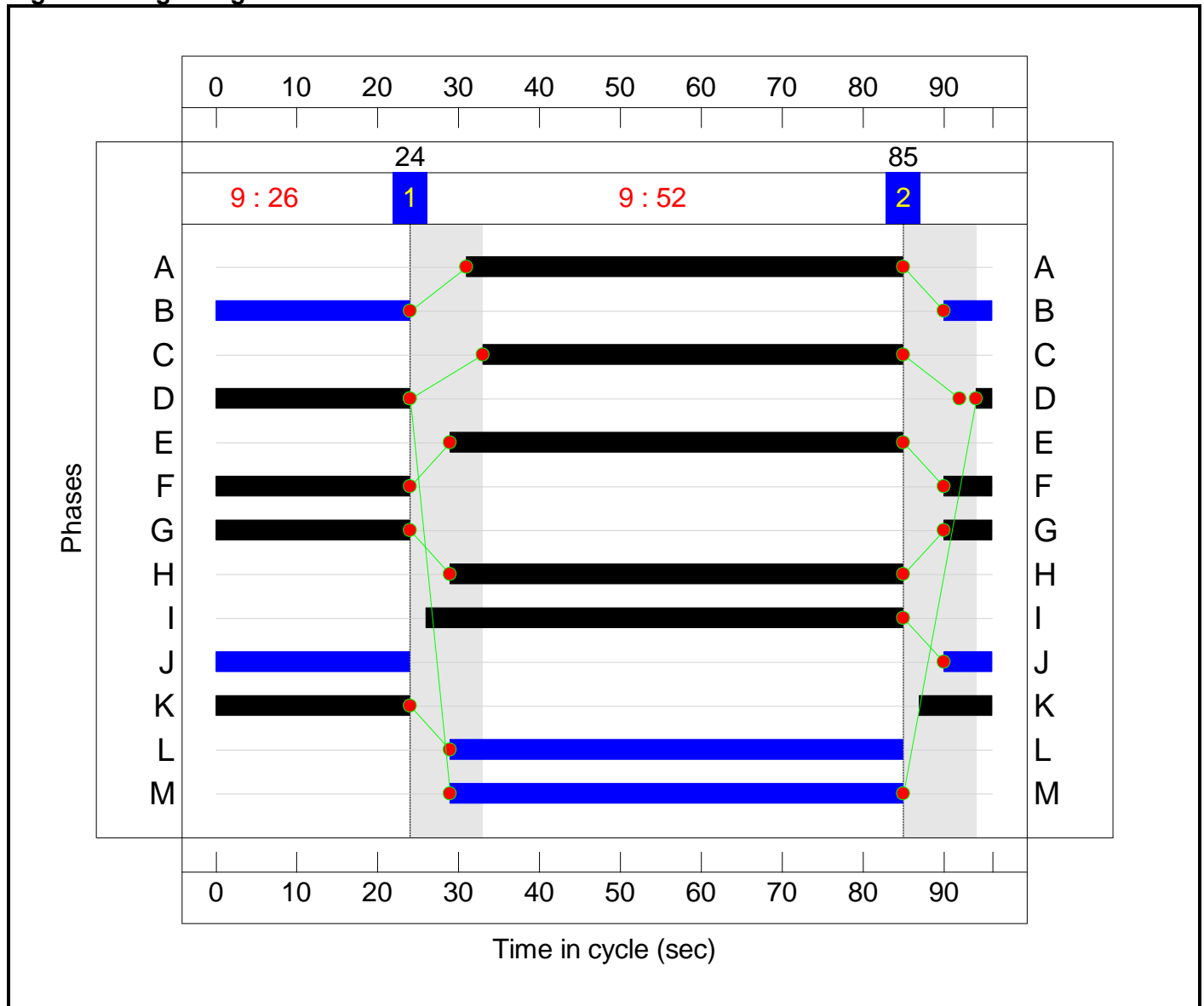
Stage Sequence Diagram



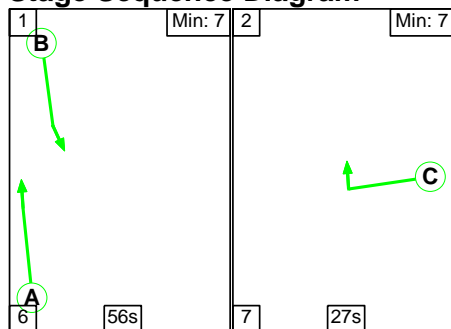
Stage Timings

Stage	1	2
Duration	52	26
Change Point	24	85

Signal Timings Diagram



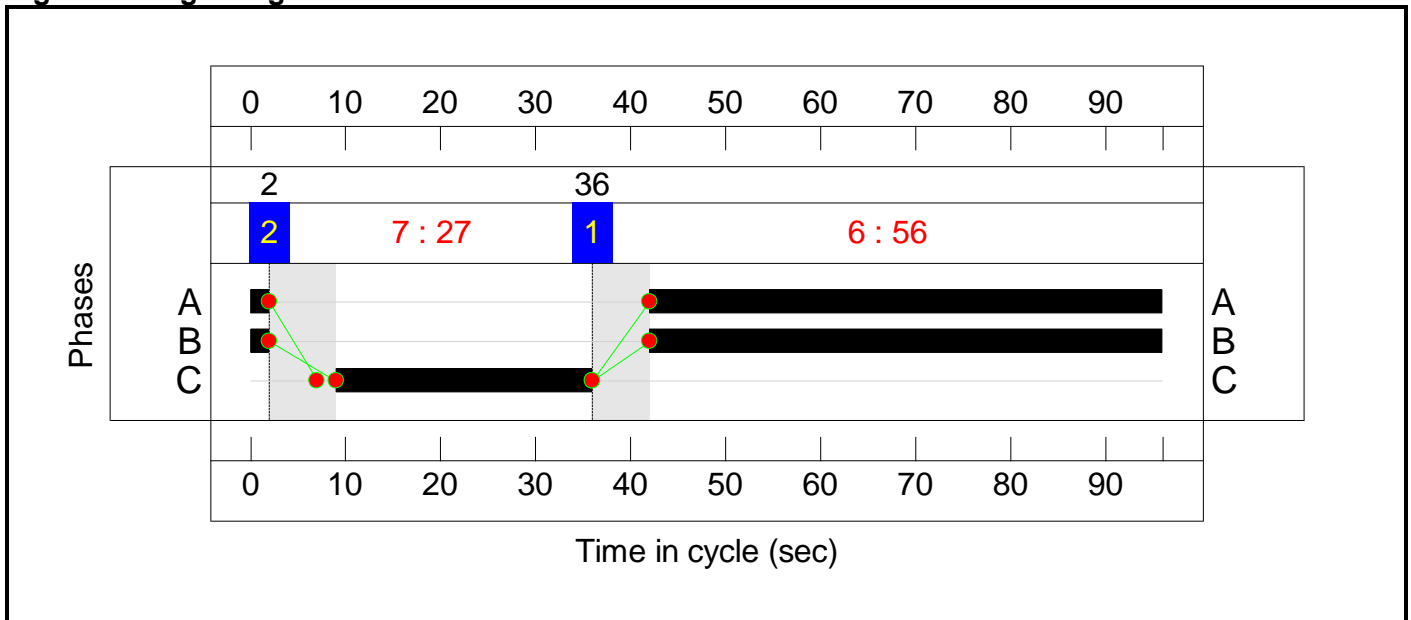
C3 Stage Sequence Diagram



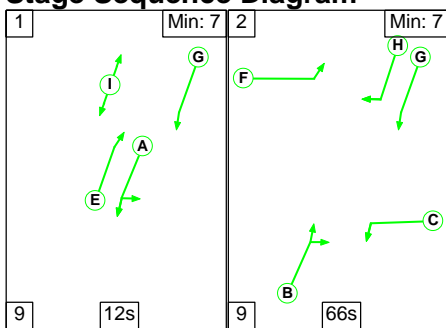
Stage Timings

Stage	1	2
Duration	56	27
Change Point	36	2

Signal Timings Diagram



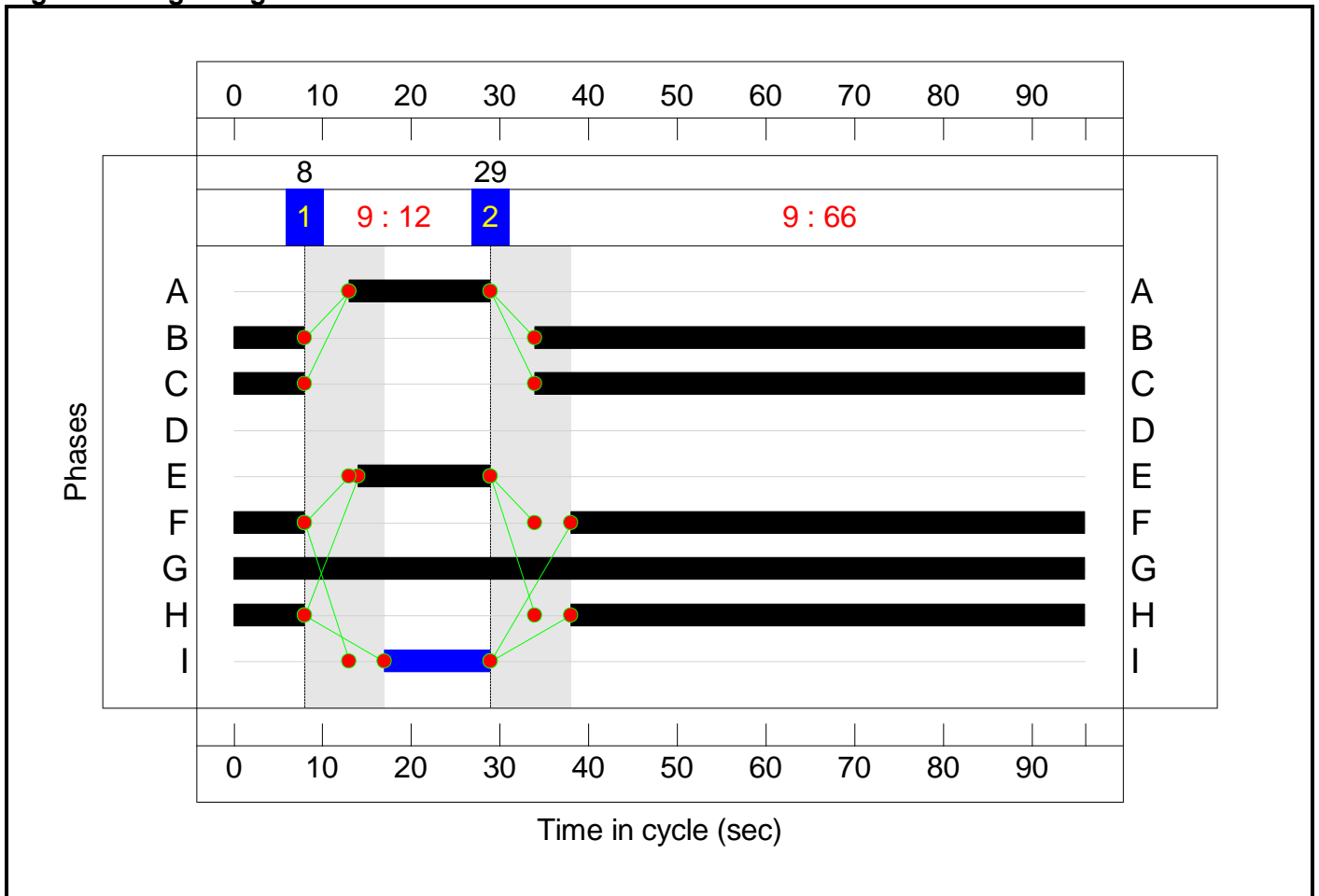
C4 Stage Sequence Diagram



Stage Timings

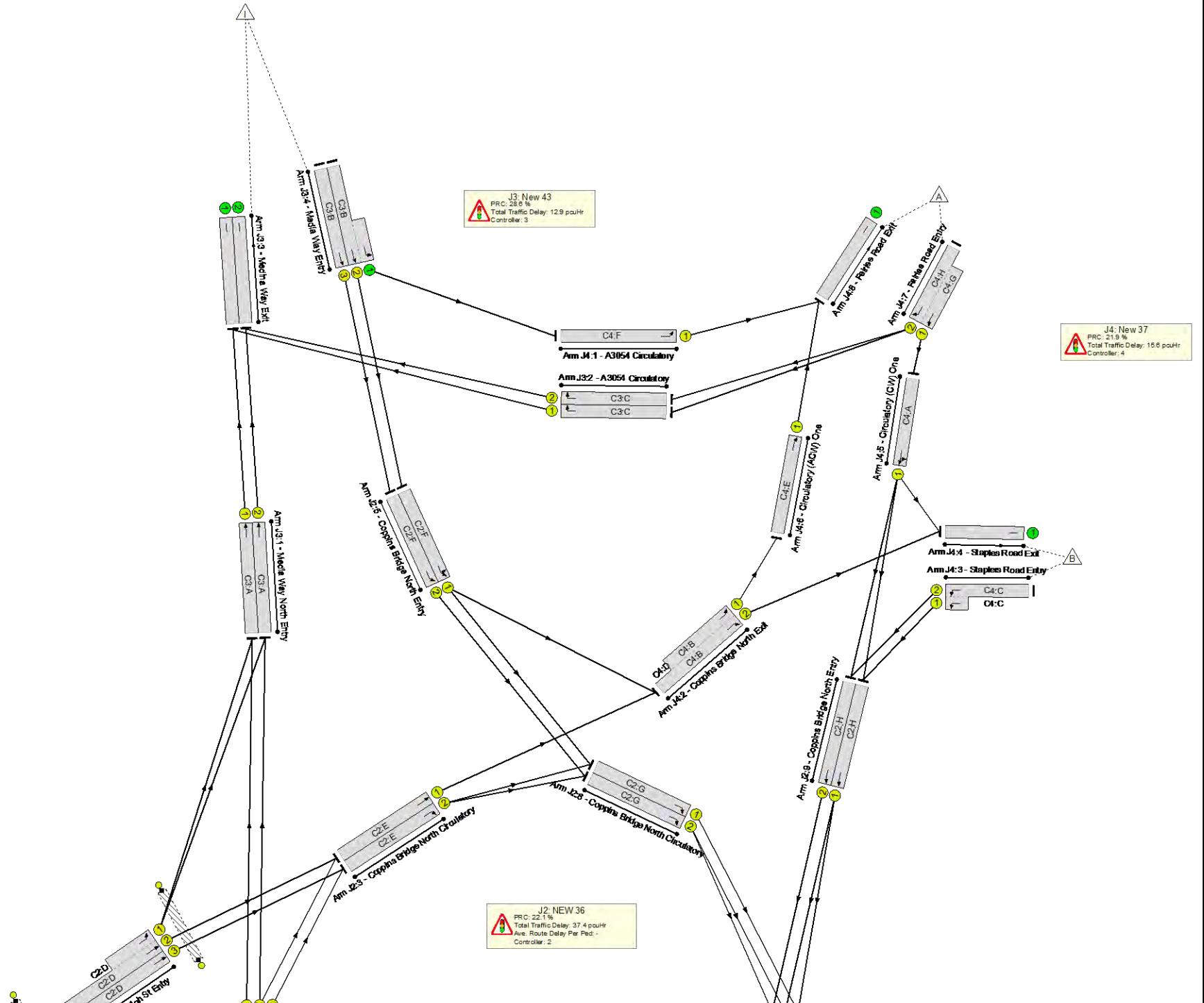
Stage	1	2
Duration	12	66
Change Point	8	29

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: HCA Tender IoW	-	-	N/A	-	-		-	-	-	-	-	-	73.8%
J1: George Way NEW 35	-	-	N/A	-	-		-	-	-	-	-	-	62.0%
1/1	Coppins Bridge South Entry Ahead Left	U	N/A	N/A	C1:B		1	53	-	394	1901	1069	36.8%
1/2	Coppins Bridge South Entry Right	U	N/A	N/A	C1:B		1	53	-	642	1842	1036	62.0%
2/1	East St Exit - Pyle St Ahead	O	N/A	N/A	-		-	-	-	102	1730	1193	8.6%
3/1	East St (Pyle St Turn) Entry Left Ahead	U	N/A	N/A	-		-	-	-	226	Inf	Inf	0.0%
4/1	East St Exit	U	N/A	N/A	-		-	-	-	315	Inf	Inf	0.0%
5/1	Pyle St Exit	U	N/A	N/A	-		-	-	-	131	Inf	Inf	0.0%
6/1	Pyle St Entry Left	O	N/A	N/A	-		-	-	-	33	1598	766	4.3%
7/1	East St Entry Ahead	O	N/A	N/A	-		-	-	-	55	1865	768	7.2%
7/2	East St Entry Ahead	O	N/A	N/A	-		-	-	-	175	1865	788	22.2%
8/1	A3020 Exit	U	N/A	N/A	-		-	-	-	385	Inf	Inf	0.0%
9/2+9/1	A3020 Entry Left Left2 Ahead	U	N/A	N/A	C1:A		1	33	-	717	1978:1973	571+619	60.2 : 60.2%
J2: NEW 36	-	-	N/A	-	-		-	-	-	-	-	-	73.7%
1/1	Ahead	U	N/A	N/A	C2:C		1	52	-	756	1915	1057	71.5%
1/2	Ahead Right	U	N/A	N/A	C2:C		1	52	-	777	2055	1135	68.5%
1/3	Right	U	N/A	N/A	C2:C		1	52	-	33	1769	977	3.4%
2/1	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	54	-	756	1915	1097	68.9%

Full Input Data And Results

2/2	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	54	-	777	2035	1166	66.6%
2/3	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	54	-	33	1865	1068	3.1%
3/1	Coppins Bridge North Circulatory Ahead	U	N/A	N/A	C2:E		1	56	-	457	2015	1196	38.2%
3/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:E		1	56	-	168	1791	1063	15.8%
4/2+4/1	High St Entry Left Ahead	U	N/A	N/A	C2:D		1	26	-	274	1915:1915	470+149	44.3 : 44.3%
4/3	High St Entry Ahead	U	N/A	N/A	C2:D		1	26	-	135	1915	539	25.1%
5/1	Coppins Bridge North Entry Left Ahead	U	N/A	N/A	C2:F		1	30	-	420	1764	570	73.7%
5/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:F		1	30	-	126	1874	605	20.8%
6/2+6/1	Ahead Left Left2	U	N/A	N/A	C2:l -		1	59	-	495	1915:1492	1000+162	42.6 : 42.6%
6/3	Right	U	N/A	N/A	C2:l		1	59	-	391	2055	1284	30.4%
6/4	Right	U	N/A	N/A	C2:l		1	59	-	639	1915	1197	53.4%
7/1		U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
8/1	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	30	-	337	1885	609	55.4%
8/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	30	-	154	1885	609	25.3%
9/1	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	56	-	398	1940	1152	34.6%
9/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	56	-	636	1940	1152	55.2%
10/1	Ahead	U	N/A	N/A	C2:K		1	33	-	274	1965	696	39.4%
10/2	Ahead	U	N/A	N/A	C2:K		1	33	-	135	1965	696	19.4%

Full Input Data And Results

11/1+11/2	Entry Coppins Bridge Car Park Ahead Left	O	N/A	N/A	-	-	-	-	6	1940:1800	0+677	0.0 : 0.9%	
12/1	Exit Coppins Bridge Car Park	U	N/A	N/A	-	-	-	41	Inf	Inf	0.0%		
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:B	1	30	-	0	-	0	0.0%	
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C2:J	1	30	-	0	-	0	0.0%	
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C2:M	1	56	-	0	-	0	0.0%	
Ped Link: P4	Unnamed Ped Link	-	N/A	-	C2:L	1	56	-	0	-	0	0.0%	
J3: New 43	-	-	N/A	-	-	-	-	-	-	-	-	70.0%	
1/1	Media Way North Entry Ahead	U	N/A	N/A	C3:A	1	56	-	756	1935	1149	65.8%	
1/2	Media Way North Entry Ahead	U	N/A	N/A	C3:A	1	56	-	594	2015	1196	49.6%	
2/1	A3054 Circulatory Right	U	N/A	N/A	C3:C	1	27	-	350	1940	566	61.9%	
2/2	A3054 Circulatory Right	U	N/A	N/A	C3:C	1	27	-	401	1965	573	70.0%	
3/1	Medina Way Exit	U	N/A	N/A	-	-	-	-	1106	Inf	Inf	0.0%	
3/2	Medina Way Exit	U	N/A	N/A	-	-	-	-	995	Inf	Inf	0.0%	
4/2+4/1	Media Way Entry Left Ahead	U	N/A	N/A	C3:B -	1	56	-	966	2015:1966	619+805	67.8 : 67.8%	
4/3	Media Way Entry Ahead	U	N/A	N/A	C3:B	1	56	-	126	2015	1196	10.5%	
J4: New 37	-	-	N/A	-	-	-	-	-	-	-	-	73.8%	
1/1	A3054 Circulatory Left	U	N/A	N/A	C4:F	1	66	-	546	1881	1313	41.6%	
2/2+2/1	Coppins Bridge North Exit Ahead Ahead2	U	N/A	N/A	C4:B	C4:D	1	70	0	680	1834:1784	999+574	43.2 : 43.2%
3/2+3/1	Staplers Road Entry Left	U	N/A	N/A	C4:C	1	70	-	843	1818:1784	1041+341	61.0 : 61.0%	
4/1	Staples Road Exit	U	N/A	N/A	-	-	-	-	440	Inf	Inf	0.0%	

Full Input Data And Results

5/1	Circulatory (CW) One Left Ahead	U	N/A	N/A	C4:A		1	16	-	199	1953	346	57.5%
6/1	Circulatory (ACW) One Ahead	U	N/A	N/A	C4:E		1	15	-	248	2015	336	73.8%
7/2+7/1	Fairlee Road Entry Ahead Right	U	N/A	N/A	C4:H C4:G		1	66:96	-	950	1665:1890	1020+270	73.6 : 73.6%
8/1	Fairlee Road Exit	U	N/A	N/A	-		-	-	-	794	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: HCA Tender IoW	-	-	291	86	0	52.1	21.8	0.0	73.9	-	-	-	-
J1: George Way NEW 35	-	-	284	81	0	5.8	2.1	0.0	7.9	-	-	-	-
1/1	394	394	-	-	-	0.6	0.3	-	0.9	8.5	8.5	0.3	8.8
1/2	642	642	-	-	-	0.3	0.8	-	1.1	6.0	6.2	0.8	7.0
2/1	102	102	102	0	0	0.0	0.0	-	0.0	1.7	0.0	0.0	0.0
3/1	226	226	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	315	315	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	131	131	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	33	33	33	0	0	0.0	0.0	-	0.0	2.5	0.0	0.0	0.0
7/1	55	55	50	5	0	0.0	0.0	-	0.0	2.5	0.0	0.0	0.0
7/2	175	175	98	77	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
8/1	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	717	717	-	-	-	4.9	0.8	-	5.6	28.3	7.9	0.8	8.6
J2: NEW 36	-	-	7	4	0	27.2	10.2	0.0	37.4	-	-	-	-
1/1	756	756	-	-	-	0.2	1.2	-	1.4	6.7	0.4	1.2	1.6
1/2	777	777	-	-	-	0.2	1.1	-	1.3	5.9	2.3	1.1	3.4
1/3	33	33	-	-	-	0.0	0.0	-	0.0	2.4	0.0	0.0	0.0
2/1	756	756	-	-	-	2.9	1.1	-	4.0	19.1	14.1	1.1	15.2
2/2	777	777	-	-	-	3.3	1.0	-	4.3	20.1	14.2	1.0	15.2
2/3	33	33	-	-	-	0.1	0.0	-	0.1	11.1	0.6	0.0	0.6
3/1	457	457	-	-	-	1.4	0.3	-	1.7	13.7	5.9	0.3	6.2
3/2	168	168	-	-	-	0.9	0.1	-	0.9	20.2	3.6	0.1	3.7
4/2+4/1	274	274	-	-	-	0.3	0.4	-	0.7	9.6	7.8	0.4	8.2
4/3	135	135	-	-	-	1.7	0.2	-	1.9	50.7	3.0	0.2	3.1
5/1	420	420	-	-	-	3.6	1.4	-	5.0	42.7	11.2	1.4	12.5

Full Input Data And Results

5/2	126	126	-	-	-	0.9	0.1	-	1.0	28.9	2.9	0.1	3.0
6/2+6/1	495	495	-	-	-	2.5	0.4	-	2.8	20.6	12.5	0.4	12.8
6/3	391	391	-	-	-	1.1	0.2	-	1.3	12.4	4.3	0.2	4.5
6/4	639	639	-	-	-	0.4	0.6	-	1.0	5.7	1.3	0.6	1.8
7/1	69	69	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	337	337	-	-	-	2.2	0.6	-	2.8	30.2	5.4	0.6	6.0
8/2	154	154	-	-	-	0.4	0.2	-	0.6	14.0	0.7	0.2	0.9
9/1	398	398	-	-	-	1.0	0.3	-	1.2	11.3	6.8	0.3	7.0
9/2	636	636	-	-	-	1.5	0.6	-	2.1	11.9	4.8	0.6	5.4
10/1	274	274	-	-	-	1.8	0.3	-	2.1	27.5	5.5	0.3	5.8
10/2	135	135	-	-	-	0.8	0.1	-	0.9	24.7	2.5	0.1	2.6
11/1+11/2	6	6	7	4	0	0.0	0.0	-	0.0	11.2	0.1	0.0	0.1
12/1	41	41	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: New 43	-	-	0	0	0	8.4	4.5	0.0	12.9	-	-	-	-
1/1	756	756	-	-	-	0.0	1.0	-	1.0	4.7	0.2	1.0	1.2
1/2	594	594	-	-	-	0.6	0.5	-	1.0	6.3	4.0	0.5	4.5
2/1	350	350	-	-	-	2.1	0.8	-	2.9	29.9	7.9	0.8	8.7
2/2	401	401	-	-	-	4.2	1.1	-	5.3	48.0	10.7	1.1	11.8
3/1	1106	1106	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	995	995	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	966	966	-	-	-	1.2	1.0	-	2.3	8.5	7.7	1.0	8.7
4/3	126	126	-	-	-	0.3	0.1	-	0.4	10.2	1.4	0.1	1.5
J4: New 37	-	-	0	0	0	10.7	4.9	0.0	15.6	-	-	-	-
1/1	546	546	-	-	-	0.9	0.4	-	1.3	8.5	6.1	0.4	6.4
2/2+2/1	680	680	-	-	-	1.1	0.4	-	1.5	7.7	14.1	0.4	14.5
3/2+3/1	843	843	-	-	-	1.2	0.8	-	2.0	8.5	9.0	0.8	9.8

Full Input Data And Results

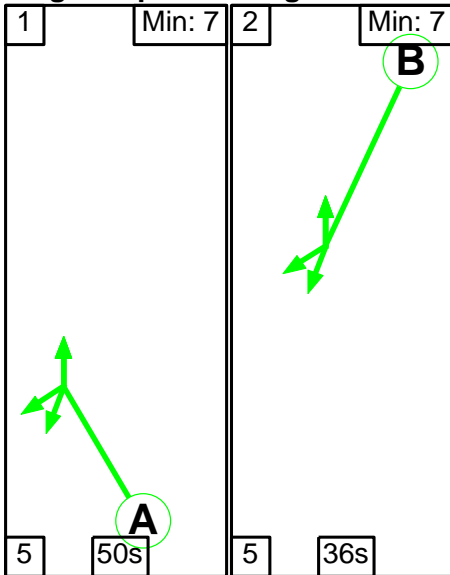
4/1	440	440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	199	199	-	-	-	2.0	0.7	-	2.7	48.1	4.8	0.7	5.5
6/1	248	248	-	-	-	3.8	1.4	-	5.1	74.6	6.6	1.4	8.0
7/2+7/1	950	950	-	-	-	1.7	1.4	-	3.1	11.6	11.6	1.4	13.0
8/1	794	794	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
			C1	PRC for Signalled Lanes (%)	45.3	Total Delay for Signalled Lanes (pcuHr)	7.64	Cycle Time (s)	96				
			C2	PRC for Signalled Lanes (%)	22.1	Total Delay for Signalled Lanes (pcuHr)	37.43	Cycle Time (s)	96				
			C3	PRC for Signalled Lanes (%)	28.6	Total Delay for Signalled Lanes (pcuHr)	12.92	Cycle Time (s)	96				
			C4	PRC for Signalled Lanes (%)	21.9	Total Delay for Signalled Lanes (pcuHr)	15.60	Cycle Time (s)	96				
				PRC Over All Lanes (%)	21.9	Total Delay Over All Lanes(pcuHr)	73.86						

Full Input Data And Results

Scenario 2: '2017 PM' (FG2: '2017 PM', Plan 1: 'Fairlee Rd A3054')

C1

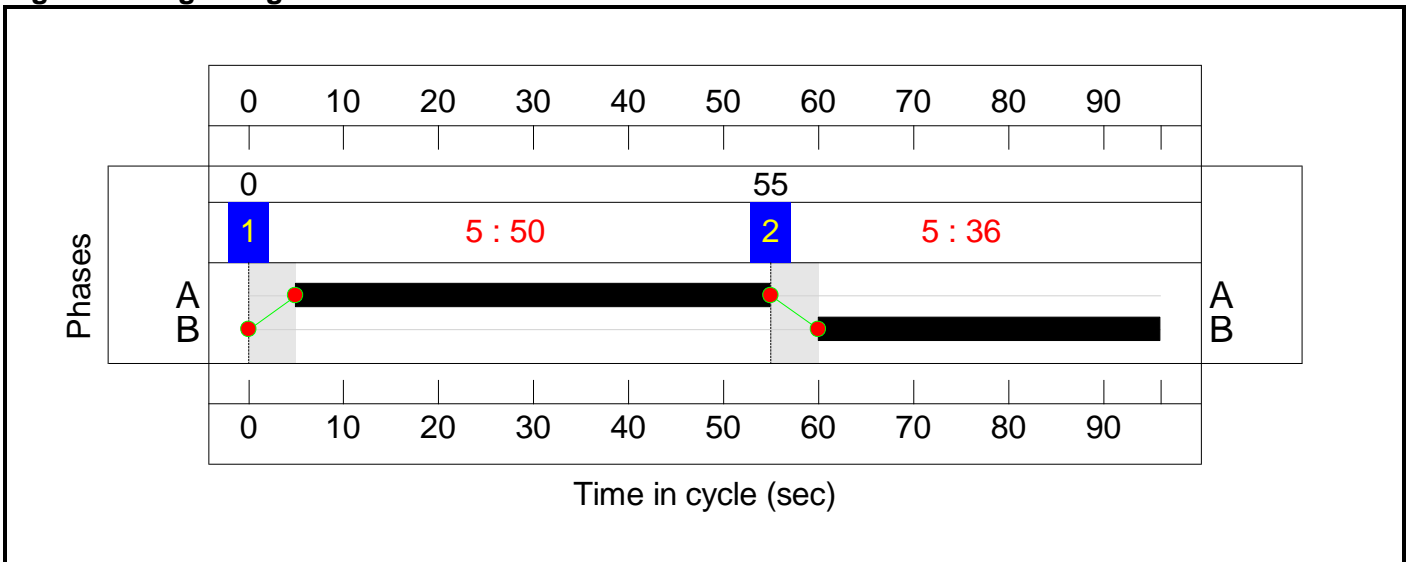
Stage Sequence Diagram



Stage Timings

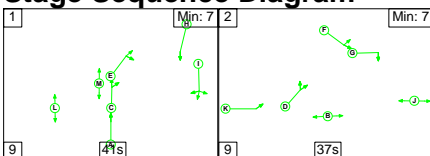
Stage	1	2
Duration	50	36
Change Point	0	55

Signal Timings Diagram



C2

Stage Sequence Diagram

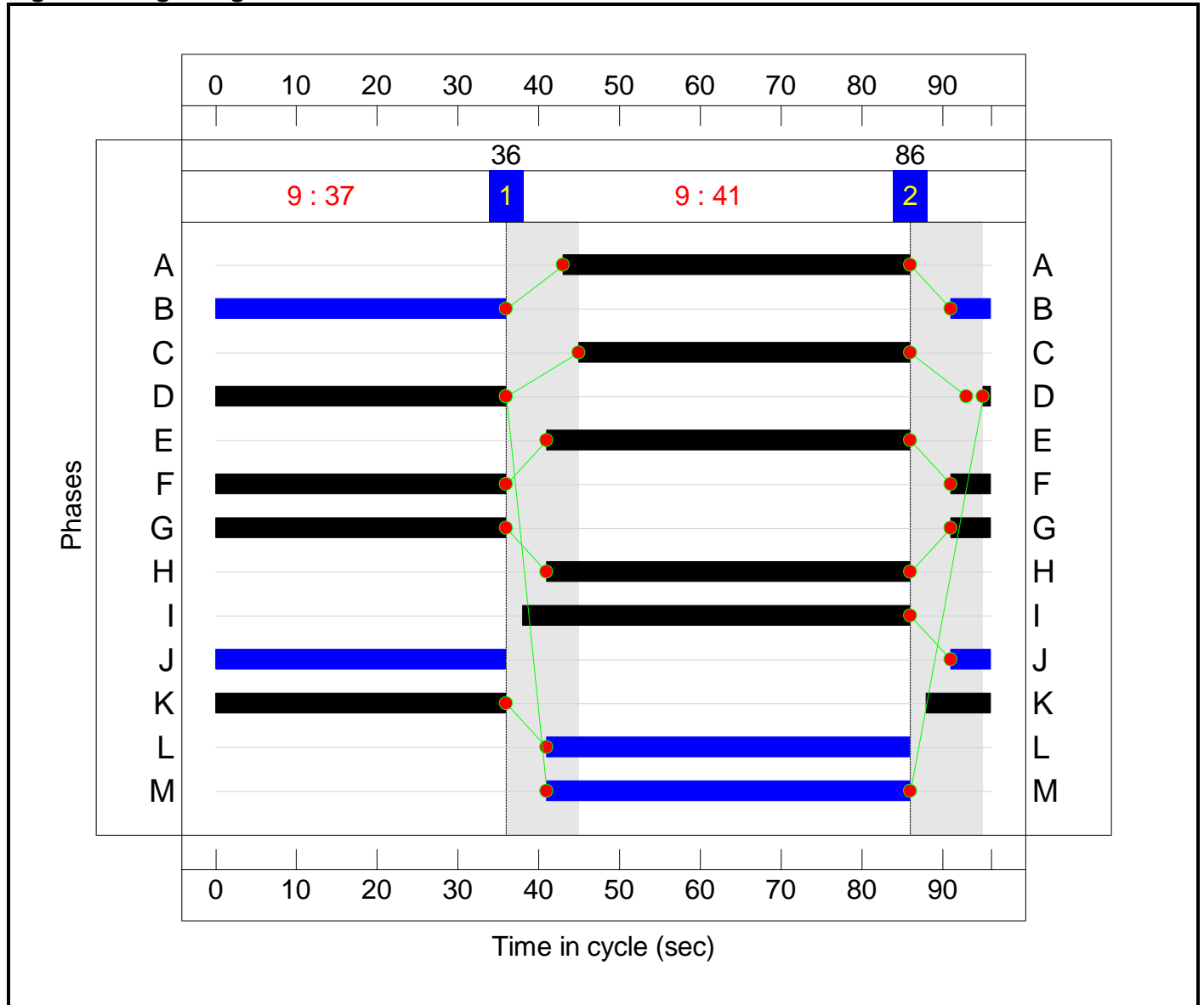


Full Input Data And Results

Stage Timings

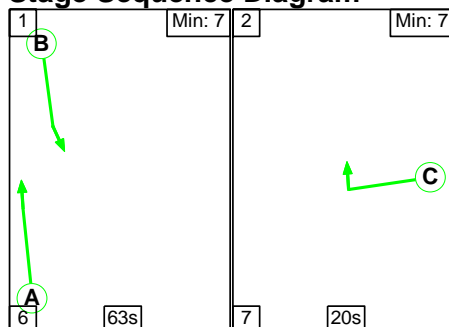
Stage	1	2
Duration	41	37
Change Point	36	86

Signal Timings Diagram



C3

Stage Sequence Diagram

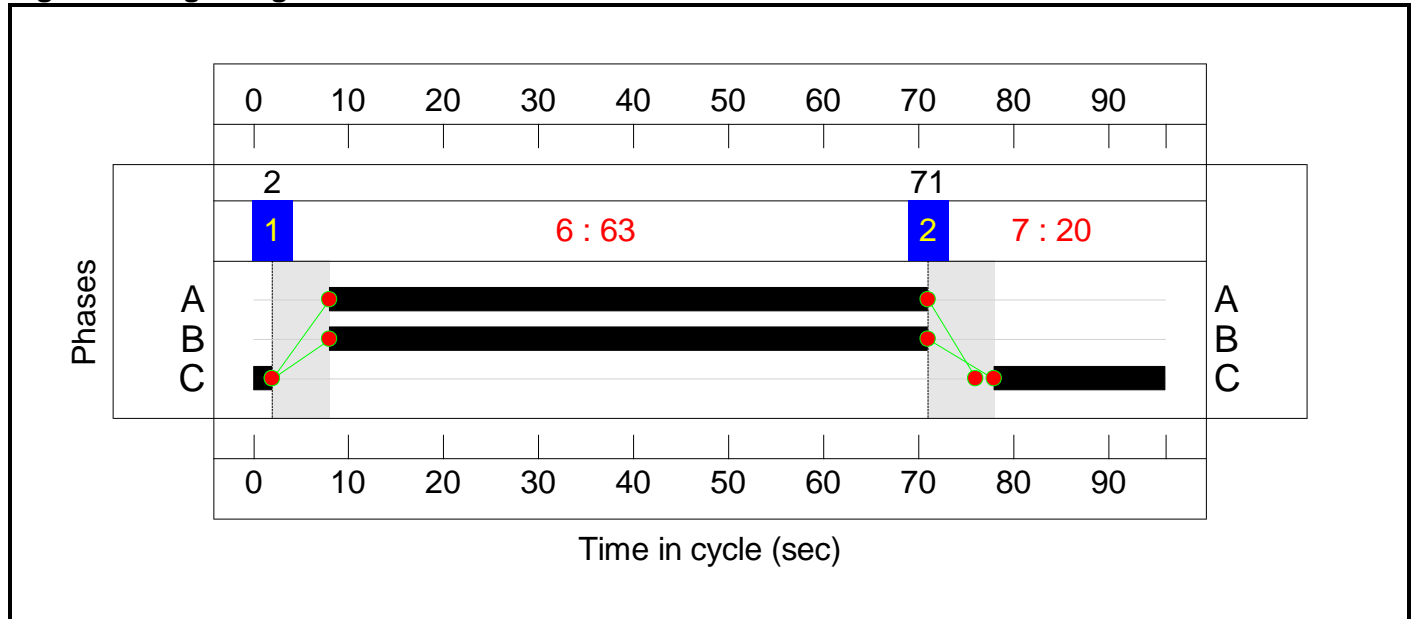


Full Input Data And Results

Stage Timings

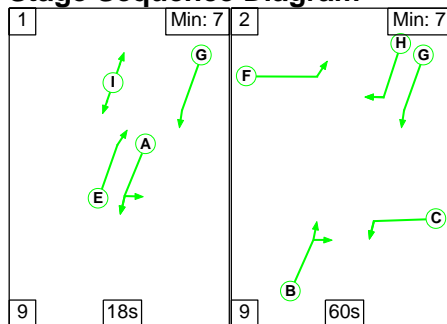
Stage	1	2
Duration	63	20
Change Point	2	71

Signal Timings Diagram



C4

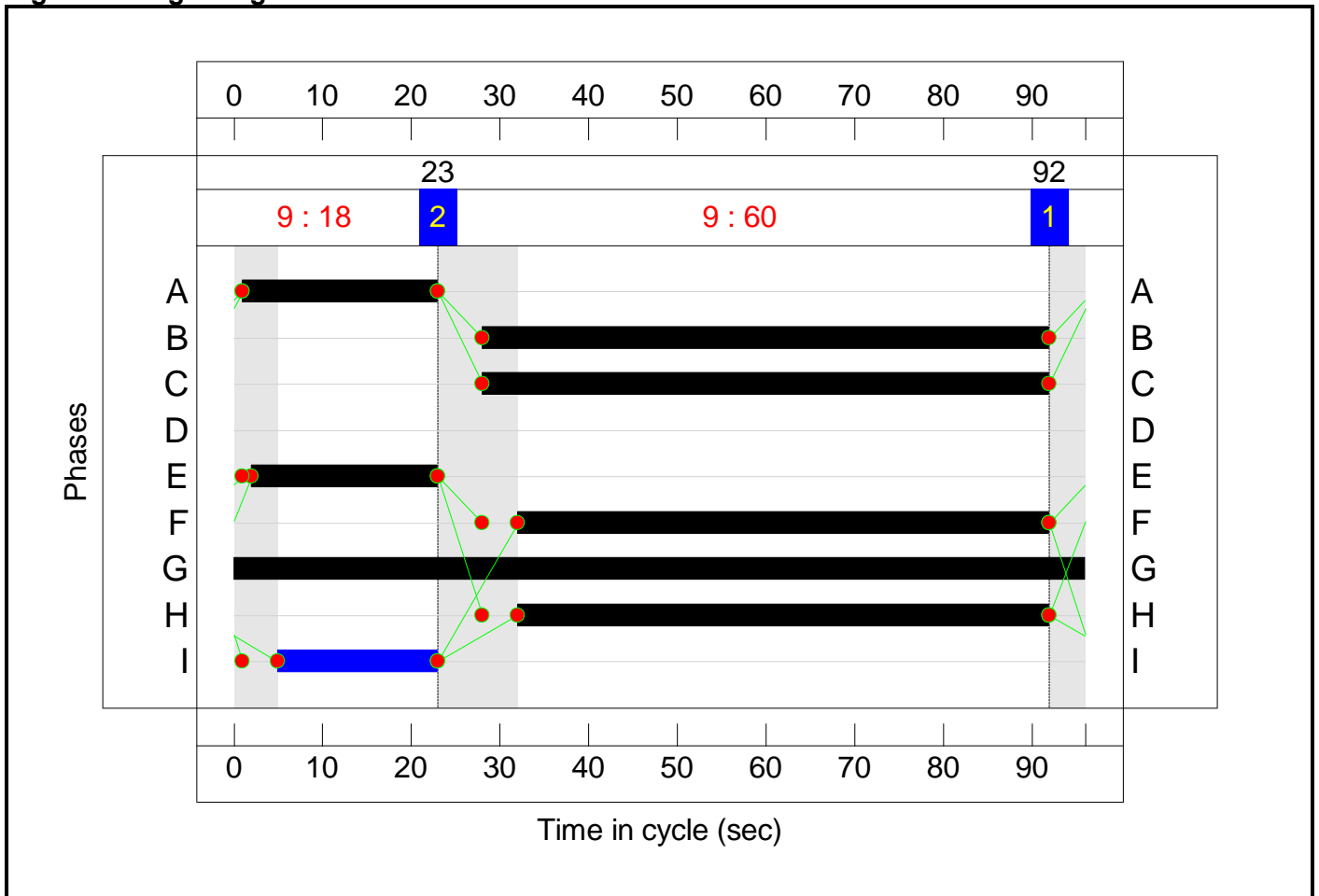
Stage Sequence Diagram



Stage Timings

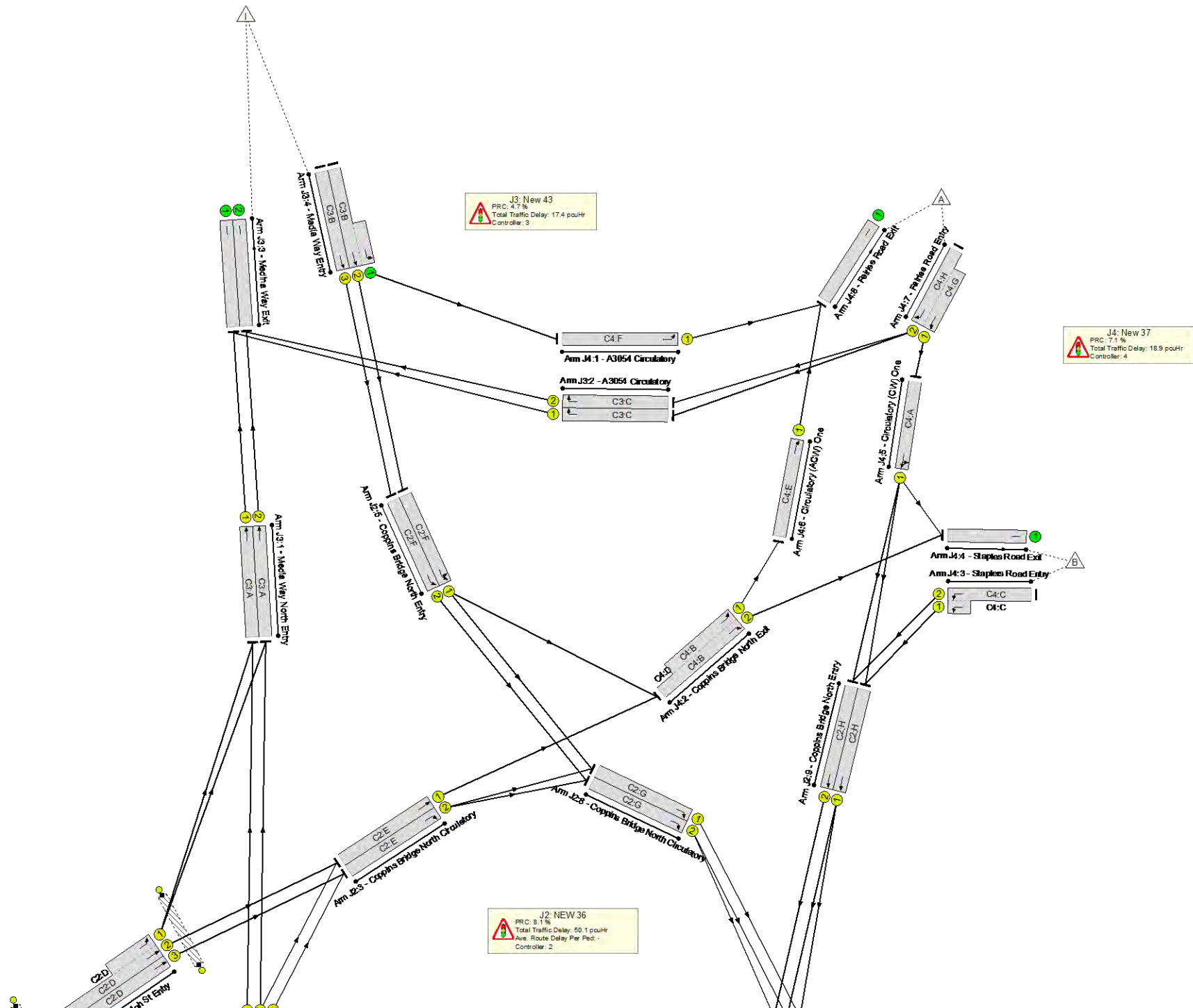
Stage	1	2
Duration	18	60
Change Point	92	23

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: HCA Tender IoW	-	-	N/A	-	-		-	-	-	-	-	-	85.9%
J1: George Way NEW 35	-	-	N/A	-	-		-	-	-	-	-	-	58.6%
1/1	Coppins Bridge South Entry Ahead Left	U	N/A	N/A	C1:B		1	36	-	429	1901	733	58.6%
1/2	Coppins Bridge South Entry Right	U	N/A	N/A	C1:B		1	36	-	384	1842	710	54.1%
2/1	East St Exit - Pyle St Ahead	O	N/A	N/A	-		-	-	-	68	1730	1176	5.8%
3/1	East St (Pyle St Turn) Entry Left Ahead	U	N/A	N/A	-		-	-	-	241	Inf	Inf	0.0%
4/1	East St Exit	U	N/A	N/A	-		-	-	-	406	Inf	Inf	0.0%
5/1	Pyle St Exit	U	N/A	N/A	-		-	-	-	74	Inf	Inf	0.0%
6/1	Pyle St Entry Left	O	N/A	N/A	-		-	-	-	64	1598	781	8.2%
7/1	East St Entry Ahead	O	N/A	N/A	-		-	-	-	75	1865	825	9.1%
7/2	East St Entry Ahead	O	N/A	N/A	-		-	-	-	224	1865	873	25.7%
8/1	A3020 Exit	U	N/A	N/A	-		-	-	-	424	Inf	Inf	0.0%
9/2+9/1	A3020 Entry Left Left2 Ahead	U	N/A	N/A	C1:A		1	50	-	719	1978:1967	801+739	46.7 : 46.7%
J2: NEW 36	-	-	N/A	-	-		-	-	-	-	-	-	83.3%
1/1	Ahead	U	N/A	N/A	C2:C		1	41	-	606	1915	838	72.3%
1/2	Ahead Right	U	N/A	N/A	C2:C		1	41	-	726	2055	899	80.8%
1/3	Right	U	N/A	N/A	C2:C		1	41	-	25	1769	774	3.2%
2/1	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	43	-	606	1915	878	69.0%

Full Input Data And Results

2/2	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	43	-	726	2035	933	77.8%
2/3	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	43	-	25	1865	855	2.9%
3/1	Coppins Bridge North Circulatory Ahead	U	N/A	N/A	C2:E		1	45	-	804	2015	966	83.3%
3/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:E		1	45	-	189	1791	858	22.0%
4/2+4/1	High St Entry Left Ahead	U	N/A	N/A	C2:D		1	37	-	418	1915:1915	686+119	51.9 : 51.9%
4/3	High St Entry Ahead	U	N/A	N/A	C2:D		1	37	-	164	1915	758	21.6%
5/1	Coppins Bridge North Entry Left Ahead	U	N/A	N/A	C2:F		1	41	-	630	1759	770	81.9%
5/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:F		1	41	-	206	1874	820	25.1%
6/2+6/1	Ahead Left Left2	U	N/A	N/A	C2:I -		1	48	-	580	1915:1492	705+233	61.8 : 61.8%
6/3	Right	U	N/A	N/A	C2:I		1	48	-	424	2055	1049	40.4%
6/4	Right	U	N/A	N/A	C2:I		1	48	-	377	1915	977	38.6%
7/1		U	N/A	N/A	-		-	-	-	144	Inf	Inf	0.0%
8/1	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	41	-	420	1885	825	50.9%
8/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	41	-	232	1885	825	28.1%
9/1	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	45	-	373	1940	930	40.1%
9/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	45	-	356	1940	930	38.3%
10/1	Ahead	U	N/A	N/A	C2:K		1	44	-	418	1965	921	45.4%
10/2	Ahead	U	N/A	N/A	C2:K		1	44	-	164	1965	921	17.8%

Full Input Data And Results

11/1+11/2	Entry Coppins Bridge Car Park Ahead Left	O	N/A	N/A	-	-	-	-	37	1822:1800	969+465	2.6 : 2.6%	
12/1	Exit Coppins Bridge Car Park	U	N/A	N/A	-	-	-	-	37	Inf	Inf	0.0%	
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:B	1	41	-	0	-	0	0.0%	
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C2:J	1	41	-	0	-	0	0.0%	
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C2:M	1	45	-	0	-	0	0.0%	
Ped Link: P4	Unnamed Ped Link	-	N/A	-	C2:L	1	45	-	0	-	0	0.0%	
J3: New 43	-	-	N/A	-	-	-	-	-	-	-	-	85.9%	
1/1	Media Way North Entry Ahead	U	N/A	N/A	C3:A	1	63	-	636	1935	1290	49.3%	
1/2	Media Way North Entry Ahead	U	N/A	N/A	C3:A	1	63	-	310	2015	1343	23.1%	
2/1	A3054 Circulatory Right	U	N/A	N/A	C3:C	1	20	-	330	1940	424	77.8%	
2/2	A3054 Circulatory Right	U	N/A	N/A	C3:C	1	20	-	330	1965	430	76.8%	
3/1	Medina Way Exit	U	N/A	N/A	-	-	-	-	966	Inf	Inf	0.0%	
3/2	Medina Way Exit	U	N/A	N/A	-	-	-	-	640	Inf	Inf	0.0%	
4/2+4/1	Media Way Entry Left Ahead	U	N/A	N/A	C3:B -	1	63	-	1316	2015:1966	733+798	85.9 : 85.9%	
4/3	Media Way Entry Ahead	U	N/A	N/A	C3:B	1	63	-	206	2015	1343	15.3%	
J4: New 37	-	-	N/A	-	-	-	-	-	-	-	-	84.0%	
1/1	A3054 Circulatory Left	U	N/A	N/A	C4:F	1	60	-	686	1881	1195	57.4%	
2/2+2/1	Coppins Bridge North Exit Ahead Ahead2	U	N/A	N/A	C4:B	C4:D	1	64	0	1177	1834:1784	957+471	82.4 : 82.4%
3/2+3/1	Staplers Road Entry Left	U	N/A	N/A	C4:C	1	64	-	522	1818:1784	852+433	40.6 : 40.6%	
4/1	Staples Road Exit	U	N/A	N/A	-	-	-	-	799	Inf	Inf	0.0%	

Full Input Data And Results

5/1	Circulatory (CW) One Left Ahead	U	N/A	N/A	C4:A		1	22	-	217	1952	468	46.4%
6/1	Circulatory (ACW) One Ahead	U	N/A	N/A	C4:E		1	21	-	388	2015	462	84.0%
7/2+7/1	Fairlee Road Entry Ahead Right	U	N/A	N/A	C4:H C4:G		1	60:96	-	877	1665:1890	909+299	72.6 : 72.6%
8/1	Fairlee Road Exit	U	N/A	N/A	-		-	-	-	1074	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: HCA Tender IoW	-	-	325	180	0	61.5	31.7	0.0	93.2	-	-	-	-
J1: George Way NEW 35	-	-	287	144	0	4.8	2.0	0.0	6.9	-	-	-	-
1/1	429	429	-	-	-	1.5	0.7	-	2.2	18.7	11.0	0.7	11.7
1/2	384	384	-	-	-	0.7	0.6	-	1.3	12.4	8.4	0.6	9.0
2/1	68	68	68	0	0	0.0	0.0	-	0.0	1.6	0.0	0.0	0.0
3/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	406	406	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	74	74	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	64	64	64	0	0	0.0	0.0	-	0.0	2.5	0.0	0.0	0.0
7/1	75	75	69	6	0	0.0	0.1	-	0.1	2.4	0.0	0.1	0.1
7/2	224	224	86	138	0	0.0	0.2	-	0.2	2.8	0.0	0.2	0.2
8/1	424	424	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	719	719	-	-	-	2.6	0.4	-	3.0	15.1	5.7	0.4	6.2
J2: NEW 36	-	-	38	36	0	35.0	15.1	0.0	50.1	-	-	-	-
1/1	606	606	-	-	-	0.1	1.3	-	1.4	8.5	0.3	1.3	1.6
1/2	726	726	-	-	-	0.2	2.0	-	2.3	11.3	1.7	2.0	3.8
1/3	25	25	-	-	-	0.0	0.0	-	0.0	3.7	0.0	0.0	0.0
2/1	606	606	-	-	-	3.0	1.1	-	4.1	24.6	10.2	1.1	11.3
2/2	726	726	-	-	-	4.8	1.7	-	6.6	32.6	15.4	1.7	17.1
2/3	25	25	-	-	-	0.1	0.0	-	0.1	16.9	0.4	0.0	0.4
3/1	804	804	-	-	-	4.0	2.4	-	6.4	28.8	20.9	2.4	23.3
3/2	189	189	-	-	-	1.2	0.1	-	1.3	25.3	4.6	0.1	4.8
4/2+4/1	418	418	-	-	-	0.5	0.5	-	1.0	8.8	9.9	0.5	10.5
4/3	164	164	-	-	-	1.0	0.1	-	1.1	24.9	2.3	0.1	2.4
5/1	630	630	-	-	-	4.0	2.2	-	6.2	35.6	9.0	2.2	11.2

Full Input Data And Results

5/2	206	206	-	-	-	0.9	0.2	-	1.1	18.8	2.5	0.2	2.7
6/2+6/1	580	580	-	-	-	4.0	0.8	-	4.8	29.8	15.7	0.8	16.5
6/3	424	424	-	-	-	1.7	0.3	-	2.1	17.4	6.3	0.3	6.7
6/4	377	377	-	-	-	0.4	0.3	-	0.7	7.1	1.2	0.3	1.5
7/1	144	144	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	420	420	-	-	-	2.3	0.5	-	2.8	24.2	6.5	0.5	7.0
8/2	232	232	-	-	-	0.4	0.2	-	0.6	9.2	0.9	0.2	1.0
9/1	373	373	-	-	-	2.4	0.3	-	2.7	26.3	8.4	0.3	8.8
9/2	356	356	-	-	-	1.0	0.3	-	1.3	13.6	6.1	0.3	6.4
10/1	418	418	-	-	-	2.0	0.4	-	2.4	20.8	7.4	0.4	7.8
10/2	164	164	-	-	-	0.7	0.1	-	0.8	17.2	2.5	0.1	2.6
11/1+11/2	37	37	38	36	0	0.0	0.0	-	0.0	3.0	0.1	0.0	0.1
12/1	37	37	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: New 43	-	-	0	0	0	10.4	7.0	0.0	17.4	-	-	-	-
1/1	636	636	-	-	-	2.2	0.5	-	2.7	15.2	8.2	0.5	8.7
1/2	310	310	-	-	-	1.0	0.1	-	1.2	13.8	4.8	0.1	4.9
2/1	330	330	-	-	-	2.5	1.7	-	4.2	45.8	7.9	1.7	9.6
2/2	330	330	-	-	-	2.3	1.6	-	3.9	42.1	8.2	1.6	9.9
3/1	966	966	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	640	640	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	1316	1316	-	-	-	2.0	3.0	-	5.0	13.7	18.5	3.0	21.5
4/3	206	206	-	-	-	0.3	0.1	-	0.4	7.5	2.0	0.1	2.1
J4: New 37	-	-	0	0	0	11.4	7.5	0.0	18.9	-	-	-	-
1/1	686	686	-	-	-	1.5	0.7	-	2.2	11.3	9.5	0.7	10.2
2/2+2/1	1177	1177	-	-	-	2.0	2.3	-	4.3	13.3	31.6	2.3	33.9
3/2+3/1	522	522	-	-	-	0.9	0.3	-	1.2	8.4	4.2	0.3	4.5

Full Input Data And Results

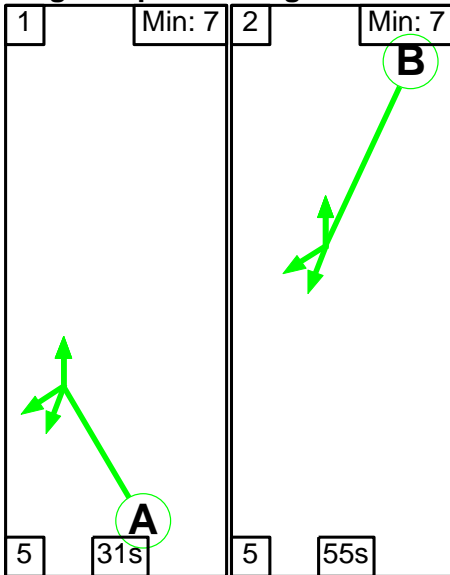
4/1	799	799	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	217	217	-	-	-	1.9	0.4	-	2.3	38.1	4.9	0.4	5.4
6/1	388	388	-	-	-	3.1	2.5	-	5.6	52.0	10.3	2.5	12.8
7/2+7/1	877	877	-	-	-	2.0	1.3	-	3.3	13.4	11.4	1.3	12.7
8/1	1074	1074	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
			C1	PRC for Signalled Lanes (%)	53.7	Total Delay for Signalled Lanes (pcuHr)	6.56	Cycle Time (s)	96				
			C2	PRC for Signalled Lanes (%)	8.1	Total Delay for Signalled Lanes (pcuHr)	50.07	Cycle Time (s)	96				
			C3	PRC for Signalled Lanes (%)	4.7	Total Delay for Signalled Lanes (pcuHr)	17.37	Cycle Time (s)	96				
			C4	PRC for Signalled Lanes (%)	7.1	Total Delay for Signalled Lanes (pcuHr)	18.89	Cycle Time (s)	96				
				PRC Over All Lanes (%)	4.7	Total Delay Over All Lanes(pcuHr)	93.21						

Full Input Data And Results

Scenario 3: '2034 AM DN' (FG3: '2034 - AM - DN', Plan 1: 'Fairlee Rd A3054')

C1

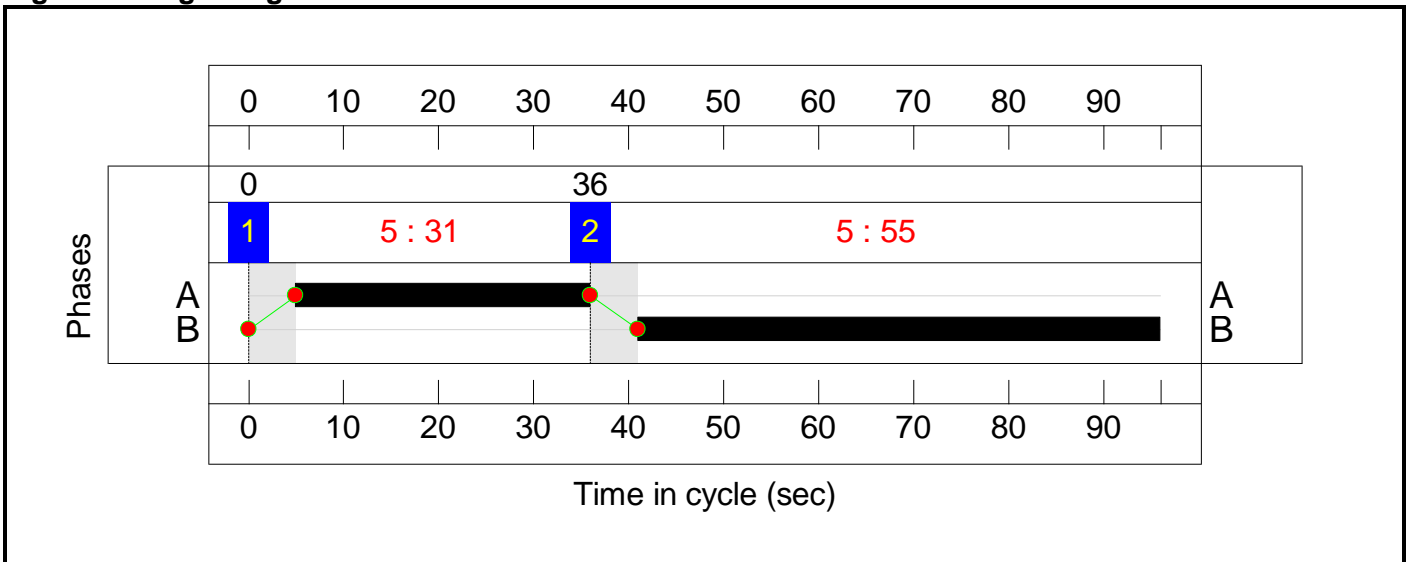
Stage Sequence Diagram



Stage Timings

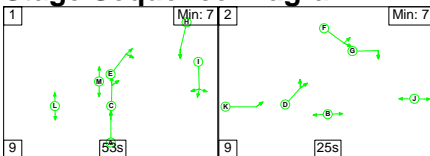
Stage	1	2
Duration	31	55
Change Point	0	36

Signal Timings Diagram



C2

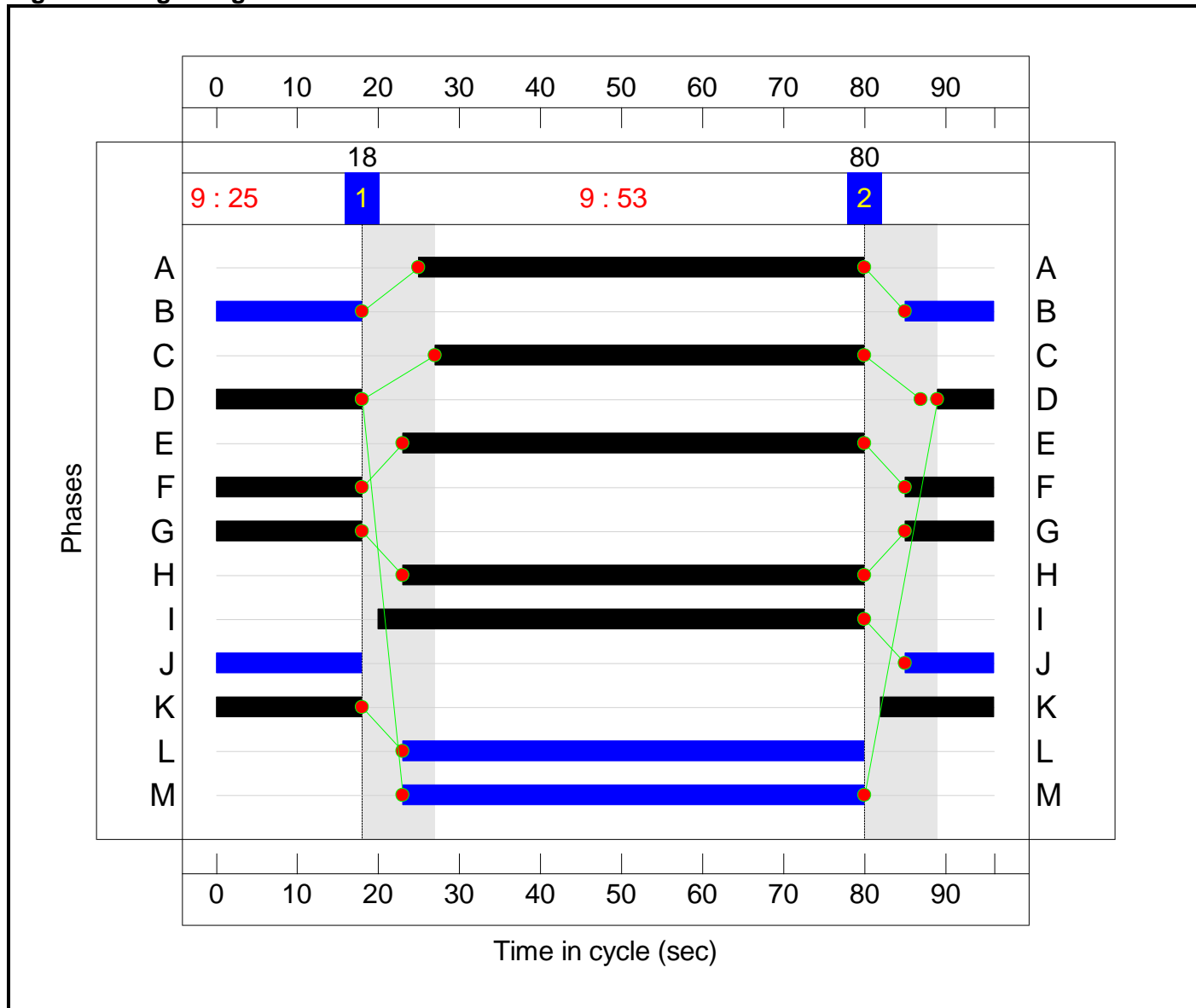
Stage Sequence Diagram



Stage Timings

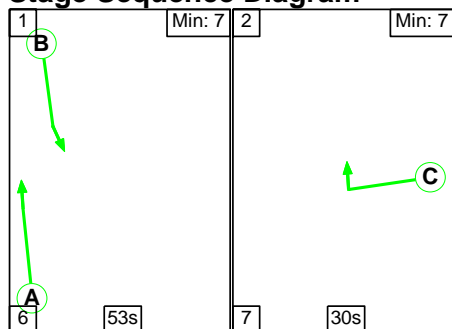
Stage	1	2
Duration	53	25
Change Point	18	80

Signal Timings Diagram



C3

Stage Sequence Diagram

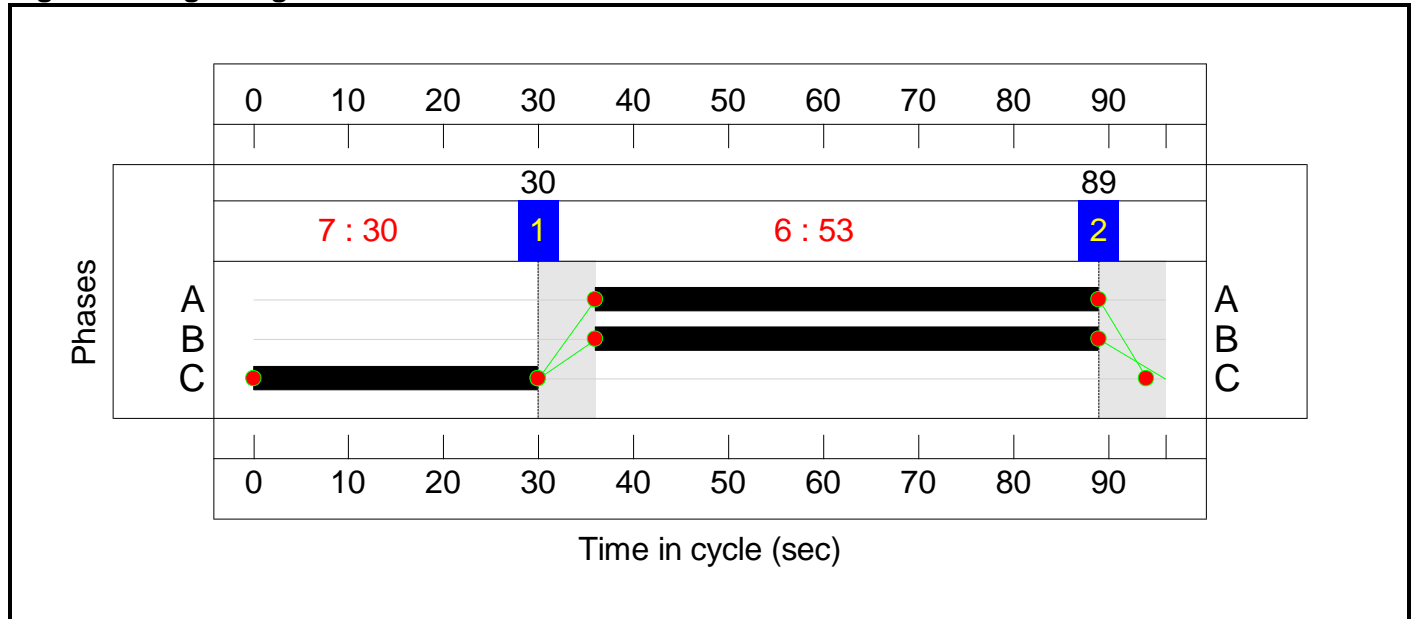


Full Input Data And Results

Stage Timings

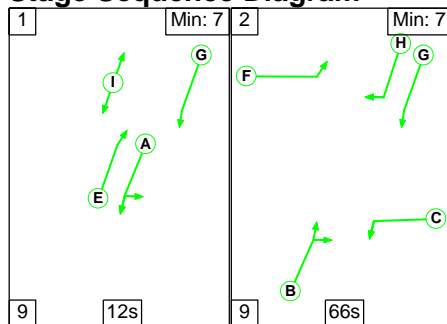
Stage	1	2
Duration	53	30
Change Point	30	89

Signal Timings Diagram



C4

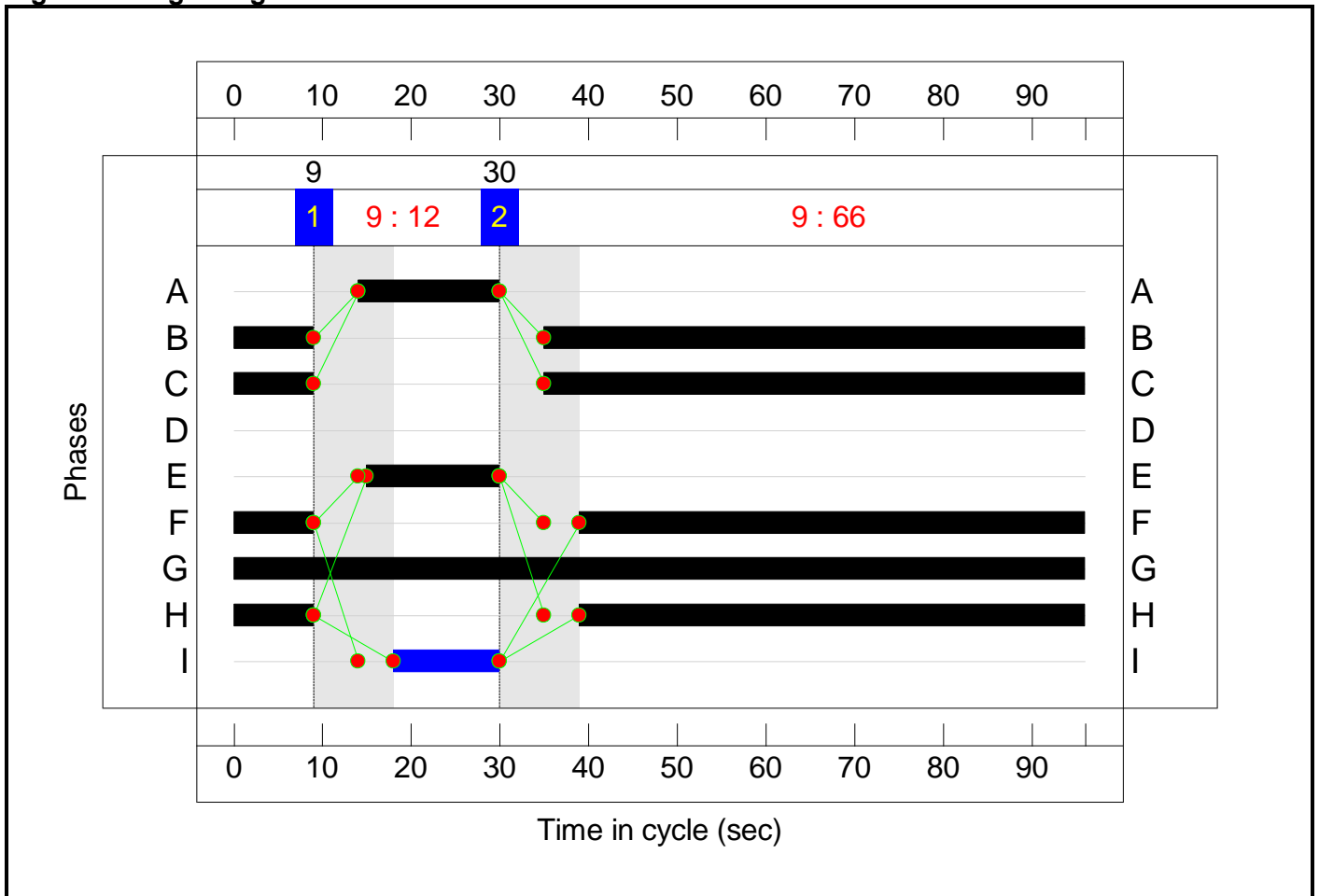
Stage Sequence Diagram



Stage Timings

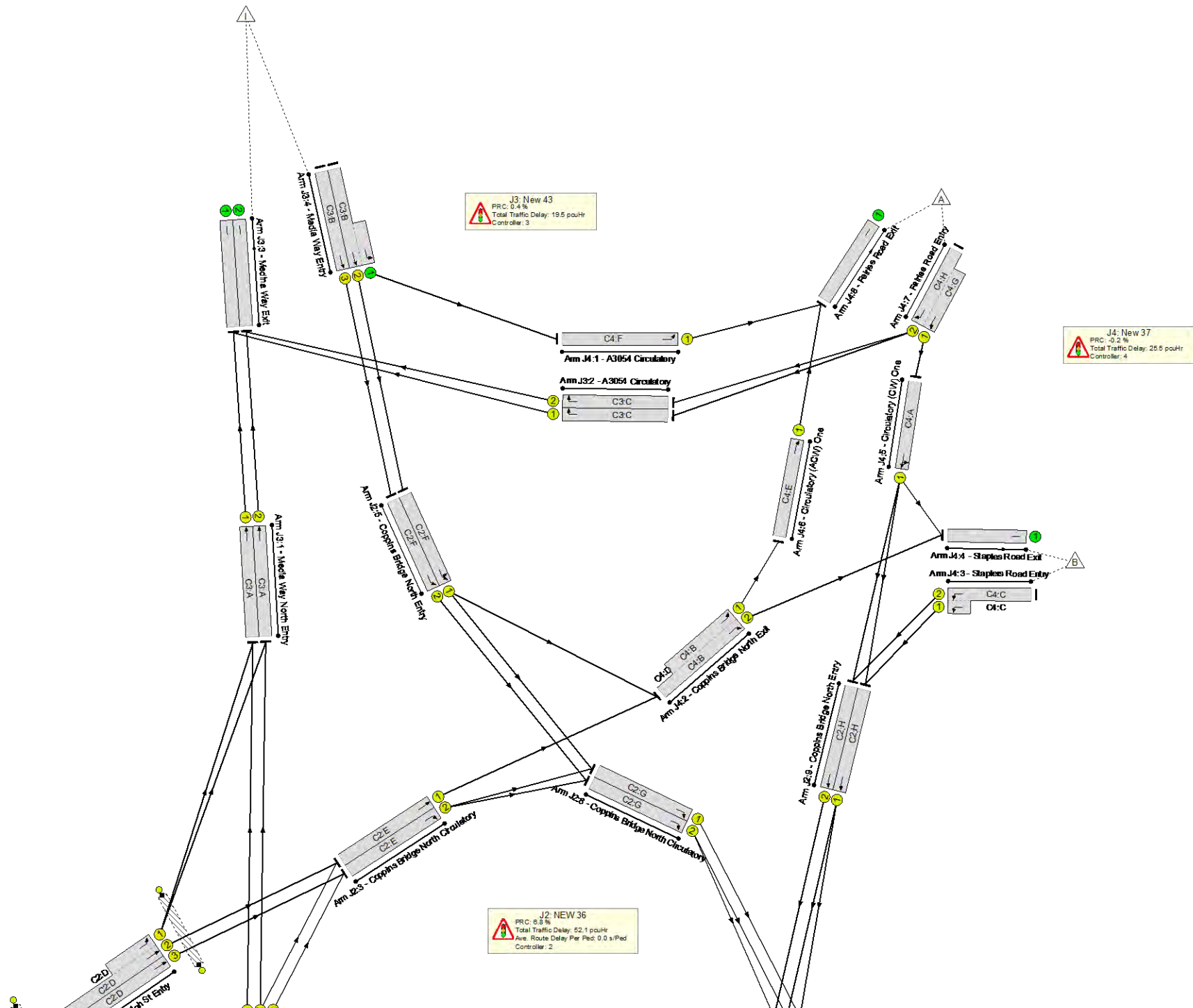
Stage	1	2
Duration	12	66
Change Point	9	30

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: HCA Tender IoW	-	-	N/A	-	-		-	-	-	-	-	-	90.2%
J1: George Way NEW 35	-	-	N/A	-	-		-	-	-	-	-	-	82.3%
1/1	Coppins Bridge South Entry Ahead Left	U	N/A	N/A	C1:B		1	55	-	480	1901	1109	43.3%
1/2	Coppins Bridge South Entry Right	U	N/A	N/A	C1:B		1	55	-	784	1842	1074	73.0%
2/1	East St Exit - Pyle St Ahead	O	N/A	N/A	-		-	-	-	123	1730	1137	10.8%
3/1	East St (Pyle St Turn) Entry Left Ahead	U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
4/1	East St Exit	U	N/A	N/A	-		-	-	-	385	Inf	Inf	0.0%
5/1	Pyle St Exit	U	N/A	N/A	-		-	-	-	158	Inf	Inf	0.0%
6/1	Pyle St Entry Left	O	N/A	N/A	-		-	-	-	43	1598	781	5.5%
7/1	East St Entry Ahead	O	N/A	N/A	-		-	-	-	95	1865	734	12.9%
7/2	East St Entry Ahead	O	N/A	N/A	-		-	-	-	190	1865	741	25.6%
8/1	A3020 Exit	U	N/A	N/A	-		-	-	-	408	Inf	Inf	0.0%
9/2+9/1	A3020 Entry Left Left2 Ahead	U	N/A	N/A	C1:A		1	31	-	877	1978:1971	605+460	82.3 : 82.3%
J2: NEW 36	-	-	N/A	-	-		-	-	-	-	-	-	84.3%
1/1	Ahead	U	N/A	N/A	C2:C		1	53	-	899	1915	1077	83.5%
1/2	Ahead Right	U	N/A	N/A	C2:C		1	53	-	974	2055	1156	84.3%
1/3	Right	U	N/A	N/A	C2:C		1	53	-	45	1769	995	4.5%
2/1	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	55	-	899	1915	1117	80.5%

Full Input Data And Results

2/2	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	55	-	974	2035	1187	82.0%
2/3	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	55	-	45	1865	1088	4.1%
3/1	Coppins Bridge North Circulatory Ahead	U	N/A	N/A	C2:E		1	57	-	557	2015	1217	45.8%
3/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:E		1	57	-	223	1791	1082	20.6%
4/2+4/1	High St Entry Left Ahead	U	N/A	N/A	C2:D		1	25	-	334	1915:1915	455+143	55.8 : 55.8%
4/3	High St Entry Ahead	U	N/A	N/A	C2:D		1	25	-	178	1915	519	34.3%
5/1	Coppins Bridge North Entry Left Ahead	U	N/A	N/A	C2:F		1	29	-	444	1757	549	80.9%
5/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:F		1	29	-	154	1874	586	26.3%
6/2+6/1	Ahead Left Left2	U	N/A	N/A	C2:l -		1	60	-	544	1915:1492	994+184	46.2 : 46.2%
6/3	Right	U	N/A	N/A	C2:l		1	60	-	476	2055	1306	36.5%
6/4	Right	U	N/A	N/A	C2:l		1	60	-	781	1915	1217	64.2%
7/1		U	N/A	N/A	-		-	-	-	85	Inf	Inf	0.0%
8/1	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	29	-	360	1885	589	61.1%
8/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	29	-	188	1885	589	31.9%
9/1	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	57	-	476	1940	1172	40.6%
9/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	57	-	777	1940	1172	66.3%
10/1	Ahead	U	N/A	N/A	C2:K		1	32	-	334	1965	675	49.4%
10/2	Ahead	U	N/A	N/A	C2:K		1	32	-	178	1965	675	26.4%

Full Input Data And Results

11/1+11/2	Entry Coppins Bridge Car Park Ahead Left	O	N/A	N/A	-	-	-	-	7	1940:1800	0+550	0.0 : 1.3%	
12/1	Exit Coppins Bridge Car Park	U	N/A	N/A	-	-	-	-	51	Inf	Inf	0.0%	
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:B		1	29	-	0	0	0.0%	
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C2:J		1	29	-	0	0	0.0%	
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C2:M		1	57	-	0	0	0.0%	
Ped Link: P4	Unnamed Ped Link	-	N/A	-	C2:L		1	57	-	0	0	0.0%	
J3: New 43	-	-	N/A	-	-		-	-	-	-	-	89.7%	
1/1	Media Way North Entry Ahead	U	N/A	N/A	C3:A		1	53	-	902	1935	1088	82.9%
1/2	Media Way North Entry Ahead	U	N/A	N/A	C3:A		1	53	-	748	2015	1133	66.0%
2/1	A3054 Circulatory Right	U	N/A	N/A	C3:C		1	30	-	350	1940	626	55.9%
2/2	A3054 Circulatory Right	U	N/A	N/A	C3:C		1	30	-	569	1965	635	89.7%
3/1	Medina Way Exit	U	N/A	N/A	-		-	-	-	1252	Inf	Inf	0.0%
3/2	Medina Way Exit	U	N/A	N/A	-		-	-	-	1317	Inf	Inf	0.0%
4/2+4/1	Media Way Entry Left Ahead	U	N/A	N/A	C3:B -		1	53	-	1111	2015:1966	559+840	79.4 : 79.4%
4/3	Media Way Entry Ahead	U	N/A	N/A	C3:B		1	53	-	154	2015	1133	13.6%
J4: New 37	-	-	N/A	-	-		-	-	-	-	-	-	90.2%
1/1	A3054 Circulatory Left	U	N/A	N/A	C4:F		1	66	-	667	1881	1313	50.8%
2/2+2/1	Coppins Bridge North Exit Ahead Ahead2	U	N/A	N/A	C4:B	C4:D	1	70	0	830	1834:1784	999+574	52.8 : 52.8%
3/2+3/1	Staplers Road Entry Left	U	N/A	N/A	C4:C		1	70	-	1033	1818:1784	1039+344	74.7 : 74.7%
4/1	Staples Road Exit	U	N/A	N/A	-		-	-	-	537	Inf	Inf	0.0%

Full Input Data And Results

5/1	Circulatory (CW) One Left Ahead	U	N/A	N/A	C4:A		1	16	-	230	1952	346	66.5%
6/1	Circulatory (ACW) One Ahead	U	N/A	N/A	C4:E		1	15	-	303	2015	336	90.2%
7/2+7/1	Fairlee Road Entry Ahead Right	U	N/A	N/A	C4:H C4:G		1	66:96	-	1149	1665:1890	1027+257	89.4 : 89.4%
8/1	Fairlee Road Exit	U	N/A	N/A	-		-	-	-	970	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: HCA Tender IoW	-	-	373	92	0	67.2	43.0	0.0	110.2	-	-	-	-
J1: George Way NEW 35	-	-	364	87	0	8.8	4.3	0.0	13.1	-	-	-	-
1/1	480	480	-	-	-	1.3	0.4	-	1.7	12.6	10.8	0.4	11.2
1/2	784	784	-	-	-	0.8	1.3	-	2.1	9.7	11.1	1.3	12.4
2/1	123	123	123	0	0	0.0	0.1	-	0.1	1.8	0.0	0.1	0.1
3/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	158	158	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	43	43	43	0	0	0.0	0.0	-	0.0	2.4	0.0	0.0	0.0
7/1	95	95	87	8	0	0.0	0.1	-	0.1	2.8	0.0	0.1	0.1
7/2	190	190	111	79	0	0.0	0.2	-	0.2	3.3	0.0	0.2	0.2
8/1	408	408	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	877	877	-	-	-	6.7	2.3	-	9.0	36.9	11.8	2.3	14.0
J2: NEW 36	-	-	9	5	0	34.5	17.6	0.0	52.1	-	-	-	-
1/1	899	899	-	-	-	0.4	2.5	-	2.8	11.4	1.4	2.5	3.9
1/2	974	974	-	-	-	0.3	2.6	-	2.9	10.6	17.1	2.6	19.7
1/3	45	45	-	-	-	0.0	0.0	-	0.0	2.5	0.0	0.0	0.0
2/1	899	899	-	-	-	3.4	2.0	-	5.4	21.5	16.7	2.0	18.7
2/2	974	974	-	-	-	4.6	2.2	-	6.9	25.4	21.7	2.2	23.9
2/3	45	45	-	-	-	0.1	0.0	-	0.1	7.6	0.6	0.0	0.6
3/1	557	557	-	-	-	1.7	0.4	-	2.1	13.8	7.4	0.4	7.9
3/2	223	223	-	-	-	1.2	0.1	-	1.3	21.1	5.2	0.1	5.4
4/2+4/1	334	334	-	-	-	0.4	0.6	-	1.0	11.2	9.4	0.6	10.1
4/3	178	178	-	-	-	2.6	0.3	-	2.9	58.3	4.3	0.3	4.6
5/1	444	444	-	-	-	4.1	2.0	-	6.1	49.8	11.8	2.0	13.9

Full Input Data And Results

5/2	154	154	-	-	-	1.2	0.2	-	1.4	32.0	3.8	0.2	4.0
6/2+6/1	544	544	-	-	-	2.7	0.4	-	3.1	20.5	13.3	0.4	13.7
6/3	476	476	-	-	-	1.4	0.3	-	1.6	12.4	5.3	0.3	5.6
6/4	781	781	-	-	-	0.5	0.9	-	1.4	6.6	1.6	0.9	2.5
7/1	85	85	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	360	360	-	-	-	3.0	0.8	-	3.8	38.1	7.0	0.8	7.8
8/2	188	188	-	-	-	0.5	0.2	-	0.8	14.5	0.9	0.2	1.1
9/1	476	476	-	-	-	0.9	0.3	-	1.2	9.2	8.0	0.3	8.3
9/2	777	777	-	-	-	2.1	1.0	-	3.1	14.2	7.2	1.0	8.1
10/1	334	334	-	-	-	2.3	0.5	-	2.8	30.2	7.0	0.5	7.4
10/2	178	178	-	-	-	1.1	0.2	-	1.3	26.4	3.4	0.2	3.6
11/1+11/2	7	7	9	5	0	0.0	0.0	-	0.0	11.6	0.1	0.0	0.1
12/1	51	51	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: New 43	-	-	0	0	0	9.7	9.8	0.0	19.5	-	-	-	-
1/1	902	902	-	-	-	0.2	2.4	-	2.6	10.4	1.7	2.4	4.1
1/2	748	748	-	-	-	0.8	1.0	-	1.8	8.5	6.3	1.0	7.2
2/1	350	350	-	-	-	1.7	0.6	-	2.4	24.5	7.1	0.6	7.7
2/2	569	569	-	-	-	4.7	3.9	-	8.6	54.3	15.1	3.9	19.0
3/1	1252	1252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	1317	1317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	1111	1111	-	-	-	1.8	1.9	-	3.7	11.9	12.4	1.9	14.3
4/3	154	154	-	-	-	0.4	0.1	-	0.5	11.8	1.9	0.1	2.0
J4: New 37	-	-	0	0	0	14.2	11.3	0.0	25.5	-	-	-	-
1/1	667	667	-	-	-	1.2	0.5	-	1.7	9.4	7.1	0.5	7.7
2/2+2/1	830	830	-	-	-	1.2	0.6	-	1.8	7.7	12.4	0.6	13.0
3/2+3/1	1033	1033	-	-	-	1.8	1.5	-	3.3	11.5	14.1	1.5	15.5

Full Input Data And Results

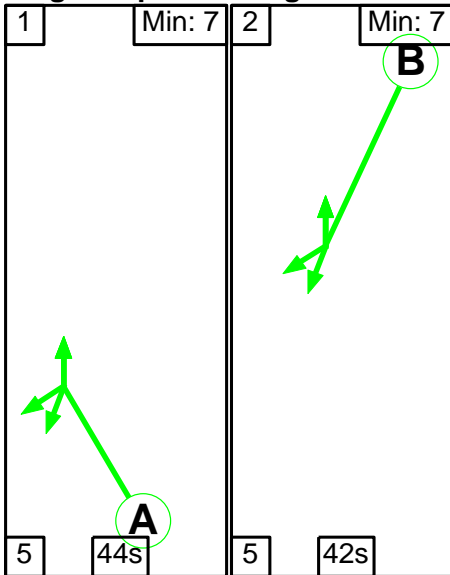
4/1	537	537	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	230	230	-	-	-	2.2	1.0	-	3.2	49.6	5.7	1.0	6.7
6/1	303	303	-	-	-	5.0	3.8	-	8.8	104.2	8.1	3.8	11.8
7/2+7/1	1149	1149	-	-	-	2.8	4.0	-	6.8	21.2	21.1	4.0	25.1
8/1	970	970	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%)	9.3	Total Delay for Signalled Lanes (pcuHr):	12.80	Cycle Time (s):	96					
		C2	PRC for Signalled Lanes (%)	6.8	Total Delay for Signalled Lanes (pcuHr):	52.10	Cycle Time (s):	96					
		C3	PRC for Signalled Lanes (%)	0.4	Total Delay for Signalled Lanes (pcuHr):	19.49	Cycle Time (s):	96					
		C4	PRC for Signalled Lanes (%)	-0.2	Total Delay for Signalled Lanes (pcuHr):	25.50	Cycle Time (s):	96					
			PRC Over All Lanes (%)	-0.2	Total Delay Over All Lanes(pcuHr):	110.25							

Full Input Data And Results

Scenario 4: '2034 PM DN' (FG4: '2034 - PM - DN', Plan 1: 'Fairlee Rd A3054')

C1

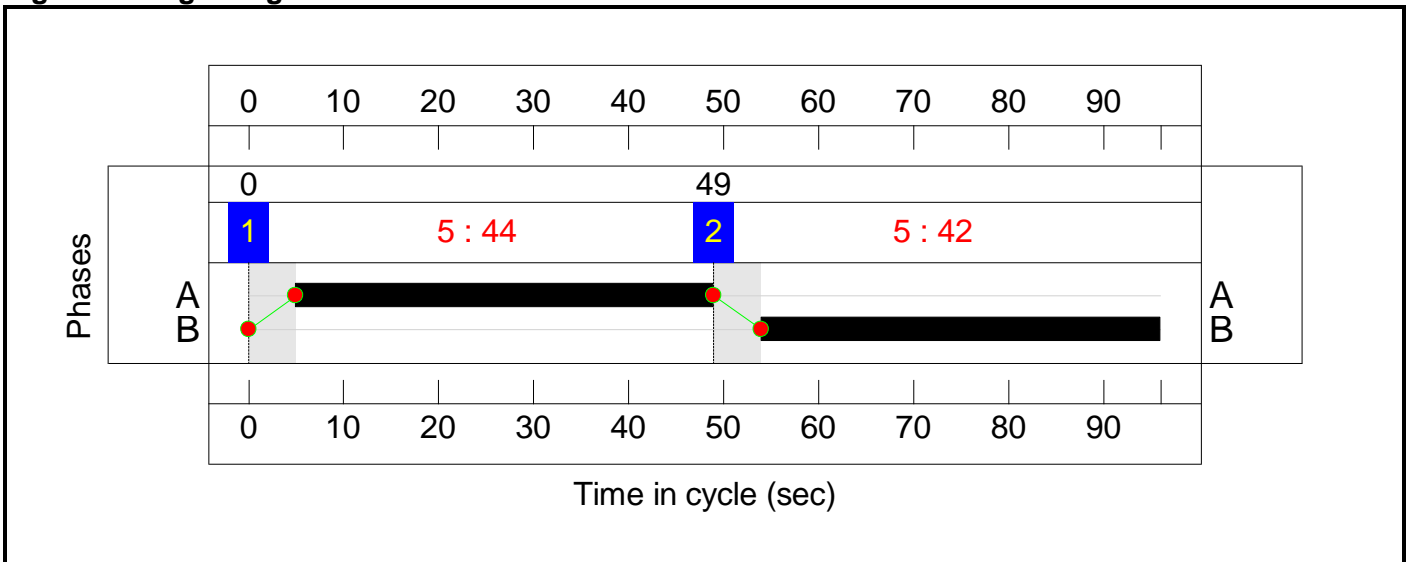
Stage Sequence Diagram



Stage Timings

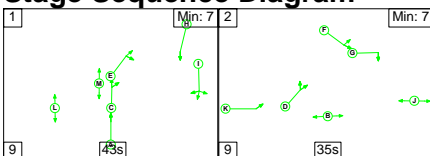
Stage	1	2
Duration	44	42
Change Point	0	49

Signal Timings Diagram



C2

Stage Sequence Diagram

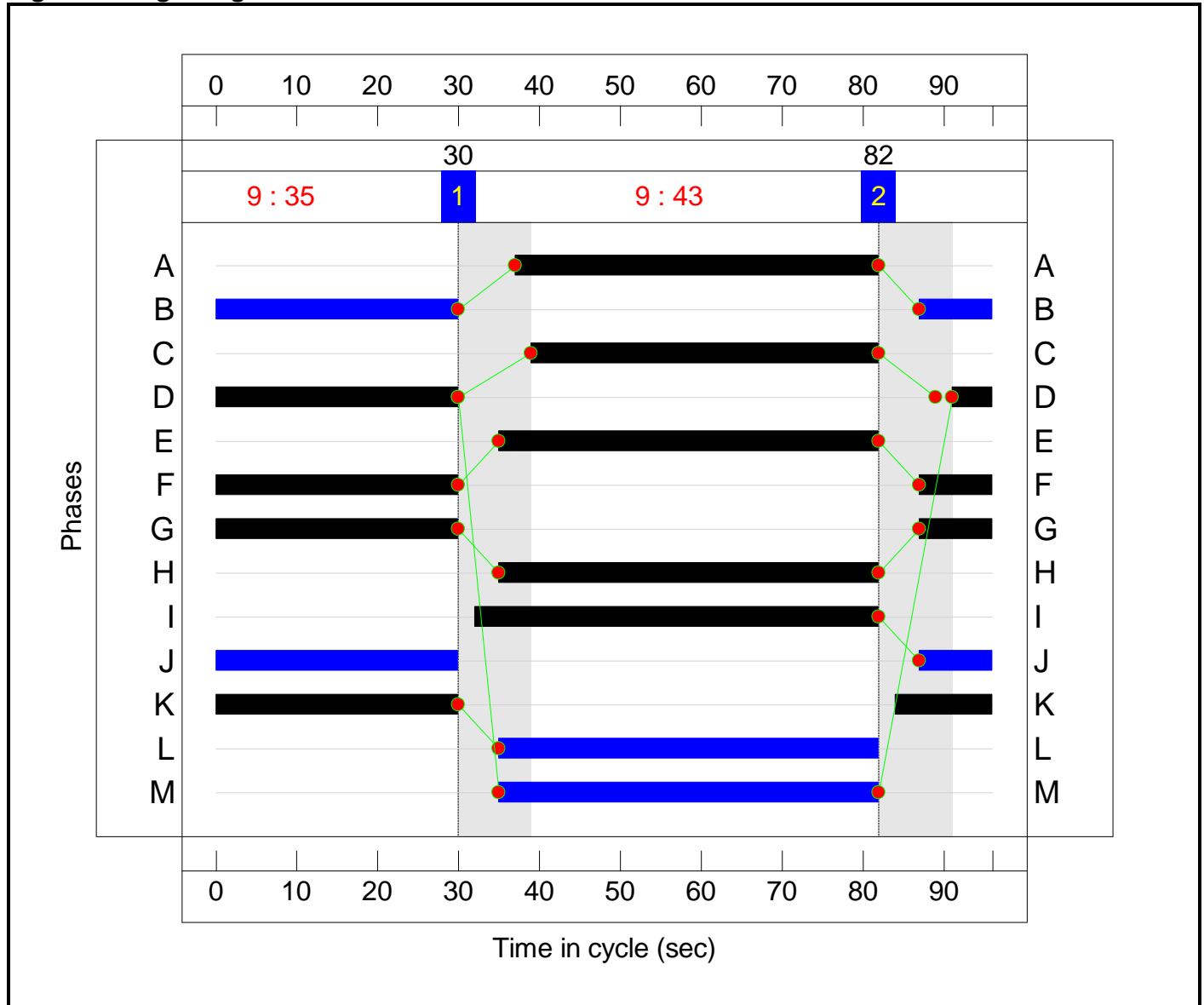


Full Input Data And Results

Stage Timings

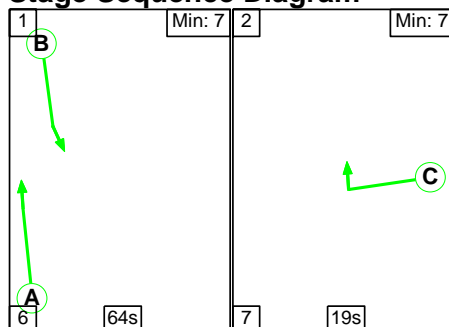
Stage	1	2
Duration	43	35
Change Point	30	82

Signal Timings Diagram



C3

Stage Sequence Diagram

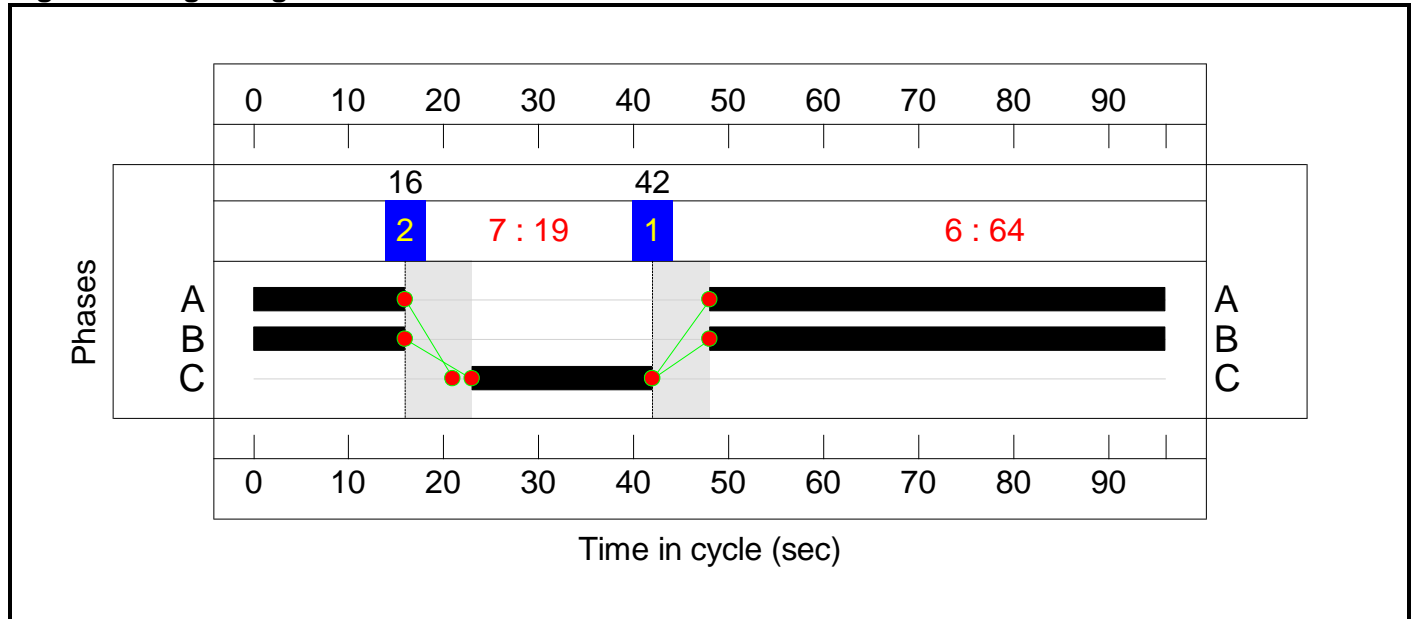


Full Input Data And Results

Stage Timings

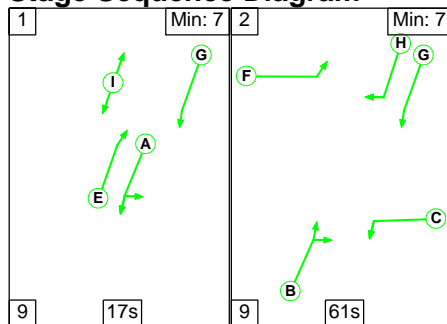
Stage	1	2
Duration	64	19
Change Point	42	16

Signal Timings Diagram



C4

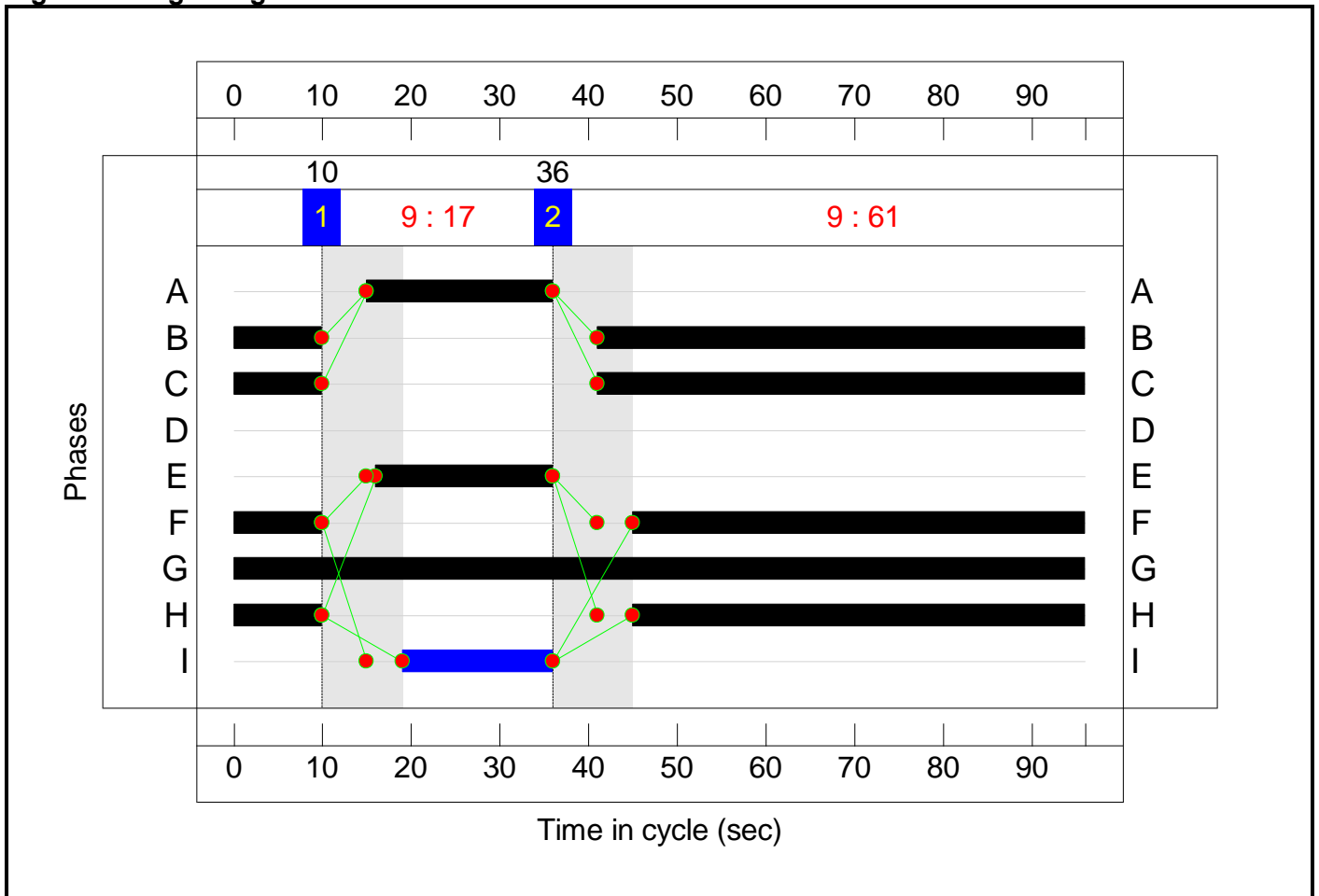
Stage Sequence Diagram



Stage Timings

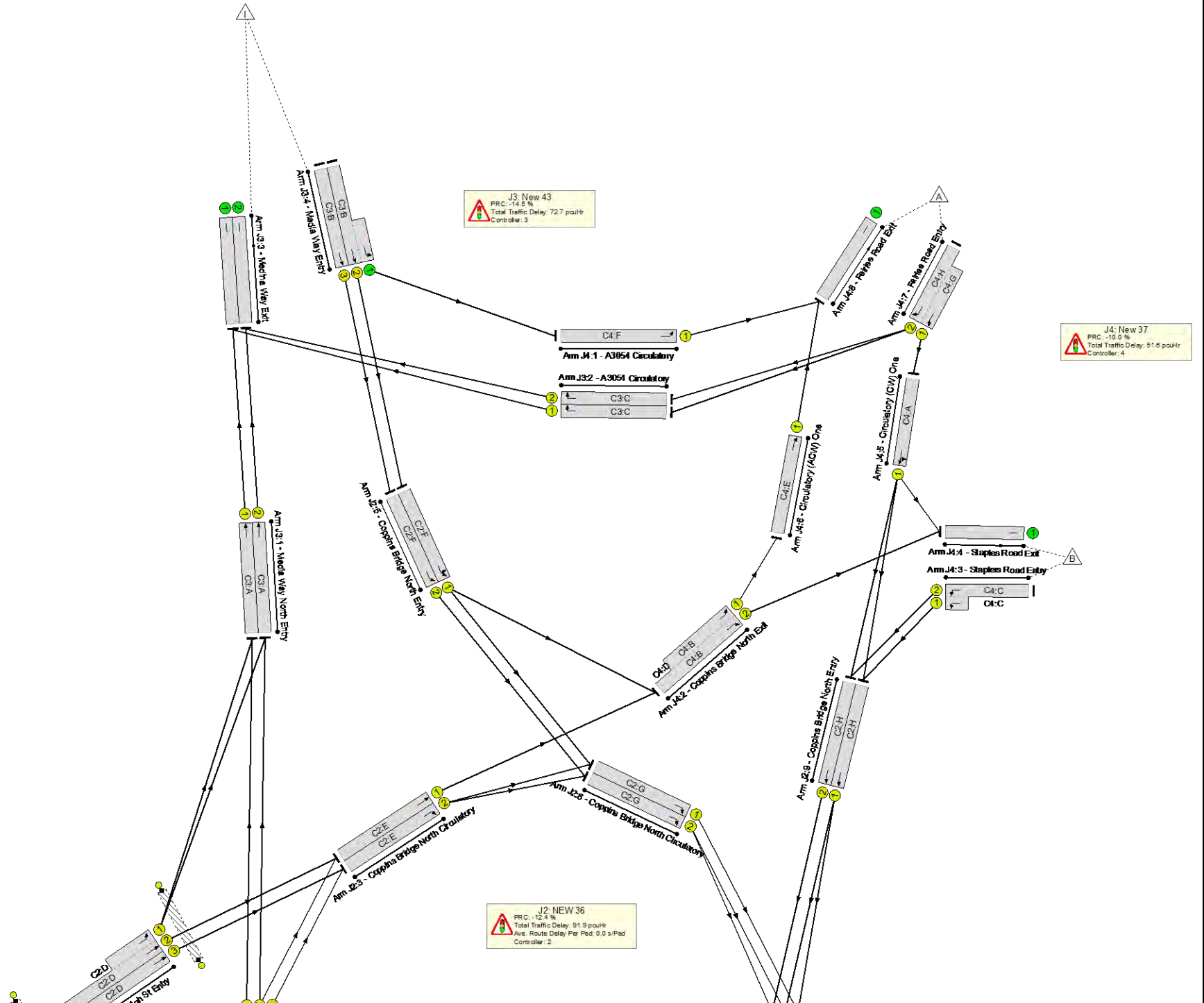
Stage	1	2
Duration	17	61
Change Point	10	36

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: HCA Tender IoW	-	-	N/A	-	-		-	-	-	-	-	-	103.0%
J1: George Way NEW 35	-	-	N/A	-	-		-	-	-	-	-	-	62.6%
1/1	Coppins Bridge South Entry Ahead Left	U	N/A	N/A	C1:B		1	42	-	523	1901	851	61.4%
1/2	Coppins Bridge South Entry Right	U	N/A	N/A	C1:B		1	42	-	456	1842	825	55.3%
2/1	East St Exit - Pyle St Ahead	O	N/A	N/A	-		-	-	-	83	1730	1120	7.4%
3/1	East St (Pyle St Turn) Entry Left Ahead	U	N/A	N/A	-		-	-	-	293	Inf	Inf	0.0%
4/1	East St Exit	U	N/A	N/A	-		-	-	-	495	Inf	Inf	0.0%
5/1	Pyle St Exit	U	N/A	N/A	-		-	-	-	90	Inf	Inf	0.0%
6/1	Pyle St Entry Left	O	N/A	N/A	-		-	-	-	78	1598	740	10.5%
7/1	East St Entry Ahead	O	N/A	N/A	-		-	-	-	96	1865	775	12.4%
7/2	East St Entry Ahead	O	N/A	N/A	-		-	-	-	268	1865	849	31.6%
8/1	A3020 Exit	U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
9/2+9/1	A3020 Entry Left Left2 Ahead	U	N/A	N/A	C1:A		1	44	-	875	1978:1967	741+656	62.6 : 62.6%
J2: NEW 36	-	-	N/A	-	-		-	-	-	-	-	-	101.2%
1/1	Ahead	U	N/A	N/A	C2:C		1	43	-	777	1915	878	88.5%
1/2	Ahead Right	U	N/A	N/A	C2:C		1	43	-	834	2055	942	88.5%
1/3	Right	U	N/A	N/A	C2:C		1	43	-	29	1769	811	3.6%
2/1	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	45	-	777	1915	918	84.7%

Full Input Data And Results

2/2	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	45	-	834	2035	975	85.5%
2/3	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	45	-	29	1865	894	3.2%
3/1	Coppins Bridge North Circulatory Ahead	U	N/A	N/A	C2:E		1	47	-	979	2015	1007	97.2%
3/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:E		1	47	-	289	1791	896	32.3%
4/2+4/1	High St Entry Left Ahead	U	N/A	N/A	C2:D		1	35	-	510	1915:1915	652+114	66.6 : 66.6%
4/3	High St Entry Ahead	U	N/A	N/A	C2:D		1	35	-	260	1915	718	36.2%
5/1	Coppins Bridge North Entry Left Ahead	U	N/A	N/A	C2:F		1	39	-	764	1759	733	101.2%
5/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:F		1	39	-	251	1874	781	32.1%
6/2+6/1	Ahead Left Left2	U	N/A	N/A	C2:l -		1	50	-	739	1915:1492	744+233	74.6 : 73.7%
6/3	Right	U	N/A	N/A	C2:l		1	50	-	517	2055	1092	47.4%
6/4	Right	U	N/A	N/A	C2:l		1	50	-	448	1915	1017	44.0%
7/1		U	N/A	N/A	-		-	-	-	176	Inf	Inf	0.0%
8/1	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	39	-	568	1885	785	70.7%
8/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	39	-	282	1885	785	35.9%
9/1	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	47	-	432	1940	970	44.5%
9/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	47	-	422	1940	970	43.5%
10/1	Ahead	U	N/A	N/A	C2:K		1	42	-	510	1965	880	57.9%
10/2	Ahead	U	N/A	N/A	C2:K		1	42	-	260	1965	880	29.5%

Full Input Data And Results

11/1+11/2	Entry Coppins Bridge Car Park Ahead Left	O	N/A	N/A	-	-	-	-	44	1822:1800	868+405	3.5 : 3.5%
12/1	Exit Coppins Bridge Car Park	U	N/A	N/A	-	-	-	-	45	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:B		1	39	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C2:J		1	39	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C2:M		1	47	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	C2:L		1	47	0	-	0	0.0%
J3: New 43	-	-	N/A	-	-		-	-	-	-	-	103.0%
1/1	Media Way North Entry Ahead	U	N/A	N/A	C3:A		1	64	812	1935	1310	62.0%
1/2	Media Way North Entry Ahead	U	N/A	N/A	C3:A		1	64	330	2015	1364	24.2%
2/1	A3054 Circulatory Right	U	N/A	N/A	C3:C		1	19	407	1940	404	100.7%
2/2	A3054 Circulatory Right	U	N/A	N/A	C3:C		1	19	410	1965	409	100.2%
3/1	Medina Way Exit	U	N/A	N/A	-		-	-	1219	Inf	Inf	0.0%
3/2	Medina Way Exit	U	N/A	N/A	-		-	-	740	Inf	Inf	0.0%
4/2+4/1	Media Way Entry Left Ahead	U	N/A	N/A	C3:B -		1	64	1600	2015:1966	742+811	103.0 : 103.0%
4/3	Media Way Entry Ahead	U	N/A	N/A	C3:B		1	64	251	2015	1364	18.4%
J4: New 37	-	-	N/A	-	-		-	-	-	-	-	99.0%
1/1	A3054 Circulatory Left	U	N/A	N/A	C4:F		1	61	836	1881	1215	66.8%
2/2+2/1	Coppins Bridge North Exit Ahead Ahead2	U	N/A	N/A	C4:B	C4:D	1	65	1433	1834:1784	969+479	97.1 : 99.0%
3/2+3/1	Staplers Road Entry Left	U	N/A	N/A	C4:C		1	65	614	1818:1784	893+406	47.2 : 47.2%
4/1	Staples Road Exit	U	N/A	N/A	-		-	-	971	Inf	Inf	0.0%

Full Input Data And Results

5/1	Circulatory (CW) One Left Ahead	U	N/A	N/A	C4:A		1	21	-	252	1951	447	56.4%
6/1	Circulatory (ACW) One Ahead	U	N/A	N/A	C4:E		1	20	-	474	2015	441	98.0%
7/2+7/1	Fairlee Road Entry Ahead Right	U	N/A	N/A	C4:H C4:G		1	61:96	-	1069	1665:1890	931+287	87.7 : 87.7%
8/1	Fairlee Road Exit	U	N/A	N/A	-		-	-	-	1310	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: HCA Tender IoW	-	-	416	197	0	93.6	132.0	0.0	225.6	-	-	-	-
J1: George Way NEW 35	-	-	369	156	0	6.8	2.6	0.0	9.4	-	-	-	-
1/1	523	523	-	-	-	1.9	0.8	-	2.7	18.7	13.5	0.8	14.3
1/2	456	456	-	-	-	0.6	0.6	-	1.2	9.6	7.9	0.6	8.6
2/1	83	83	83	0	0	0.0	0.0	-	0.0	1.7	0.0	0.0	0.0
3/1	293	293	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	495	495	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	90	90	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	78	78	78	0	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
7/1	96	96	88	8	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
7/2	268	268	120	148	0	0.0	0.2	-	0.2	3.1	0.0	0.2	0.2
8/1	541	541	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	875	875	-	-	-	4.2	0.8	-	5.1	20.9	8.5	0.8	9.3
J2: NEW 36	-	-	47	41	0	46.0	46.0	0.0	91.9	-	-	-	-
1/1	777	777	-	-	-	0.3	3.6	-	3.9	18.1	0.5	3.6	4.1
1/2	834	834	-	-	-	0.2	3.6	-	3.8	16.6	2.3	3.6	5.9
1/3	29	29	-	-	-	0.0	0.0	-	0.0	3.5	0.0	0.0	0.0
2/1	777	777	-	-	-	3.7	2.7	-	6.4	29.6	15.0	2.7	17.6
2/2	834	834	-	-	-	5.8	2.8	-	8.6	37.2	20.4	2.8	23.2
2/3	29	29	-	-	-	0.1	0.0	-	0.1	15.2	0.4	0.0	0.4
3/1	979	979	-	-	-	5.3	10.1	-	15.3	56.3	26.0	10.1	36.0
3/2	289	289	-	-	-	2.0	0.2	-	2.2	27.8	7.4	0.2	7.7
4/2+4/1	510	510	-	-	-	0.6	1.0	-	1.6	11.4	12.7	1.0	13.7
4/3	260	260	-	-	-	2.0	0.3	-	2.3	31.2	4.1	0.3	4.4
5/1	742	733	-	-	-	4.8	15.9	-	20.7	100.5	20.0	15.9	35.9

Full Input Data And Results

5/2	251	251	-	-	-	1.2	0.2	-	1.4	19.9	4.9	0.2	5.1
6/2+6/1	726	726	-	-	-	5.8	1.4	-	7.2	35.7	19.7	1.4	21.2
6/3	517	517	-	-	-	2.4	0.4	-	2.8	19.6	8.8	0.4	9.3
6/4	448	448	-	-	-	0.5	0.4	-	0.9	7.4	1.5	0.4	1.9
7/1	171	171	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	555	555	-	-	-	4.0	1.2	-	5.2	33.7	11.0	1.2	12.2
8/2	282	282	-	-	-	0.4	0.3	-	0.7	8.5	0.9	0.3	1.1
9/1	432	432	-	-	-	1.6	0.4	-	2.0	16.4	8.9	0.4	9.3
9/2	422	422	-	-	-	1.4	0.4	-	1.8	15.1	3.8	0.4	4.1
10/1	510	510	-	-	-	2.8	0.7	-	3.5	24.6	10.1	0.7	10.7
10/2	260	260	-	-	-	1.2	0.2	-	1.4	19.8	4.4	0.2	4.6
11/1+11/2	44	44	47	41	0	0.0	0.0	-	0.1	4.1	0.1	0.0	0.2
12/1	44	44	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: New 43	-	-	0	0	0	15.6	57.1	0.0	72.7	-	-	-	-
1/1	812	812	-	-	-	0.1	0.8	-	0.9	4.1	1.2	0.8	2.0
1/2	330	330	-	-	-	0.1	0.2	-	0.3	3.2	0.8	0.2	1.0
2/1	407	404	-	-	-	3.2	10.8	-	14.0	124.0	10.9	10.8	21.7
2/2	410	409	-	-	-	5.2	10.3	-	15.5	136.2	11.0	10.3	21.2
3/1	1216	1216	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	739	739	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	1600	1553	-	-	-	6.5	35.0	-	41.4	93.3	73.4	35.0	108.4
4/3	251	251	-	-	-	0.4	0.1	-	0.5	7.3	2.4	0.1	2.6
J4: New 37	-	-	0	0	0	25.4	26.2	0.0	51.6	-	-	-	-
1/1	811	811	-	-	-	3.0	1.0	-	4.0	17.6	11.5	1.0	12.5
2/2+2/1	1415	1328	-	-	-	12.0	12.3	-	24.2	61.7	43.4	12.3	55.6
3/2+3/1	614	614	-	-	-	1.0	0.4	-	1.5	8.7	5.6	0.4	6.1

Full Input Data And Results

4/1	908	908	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	252	252	-	-	-	2.1	0.6	-	2.8	39.5	5.9	0.6	6.5
6/1	432	432	-	-	-	4.3	8.4	-	12.7	106.2	11.5	8.4	20.0
7/2+7/1	1069	1069	-	-	-	2.9	3.4	-	6.4	21.4	19.1	3.4	22.5
8/1	1243	1243	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
			C1	PRC for Signalled Lanes (%)	43.7	Total Delay for Signalled Lanes (pcuHr)	9.01	Cycle Time (s)	96				
			C2	PRC for Signalled Lanes (%)	-12.4	Total Delay for Signalled Lanes (pcuHr)	91.87	Cycle Time (s)	96				
			C3	PRC for Signalled Lanes (%)	-14.5	Total Delay for Signalled Lanes (pcuHr)	72.71	Cycle Time (s)	96				
			C4	PRC for Signalled Lanes (%)	-10.0	Total Delay for Signalled Lanes (pcuHr)	51.57	Cycle Time (s)	96				
				PRC Over All Lanes (%)	-14.5	Total Delay Over All Lanes(pcuHr)	225.60						

Full Input Data And Results

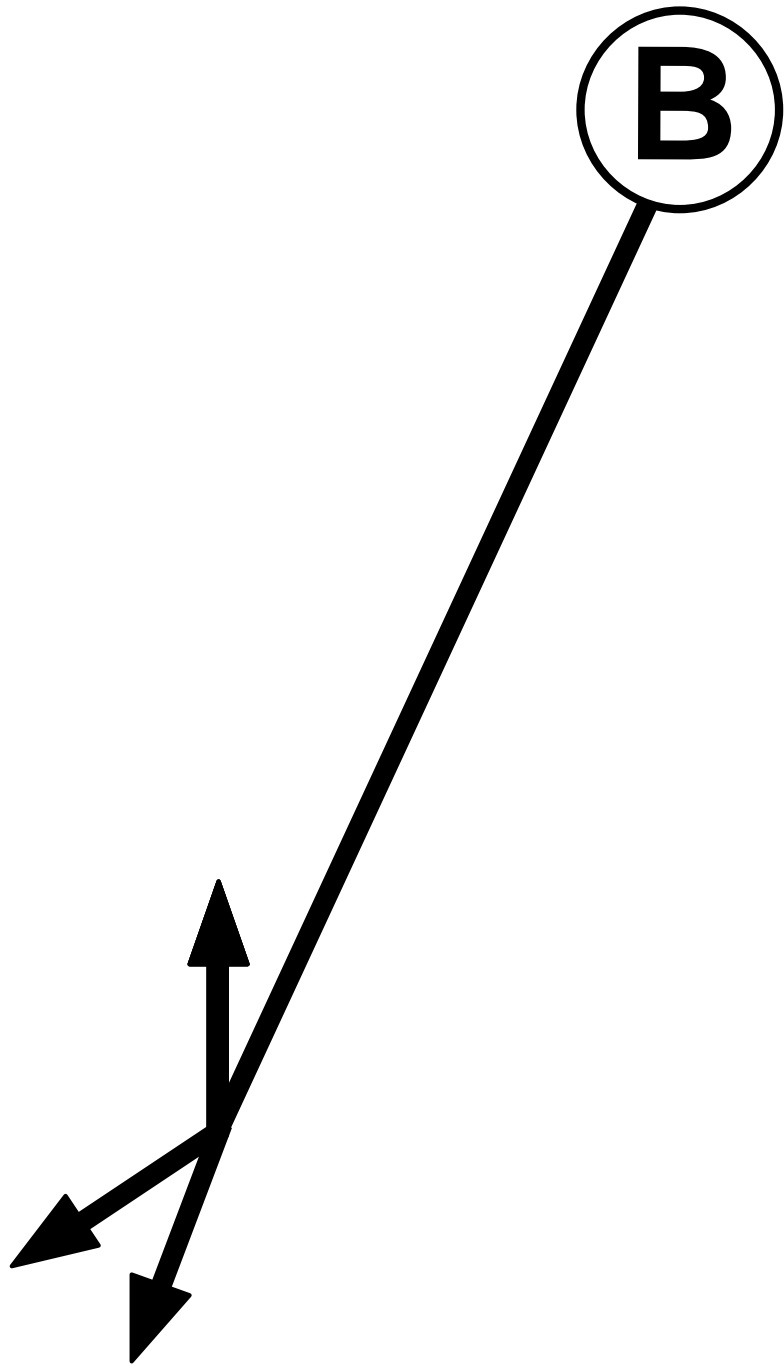
User and Project Details

Project:	A090129-60
Title:	HCA Tender IoW
Location:	
Additional detail:	
File name:	Junction 2 - Coppin Bridge Gyratory - Proposed Junction GS 19072018.lsg3x
Author:	
Company:	
Address:	

Full Input Data And Results

C1

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7

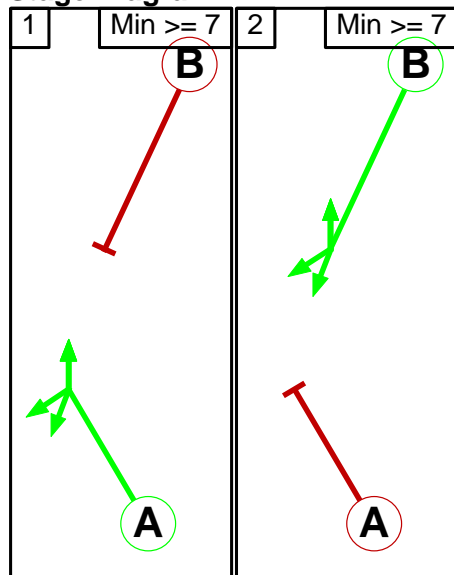
Phase Intergreens Matrix

	Starting Phase		
Terminating Phase		A	B
	A		5
	B	5	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B

Stage Diagram



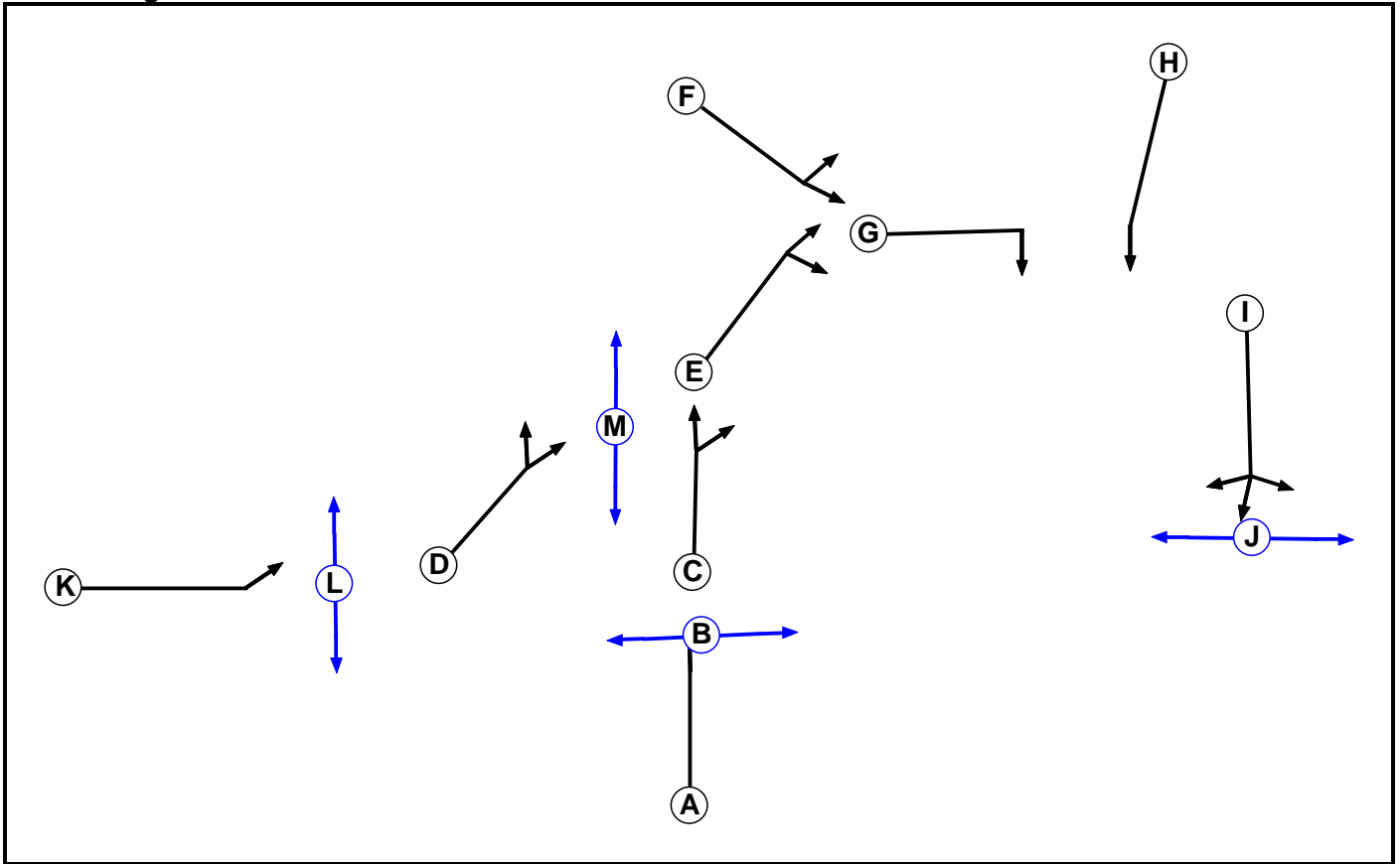
Phase Delays

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

Prohibited Stage Change

	To Stage		
From Stage		1	2
	1		5
	2	5	

C2
Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Pedestrian		6	6
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Pedestrian		7	7
K	Traffic		7	7
L	Pedestrian		5	5
M	Pedestrian		6	6

Full Input Data And Results

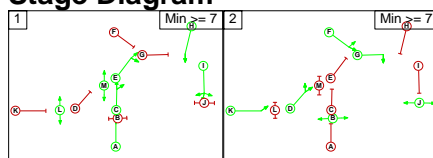
Phase Intergreens Matrix

	Starting Phase												
	A	B	C	D	E	F	G	H	I	J	K	L	M
Terminating Phase	A	5	-	-	-	-	-	-	-	-	-	-	-
B	7		-	-	-	-	-	-	-	-	-	-	-
C	-	-	7	-	-	-	-	-	-	-	-	-	-
D	-	-	9		-	-	-	-	-	-	-	5	-
E	-	-	-	-	5	-	-	-	-	-	-	-	-
F	-	-	-	-	5		-	-	-	-	-	-	-
G	-	-	-	-	-		5	-	-	-	-	-	-
H	-	-	-	-	-	5		-	-	-	-	-	-
I	-	-	-	-	-	-	-		5	-	-	-	-
J	-	-	-	-	-	-	-	-		5	-	-	-
K	-	-	-	-	-	-	-	-	-		5	-	-
L	-	-	-	-	-	-	-	-	-	-		5	-
M	-	-	-	9	-	-	-	-	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A C E H I L M
2	B D F G J K

Stage Diagram



Phase Delays

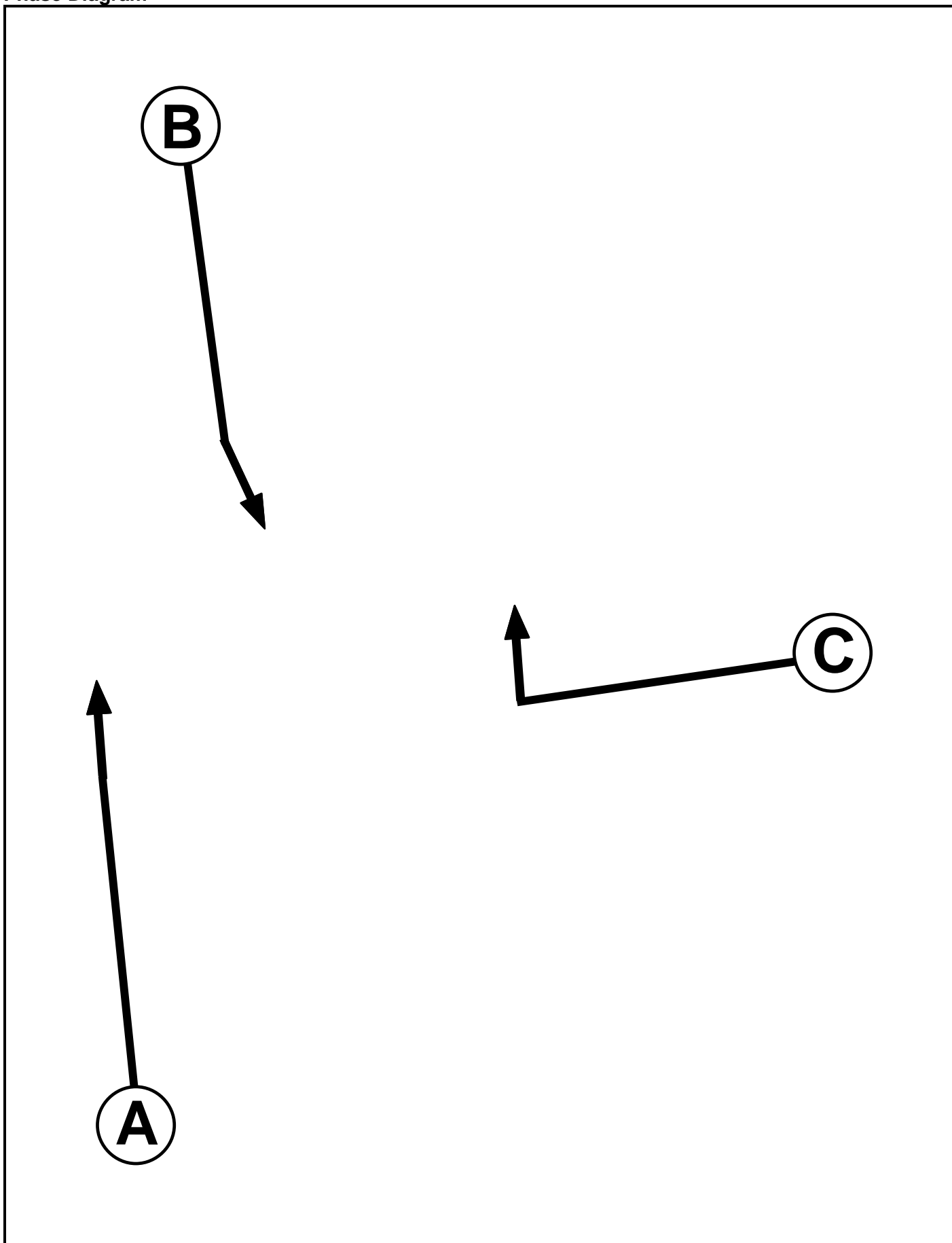
Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage	
	1	2
1		9
2	9	

C3

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7

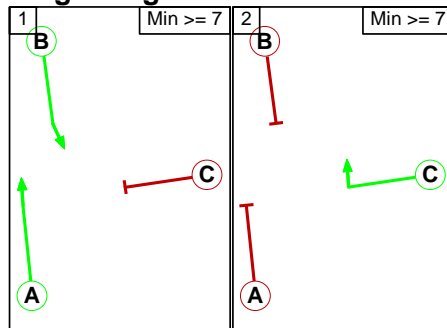
Phase Intergreens Matrix

	Starting Phase		
	A	B	C
Terminating Phase	A	-	5
	B	-	7
	C	6	6

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C

Stage Diagram



Phase Delays

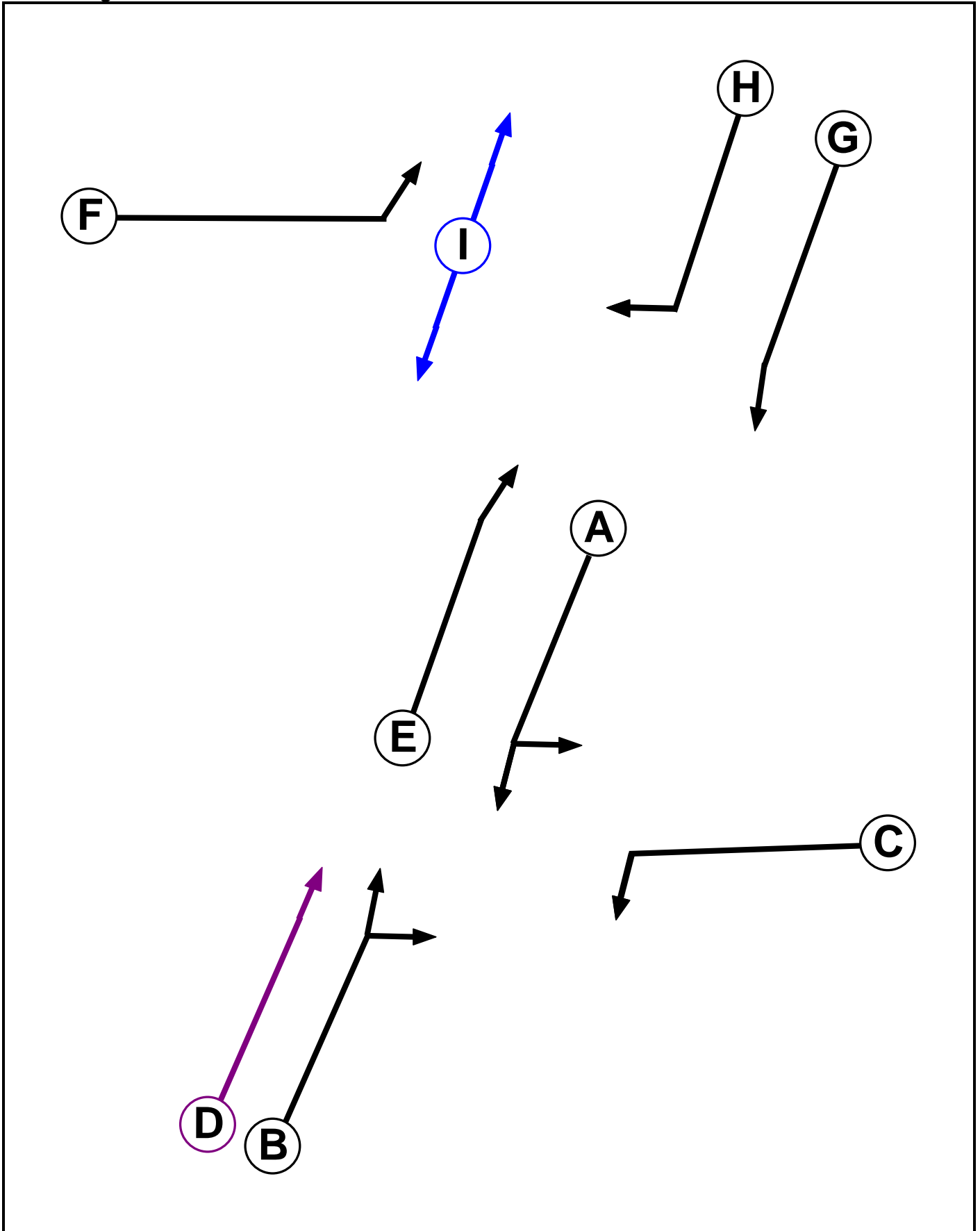
Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

	To Stage	
	1	2
From Stage	1	7
	2	6

C4

Phase Diagram



Full Input Data And Results

Phase Input Data

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

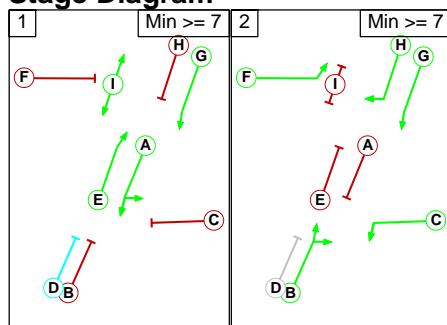
Phase Intergreens Matrix

		Starting Phase								
		A	B	C	D	E	F	G	H	I
Terminating Phase	A		5	5	-	-	-	-	-	-
	B	5		-	-	-	-	-	-	-
	C	5	-		-	-	-	-	-	-
	D	-	-	-		-	-	-	-	-
	E	-	-	-	-		5	-	5	-
	F	-	-	-	-	5		-	-	5
	G	-	-	-	-	-	-		-	-
	H	-	-	-	-	6	-	-		9
	I	-	-	-	-	-	9	-	9	

Phases in Stage

Stage No.	Phases in Stage
1	A E G I
2	B C F G H

Stage Diagram



Phase Delays

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

Full Input Data And Results

Prohibited Stage Change

From Stage	To Stage	
	1	2
1		9
2	9	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: George Way NEW 35											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J1:2/1 (East St Exit - Pyle St)	J1:5/1 (Ahead)	1439	0	J1:3/1	1.09	All	-	-	-	-	-
J1:6/1 (Pyle St Entry)	J1:7/1 (Left)	1439	0	J1:3/1	1.09	To J1:7/1 (Ahead) To J1:7/2 (Ahead)	-	-	-	-	-
	J1:7/2 (Left)	715	0	J1:3/1	0.22	To J1:7/1 (Ahead) To J1:7/2 (Ahead)					
J1:7/1 (East St Entry)	J2:2/1 (Ahead)	1000	0	J1:1/2	0.33	To J2:2/1 (Right)	-	-	-	-	-
				J1:9/1	0.33	To J2:2/1 (Ahead)					
J1:7/2 (East St Entry)	J2:2/2 (Ahead)	1000	0	J1:1/2	0.33	To J2:2/1 (Right) To J2:2/2 (Right)	-	-	-	-	-
	J2:2/3 (Ahead)	1000	0	J1:1/2	0.33	All					

Full Input Data And Results

Junction: J2: NEW 36											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J2:11/1 (Entry Coppins Bridge Car Park)	J1:8/1 (Left)	1439	0	J2:6/2	1.09	To J1:8/1 (Ahead)	-	-	-	-	-
J2:11/2 (Entry Coppins Bridge Car Park)	J1:1/1 (Ahead)	1439	0	J2:6/3	1.09	All	-	-	-	-	-
				J2:6/2	1.09	To J1:8/1 (Ahead)					
	J1:1/2 (Ahead)	1439	0	J2:6/2	1.09	To J1:8/1 (Ahead)					
				J2:6/4	1.09	All					
J2:6/3	1.09	All									

Junction: J3: New 43

There are no Opposed Lanes in this Junction

Junction: J4: New 37

There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: J1: George Way NEW 35												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (Coppins Bridge South Entry)	U	B	2	3	13.9	Geom	-	4.00	0.00	Y	Arm J1:2 Ahead	25.00
											Arm J1:4 Left	25.00
J1:1/2 (Coppins Bridge South Entry)	U	B	2	3	13.0	Geom	-	4.00	0.00	Y	Arm J2:2 Right	16.00
J1:2/1 (East St Exit - Pyle St)	O		2	3	3.5	Geom	-	3.00	0.00	Y	Arm J1:5 Ahead	14.00
J1:3/1 (East St (Pyle St Turn) Entry)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:4/1 (East St Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:5/1 (Pyle St Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:6/1 (Pyle St Entry)	O		2	3	60.0	Geom	-	3.25	0.00	Y	Arm J1:7 Left	7.00
J1:7/1 (East St Entry)	O		2	3	4.5	Geom	-	2.50	0.00	Y	Arm J2:2 Ahead	Inf
J1:7/2 (East St Entry)	O		2	3	4.0	Geom	-	2.50	0.00	Y	Arm J2:2 Ahead	Inf
J1:8/1 (A3020 Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:9/1 (A3020 Entry)	U	A	2	3	13.9	Geom	-	4.00	0.00	Y	Arm J1:2 Left	22.00
											Arm J1:4 Left	25.00
											Arm J2:2 Ahead	80.00
J1:9/2 (A3020 Entry)	U	A	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J2:2 Ahead	80.00

Full Input Data And Results

Junction: J2: NEW 36												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J2:1/1	U	C	2	3	2.1	Geom	-	3.00	0.00	Y	Arm J3:1 Ahead	Inf
J2:1/2	U	C	2	3	2.1	Geom	-	3.00	0.00	N	Arm J3:1 Ahead	Inf
											Arm J2:3 Right	Inf
J2:1/3	U	C	2	3	2.1	Geom	-	3.00	0.00	Y	Arm J2:3 Right	18.20
J2:2/1 (Circulatory NB Three)	U	A	2	3	8.9	Geom	-	3.00	0.00	Y	Arm J2:1 Ahead	Inf
J2:2/2 (Circulatory NB Three)	U	A	2	3	13.9	Geom	-	2.80	0.00	N	Arm J2:1 Ahead	Inf
J2:2/3 (Circulatory NB Three)	U	A	2	3	13.2	Geom	-	2.50	0.00	Y	Arm J2:1 Ahead	Inf
J2:3/1 (Coppins Bridge North Circulatory)	U	E	2	3	4.3	Geom	-	4.00	0.00	Y	Arm J4:2 Ahead	Inf
J2:3/2 (Coppins Bridge North Circulatory)	U	E	2	3	3.5	Geom	-	4.00	0.00	Y	Arm J2:8 Right	12.00
J2:4/1 (High St Entry)	U	D	2	3	6.1	Geom	-	3.00	0.00	Y	Arm J3:1 Left	Inf
J2:4/2 (High St Entry)	U	D	2	3	7.0	Geom	-	3.00	0.00	Y	Arm J2:3 Ahead	Inf
J2:4/3 (High St Entry)	U	D	2	3	7.0	Geom	-	3.00	0.00	Y	Arm J2:3 Ahead	Inf
J2:5/1 (Coppins Bridge North Entry)	U	F	2	3	15.8	Geom	-	4.00	0.00	Y	Arm J4:2 Left	9.00
											Arm J2:8 Ahead	13.00
J2:5/2 (Coppins Bridge North Entry)	U	F	2	3	15.8	Geom	-	4.00	0.00	Y	Arm J2:8 Ahead	20.00
J2:6/1	U		2	3	2.0	Geom	-	3.25	0.00	Y	Arm J2:7 Left	5.00

Full Input Data And Results

J2:6/2	U	I	2	3	5.7	Geom	-	3.00	0.00	Y	Arm J1:8 Ahead	Inf
											Arm J2:12 Left	Inf
J2:6/3	U	I	2	3	5.7	Geom	-	3.00	0.00	N	Arm J1:1 Right	Inf
											Arm J1:8 Ahead	Inf
J2:6/4	U	I	2	3	5.7	Geom	-	3.00	0.00	Y	Arm J1:1 Right	Inf
J2:7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:8/1 (Coppins Bridge North Circulatory)	U	G	2	3	5.0	Geom	-	2.70	0.00	Y	Arm J2:6 Right	Inf
J2:8/2 (Coppins Bridge North Circulatory)	U	G	2	3	4.9	Geom	-	3.00	0.00	Y	Arm J2:6 Right	Inf
J2:9/1 (Coppins Bridge North Entry)	U	H	2	3	10.6	Geom	-	3.25	0.00	Y	Arm J2:6 Ahead	Inf
J2:9/2 (Coppins Bridge North Entry)	U	H	2	3	10.6	Geom	-	3.25	0.00	Y	Arm J2:6 Ahead	Inf
J2:10/1	U	K	2	3	60.0	Geom	-	3.50	0.00	Y	Arm J2:4 Ahead	Inf
J2:10/2	U	K	2	3	60.0	Geom	-	3.50	0.00	Y	Arm J2:4 Ahead	Inf
J2:11/1 (Entry Coppins Bridge Car Park)	O		2	3	15.7	Geom	-	3.25	0.00	Y	Arm J1:8 Left	23.22
J2:11/2 (Entry Coppins Bridge Car Park)	O		2	3	2.6	User	1800	-	-	-	-	-
J2:12/1 (Exit Coppins Bridge Car Park)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J3: New 43												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J3:1/1 (Media Way North Entry)	U	A	2	3	17.4	Geom	-	3.20	0.00	Y	Arm J3:3 Ahead	Inf
J3:1/2 (Media Way North Entry)	U	A	2	3	17.4	Geom	-	4.00	0.00	Y	Arm J3:3 Ahead	Inf
J3:2/1 (A3054 Circulatory)	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm J3:3 Right	Inf
J3:2/2 (A3054 Circulatory)	U	C	2	3	20.0	Geom	-	3.50	0.00	Y	Arm J3:3 Right	Inf
J3:3/1 (Medina Way Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:3/2 (Medina Way Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:4/1 (Media Way Entry)	U		2	3	6.0	Geom	-	4.00	0.00	Y	Arm J4:1 Left	60.00
J3:4/2 (Media Way Entry)	U	B	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J2:5 Ahead	Inf
J3:4/3 (Media Way Entry)	U	B	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J2:5 Ahead	Inf

Full Input Data And Results

Junction: J4: New 37												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J4:1/1 (A3054 Circulatory)	U	F	2	3	24.3	Geom	-	4.00	0.00	Y	Arm J4:8 Left	21.00
J4:2/1 (Coppins Bridge North Exit)	U	B D	2	3	10.4	Geom	-	2.50	0.00	Y	Arm J4:6 Ahead	33.00
J4:2/2 (Coppins Bridge North Exit)	U	B	2	3	15.1	Geom	-	3.00	0.00	Y	Arm J4:4 Ahead	34.00
J4:3/1 (Staplers Road Entry)	U	C	2	3	2.6	Geom	-	2.30	0.00	Y	Arm J2:9 Left	44.00
J4:3/2 (Staplers Road Entry)	U	C	2	3	60.0	Geom	-	2.65	0.00	Y	Arm J2:9 Left	44.00
J4:4/1 (Staples Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J4:5/1 (Circulatory (CW) One)	U	A	2	3	9.0	Geom	-	3.50	0.00	Y	Arm J4:4 Left	10.00
J4:6/1 (Circulatory (ACW) One)	U	E	2	3	9.0	Geom	-	4.00	0.00	Y	Arm J2:9 Ahead	Inf
J4:7/1 (Fairlee Road Entry)	U	G	2	3	8.7	Geom	-	2.75	0.00	Y	Arm J4:8 Ahead	Inf
J4:7/2 (Fairlee Road Entry)	U	H	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J4:5 Ahead	Inf
J4:8/1 (Fairlee Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2017 AM'	08:00	09:00	01:00	
2: '2017 PM'	17:00	18:00	01:00	
3: '2034 - AM - DN'	08:00	09:00	01:00	
4: '2034 - PM - DN'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: '2017 AM' (FG1: '2017 AM', Plan 1: 'Fairlee Rd A3054')

Traffic Flows, Desired

Desired Flow :

		Destination									
		A	B	C	D	E	F	G	H	I	Tot.
Origin	A	1	8	0	10	68	94	20	0	751	952
	B	0	1	1	10	74	104	22	0	634	846
	C	0	0	0	0	0	0	0	0	0	0
	D	1	1	0	0	0	3	0	0	1	6
	E	80	67	6	8	7	12	11	0	528	719
	F	47	40	8	0	4	0	29	0	99	227
	G	6	5	0	0	6	0	0	0	19	36
	H	113	95	19	8	91	16	12	0	66	420
	I	546	223	35	5	357	86	37	0	3	1292
	Tot.	794	440	69	41	607	315	131	0	2101	4498

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2017 AM
Junction: J1: George Way NEW 35	
J1:1/1	394
J1:1/2	642
J1:2/1	102
J1:3/1	227
J1:4/1	315
J1:5/1	131
J1:6/1	36
J1:7/1	55
J1:7/2	179
J1:8/1	607
J1:9/1 (short)	373
J1:9/2 (with short)	719(In) 346(Out)
Junction: J2: NEW 36	
J2:1/1	756
J2:1/2	777
J2:1/3	39
J2:2/1	756
J2:2/2	777
J2:2/3	39
J2:3/1	457
J2:3/2	185
J2:4/1 (short)	66
J2:4/2 (with short)	274(In) 208(Out)
J2:4/3	146
J2:5/1	420
J2:5/2	326
J2:6/1 (short)	69
J2:6/2 (with short)	495(In) 426(Out)
J2:6/3	613
J2:6/4	639
J2:7/1	69
J2:8/1	337
J2:8/2	371
J2:9/1	403
J2:9/2	636
J2:10/1	274
J2:10/2	146

Full Input Data And Results

J2:11/1 (with short)	6(In) 0(Out)
J2:11/2 (short)	6
J2:12/1	41
Junction: J3: New 43	
J3:1/1	756
J3:1/2	594
J3:2/1	350
J3:2/2	401
J3:3/1	1106
J3:3/2	995
J3:4/1 (short)	546
J3:4/2 (with short)	966(In) 420(Out)
J3:4/3	326
Junction: J4: New 37	
J4:1/1	546
J4:2/1 (short)	248
J4:2/2 (with short)	680(In) 432(Out)
J4:3/1 (short)	211
J4:3/2 (with short)	846(In) 635(Out)
J4:4/1	440
J4:5/1	201
J4:6/1	248
J4:7/1 (short)	201
J4:7/2 (with short)	952(In) 751(Out)
J4:8/1	794

Full Input Data And Results

Lane Saturation Flows

Junction: J1: George Way NEW 35											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
J1:1/1 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J1:2 Ahead	25.00	23.1 %	1901	1901			
				Arm J1:4 Left	25.00	76.9 %					
J1:1/2 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J2:2 Right	16.00	100.0 %	1842	1842			
J1:2/1 (East St Exit - Pyle St)	3.00	0.00	Y	Arm J1:5 Ahead	14.00	100.0 %	1730	1730			
J1:3/1 (East St (Pyle St Turn) Entry Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:4/1 (East St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:5/1 (Pyle St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:6/1 (Pyle St Entry)	3.25	0.00	Y	Arm J1:7 Left	7.00	100.0 %	1598	1598			
J1:7/1 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:7/2 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:8/1 (A3020 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
J1:9/1 (A3020 Entry)	4.00	0.00	Y	Arm J1:2 Left	22.00	2.9 %	1973	1973			
				Arm J1:4 Left	25.00	3.2 %					
				Arm J2:2 Ahead	80.00	93.8 %					
J1:9/2 (A3020 Entry)	4.00	0.00	Y	Arm J2:2 Ahead	80.00	100.0 %	1978	1978			

Full Input Data And Results

Junction: J2: NEW 36								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1	3.00	0.00	Y	Arm J3:1 Ahead	Inf	100.0 %	1915	1915
J2:1/2	3.00	0.00	N	Arm J3:1 Ahead Arm J2:3 Right	Inf Inf	68.0 % 32.0 %	2055	2055
J2:1/3	3.00	0.00	Y	Arm J2:3 Right	18.20	100.0 %	1769	1769
J2:2/1 (Circulatory NB Three)	3.00	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1915	1915
J2:2/2 (Circulatory NB Three)	2.80	0.00	N	Arm J2:1 Ahead	Inf	100.0 %	2035	2035
J2:2/3 (Circulatory NB Three)	2.50	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1865	1865
J2:3/1 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	2015	2015
J2:3/2 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J2:8 Right	12.00	100.0 %	1791	1791
J2:4/1 (High St Entry)	3.00	0.00	Y	Arm J3:1 Left	Inf	100.0 %	1915	1915
J2:4/2 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:4/3 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:5/1 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J4:2 Left Arm J2:8 Ahead	9.00 13.00	53.1 % 46.9 %	1764	1764
J2:5/2 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J2:8 Ahead	20.00	100.0 %	1874	1874
J2:6/1	3.25	0.00	Y	Arm J2:7 Left Arm J1:8 Ahead	5.00 Inf	100.0 % 90.4 %	1492	1492
J2:6/2	3.00	0.00	Y	Arm J2:12 Left	Inf	9.6 %	1915	1915
J2:6/3	3.00	0.00	N	Arm J1:1 Right Arm J1:8 Ahead	Inf Inf	63.8 % 36.2 %	2055	2055
J2:6/4	3.00	0.00	Y	Arm J1:1 Right	Inf	100.0 %	1915	1915
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:8/2 (Coppins Bridge North Circulatory)	3.00	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1915	1915

Full Input Data And Results

J2:9/1 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:9/2 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:10/1	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:10/2	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:11/1 (Entry Coppins Bridge Car Park)	3.25	0.00	Y	Arm J1:8 Left	23.22	0.0 %	1940	1940
J2:11/2 (Entry Coppins Bridge Car Park Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:12/1 (Exit Coppins Bridge Car Park Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: New 43

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (Media Way North Entry)	3.20	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1935	1935
J3:1/2 (Media Way North Entry)	4.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	2015	2015
J3:2/1 (A3054 Circulatory)	3.25	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1940	1940
J3:2/2 (A3054 Circulatory)	3.50	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1965	1965
J3:3/1 (Medina Way Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (Medina Way Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (Media Way Entry)	4.00	0.00	Y	Arm J4:1 Left	60.00	100.0 %	1966	1966
J3:4/2 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015
J3:4/3 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015

Full Input Data And Results

Junction: J4: New 37								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A3054 Circulatory)	4.00	0.00	Y	Arm J4:8 Left	21.00	100.0 %	1881	1881
J4:2/1 (Coppins Bridge North Exit)	2.50	0.00	Y	Arm J4:6 Ahead	33.00	100.0 %	1784	1784
J4:2/2 (Coppins Bridge North Exit)	3.00	0.00	Y	Arm J4:4 Ahead	34.00	100.0 %	1834	1834
J4:3/1 (Staplers Road Entry)	2.30	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1784	1784
J4:3/2 (Staplers Road Entry)	2.65	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1818	1818
J4:4/1 (Staples Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:5/1 (Circulatory (CW) One)	3.50	0.00	Y	Arm J4:4 Left	10.00	4.0 %	1953	1953
Arm J2:9 Ahead				Inf	96.0 %			
J4:6/1 (Circulatory (ACW) One)	4.00	0.00	Y	Arm J4:8 Ahead	Inf	100.0 %	2015	2015
J4:7/1 (Fairlee Road Entry)	2.75	0.00	Y	Arm J4:5 Ahead	Inf	100.0 %	1890	1890
J4:7/2 (Fairlee Road Entry)	3.00	0.00	Y	Arm J3:2 Right	10.00	100.0 %	1665	1665
J4:8/1 (Fairlee Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2017 PM' (FG2: '2017 PM', Plan 1: 'Fairlee Rd A3054')

Traffic Flows, Desired

Desired Flow :

	Destination										
	A	B	C	D	E	F	G	H	I	Tot.	
Origin	A	0	10	1	2	82	104	8	0	670	877
	B	0	0	0	1	74	94	7	0	346	522
	C	0	0	0	0	0	0	0	0	0	0
	D	1	1	0	0	25	4	1	0	5	37
	E	127	136	2	1	1	37	8	0	407	719
	F	69	74	5	1	12	1	6	0	73	241
	G	19	21	0	0	2	0	0	0	22	64
	H	172	184	42	19	128	24	1	0	62	632
	I	686	373	94	13	592	142	43	0	21	1964
	Tot.	1074	799	144	37	916	406	74	0	1606	5056

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2017 PM
Junction: J1: George Way NEW 35	
J1:1/1	429
J1:1/2	384
J1:2/1	68
J1:3/1	241
J1:4/1	406
J1:5/1	74
J1:6/1	64
J1:7/1	75
J1:7/2	224
J1:8/1	916
J1:9/1 (short)	345
J1:9/2 (with short)	719(In) 374(Out)
Junction: J2: NEW 36	
J2:1/1	606
J2:1/2	726
J2:1/3	25
J2:2/1	606
J2:2/2	726
J2:2/3	25
J2:3/1	804
J2:3/2	239
J2:4/1 (short)	62
J2:4/2 (with short)	418(In) 356(Out)
J2:4/3	214
J2:5/1	630
J2:5/2	648
J2:6/1 (short)	144
J2:6/2 (with short)	580(In) 436(Out)
J2:6/3	916
J2:6/4	377
J2:7/1	144
J2:8/1	420
J2:8/2	724
J2:9/1	373
J2:9/2	356
J2:10/1	418
J2:10/2	214

Full Input Data And Results

J2:11/1 (with short)	37(In) 25(Out)
J2:11/2 (short)	12
J2:12/1	37
Junction: J3: New 43	
J3:1/1	636
J3:1/2	310
J3:2/1	330
J3:2/2	330
J3:3/1	966
J3:3/2	640
J3:4/1 (short)	686
J3:4/2 (with short)	1316(In) 630(Out)
J3:4/3	648
Junction: J4: New 37	
J4:1/1	686
J4:2/1 (short)	388
J4:2/2 (with short)	1177(In) 789(Out)
J4:3/1 (short)	176
J4:3/2 (with short)	522(In) 346(Out)
J4:4/1	799
J4:5/1	217
J4:6/1	388
J4:7/1 (short)	217
J4:7/2 (with short)	877(In) 660(Out)
J4:8/1	1074

Full Input Data And Results

Lane Saturation Flows

Junction: J1: George Way NEW 35											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
J1:1/1 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J1:2 Ahead	25.00	14.0 %	1901	1901			
				Arm J1:4 Left	25.00	86.0 %					
J1:1/2 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J2:2 Right	16.00	100.0 %	1842	1842			
J1:2/1 (East St Exit - Pyle St)	3.00	0.00	Y	Arm J1:5 Ahead	14.00	100.0 %	1730	1730			
J1:3/1 (East St (Pyle St Turn) Entry Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:4/1 (East St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:5/1 (Pyle St Exit Lane 1)	Infinite Saturation Flow		Inf	Inf							
J1:6/1 (Pyle St Entry)	3.25	0.00	Y	Arm J1:7 Left	7.00	100.0 %	1598	1598			
J1:7/1 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:7/2 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:8/1 (A3020 Exit Lane 1)	Infinite Saturation Flow		Inf	Inf							
J1:9/1 (A3020 Entry)	4.00	0.00	Y	Arm J1:2 Left	22.00	2.3 %	1967	1967			
				Arm J1:4 Left	25.00	10.7 %					
				Arm J2:2 Ahead	80.00	87.0 %					
J1:9/2 (A3020 Entry)	4.00	0.00	Y	Arm J2:2 Ahead	80.00	100.0 %	1978	1978			

Full Input Data And Results

Junction: J2: NEW 36								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1	3.00	0.00	Y	Arm J3:1 Ahead	Inf	100.0 %	1915	1915
J2:1/2	3.00	0.00	N	Arm J3:1 Ahead Arm J2:3 Right	Inf Inf	38.3 % 61.7 %	2055	2055
J2:1/3	3.00	0.00	Y	Arm J2:3 Right	18.20	100.0 %	1769	1769
J2:2/1 (Circulatory NB Three)	3.00	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1915	1915
J2:2/2 (Circulatory NB Three)	2.80	0.00	N	Arm J2:1 Ahead	Inf	100.0 %	2035	2035
J2:2/3 (Circulatory NB Three)	2.50	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1865	1865
J2:3/1 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	2015	2015
J2:3/2 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J2:8 Right	12.00	100.0 %	1791	1791
J2:4/1 (High St Entry)	3.00	0.00	Y	Arm J3:1 Left	Inf	100.0 %	1915	1915
J2:4/2 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:4/3 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:5/1 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J4:2 Left Arm J2:8 Ahead	9.00 13.00	59.2 % 40.8 %	1759	1759
J2:5/2 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J2:8 Ahead	20.00	100.0 %	1874	1874
J2:6/1	3.25	0.00	Y	Arm J2:7 Left Arm J1:8 Ahead	5.00 Inf	100.0 % 91.5 %	1492	1492
J2:6/2	3.00	0.00	Y	Arm J2:12 Left	Inf	8.5 %	1915	1915
J2:6/3	3.00	0.00	N	Arm J1:1 Right Arm J1:8 Ahead	Inf Inf	46.3 % 53.7 %	2055	2055
J2:6/4	3.00	0.00	Y	Arm J1:1 Right	Inf	100.0 %	1915	1915
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:8/2 (Coppins Bridge North Circulatory)	3.00	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1915	1915

Full Input Data And Results

J2:9/1 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:9/2 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:10/1	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:10/2	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:11/1 (Entry Coppins Bridge Car Park)	3.25	0.00	Y	Arm J1:8 Left	23.22	100.0 %	1822	1822
J2:11/2 (Entry Coppins Bridge Car Park Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:12/1 (Exit Coppins Bridge Car Park Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: New 43

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (Media Way North Entry)	3.20	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1935	1935
J3:1/2 (Media Way North Entry)	4.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	2015	2015
J3:2/1 (A3054 Circulatory)	3.25	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1940	1940
J3:2/2 (A3054 Circulatory)	3.50	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1965	1965
J3:3/1 (Medina Way Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (Medina Way Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (Media Way Entry)	4.00	0.00	Y	Arm J4:1 Left	60.00	100.0 %	1966	1966
J3:4/2 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015
J3:4/3 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015

Full Input Data And Results

Junction: J4: New 37								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A3054 Circulatory)	4.00	0.00	Y	Arm J4:8 Left	21.00	100.0 %	1881	1881
J4:2/1 (Coppins Bridge North Exit)	2.50	0.00	Y	Arm J4:6 Ahead	33.00	100.0 %	1784	1784
J4:2/2 (Coppins Bridge North Exit)	3.00	0.00	Y	Arm J4:4 Ahead	34.00	100.0 %	1834	1834
J4:3/1 (Staplers Road Entry)	2.30	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1784	1784
J4:3/2 (Staplers Road Entry)	2.65	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1818	1818
J4:4/1 (Staples Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:5/1 (Circulatory (CW) One)	3.50	0.00	Y	Arm J4:4 Left	10.00	4.6 %	1952	1952
Arm J2:9 Ahead				Inf	95.4 %			
J4:6/1 (Circulatory (ACW) One)	4.00	0.00	Y	Arm J4:8 Ahead	Inf	100.0 %	2015	2015
J4:7/1 (Fairlee Road Entry)	2.75	0.00	Y	Arm J4:5 Ahead	Inf	100.0 %	1890	1890
J4:7/2 (Fairlee Road Entry)	3.00	0.00	Y	Arm J3:2 Right	10.00	100.0 %	1665	1665
J4:8/1 (Fairlee Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2034 AM DN' (FG3: '2034 - AM - DN', Plan 1: 'Fairlee Rd A3054')

Traffic Flows, Desired

Desired Flow :

	Destination										
	A	B	C	D	E	F	G	H	I	Tot.	
Origin	A	1	10	1	12	83	115	24	0	919	1165
	B	0	1	1	13	91	127	26	0	775	1034
	C	0	0	0	0	0	0	0	0	0	0
	D	1	1	0	0	0	4	0	0	1	7
	E	98	82	7	10	9	14	14	0	646	880
	F	58	48	10	0	5	0	35	0	121	277
	G	7	6	0	0	7	0	0	0	23	43
	H	138	116	23	10	112	20	14	0	80	513
	I	667	273	43	6	436	105	45	0	4	1579
	Tot.	970	537	85	51	743	385	158	0	2569	5498

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2034 AM DN
Junction: J1: George Way NEW 35	
J1:1/1	480
J1:1/2	784
J1:2/1	123
J1:3/1	277
J1:4/1	385
J1:5/1	158
J1:6/1	43
J1:7/1	95
J1:7/2	190
J1:8/1	743
J1:9/1 (short)	379
J1:9/2 (with short)	880(In) 501(Out)
Junction: J2: NEW 36	
J2:1/1	899
J2:1/2	974
J2:1/3	48
J2:2/1	899
J2:2/2	974
J2:2/3	48
J2:3/1	557
J2:3/2	227
J2:4/1 (short)	80
J2:4/2 (with short)	334(In) 254(Out)
J2:4/3	179
J2:5/1	444
J2:5/2	468
J2:6/1 (short)	85
J2:6/2 (with short)	544(In) 459(Out)
J2:6/3	811
J2:6/4	781
J2:7/1	85
J2:8/1	360
J2:8/2	506
J2:9/1	493
J2:9/2	777
J2:10/1	334
J2:10/2	179

Full Input Data And Results

J2:11/1 (with short)	7(In) 0(Out)
J2:11/2 (short)	7
J2:12/1	51
Junction: J3: New 43	
J3:1/1	902
J3:1/2	748
J3:2/1	350
J3:2/2	569
J3:3/1	1252
J3:3/2	1317
J3:4/1 (short)	667
J3:4/2 (with short)	1111(In) 444(Out)
J3:4/3	468
Junction: J4: New 37	
J4:1/1	667
J4:2/1 (short)	303
J4:2/2 (with short)	830(In) 527(Out)
J4:3/1 (short)	258
J4:3/2 (with short)	1034(In) 776(Out)
J4:4/1	537
J4:5/1	246
J4:6/1	303
J4:7/1 (short)	246
J4:7/2 (with short)	1165(In) 919(Out)
J4:8/1	970

Full Input Data And Results

Lane Saturation Flows

Junction: J1: George Way NEW 35											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
J1:1/1 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J1:2 Ahead	25.00	22.7 %	1901	1901			
				Arm J1:4 Left	25.00	77.3 %					
J1:1/2 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J2:2 Right	16.00	100.0 %	1842	1842			
J1:2/1 (East St Exit - Pyle St)	3.00	0.00	Y	Arm J1:5 Ahead	14.00	100.0 %	1730	1730			
J1:3/1 (East St (Pyle St Turn) Entry Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:4/1 (East St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:5/1 (Pyle St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:6/1 (Pyle St Entry)	3.25	0.00	Y	Arm J1:7 Left	7.00	100.0 %	1598	1598			
J1:7/1 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:7/2 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:8/1 (A3020 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
J1:9/1 (A3020 Entry)	4.00	0.00	Y	Arm J1:2 Left	22.00	3.7 %	1971	1971			
				Arm J1:4 Left	25.00	3.7 %					
				Arm J2:2 Ahead	80.00	92.6 %					
J1:9/2 (A3020 Entry)	4.00	0.00	Y	Arm J2:2 Ahead	80.00	100.0 %	1978	1978			

Full Input Data And Results

Junction: J2: NEW 36								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1	3.00	0.00	Y	Arm J3:1 Ahead	Inf	100.0 %	1915	1915
J2:1/2	3.00	0.00	N	Arm J3:1 Ahead Arm J2:3 Right	Inf Inf	68.9 % 31.1 %	2055	2055
J2:1/3	3.00	0.00	Y	Arm J2:3 Right	18.20	100.0 %	1769	1769
J2:2/1 (Circulatory NB Three)	3.00	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1915	1915
J2:2/2 (Circulatory NB Three)	2.80	0.00	N	Arm J2:1 Ahead	Inf	100.0 %	2035	2035
J2:2/3 (Circulatory NB Three)	2.50	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1865	1865
J2:3/1 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	2015	2015
J2:3/2 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J2:8 Right	12.00	100.0 %	1791	1791
J2:4/1 (High St Entry)	3.00	0.00	Y	Arm J3:1 Left	Inf	100.0 %	1915	1915
J2:4/2 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:4/3 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:5/1 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J4:2 Left Arm J2:8 Ahead	9.00 13.00	61.5 % 38.5 %	1757	1757
J2:5/2 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J2:8 Ahead	20.00	100.0 %	1874	1874
J2:6/1	3.25	0.00	Y	Arm J2:7 Left Arm J1:8 Ahead	5.00 Inf	100.0 % 88.9 %	1492	1492
J2:6/2	3.00	0.00	Y	Arm J2:12 Left	Inf	11.1 %	1915	1915
J2:6/3	3.00	0.00	N	Arm J1:1 Right Arm J1:8 Ahead	Inf Inf	58.7 % 41.3 %	2055	2055
J2:6/4	3.00	0.00	Y	Arm J1:1 Right	Inf	100.0 %	1915	1915
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:8/2 (Coppins Bridge North Circulatory)	3.00	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1915	1915

Full Input Data And Results

J2:9/1 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:9/2 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:10/1	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:10/2	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:11/1 (Entry Coppins Bridge Car Park)	3.25	0.00	Y	Arm J1:8 Left	23.22	0.0 %	1940	1940
J2:11/2 (Entry Coppins Bridge Car Park Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:12/1 (Exit Coppins Bridge Car Park Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: New 43

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (Media Way North Entry)	3.20	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1935	1935
J3:1/2 (Media Way North Entry)	4.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	2015	2015
J3:2/1 (A3054 Circulatory)	3.25	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1940	1940
J3:2/2 (A3054 Circulatory)	3.50	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1965	1965
J3:3/1 (Medina Way Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (Medina Way Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (Media Way Entry)	4.00	0.00	Y	Arm J4:1 Left	60.00	100.0 %	1966	1966
J3:4/2 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015
J3:4/3 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015

Full Input Data And Results

Junction: J4: New 37								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A3054 Circulatory)	4.00	0.00	Y	Arm J4:8 Left	21.00	100.0 %	1881	1881
J4:2/1 (Coppins Bridge North Exit)	2.50	0.00	Y	Arm J4:6 Ahead	33.00	100.0 %	1784	1784
J4:2/2 (Coppins Bridge North Exit)	3.00	0.00	Y	Arm J4:4 Ahead	34.00	100.0 %	1834	1834
J4:3/1 (Staplers Road Entry)	2.30	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1784	1784
J4:3/2 (Staplers Road Entry)	2.65	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1818	1818
J4:4/1 (Staples Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:5/1 (Circulatory (CW) One)	3.50	0.00	Y	Arm J4:4 Left	10.00	4.1 %	1953	1953
Arm J2:9 Ahead				Inf	95.9 %			
J4:6/1 (Circulatory (ACW) One)	4.00	0.00	Y	Arm J4:8 Ahead	Inf	100.0 %	2015	2015
J4:7/1 (Fairlee Road Entry)	2.75	0.00	Y	Arm J4:5 Ahead	Inf	100.0 %	1890	1890
J4:7/2 (Fairlee Road Entry)	3.00	0.00	Y	Arm J3:2 Right	10.00	100.0 %	1665	1665
J4:8/1 (Fairlee Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2034 PM DN' (FG4: '2034 - PM - DN', Plan 1: 'Fairlee Rd A3054')

Traffic Flows, Desired

Desired Flow :

	Destination										
	A	B	C	D	E	F	G	H	I	Tot.	
Origin	A	0	12	1	2	100	127	10	0	817	1069
	B	0	0	1	2	90	115	9	0	422	639
	C	0	0	0	0	0	0	0	0	0	0
	D	1	1	0	0	30	5	1	0	6	44
	E	155	165	2	1	1	45	10	0	496	875
	F	84	90	6	1	15	1	7	0	89	293
	G	24	25	0	0	2	0	0	0	27	78
	H	210	224	52	23	155	29	1	0	76	770
	I	836	454	114	16	722	173	52	0	26	2393
	Tot.	1310	971	176	45	1115	495	90	0	1959	6161

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2034 PM DN
Junction: J1: George Way NEW 35	
J1:1/1	523
J1:1/2	456
J1:2/1	83
J1:3/1	293
J1:4/1	495
J1:5/1	90
J1:6/1	78
J1:7/1	100
J1:7/2	264
J1:8/1	1115
J1:9/1 (short)	407
J1:9/2 (with short)	875(In) 468(Out)
Junction: J2: NEW 36	
J2:1/1	776
J2:1/2	835
J2:1/3	29
J2:2/1	776
J2:2/2	835
J2:2/3	29
J2:3/1	979
J2:3/2	289
J2:4/1 (short)	76
J2:4/2 (with short)	510(In) 434(Out)
J2:4/3	260
J2:5/1	764
J2:5/2	793
J2:6/1 (short)	176
J2:6/2 (with short)	739(In) 563(Out)
J2:6/3	1084
J2:6/4	448
J2:7/1	176
J2:8/1	568
J2:8/2	824
J2:9/1	457
J2:9/2	422
J2:10/1	510
J2:10/2	260

Full Input Data And Results

J2:11/1 (with short)	44(In) 30(Out)
J2:11/2 (short)	14
J2:12/1	45
Junction: J3: New 43	
J3:1/1	811
J3:1/2	331
J3:2/1	407
J3:2/2	410
J3:3/1	1218
J3:3/2	741
J3:4/1 (short)	836
J3:4/2 (with short)	1600(In) 764(Out)
J3:4/3	793
Junction: J4: New 37	
J4:1/1	836
J4:2/1 (short)	474
J4:2/2 (with short)	1433(In) 959(Out)
J4:3/1 (short)	217
J4:3/2 (with short)	639(In) 422(Out)
J4:4/1	971
J4:5/1	252
J4:6/1	474
J4:7/1 (short)	252
J4:7/2 (with short)	1069(In) 817(Out)
J4:8/1	1310

Full Input Data And Results

Lane Saturation Flows

Junction: J1: George Way NEW 35											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
J1:1/1 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J1:2 Ahead	25.00	14.0 %	1901	1901			
				Arm J1:4 Left	25.00	86.0 %					
J1:1/2 (Coppins Bridge South Entry)	4.00	0.00	Y	Arm J2:2 Right	16.00	100.0 %	1842	1842			
J1:2/1 (East St Exit - Pyle St)	3.00	0.00	Y	Arm J1:5 Ahead	14.00	100.0 %	1730	1730			
J1:3/1 (East St (Pyle St Turn) Entry Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:4/1 (East St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:5/1 (Pyle St Exit Lane 1)				Infinite Saturation Flow					Inf	Inf	
J1:6/1 (Pyle St Entry)	3.25	0.00	Y	Arm J1:7 Left	7.00	100.0 %	1598	1598			
J1:7/1 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:7/2 (East St Entry)	2.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1865	1865			
J1:8/1 (A3020 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
J1:9/1 (A3020 Entry)	4.00	0.00	Y	Arm J1:2 Left	22.00	2.5 %	1967	1967			
				Arm J1:4 Left	25.00	11.1 %					
				Arm J2:2 Ahead	80.00	86.5 %					
J1:9/2 (A3020 Entry)	4.00	0.00	Y	Arm J2:2 Ahead	80.00	100.0 %	1978	1978			

Full Input Data And Results

Junction: J2: NEW 36								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1	3.00	0.00	Y	Arm J3:1 Ahead	Inf	100.0 %	1915	1915
J2:1/2	3.00	0.00	N	Arm J3:1 Ahead Arm J2:3 Right	Inf Inf	34.7 % 65.3 %	2055	2055
J2:1/3	3.00	0.00	Y	Arm J2:3 Right	18.20	100.0 %	1769	1769
J2:2/1 (Circulatory NB Three)	3.00	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1915	1915
J2:2/2 (Circulatory NB Three)	2.80	0.00	N	Arm J2:1 Ahead	Inf	100.0 %	2035	2035
J2:2/3 (Circulatory NB Three)	2.50	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1865	1865
J2:3/1 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	2015	2015
J2:3/2 (Coppins Bridge North Circulatory)	4.00	0.00	Y	Arm J2:8 Right	12.00	100.0 %	1791	1791
J2:4/1 (High St Entry)	3.00	0.00	Y	Arm J3:1 Left	Inf	100.0 %	1915	1915
J2:4/2 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:4/3 (High St Entry)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:5/1 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J4:2 Left Arm J2:8 Ahead	9.00 13.00	59.4 % 40.6 %	1759	1759
J2:5/2 (Coppins Bridge North Entry)	4.00	0.00	Y	Arm J2:8 Ahead	20.00	100.0 %	1874	1874
J2:6/1	3.25	0.00	Y	Arm J2:7 Left Arm J1:8 Ahead	5.00 Inf	100.0 % 92.0 %	1492	1492
J2:6/2	3.00	0.00	Y	Arm J2:12 Left	Inf	8.0 %	1915	1915
J2:6/3	3.00	0.00	N	Arm J1:1 Right Arm J1:8 Ahead	Inf Inf	47.7 % 52.3 %	2055	2055
J2:6/4	3.00	0.00	Y	Arm J1:1 Right	Inf	100.0 %	1915	1915
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1 (Coppins Bridge North Circulatory)	2.70	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1885	1885
J2:8/2 (Coppins Bridge North Circulatory)	3.00	0.00	Y	Arm J2:6 Right	Inf	100.0 %	1915	1915

Full Input Data And Results

J2:9/1 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:9/2 (Coppins Bridge North Entry)	3.25	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1940	1940
J2:10/1	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:10/2	3.50	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1965	1965
J2:11/1 (Entry Coppins Bridge Car Park)	3.25	0.00	Y	Arm J1:8 Left	23.22	100.0 %	1822	1822
J2:11/2 (Entry Coppins Bridge Car Park Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:12/1 (Exit Coppins Bridge Car Park Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: New 43

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (Media Way North Entry)	3.20	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1935	1935
J3:1/2 (Media Way North Entry)	4.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	2015	2015
J3:2/1 (A3054 Circulatory)	3.25	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1940	1940
J3:2/2 (A3054 Circulatory)	3.50	0.00	Y	Arm J3:3 Right	Inf	100.0 %	1965	1965
J3:3/1 (Medina Way Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (Medina Way Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (Media Way Entry)	4.00	0.00	Y	Arm J4:1 Left	60.00	100.0 %	1966	1966
J3:4/2 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015
J3:4/3 (Media Way Entry)	4.00	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	2015	2015

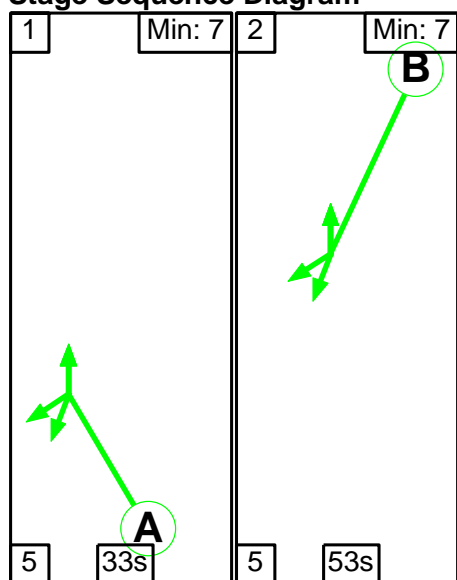
Full Input Data And Results

Junction: J4: New 37								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A3054 Circulatory)	4.00	0.00	Y	Arm J4:8 Left	21.00	100.0 %	1881	1881
J4:2/1 (Coppins Bridge North Exit)	2.50	0.00	Y	Arm J4:6 Ahead	33.00	100.0 %	1784	1784
J4:2/2 (Coppins Bridge North Exit)	3.00	0.00	Y	Arm J4:4 Ahead	34.00	100.0 %	1834	1834
J4:3/1 (Staplers Road Entry)	2.30	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1784	1784
J4:3/2 (Staplers Road Entry)	2.65	0.00	Y	Arm J2:9 Left	44.00	100.0 %	1818	1818
J4:4/1 (Staples Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:5/1 (Circulatory (CW) One)	3.50	0.00	Y	Arm J4:4 Left	10.00	4.8 %	1951	1951
Arm J2:9 Ahead				Inf	95.2 %			
J4:6/1 (Circulatory (ACW) One)	4.00	0.00	Y	Arm J4:8 Ahead	Inf	100.0 %	2015	2015
J4:7/1 (Fairlee Road Entry)	2.75	0.00	Y	Arm J4:5 Ahead	Inf	100.0 %	1890	1890
J4:7/2 (Fairlee Road Entry)	3.00	0.00	Y	Arm J3:2 Right	10.00	100.0 %	1665	1665
J4:8/1 (Fairlee Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2017 AM' (FG1: '2017 AM', Plan 1: 'Fairlee Rd A3054')

C1

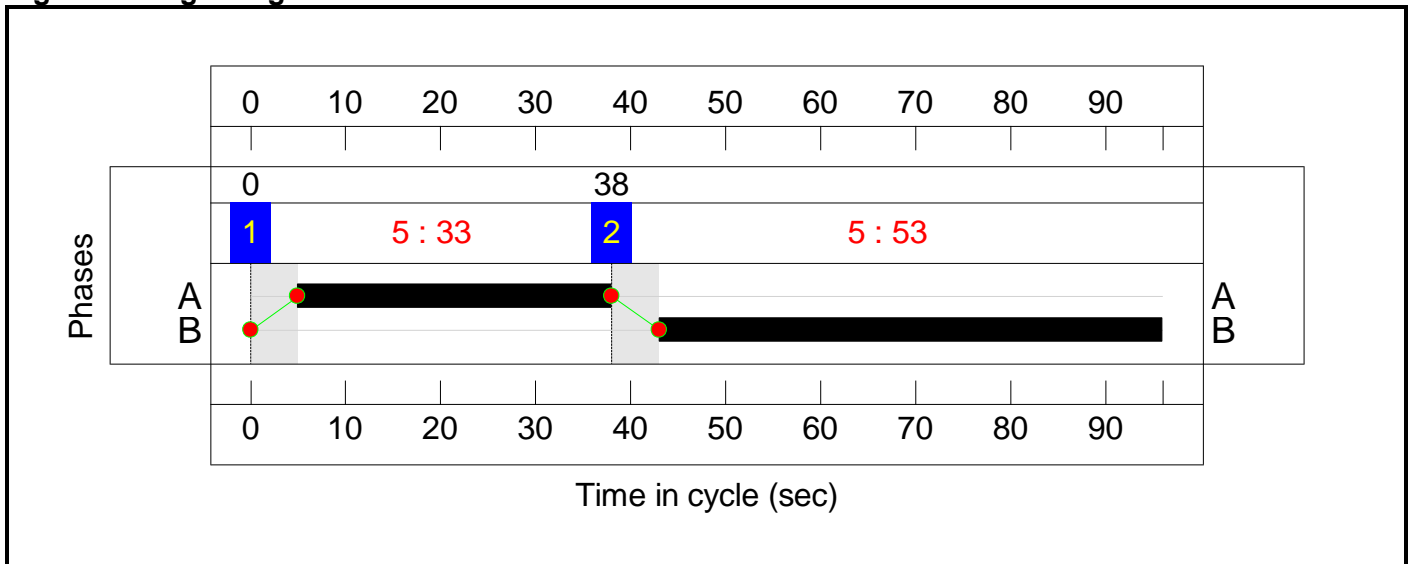
Stage Sequence Diagram



Stage Timings

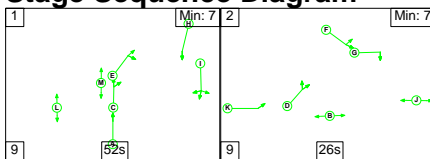
Stage	1	2
Duration	33	53
Change Point	0	38

Signal Timings Diagram



C2

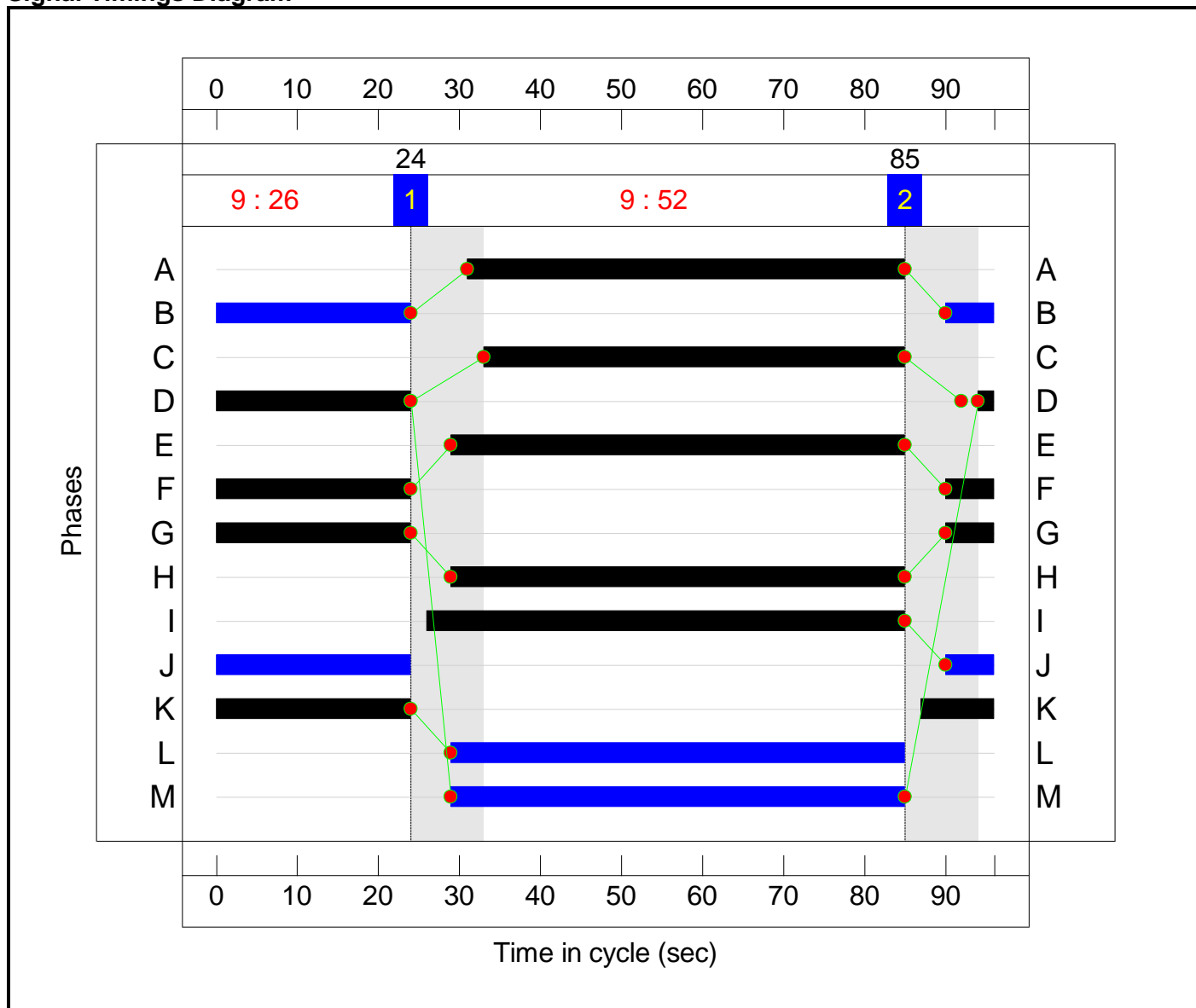
Stage Sequence Diagram



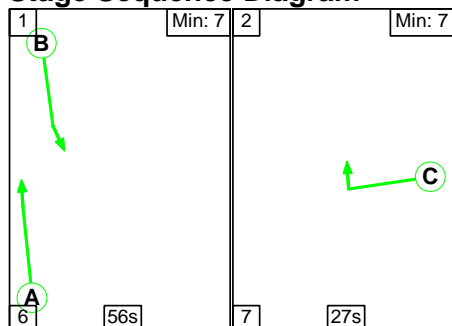
Stage Timings

Stage	1	2
Duration	52	26
Change Point	24	85

Signal Timings Diagram



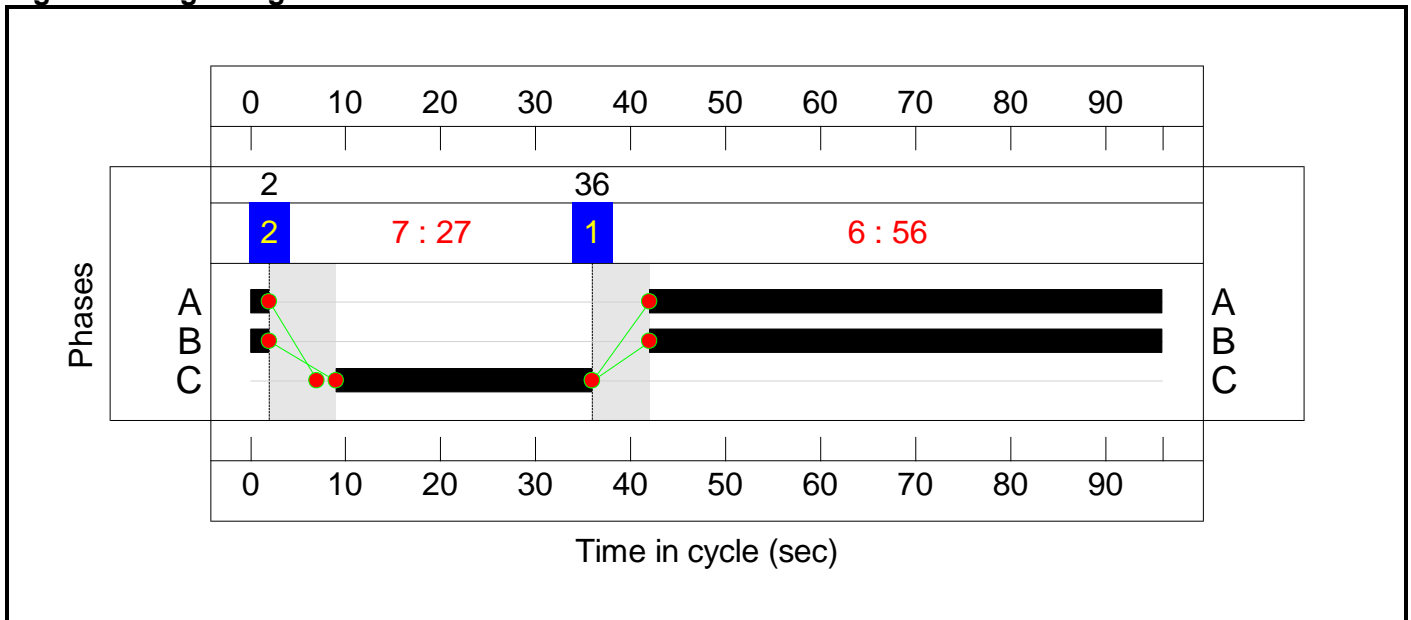
C3 Stage Sequence Diagram



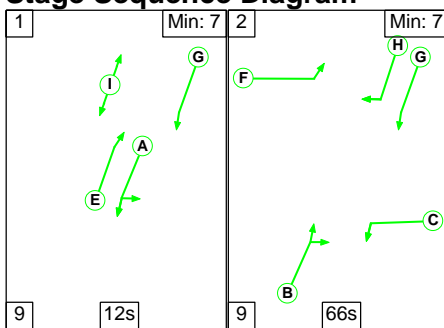
Stage Timings

Stage	1	2
Duration	56	27
Change Point	36	2

Signal Timings Diagram



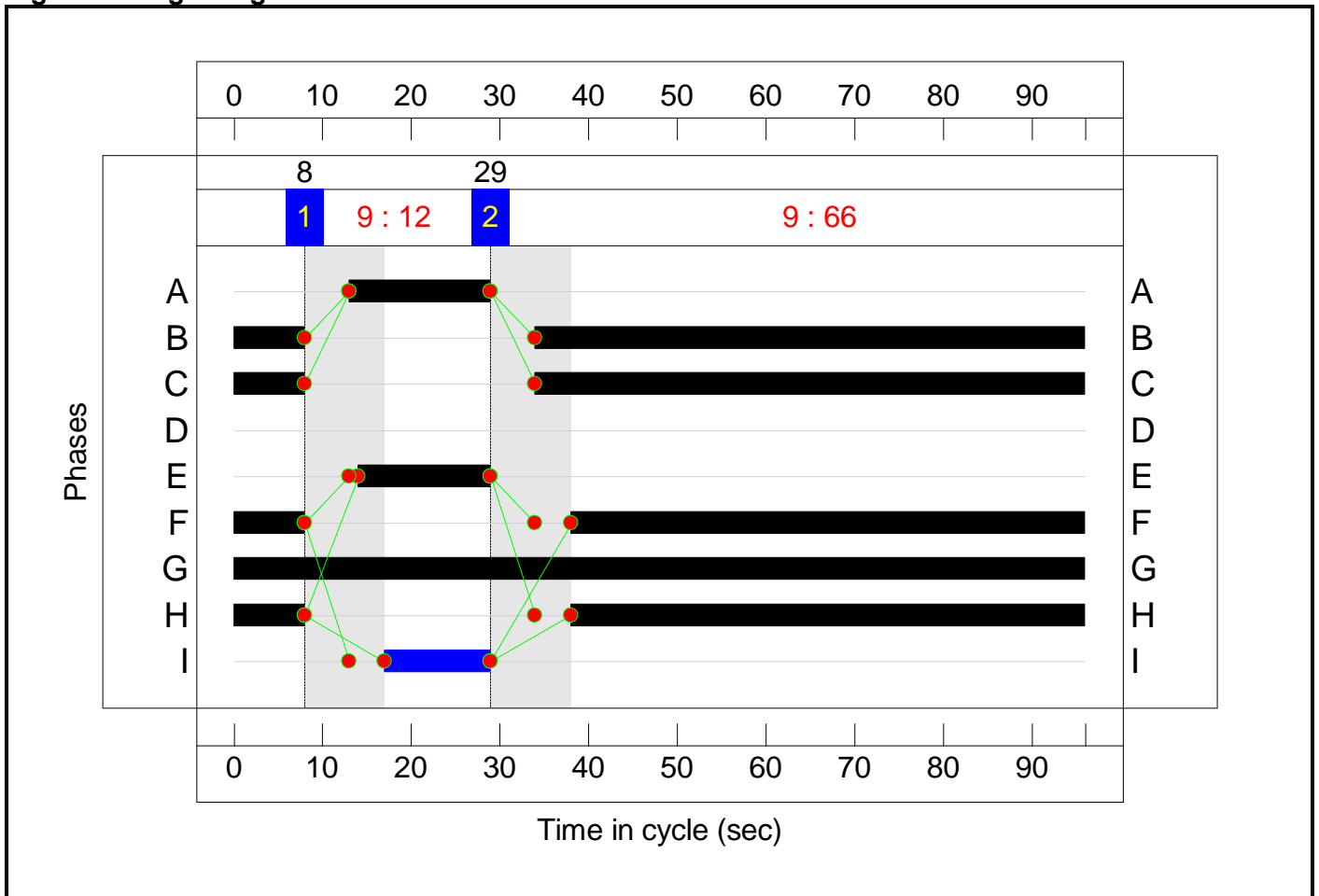
C4 Stage Sequence Diagram



Stage Timings

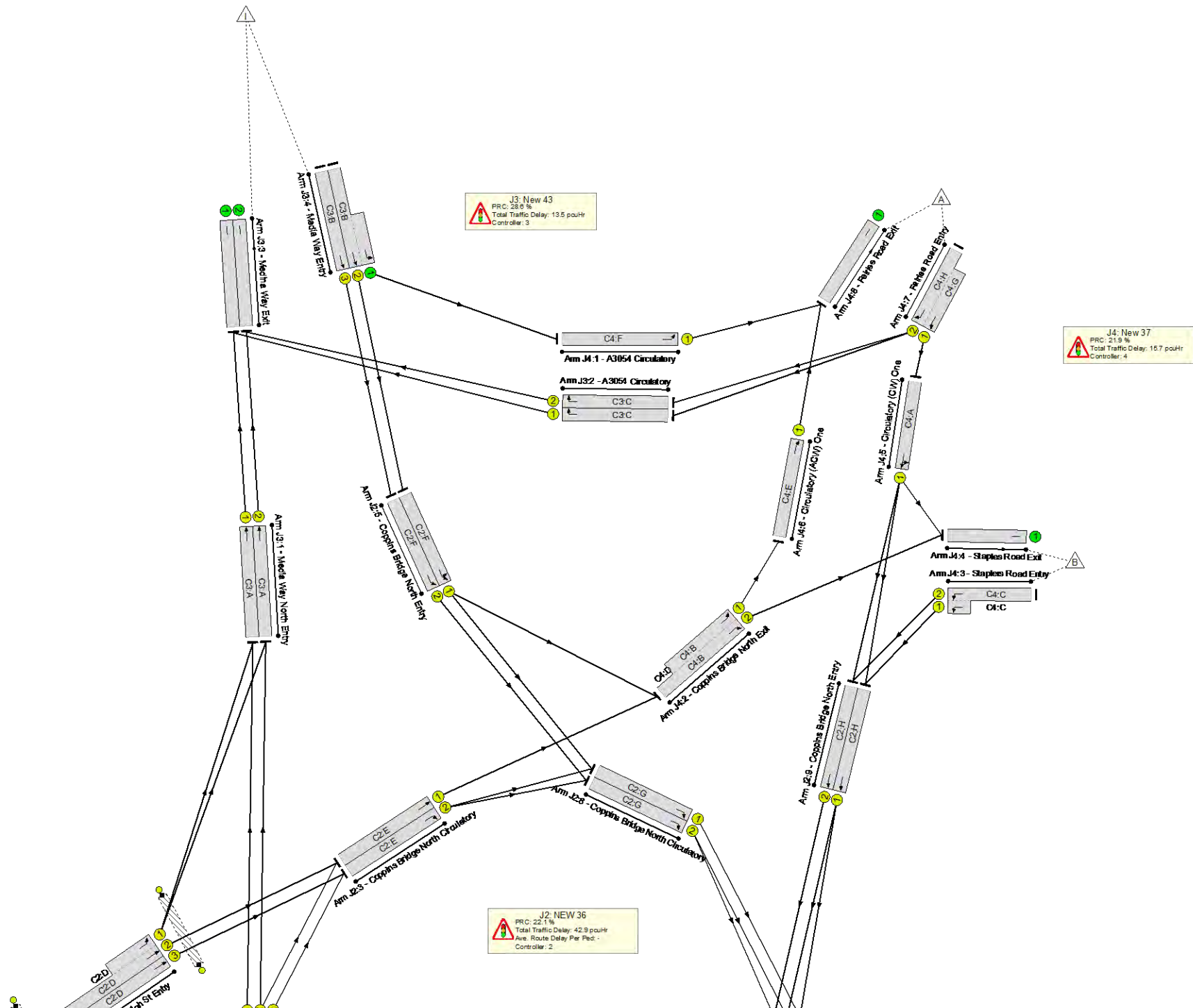
Stage	1	2
Duration	12	66
Change Point	8	29

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: HCA Tender IoW	-	-	N/A	-	-		-	-	-	-	-	-	73.8%
J1: George Way NEW 35	-	-	N/A	-	-		-	-	-	-	-	-	62.0%
1/1	Coppins Bridge South Entry Ahead Left	U	N/A	N/A	C1:B		1	53	-	394	1901	1069	36.8%
1/2	Coppins Bridge South Entry Right	U	N/A	N/A	C1:B		1	53	-	642	1842	1036	62.0%
2/1	East St Exit - Pyle St Ahead	O	N/A	N/A	-		-	-	-	102	1730	1191	8.6%
3/1	East St (Pyle St Turn) Entry Left Ahead	U	N/A	N/A	-		-	-	-	227	Inf	Inf	0.0%
4/1	East St Exit	U	N/A	N/A	-		-	-	-	315	Inf	Inf	0.0%
5/1	Pyle St Exit	U	N/A	N/A	-		-	-	-	131	Inf	Inf	0.0%
6/1	Pyle St Entry Left	O	N/A	N/A	-		-	-	-	36	1598	757	4.8%
7/1	East St Entry Ahead	O	N/A	N/A	-		-	-	-	55	1865	768	7.2%
7/2	East St Entry Ahead	O	N/A	N/A	-		-	-	-	179	1865	788	22.7%
8/1	A3020 Exit	U	N/A	N/A	-		-	-	-	607	Inf	Inf	0.0%
9/2+9/1	A3020 Entry Left Left2 Ahead	U	N/A	N/A	C1:A		1	33	-	719	1978:1973	574+619	60.2 : 60.2%
J2: NEW 36	-	-	N/A	-	-		-	-	-	-	-	-	73.7%
1/1	Ahead	U	N/A	N/A	C2:C		1	52	-	756	1915	1057	71.5%
1/2	Ahead Right	U	N/A	N/A	C2:C		1	52	-	777	2055	1135	68.5%
1/3	Right	U	N/A	N/A	C2:C		1	52	-	39	1769	977	4.0%
2/1	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	54	-	756	1915	1097	68.9%

Full Input Data And Results

2/2	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	54	-	777	2035	1166	66.6%
2/3	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	54	-	39	1865	1068	3.7%
3/1	Coppins Bridge North Circulatory Ahead	U	N/A	N/A	C2:E		1	56	-	457	2015	1196	38.2%
3/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:E		1	56	-	185	1791	1063	17.4%
4/2+4/1	High St Entry Left Ahead	U	N/A	N/A	C2:D		1	26	-	274	1915:1915	470+149	44.3 : 44.3%
4/3	High St Entry Ahead	U	N/A	N/A	C2:D		1	26	-	146	1915	539	27.1%
5/1	Coppins Bridge North Entry Left Ahead	U	N/A	N/A	C2:F		1	30	-	420	1764	570	73.7%
5/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:F		1	30	-	326	1874	605	53.9%
6/2+6/1	Ahead Left Left2	U	N/A	N/A	C2:l -		1	59	-	495	1915:1492	1000+162	42.6 : 42.6%
6/3	Right Ahead	U	N/A	N/A	C2:l		1	59	-	613	2055	1284	47.7%
6/4	Right	U	N/A	N/A	C2:l		1	59	-	639	1915	1197	53.4%
7/1		U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
8/1	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	30	-	337	1885	609	55.4%
8/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	30	-	371	1915	618	60.0%
9/1	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	56	-	403	1940	1152	35.0%
9/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	56	-	636	1940	1152	55.2%
10/1	Ahead	U	N/A	N/A	C2:K		1	33	-	274	1965	696	39.4%
10/2	Ahead	U	N/A	N/A	C2:K		1	33	-	146	1965	696	21.0%

Full Input Data And Results

11/1+11/2	Entry Coppins Bridge Car Park Ahead Left	O	N/A	N/A	-	-	-	-	6	1940:1800	0+676	0.0 : 0.9%
12/1	Exit Coppins Bridge Car Park	U	N/A	N/A	-	-	-	41	Inf	Inf		0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:B		1	30	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C2:J		1	30	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C2:M		1	56	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	C2:L		1	56	0	-	0	0.0%
J3: New 43	-	-	N/A	-	-		-	-	-	-	-	70.0%
1/1	Media Way North Entry Ahead	U	N/A	N/A	C3:A		1	56	756	1935	1149	65.8%
1/2	Media Way North Entry Ahead	U	N/A	N/A	C3:A		1	56	594	2015	1196	49.6%
2/1	A3054 Circulatory Right	U	N/A	N/A	C3:C		1	27	350	1940	566	61.9%
2/2	A3054 Circulatory Right	U	N/A	N/A	C3:C		1	27	401	1965	573	70.0%
3/1	Medina Way Exit	U	N/A	N/A	-		-	-	1106	Inf	Inf	0.0%
3/2	Medina Way Exit	U	N/A	N/A	-		-	-	995	Inf	Inf	0.0%
4/2+4/1	Media Way Entry Left Ahead	U	N/A	N/A	C3:B -		1	56	966	2015:1966	639+831	65.7 : 65.7%
4/3	Media Way Entry Ahead	U	N/A	N/A	C3:B		1	56	326	2015	1196	27.2%
J4: New 37	-	-	N/A	-	-		-	-	-	-	-	73.8%
1/1	A3054 Circulatory Left	U	N/A	N/A	C4:F		1	66	546	1881	1313	41.6%
2/2+2/1	Coppins Bridge North Exit Ahead Ahead2	U	N/A	N/A	C4:B	C4:D	1	70	680	1834:1784	999+574	43.2 : 43.2%
3/2+3/1	Staplers Road Entry Left	U	N/A	N/A	C4:C		1	70	846	1818:1784	1038+345	61.2 : 61.2%
4/1	Staples Road Exit	U	N/A	N/A	-		-	-	440	Inf	Inf	0.0%

Full Input Data And Results

5/1	Circulatory (CW) One Left Ahead	U	N/A	N/A	C4:A		1	16	-	201	1953	346	58.1%
6/1	Circulatory (ACW) One Ahead	U	N/A	N/A	C4:E		1	15	-	248	2015	336	73.8%
7/2+7/1	Fairlee Road Entry Ahead Right	U	N/A	N/A	C4:H C4:G		1	66:96	-	952	1665:1890	1019+273	73.7 : 73.7%
8/1	Fairlee Road Exit	U	N/A	N/A	-		-	-	-	794	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: HCA Tender IoW	-	-	297	87	0	56.4	23.2	0.0	79.5	-	-	-	-
J1: George Way NEW 35	-	-	289	83	0	5.4	2.1	0.0	7.5	-	-	-	-
1/1	394	394	-	-	-	0.2	0.3	-	0.5	4.9	4.3	0.3	4.6
1/2	642	642	-	-	-	0.3	0.8	-	1.1	6.0	6.2	0.8	7.0
2/1	102	102	102	0	0	0.0	0.0	-	0.0	1.7	0.0	0.0	0.0
3/1	227	227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	315	315	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	131	131	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	36	36	36	0	0	0.0	0.0	-	0.0	2.5	0.0	0.0	0.0
7/1	55	55	50	5	0	0.0	0.0	-	0.0	2.5	0.0	0.0	0.0
7/2	179	179	101	78	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
8/1	607	607	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	719	719	-	-	-	4.9	0.8	-	5.6	28.3	7.9	0.8	8.6
J2: NEW 36	-	-	7	4	0	31.4	11.5	0.0	42.9	-	-	-	-
1/1	756	756	-	-	-	0.2	1.2	-	1.4	6.7	0.4	1.2	1.6
1/2	777	777	-	-	-	0.2	1.1	-	1.3	5.9	2.3	1.1	3.4
1/3	39	39	-	-	-	0.0	0.0	-	0.0	2.5	0.0	0.0	0.0
2/1	756	756	-	-	-	2.9	1.1	-	4.0	19.1	14.1	1.1	15.2
2/2	777	777	-	-	-	3.3	1.0	-	4.3	20.1	14.2	1.0	15.2
2/3	39	39	-	-	-	0.1	0.0	-	0.1	11.1	0.7	0.0	0.7
3/1	457	457	-	-	-	1.4	0.3	-	1.7	13.7	5.9	0.3	6.2
3/2	185	185	-	-	-	0.9	0.1	-	1.0	20.2	4.1	0.1	4.2
4/2+4/1	274	274	-	-	-	0.3	0.4	-	0.7	9.6	7.8	0.4	8.2
4/3	146	146	-	-	-	1.9	0.2	-	2.1	51.5	3.2	0.2	3.4
5/1	420	420	-	-	-	3.6	1.4	-	5.0	42.8	11.2	1.4	12.5

Full Input Data And Results

5/2	326	326	-	-	-	2.6	0.6	-	3.2	34.9	8.5	0.6	9.1
6/2+6/1	495	495	-	-	-	2.5	0.4	-	2.8	20.5	12.4	0.4	12.8
6/3	613	613	-	-	-	2.9	0.5	-	3.4	20.0	14.4	0.5	14.9
6/4	639	639	-	-	-	0.4	0.6	-	1.0	5.6	1.3	0.6	1.8
7/1	69	69	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	337	337	-	-	-	2.2	0.6	-	2.8	30.0	5.4	0.6	6.0
8/2	371	371	-	-	-	0.7	0.7	-	1.4	13.8	1.2	0.7	1.9
9/1	403	403	-	-	-	1.0	0.3	-	1.3	11.3	7.1	0.3	7.3
9/2	636	636	-	-	-	1.5	0.6	-	2.1	11.9	4.8	0.6	5.4
10/1	274	274	-	-	-	1.8	0.3	-	2.1	27.5	5.5	0.3	5.8
10/2	146	146	-	-	-	0.9	0.1	-	1.0	24.9	2.7	0.1	2.8
11/1+11/2	6	6	7	4	0	0.0	0.0	-	0.0	11.3	0.1	0.0	0.1
12/1	41	41	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: New 43	-	-	0	0	0	8.9	4.5	0.0	13.5	-	-	-	-
1/1	756	756	-	-	-	0.0	1.0	-	1.0	4.7	0.2	1.0	1.2
1/2	594	594	-	-	-	0.6	0.5	-	1.0	6.3	4.0	0.5	4.5
2/1	350	350	-	-	-	2.1	0.8	-	2.9	29.9	7.9	0.8	8.7
2/2	401	401	-	-	-	4.2	1.1	-	5.3	48.0	10.7	1.1	11.8
3/1	1106	1106	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	995	995	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	966	966	-	-	-	1.2	1.0	-	2.1	7.9	5.7	1.0	6.7
4/3	326	326	-	-	-	0.9	0.2	-	1.0	11.5	4.2	0.2	4.4
J4: New 37	-	-	0	0	0	10.7	5.0	0.0	15.7	-	-	-	-
1/1	546	546	-	-	-	0.9	0.4	-	1.3	8.5	6.1	0.4	6.4
2/2+2/1	680	680	-	-	-	1.1	0.4	-	1.5	7.7	14.1	0.4	14.5
3/2+3/1	846	846	-	-	-	1.2	0.8	-	2.0	8.5	9.0	0.8	9.8

Full Input Data And Results

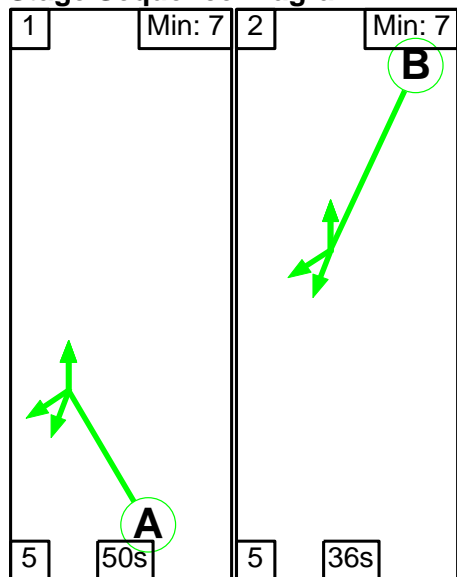
4/1	440	440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	201	201	-	-	-	2.0	0.7	-	2.7	48.3	4.9	0.7	5.6
6/1	248	248	-	-	-	3.8	1.4	-	5.1	74.6	6.6	1.4	8.0
7/2+7/1	952	952	-	-	-	1.7	1.4	-	3.1	11.6	11.6	1.4	13.0
8/1	794	794	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%)	45.3	Total Delay for Signalled Lanes (pcuHr)	7.26	Cycle Time (s)	96					
		C2	PRC for Signalled Lanes (%)	22.1	Total Delay for Signalled Lanes (pcuHr)	42.86	Cycle Time (s)	96					
		C3	PRC for Signalled Lanes (%)	28.6	Total Delay for Signalled Lanes (pcuHr)	13.46	Cycle Time (s)	96					
		C4	PRC for Signalled Lanes (%)	21.9	Total Delay for Signalled Lanes (pcuHr)	15.66	Cycle Time (s)	96					
			PRC Over All Lanes (%)	21.9	Total Delay Over All Lanes(pcuHr)	79.51							

Full Input Data And Results

Scenario 2: '2017 PM' (FG2: '2017 PM', Plan 1: 'Fairlee Rd A3054')

C1

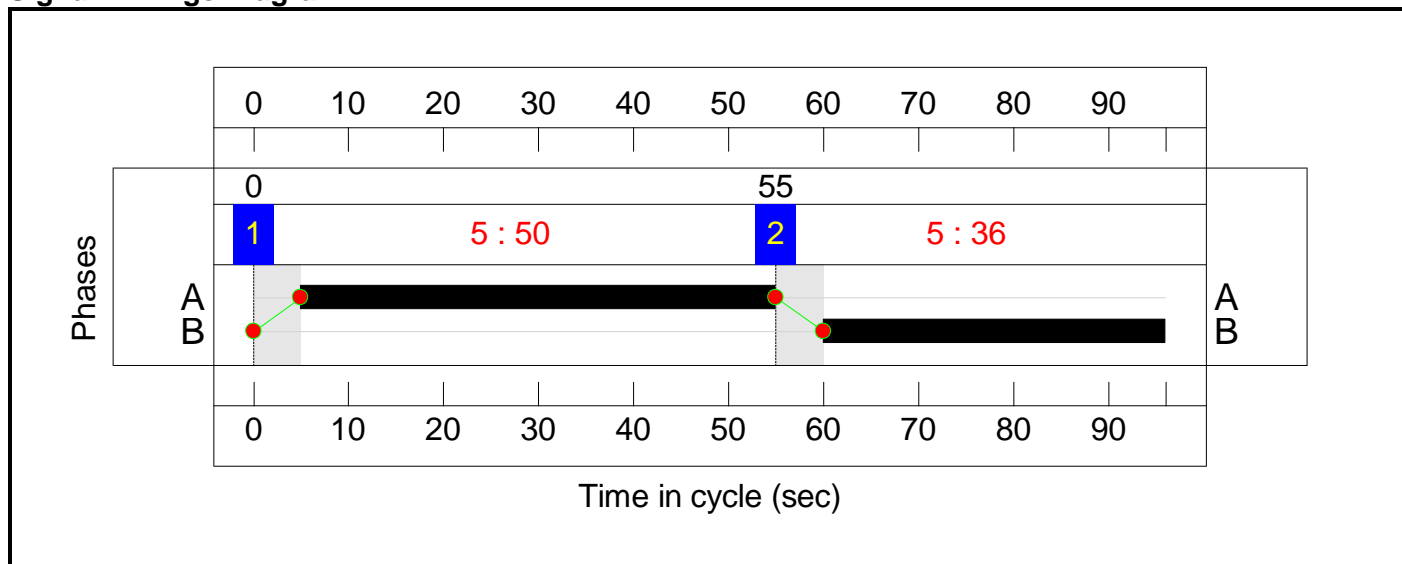
Stage Sequence Diagram



Stage Timings

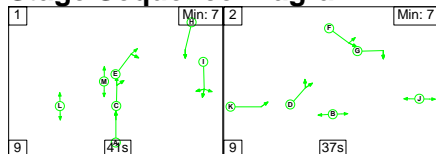
Stage	1	2
Duration	50	36
Change Point	0	55

Signal Timings Diagram



C2

Stage Sequence Diagram

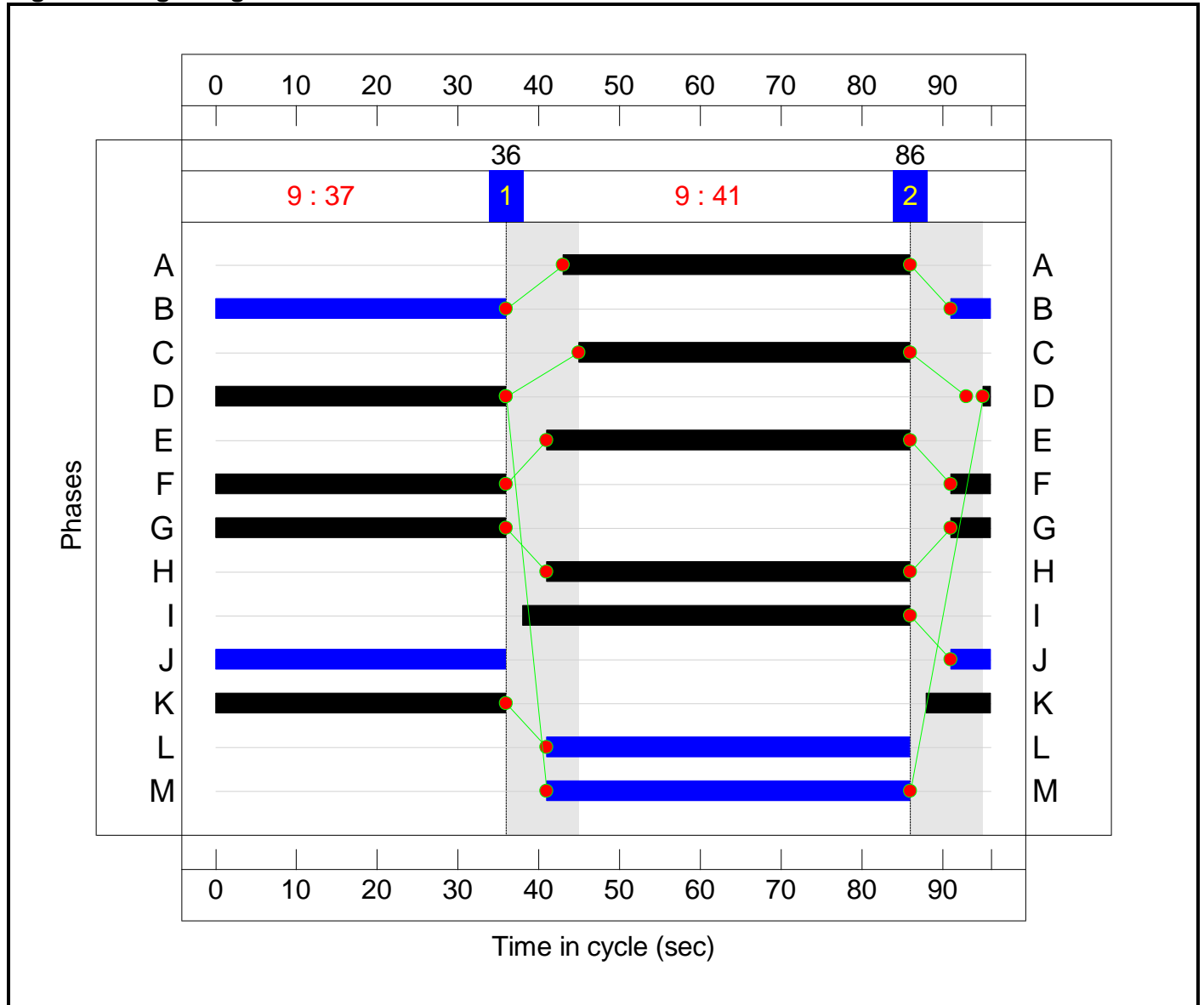


Full Input Data And Results

Stage Timings

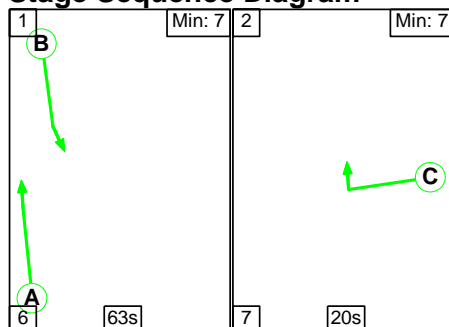
Stage	1	2
Duration	41	37
Change Point	36	86

Signal Timings Diagram



C3

Stage Sequence Diagram

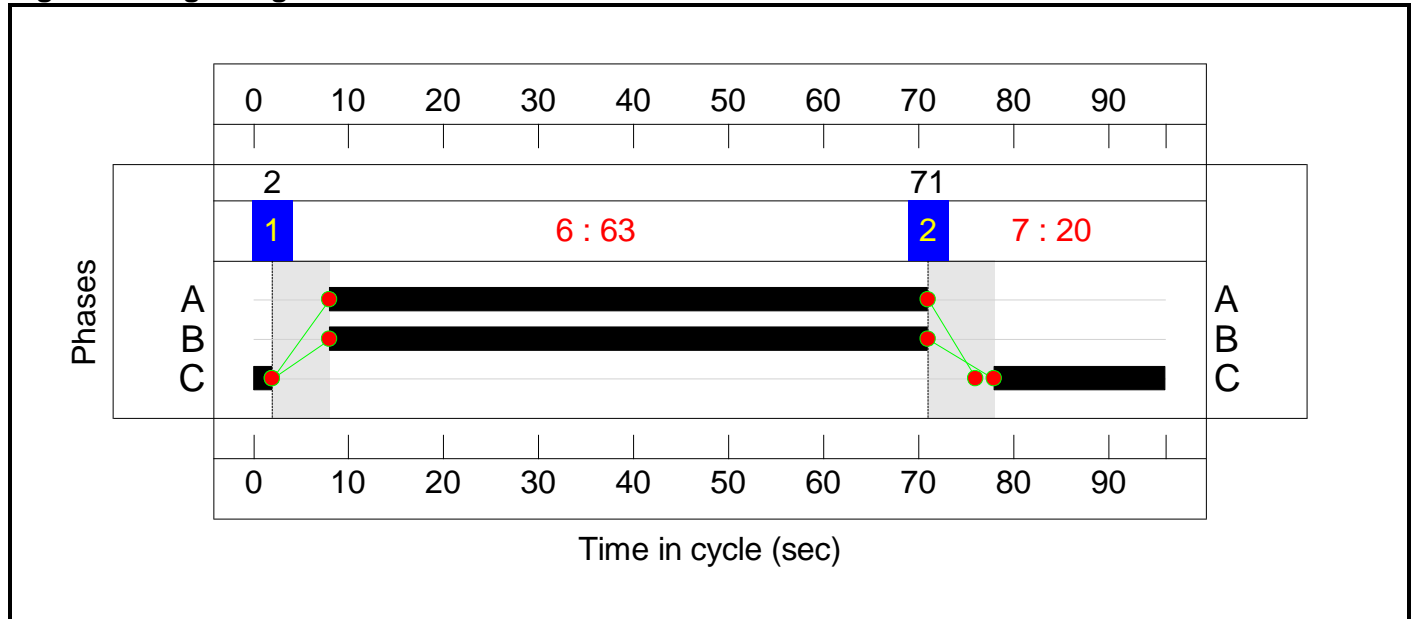


Full Input Data And Results

Stage Timings

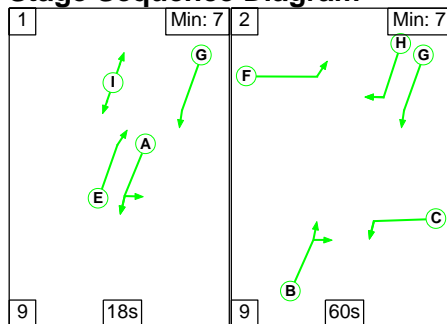
Stage	1	2
Duration	63	20
Change Point	2	71

Signal Timings Diagram



C4

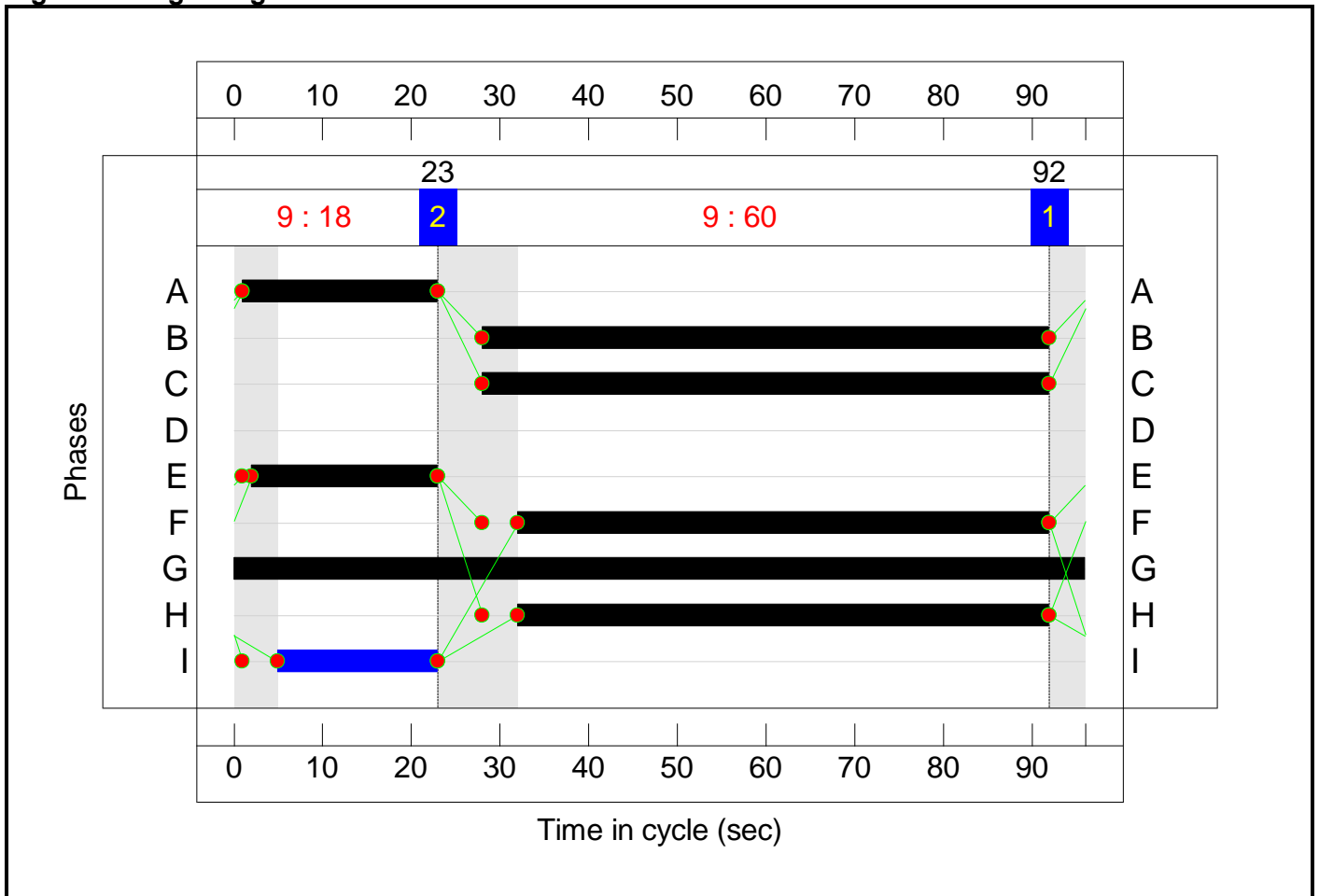
Stage Sequence Diagram



Stage Timings

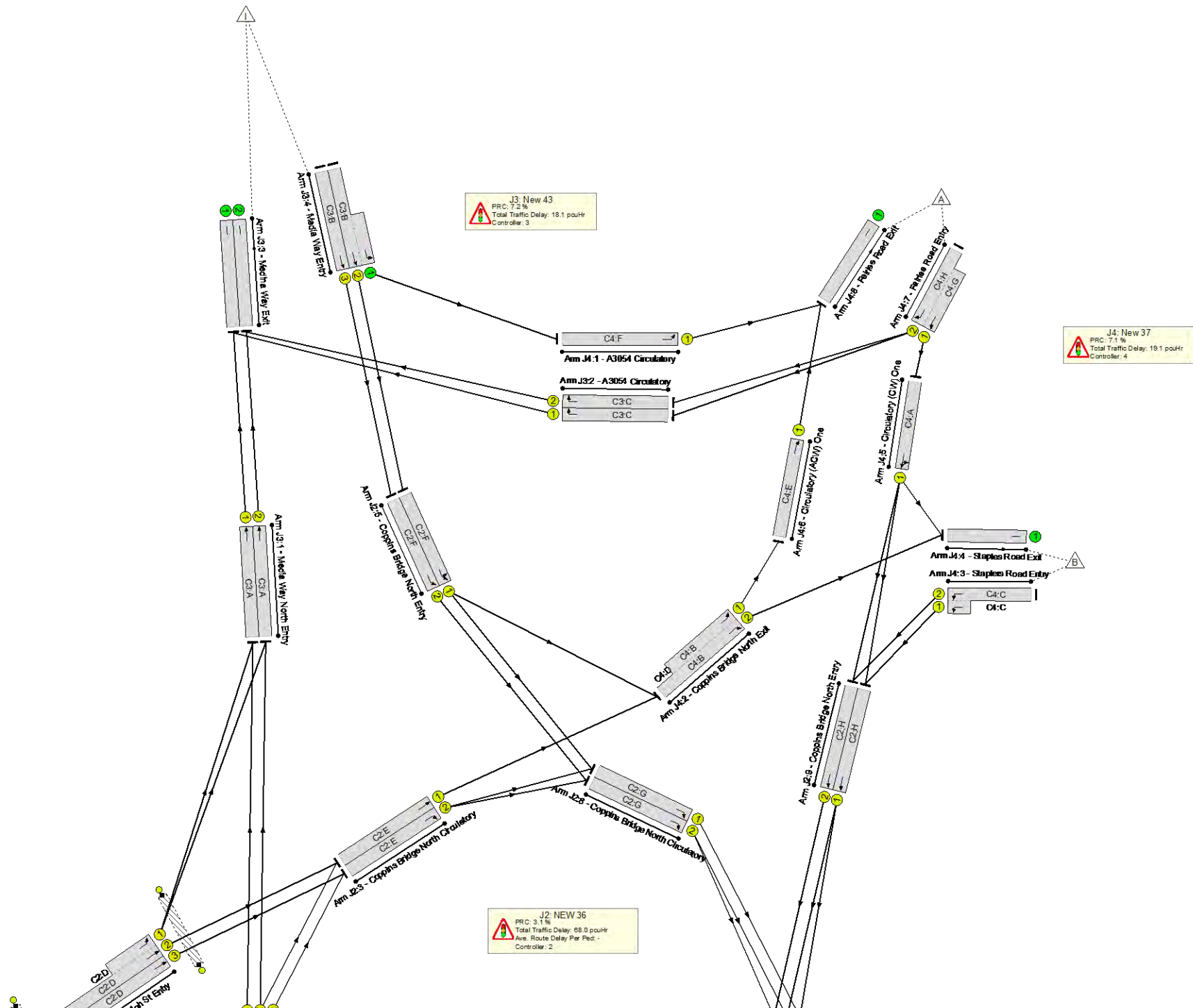
Stage	1	2
Duration	18	60
Change Point	92	23

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: HCA Tender IoW	-	-	N/A	-	-		-	-	-	-	-	-	87.3%
J1: George Way NEW 35	-	-	N/A	-	-		-	-	-	-	-	-	58.6%
1/1	Coppins Bridge South Entry Ahead Left	U	N/A	N/A	C1:B		1	36	-	429	1901	733	58.6%
1/2	Coppins Bridge South Entry Right	U	N/A	N/A	C1:B		1	36	-	384	1842	710	54.1%
2/1	East St Exit - Pyle St Ahead	O	N/A	N/A	-		-	-	-	68	1730	1176	5.8%
3/1	East St (Pyle St Turn) Entry Left Ahead	U	N/A	N/A	-		-	-	-	241	Inf	Inf	0.0%
4/1	East St Exit	U	N/A	N/A	-		-	-	-	406	Inf	Inf	0.0%
5/1	Pyle St Exit	U	N/A	N/A	-		-	-	-	74	Inf	Inf	0.0%
6/1	Pyle St Entry Left	O	N/A	N/A	-		-	-	-	64	1598	781	8.2%
7/1	East St Entry Ahead	O	N/A	N/A	-		-	-	-	75	1865	825	9.1%
7/2	East St Entry Ahead	O	N/A	N/A	-		-	-	-	224	1865	873	25.7%
8/1	A3020 Exit	U	N/A	N/A	-		-	-	-	916	Inf	Inf	0.0%
9/2+9/1	A3020 Entry Left Left2 Ahead	U	N/A	N/A	C1:A		1	50	-	719	1978:1967	801+739	46.7 : 46.7%
J2: NEW 36	-	-	N/A	-	-		-	-	-	-	-	-	87.3%
1/1	Ahead	U	N/A	N/A	C2:C		1	41	-	606	1915	838	72.3%
1/2	Ahead Right	U	N/A	N/A	C2:C		1	41	-	726	2055	899	80.8%
1/3	Right	U	N/A	N/A	C2:C		1	41	-	25	1769	774	3.2%
2/1	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	43	-	606	1915	878	69.0%

Full Input Data And Results

2/2	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	43	-	726	2035	933	77.8%
2/3	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	43	-	25	1865	855	2.9%
3/1	Coppins Bridge North Circulatory Ahead	U	N/A	N/A	C2:E		1	45	-	804	2015	966	83.3%
3/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:E		1	45	-	239	1791	858	27.8%
4/2+4/1	High St Entry Left Ahead	U	N/A	N/A	C2:D		1	37	-	418	1915:1915	686+119	51.9 : 51.9%
4/3	High St Entry Ahead	U	N/A	N/A	C2:D		1	37	-	214	1915	758	28.2%
5/1	Coppins Bridge North Entry Left Ahead	U	N/A	N/A	C2:F		1	41	-	630	1759	770	81.9%
5/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:F		1	41	-	648	1874	820	79.0%
6/2+6/1	Ahead Left Left2	U	N/A	N/A	C2:I -		1	48	-	580	1915:1492	705+233	61.8 : 61.8%
6/3	Right Ahead	U	N/A	N/A	C2:I		1	48	-	916	2055	1049	87.3%
6/4	Right	U	N/A	N/A	C2:I		1	48	-	377	1915	977	38.6%
7/1		U	N/A	N/A	-		-	-	-	144	Inf	Inf	0.0%
8/1	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	41	-	420	1885	825	50.9%
8/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	41	-	724	1915	838	86.4%
9/1	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	45	-	373	1940	930	40.1%
9/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	45	-	356	1940	930	38.3%
10/1	Ahead	U	N/A	N/A	C2:K		1	44	-	418	1965	921	45.4%
10/2	Ahead	U	N/A	N/A	C2:K		1	44	-	214	1965	921	23.2%

Full Input Data And Results

11/1+11/2	Entry Coppins Bridge Car Park Ahead Left	O	N/A	N/A	-	-	-	-	37	1822:1800	825+396	3.0 : 3.0%	
12/1	Exit Coppins Bridge Car Park	U	N/A	N/A	-	-	-	37	Inf	Inf	0.0%		
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:B	1	41	-	0	-	0	0.0%	
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C2:J	1	41	-	0	-	0	0.0%	
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C2:M	1	45	-	0	-	0	0.0%	
Ped Link: P4	Unnamed Ped Link	-	N/A	-	C2:L	1	45	-	0	-	0	0.0%	
J3: New 43	-	-	N/A	-	-	-	-	-	-	-	-	83.9%	
1/1	Media Way North Entry Ahead	U	N/A	N/A	C3:A	1	63	-	636	1935	1290	49.3%	
1/2	Media Way North Entry Ahead	U	N/A	N/A	C3:A	1	63	-	310	2015	1343	23.1%	
2/1	A3054 Circulatory Right	U	N/A	N/A	C3:C	1	20	-	330	1940	424	77.8%	
2/2	A3054 Circulatory Right	U	N/A	N/A	C3:C	1	20	-	330	1965	430	76.8%	
3/1	Medina Way Exit	U	N/A	N/A	-	-	-	-	966	Inf	Inf	0.0%	
3/2	Medina Way Exit	U	N/A	N/A	-	-	-	-	640	Inf	Inf	0.0%	
4/2+4/1	Media Way Entry Left Ahead	U	N/A	N/A	C3:B -	1	63	-	1316	2015:1966	751+817	83.9 : 83.9%	
4/3	Media Way Entry Ahead	U	N/A	N/A	C3:B	1	63	-	648	2015	1343	48.2%	
J4: New 37	-	-	N/A	-	-	-	-	-	-	-	-	84.0%	
1/1	A3054 Circulatory Left	U	N/A	N/A	C4:F	1	60	-	686	1881	1195	57.4%	
2/2+2/1	Coppins Bridge North Exit Ahead Ahead2	U	N/A	N/A	C4:B	C4:D	1	64	0	1177	1834:1784	957+471	82.4 : 82.4%
3/2+3/1	Staplers Road Entry Left	U	N/A	N/A	C4:C	1	64	-	522	1818:1784	852+433	40.6 : 40.6%	
4/1	Staples Road Exit	U	N/A	N/A	-	-	-	-	799	Inf	Inf	0.0%	

Full Input Data And Results

5/1	Circulatory (CW) One Left Ahead	U	N/A	N/A	C4:A		1	22	-	217	1952	468	46.4%
6/1	Circulatory (ACW) One Ahead	U	N/A	N/A	C4:E		1	21	-	388	2015	462	84.0%
7/2+7/1	Fairlee Road Entry Ahead Right	U	N/A	N/A	C4:H C4:G		1	60:96	-	877	1665:1890	909+299	72.6 : 72.6%
8/1	Fairlee Road Exit	U	N/A	N/A	-		-	-	-	1074	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: HCA Tender IoW	-	-	325	180	0	71.6	39.3	0.0	110.8	-	-	-	-
J1: George Way NEW 35	-	-	287	144	0	3.7	2.0	0.0	5.7	-	-	-	-
1/1	429	429	-	-	-	0.4	0.7	-	1.1	8.8	3.8	0.7	4.5
1/2	384	384	-	-	-	0.7	0.6	-	1.3	12.3	8.3	0.6	8.9
2/1	68	68	68	0	0	0.0	0.0	-	0.0	1.6	0.0	0.0	0.0
3/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	406	406	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	74	74	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	64	64	64	0	0	0.0	0.0	-	0.0	2.5	0.0	0.0	0.0
7/1	75	75	69	6	0	0.0	0.1	-	0.1	2.4	0.0	0.1	0.1
7/2	224	224	86	138	0	0.0	0.2	-	0.2	2.8	0.0	0.2	0.2
8/1	916	916	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	719	719	-	-	-	2.6	0.4	-	3.0	15.1	5.7	0.4	6.2
J2: NEW 36	-	-	38	36	0	45.3	22.8	0.0	68.0	-	-	-	-
1/1	606	606	-	-	-	0.1	1.3	-	1.4	8.5	0.3	1.3	1.5
1/2	726	726	-	-	-	0.2	2.0	-	2.3	11.3	1.7	2.0	3.8
1/3	25	25	-	-	-	0.0	0.0	-	0.0	3.7	0.0	0.0	0.0
2/1	606	606	-	-	-	3.1	1.1	-	4.2	24.8	10.2	1.1	11.4
2/2	726	726	-	-	-	4.9	1.7	-	6.6	32.6	15.4	1.7	17.1
2/3	25	25	-	-	-	0.1	0.0	-	0.1	16.9	0.4	0.0	0.4
3/1	804	804	-	-	-	4.0	2.4	-	6.4	28.8	20.9	2.4	23.3
3/2	239	239	-	-	-	1.6	0.2	-	1.8	27.3	6.1	0.2	6.3
4/2+4/1	418	418	-	-	-	0.5	0.5	-	1.0	8.8	9.9	0.5	10.5
4/3	214	214	-	-	-	1.4	0.2	-	1.6	26.2	3.0	0.2	3.2
5/1	630	630	-	-	-	3.8	2.2	-	5.9	33.9	8.6	2.2	10.7

Full Input Data And Results

5/2	648	648	-	-	-	3.4	1.8	-	5.2	28.9	8.1	1.8	9.9
6/2+6/1	580	580	-	-	-	4.0	0.8	-	4.8	29.6	15.7	0.8	16.5
6/3	916	916	-	-	-	7.8	3.3	-	11.1	43.7	24.2	3.3	27.5
6/4	377	377	-	-	-	0.4	0.3	-	0.7	6.8	1.2	0.3	1.5
7/1	144	144	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	420	420	-	-	-	2.3	0.5	-	2.8	23.7	6.5	0.5	7.0
8/2	724	724	-	-	-	1.5	3.0	-	4.5	22.4	10.7	3.0	13.7
9/1	373	373	-	-	-	2.4	0.3	-	2.7	26.3	8.4	0.3	8.8
9/2	356	356	-	-	-	1.0	0.3	-	1.3	13.6	6.1	0.3	6.4
10/1	418	418	-	-	-	2.0	0.4	-	2.4	20.8	7.4	0.4	7.8
10/2	214	214	-	-	-	0.9	0.2	-	1.1	17.8	3.4	0.2	3.5
11/1+11/2	37	37	38	36	0	0.0	0.0	-	0.1	5.0	0.1	0.0	0.2
12/1	37	37	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: New 43	-	-	0	0	0	11.1	6.9	0.0	18.1	-	-	-	-
1/1	636	636	-	-	-	2.2	0.5	-	2.7	15.3	8.2	0.5	8.7
1/2	310	310	-	-	-	1.0	0.1	-	1.2	13.8	4.8	0.1	4.9
2/1	330	330	-	-	-	2.5	1.7	-	4.2	45.8	7.9	1.7	9.6
2/2	330	330	-	-	-	2.3	1.6	-	3.9	42.1	8.2	1.6	9.9
3/1	966	966	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	640	640	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	1316	1316	-	-	-	1.7	2.6	-	4.2	11.6	15.9	2.6	18.4
4/3	648	648	-	-	-	1.4	0.5	-	1.9	10.4	8.5	0.5	8.9
J4: New 37	-	-	0	0	0	11.5	7.5	0.0	19.1	-	-	-	-
1/1	686	686	-	-	-	1.7	0.7	-	2.4	12.4	10.1	0.7	10.8
2/2+2/1	1177	1177	-	-	-	2.0	2.3	-	4.3	13.1	31.6	2.3	33.9
3/2+3/1	522	522	-	-	-	0.9	0.3	-	1.2	8.4	4.2	0.3	4.5

Full Input Data And Results

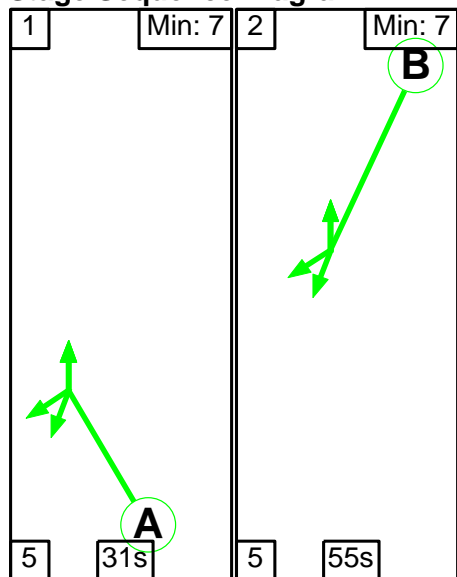
4/1	799	799	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	217	217	-	-	-	1.9	0.4	-	2.3	38.1	4.9	0.4	5.4
6/1	388	388	-	-	-	3.1	2.5	-	5.6	52.0	10.3	2.5	12.8
7/2+7/1	877	877	-	-	-	2.0	1.3	-	3.3	13.4	11.4	1.3	12.7
8/1	1074	1074	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
			C1	PRC for Signalled Lanes (%)	53.7	Total Delay for Signalled Lanes (pcuHr)	5.39	Cycle Time (s)	96				
			C2	PRC for Signalled Lanes (%)	3.1	Total Delay for Signalled Lanes (pcuHr)	67.95	Cycle Time (s)	96				
			C3	PRC for Signalled Lanes (%)	7.2	Total Delay for Signalled Lanes (pcuHr)	18.08	Cycle Time (s)	96				
			C4	PRC for Signalled Lanes (%)	7.1	Total Delay for Signalled Lanes (pcuHr)	19.06	Cycle Time (s)	96				
				PRC Over All Lanes (%)	3.1	Total Delay Over All Lanes(pcuHr)	110.83						

Full Input Data And Results

Scenario 3: '2034 AM DN' (FG3: '2034 - AM - DN', Plan 1: 'Fairlee Rd A3054')

C1

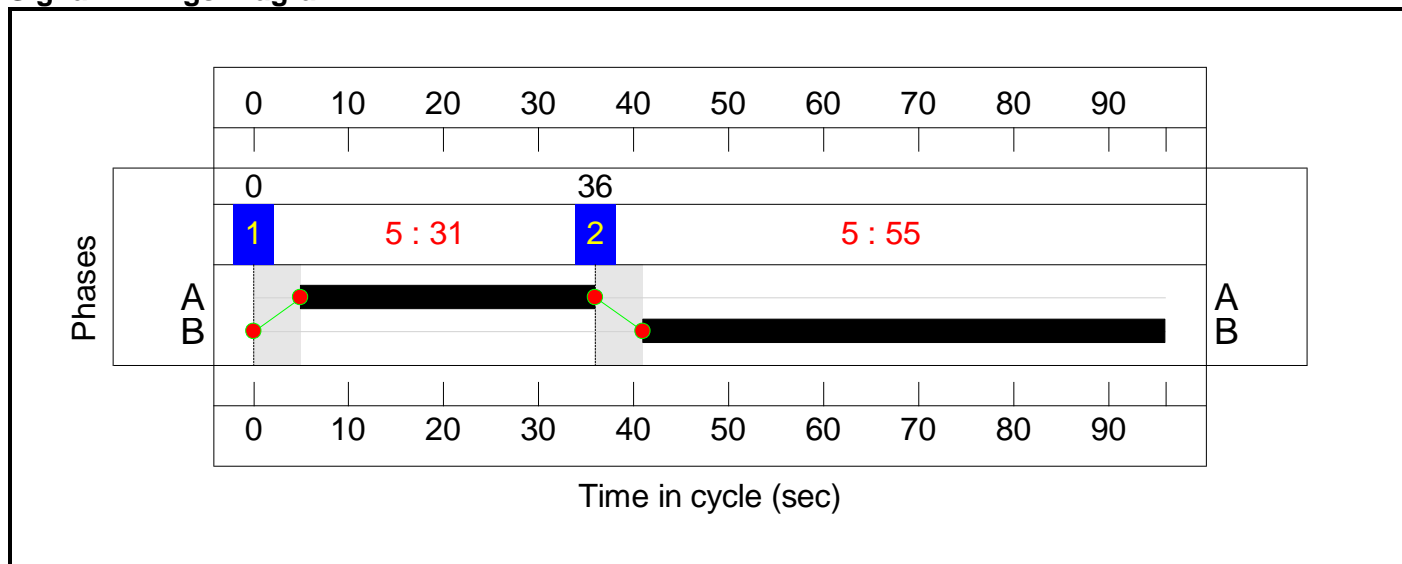
Stage Sequence Diagram



Stage Timings

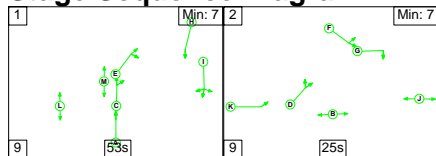
Stage	1	2
Duration	31	55
Change Point	0	36

Signal Timings Diagram



C2

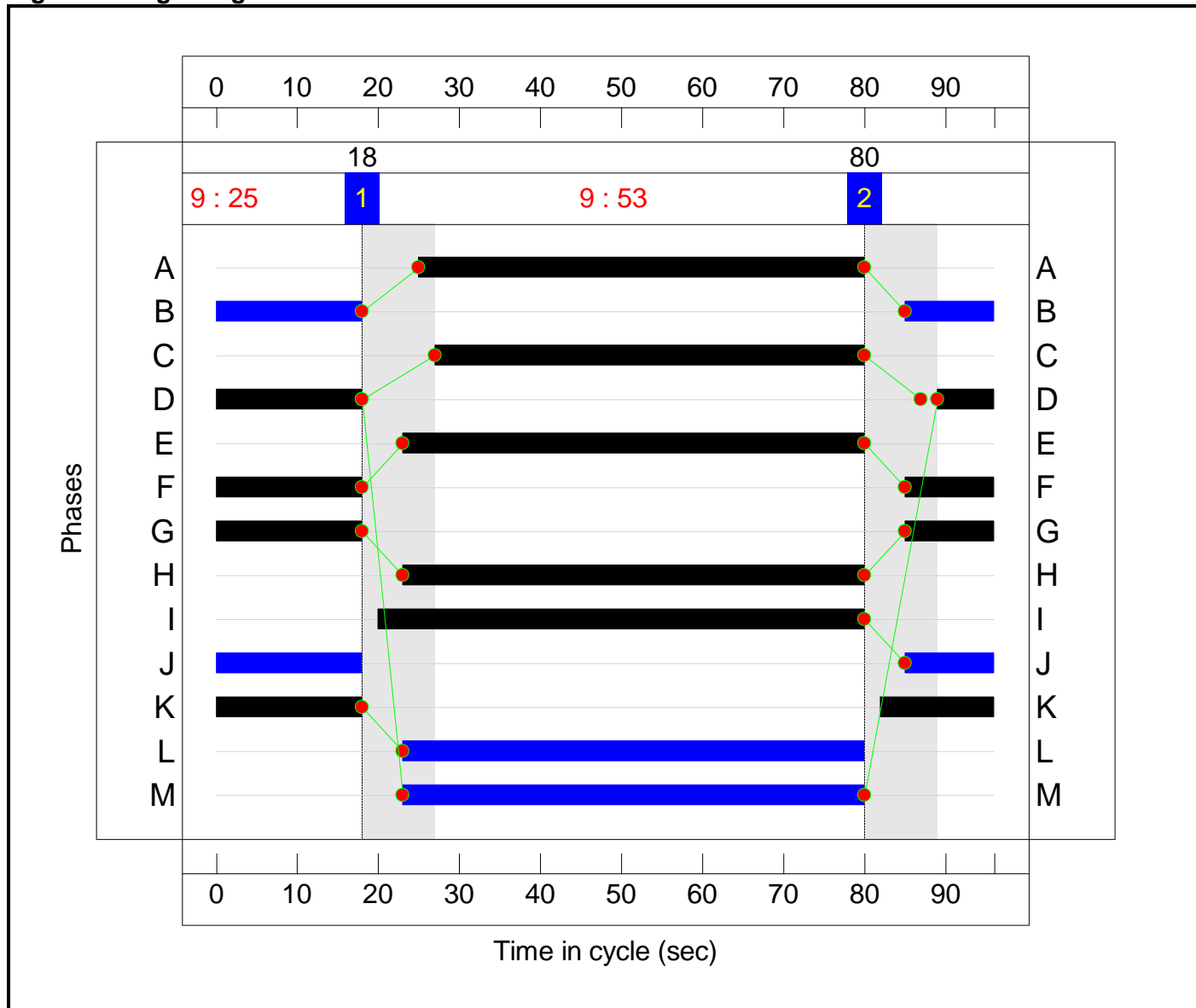
Stage Sequence Diagram



Stage Timings

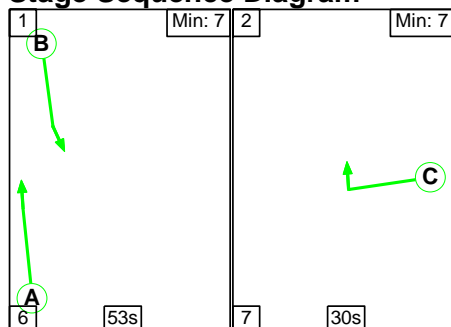
Stage	1	2
Duration	53	25
Change Point	18	80

Signal Timings Diagram



C3

Stage Sequence Diagram

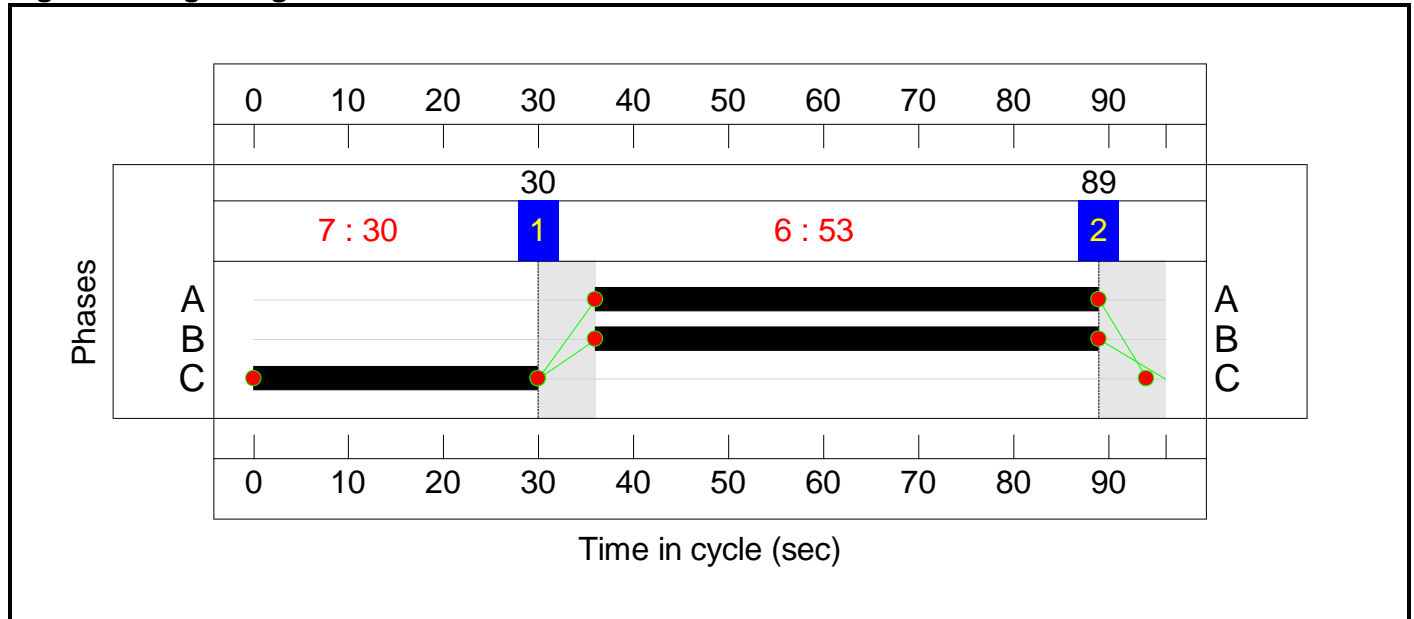


Full Input Data And Results

Stage Timings

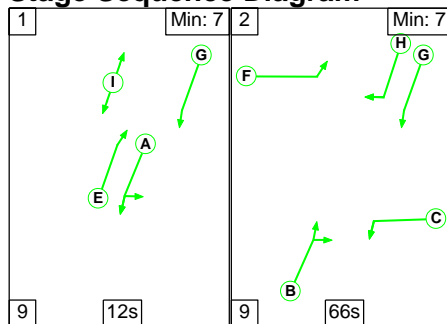
Stage	1	2
Duration	53	30
Change Point	30	89

Signal Timings Diagram



C4

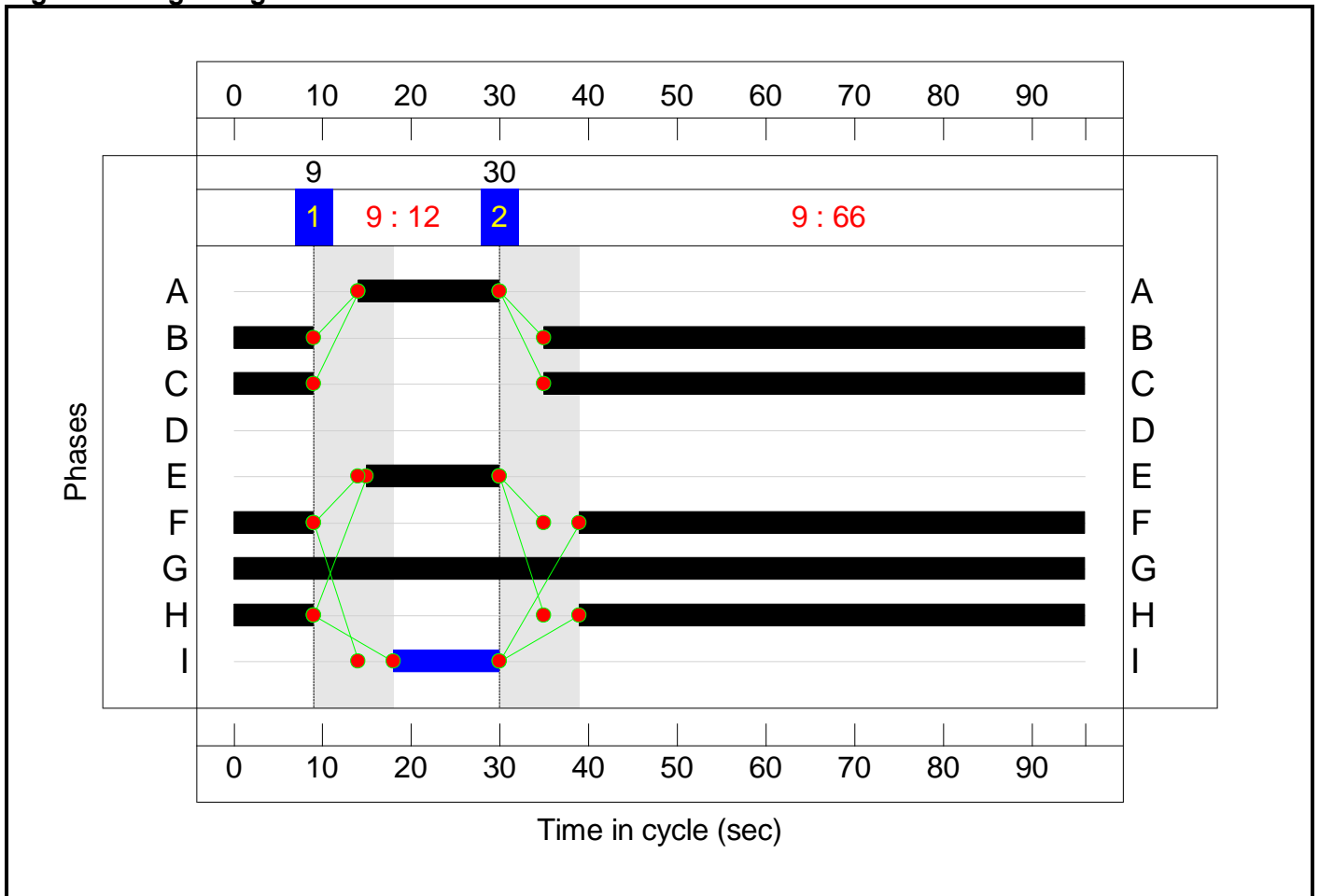
Stage Sequence Diagram



Stage Timings

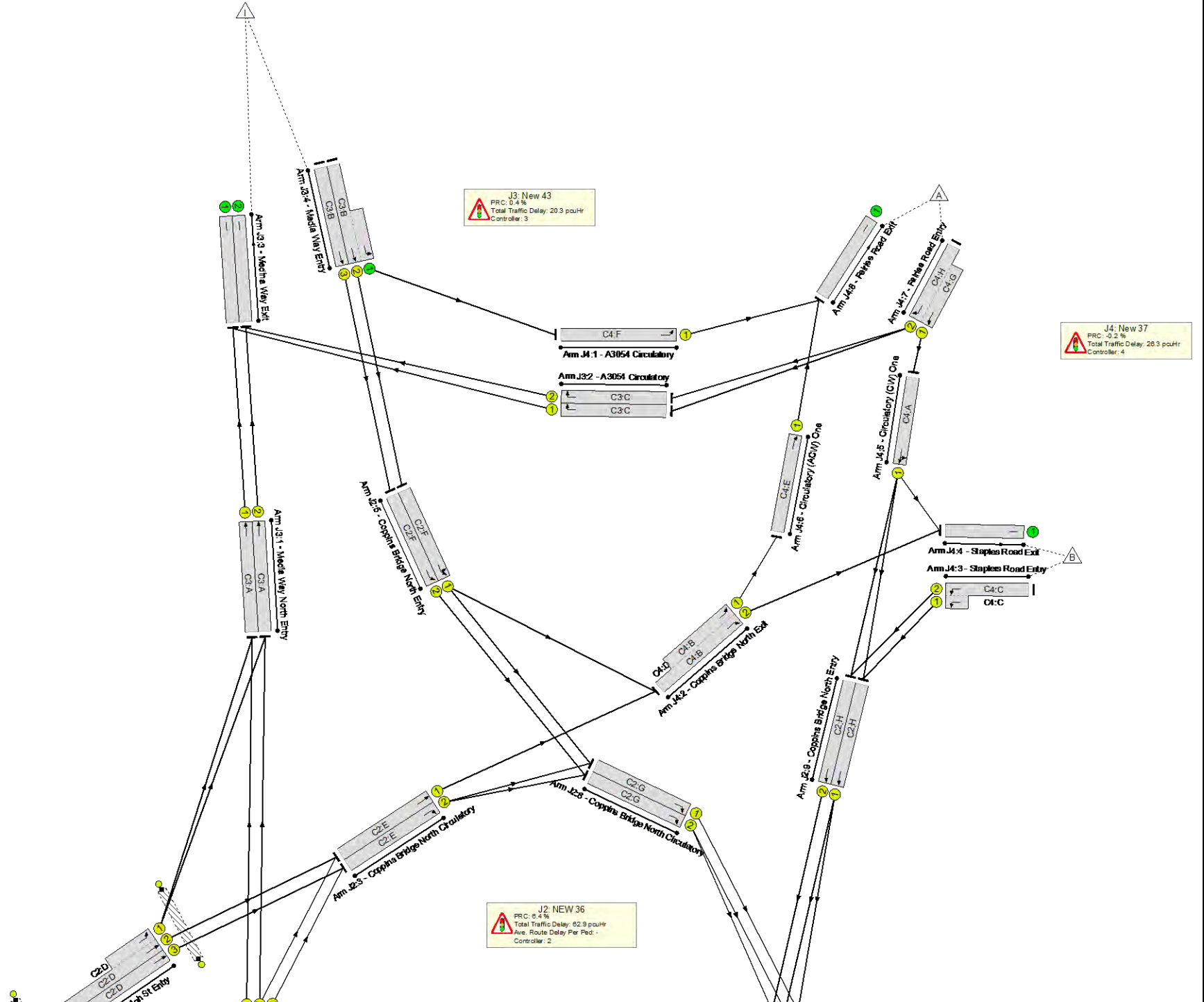
Stage	1	2
Duration	12	66
Change Point	9	30

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: HCA Tender IoW	-	-	N/A	-	-		-	-	-	-	-	-	90.2%
J1: George Way NEW 35	-	-	N/A	-	-		-	-	-	-	-	-	82.8%
1/1	Coppins Bridge South Entry Ahead Left	U	N/A	N/A	C1:B		1	55	-	480	1901	1109	43.3%
1/2	Coppins Bridge South Entry Right	U	N/A	N/A	C1:B		1	55	-	784	1842	1074	73.0%
2/1	East St Exit - Pyle St Ahead	O	N/A	N/A	-		-	-	-	123	1730	1137	10.8%
3/1	East St (Pyle St Turn) Entry Left Ahead	U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
4/1	East St Exit	U	N/A	N/A	-		-	-	-	385	Inf	Inf	0.0%
5/1	Pyle St Exit	U	N/A	N/A	-		-	-	-	158	Inf	Inf	0.0%
6/1	Pyle St Entry Left	O	N/A	N/A	-		-	-	-	43	1598	781	5.5%
7/1	East St Entry Ahead	O	N/A	N/A	-		-	-	-	95	1865	734	12.9%
7/2	East St Entry Ahead	O	N/A	N/A	-		-	-	-	190	1865	741	25.6%
8/1	A3020 Exit	U	N/A	N/A	-		-	-	-	743	Inf	Inf	0.0%
9/2+9/1	A3020 Entry Left Left2 Ahead	U	N/A	N/A	C1:A		1	31	-	880	1978:1971	605+458	82.8 : 82.8%
J2: NEW 36	-	-	N/A	-	-		-	-	-	-	-	-	84.6%
1/1	Ahead	U	N/A	N/A	C2:C		1	53	-	899	1915	1077	83.5%
1/2	Ahead Right	U	N/A	N/A	C2:C		1	53	-	974	2055	1156	84.3%
1/3	Right	U	N/A	N/A	C2:C		1	53	-	48	1769	995	4.8%
2/1	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	55	-	899	1915	1117	80.5%

Full Input Data And Results

2/2	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	55	-	974	2035	1187	82.0%
2/3	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	55	-	48	1865	1088	4.4%
3/1	Coppins Bridge North Circulatory Ahead	U	N/A	N/A	C2:E		1	57	-	557	2015	1217	45.8%
3/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:E		1	57	-	227	1791	1082	21.0%
4/2+4/1	High St Entry Left Ahead	U	N/A	N/A	C2:D		1	25	-	334	1915:1915	455+143	55.8 : 55.8%
4/3	High St Entry Ahead	U	N/A	N/A	C2:D		1	25	-	179	1915	519	34.5%
5/1	Coppins Bridge North Entry Left Ahead	U	N/A	N/A	C2:F		1	29	-	444	1757	549	80.9%
5/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:F		1	29	-	468	1874	586	79.9%
6/2+6/1	Ahead Left Left2	U	N/A	N/A	C2:l -		1	60	-	544	1915:1492	994+184	46.2 : 46.2%
6/3	Right Ahead	U	N/A	N/A	C2:l		1	60	-	811	2055	1306	62.1%
6/4	Right	U	N/A	N/A	C2:l		1	60	-	781	1915	1217	64.2%
7/1		U	N/A	N/A	-		-	-	-	85	Inf	Inf	0.0%
8/1	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	29	-	360	1885	589	61.1%
8/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	29	-	506	1915	598	84.6%
9/1	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	57	-	493	1940	1172	42.1%
9/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	57	-	777	1940	1172	66.3%
10/1	Ahead	U	N/A	N/A	C2:K		1	32	-	334	1965	675	49.4%
10/2	Ahead	U	N/A	N/A	C2:K		1	32	-	179	1965	675	26.5%

Full Input Data And Results

11/1+11/2	Entry Coppins Bridge Car Park Ahead Left	O	N/A	N/A	-	-	-	-	7	1940:1800	0+533	0.0 : 1.3%	
12/1	Exit Coppins Bridge Car Park	U	N/A	N/A	-	-	-	-	51	Inf	Inf	0.0%	
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:B		1	29	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C2:J		1	29	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C2:M		1	57	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	C2:L		1	57	-	0	-	0	0.0%
J3: New 43	-	-	N/A	-	-		-	-	-	-	-	-	89.7%
1/1	Media Way North Entry Ahead	U	N/A	N/A	C3:A		1	53	-	902	1935	1088	82.9%
1/2	Media Way North Entry Ahead	U	N/A	N/A	C3:A		1	53	-	748	2015	1133	66.0%
2/1	A3054 Circulatory Right	U	N/A	N/A	C3:C		1	30	-	350	1940	626	55.9%
2/2	A3054 Circulatory Right	U	N/A	N/A	C3:C		1	30	-	569	1965	635	89.7%
3/1	Medina Way Exit	U	N/A	N/A	-		-	-	-	1252	Inf	Inf	0.0%
3/2	Medina Way Exit	U	N/A	N/A	-		-	-	-	1317	Inf	Inf	0.0%
4/2+4/1	Media Way Entry Left Ahead	U	N/A	N/A	C3:B -		1	53	-	1111	2015:1966	580+872	76.5 : 76.5%
4/3	Media Way Entry Ahead	U	N/A	N/A	C3:B		1	53	-	468	2015	1133	41.3%
J4: New 37	-	-	N/A	-	-		-	-	-	-	-	-	90.2%
1/1	A3054 Circulatory Left	U	N/A	N/A	C4:F		1	66	-	667	1881	1313	50.8%
2/2+2/1	Coppins Bridge North Exit Ahead Ahead2	U	N/A	N/A	C4:B	C4:D	1	70	0	830	1834:1784	999+574	52.8 : 52.8%
3/2+3/1	Staplers Road Entry Left	U	N/A	N/A	C4:C		1	70	-	1034	1818:1784	1038+345	74.8 : 74.8%
4/1	Staples Road Exit	U	N/A	N/A	-		-	-	-	537	Inf	Inf	0.0%

Full Input Data And Results

5/1	Circulatory (CW) One Left Ahead	U	N/A	N/A	C4:A		1	16	-	246	1953	346	71.1%
6/1	Circulatory (ACW) One Ahead	U	N/A	N/A	C4:E		1	15	-	303	2015	336	90.2%
7/2+7/1	Fairlee Road Entry Ahead Right	U	N/A	N/A	C4:H C4:G		1	66:96	-	1165	1665:1890	1019+273	90.2 : 90.2%
8/1	Fairlee Road Exit	U	N/A	N/A	-		-	-	-	970	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: HCA Tender IoW	-	-	373	92	0	73.6	48.3	0.0	121.9	-	-	-	-
J1: George Way NEW 35	-	-	364	87	0	8.0	4.4	0.0	12.4	-	-	-	-
1/1	480	480	-	-	-	0.4	0.4	-	0.8	6.0	4.9	0.4	5.2
1/2	784	784	-	-	-	0.8	1.3	-	2.1	9.7	11.1	1.3	12.4
2/1	123	123	123	0	0	0.0	0.1	-	0.1	1.8	0.0	0.1	0.1
3/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	158	158	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	43	43	43	0	0	0.0	0.0	-	0.0	2.4	0.0	0.0	0.0
7/1	95	95	87	8	0	0.0	0.1	-	0.1	2.8	0.0	0.1	0.1
7/2	190	190	111	79	0	0.0	0.2	-	0.2	3.3	0.0	0.2	0.2
8/1	743	743	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	880	880	-	-	-	6.8	2.3	-	9.1	37.2	11.8	2.3	14.2
J2: NEW 36	-	-	9	5	0	40.6	22.3	0.0	62.9	-	-	-	-
1/1	899	899	-	-	-	0.4	2.5	-	2.8	11.4	1.4	2.5	3.9
1/2	974	974	-	-	-	0.3	2.6	-	2.9	10.6	17.1	2.6	19.7
1/3	48	48	-	-	-	0.0	0.0	-	0.0	2.4	0.0	0.0	0.0
2/1	899	899	-	-	-	3.4	2.0	-	5.4	21.6	16.7	2.0	18.7
2/2	974	974	-	-	-	4.6	2.2	-	6.9	25.4	21.7	2.2	23.9
2/3	48	48	-	-	-	0.1	0.0	-	0.1	7.5	0.6	0.0	0.6
3/1	557	557	-	-	-	1.7	0.4	-	2.1	13.8	7.4	0.4	7.9
3/2	227	227	-	-	-	1.2	0.1	-	1.3	20.9	5.3	0.1	5.4
4/2+4/1	334	334	-	-	-	0.4	0.6	-	1.0	11.2	9.4	0.6	10.1
4/3	179	179	-	-	-	2.6	0.3	-	2.9	58.4	4.3	0.3	4.6
5/1	444	444	-	-	-	4.2	2.0	-	6.2	50.3	11.8	2.0	13.9

Full Input Data And Results

5/2	468	468	-	-	-	4.4	1.9	-	6.3	48.4	12.5	1.9	14.4
6/2+6/1	544	544	-	-	-	2.7	0.4	-	3.1	20.4	13.2	0.4	13.7
6/3	811	811	-	-	-	4.1	0.8	-	4.9	22.0	19.7	0.8	20.6
6/4	781	781	-	-	-	0.5	0.9	-	1.4	6.6	1.6	0.9	2.5
7/1	85	85	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	360	360	-	-	-	3.0	0.8	-	3.8	38.1	7.0	0.8	7.8
8/2	506	506	-	-	-	0.6	2.6	-	3.2	22.6	1.0	2.6	3.6
9/1	493	493	-	-	-	0.9	0.4	-	1.3	9.3	8.5	0.4	8.8
9/2	777	777	-	-	-	2.1	1.0	-	3.1	14.2	7.2	1.0	8.1
10/1	334	334	-	-	-	2.3	0.5	-	2.8	30.2	7.0	0.5	7.4
10/2	179	179	-	-	-	1.1	0.2	-	1.3	26.4	3.4	0.2	3.6
11/1+11/2	7	7	9	5	0	0.0	0.0	-	0.0	21.6	0.1	0.0	0.1
12/1	51	51	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: New 43	-	-	0	0	0	10.5	9.8	0.0	20.3	-	-	-	-
1/1	902	902	-	-	-	0.2	2.4	-	2.6	10.4	1.7	2.4	4.1
1/2	748	748	-	-	-	0.8	1.0	-	1.8	8.5	6.3	1.0	7.2
2/1	350	350	-	-	-	1.8	0.6	-	2.4	24.5	7.1	0.6	7.7
2/2	569	569	-	-	-	4.7	3.9	-	8.6	54.2	15.1	3.9	19.0
3/1	1252	1252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	1317	1317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	1111	1111	-	-	-	1.5	1.6	-	3.1	10.1	9.1	1.6	10.7
4/3	468	468	-	-	-	1.6	0.4	-	1.9	14.7	7.0	0.4	7.4
J4: New 37	-	-	0	0	0	14.5	11.8	0.0	26.3	-	-	-	-
1/1	667	667	-	-	-	1.3	0.5	-	1.8	9.6	8.1	0.5	8.6
2/2+2/1	830	830	-	-	-	1.2	0.6	-	1.8	7.7	12.4	0.6	13.0
3/2+3/1	1034	1034	-	-	-	1.8	1.5	-	3.3	11.5	14.1	1.5	15.5

Full Input Data And Results

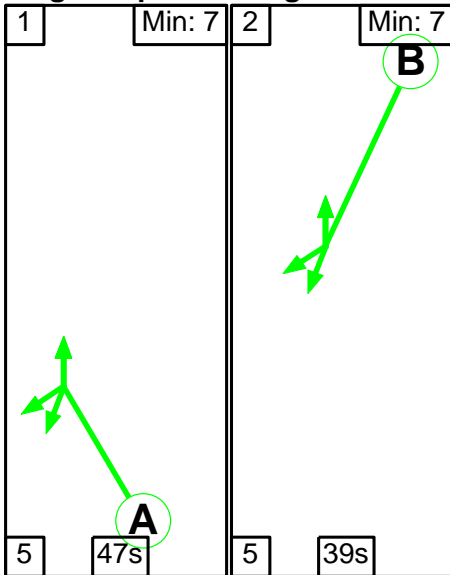
4/1	537	537	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	246	246	-	-	-	2.4	1.2	-	3.6	52.2	6.2	1.2	7.4
6/1	303	303	-	-	-	5.0	3.8	-	8.8	104.2	8.1	3.8	11.8
7/2+7/1	1165	1165	-	-	-	2.8	4.3	-	7.1	21.9	21.6	4.3	26.0
8/1	970	970	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%)	8.7	Total Delay for Signalled Lanes (pcuHr)	12.03	Cycle Time (s)	96					
		C2	PRC for Signalled Lanes (%)	6.4	Total Delay for Signalled Lanes (pcuHr)	62.88	Cycle Time (s)	96					
		C3	PRC for Signalled Lanes (%)	0.4	Total Delay for Signalled Lanes (pcuHr)	20.34	Cycle Time (s)	96					
		C4	PRC for Signalled Lanes (%)	-0.2	Total Delay for Signalled Lanes (pcuHr)	26.28	Cycle Time (s)	96					
			PRC Over All Lanes (%)	-0.2	Total Delay Over All Lanes(pcuHr)	121.91							

Full Input Data And Results

Scenario 4: '2034 PM DN' (FG4: '2034 - PM - DN', Plan 1: 'Fairlee Rd A3054')

C1

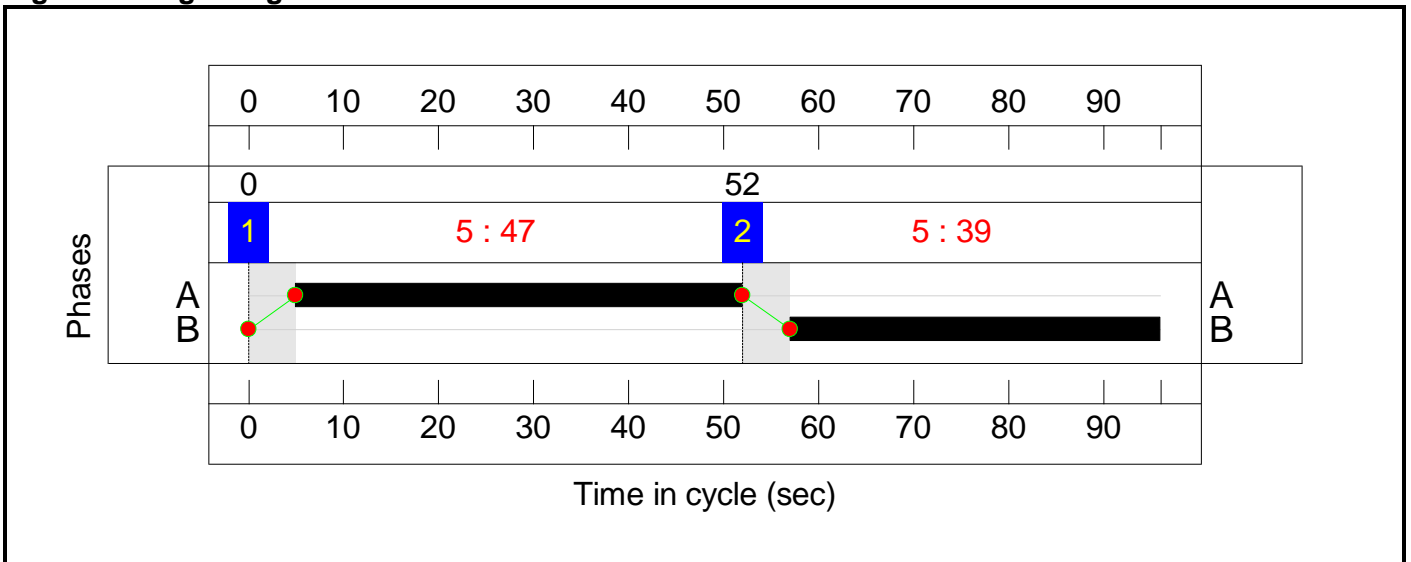
Stage Sequence Diagram



Stage Timings

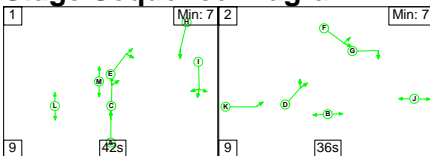
Stage	1	2
Duration	47	39
Change Point	0	52

Signal Timings Diagram



C2

Stage Sequence Diagram

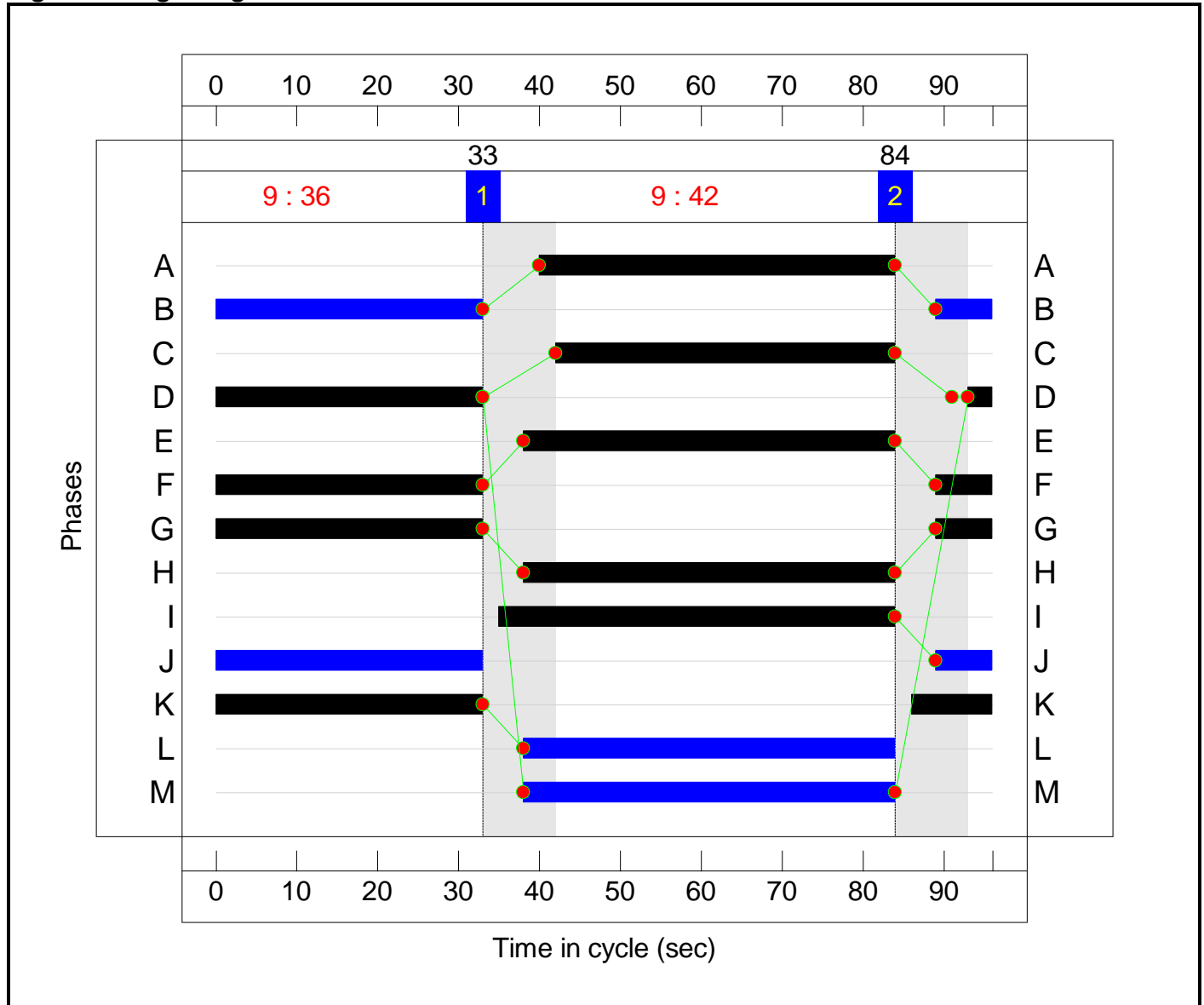


Full Input Data And Results

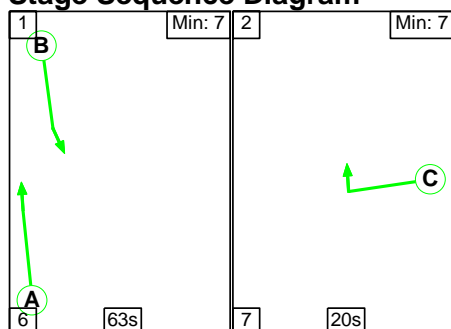
Stage Timings

Stage	1	2
Duration	42	36
Change Point	33	84

Signal Timings Diagram



C3 Stage Sequence Diagram

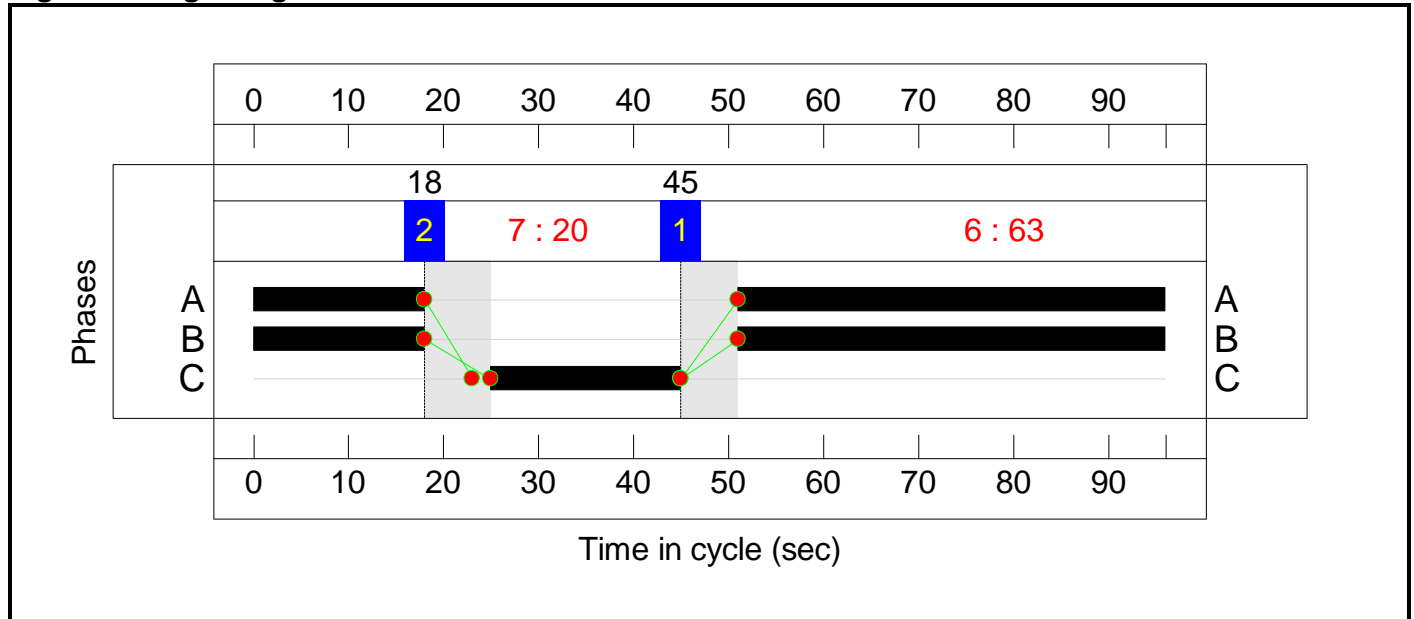


Full Input Data And Results

Stage Timings

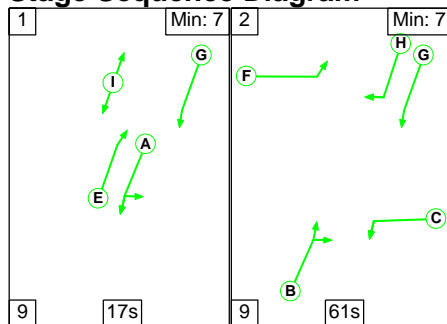
Stage	1	2
Duration	63	20
Change Point	45	18

Signal Timings Diagram



C4

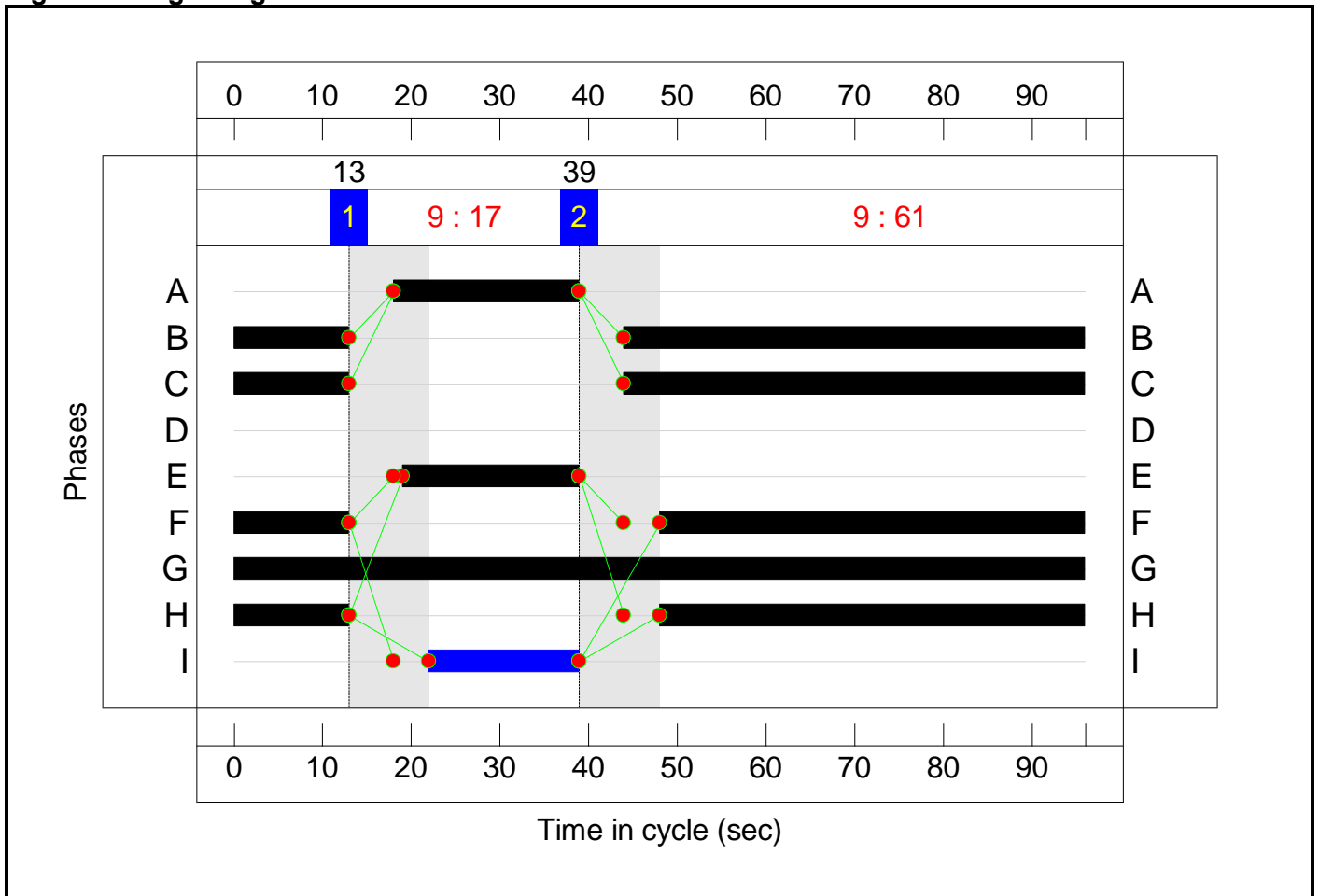
Stage Sequence Diagram



Stage Timings

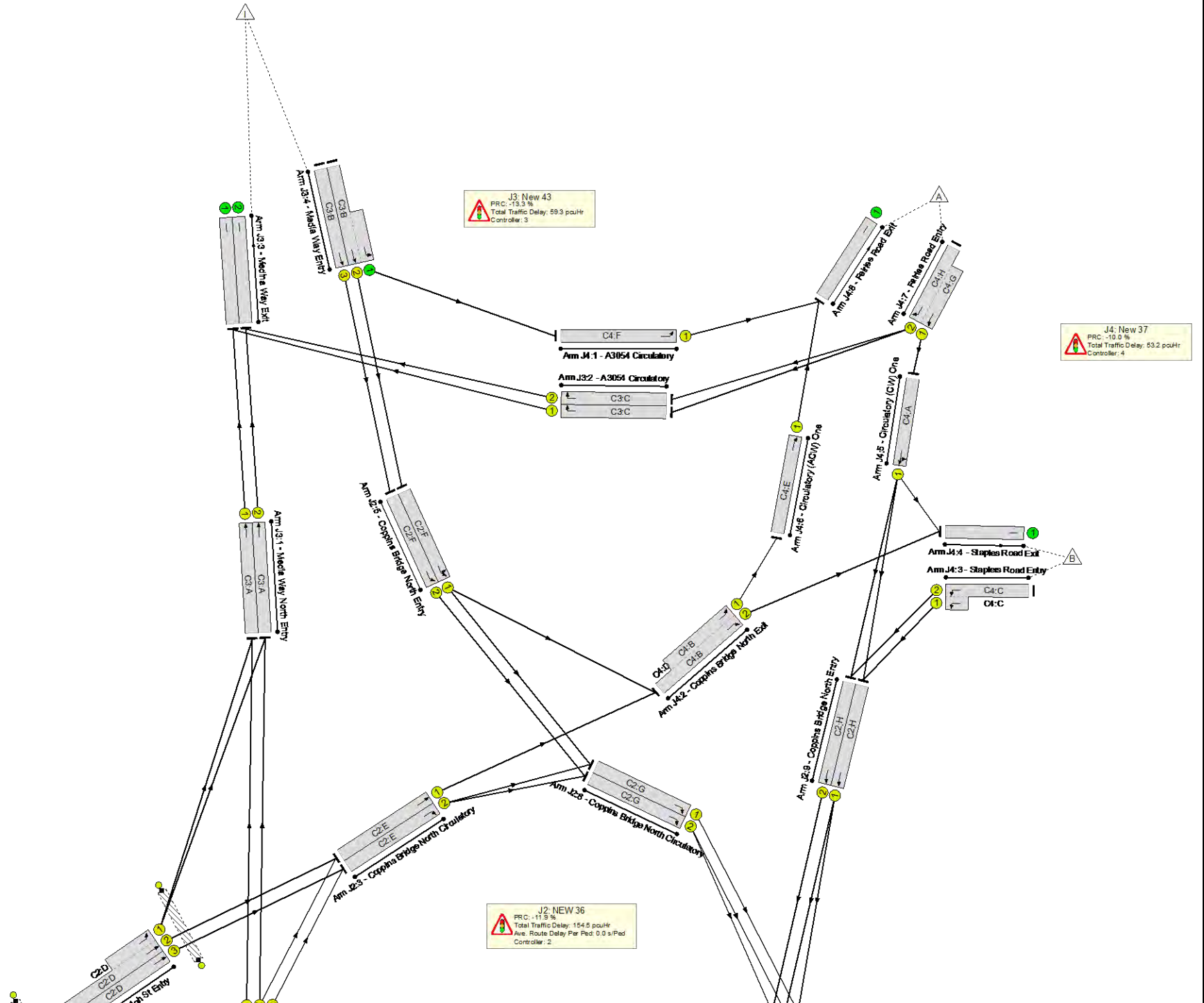
Stage	1	2
Duration	17	61
Change Point	13	39

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: HCA Tender IoW	-	-	N/A	-	-		-	-	-	-	-	-	102.0%
J1: George Way NEW 35	-	-	N/A	-	-		-	-	-	-	-	-	65.0%
1/1	Coppins Bridge South Entry Ahead Left	U	N/A	N/A	C1:B		1	39	-	523	1901	792	65.0%
1/2	Coppins Bridge South Entry Right	U	N/A	N/A	C1:B		1	39	-	456	1842	768	59.4%
2/1	East St Exit - Pyle St Ahead	O	N/A	N/A	-		-	-	-	83	1730	1120	7.3%
3/1	East St (Pyle St Turn) Entry Left Ahead	U	N/A	N/A	-		-	-	-	293	Inf	Inf	0.0%
4/1	East St Exit	U	N/A	N/A	-		-	-	-	495	Inf	Inf	0.0%
5/1	Pyle St Exit	U	N/A	N/A	-		-	-	-	90	Inf	Inf	0.0%
6/1	Pyle St Entry Left	O	N/A	N/A	-		-	-	-	78	1598	745	10.5%
7/1	East St Entry Ahead	O	N/A	N/A	-		-	-	-	100	1865	777	12.9%
7/2	East St Entry Ahead	O	N/A	N/A	-		-	-	-	264	1865	849	31.1%
8/1	A3020 Exit	U	N/A	N/A	-		-	-	-	1115	Inf	Inf	0.0%
9/2+9/1	A3020 Entry Left Left2 Ahead	U	N/A	N/A	C1:A		1	47	-	875	1978:1967	776+675	60.3 : 60.3%
J2: NEW 36	-	-	N/A	-	-		-	-	-	-	-	-	100.8%
1/1	Ahead	U	N/A	N/A	C2:C		1	42	-	776	1915	858	90.5%
1/2	Ahead Right	U	N/A	N/A	C2:C		1	42	-	835	2055	920	90.7%
1/3	Right	U	N/A	N/A	C2:C		1	42	-	29	1769	792	3.7%
2/1	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	44	-	776	1915	898	86.4%

Full Input Data And Results

2/2	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	44	-	835	2035	954	87.5%
2/3	Circulatory NB Three Ahead	U	N/A	N/A	C2:A		1	44	-	29	1865	874	3.3%
3/1	Coppins Bridge North Circulatory Ahead	U	N/A	N/A	C2:E		1	46	-	979	2015	987	99.2%
3/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:E		1	46	-	289	1791	877	33.0%
4/2+4/1	High St Entry Left Ahead	U	N/A	N/A	C2:D		1	36	-	510	1915:1915	669+117	64.9 : 64.9%
4/3	High St Entry Ahead	U	N/A	N/A	C2:D		1	36	-	260	1915	738	35.2%
5/1	Coppins Bridge North Entry Left Ahead	U	N/A	N/A	C2:F		1	40	-	764	1759	751	99.8%
5/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:F		1	40	-	793	1874	800	99.1%
6/2+6/1	Ahead Left Left2	U	N/A	N/A	C2:l -		1	49	-	739	1915:1492	730+228	76.6 : 76.2%
6/3	Right Ahead	U	N/A	N/A	C2:l		1	49	-	1084	2055	1070	100.7%
6/4	Right	U	N/A	N/A	C2:l		1	49	-	448	1915	997	44.9%
7/1		U	N/A	N/A	-		-	-	-	176	Inf	Inf	0.0%
8/1	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	40	-	568	1885	805	69.8%
8/2	Coppins Bridge North Circulatory Right	U	N/A	N/A	C2:G		1	40	-	824	1915	818	100.8%
9/1	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	46	-	457	1940	950	48.1%
9/2	Coppins Bridge North Entry Ahead	U	N/A	N/A	C2:H		1	46	-	422	1940	950	44.4%
10/1	Ahead	U	N/A	N/A	C2:K		1	43	-	510	1965	901	56.6%
10/2	Ahead	U	N/A	N/A	C2:K		1	43	-	260	1965	901	28.9%

Full Input Data And Results

11/1+11/2	Entry Coppins Bridge Car Park Ahead Left	O	N/A	N/A	-	-	-	-	44	1822:1800	746+348	4.0 : 4.0%	
12/1	Exit Coppins Bridge Car Park	U	N/A	N/A	-	-	-	-	45	Inf	Inf	0.0%	
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:B		1	40	-	0	0	0.0%	
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C2:J		1	40	-	0	0	0.0%	
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C2:M		1	46	-	0	0	0.0%	
Ped Link: P4	Unnamed Ped Link	-	N/A	-	C2:L		1	46	-	0	0	0.0%	
J3: New 43	-	-	N/A	-	-		-	-	-	-	-	102.0%	
1/1	Media Way North Entry Ahead	U	N/A	N/A	C3:A		1	63	-	811	1935	1290	62.9%
1/2	Media Way North Entry Ahead	U	N/A	N/A	C3:A		1	63	-	331	2015	1343	24.6%
2/1	A3054 Circulatory Right	U	N/A	N/A	C3:C		1	20	-	407	1940	424	95.9%
2/2	A3054 Circulatory Right	U	N/A	N/A	C3:C		1	20	-	410	1965	430	95.4%
3/1	Medina Way Exit	U	N/A	N/A	-		-	-	-	1218	Inf	Inf	0.0%
3/2	Medina Way Exit	U	N/A	N/A	-		-	-	-	741	Inf	Inf	0.0%
4/2+4/1	Media Way Entry Left Ahead	U	N/A	N/A	C3:B -		1	63	-	1600	2015:1966	749+820	102.0 : 102.0%
4/3	Media Way Entry Ahead	U	N/A	N/A	C3:B		1	63	-	793	2015	1343	59.0%
J4: New 37	-	-	N/A	-	-		-	-	-	-	-	-	99.0%
1/1	A3054 Circulatory Left	U	N/A	N/A	C4:F		1	61	-	836	1881	1215	67.5%
2/2+2/1	Coppins Bridge North Exit Ahead2	U	N/A	N/A	C4:B	C4:D	1	65	0	1433	1834:1784	969+479	98.1 : 99.0%
3/2+3/1	Staplers Road Entry Left	U	N/A	N/A	C4:C		1	65	-	639	1818:1784	862+443	49.0 : 49.0%
4/1	Staples Road Exit	U	N/A	N/A	-		-	-	-	971	Inf	Inf	0.0%

Full Input Data And Results

5/1	Circulatory (CW) One Left Ahead	U	N/A	N/A	C4:A		1	21	-	252	1951	447	56.4%
6/1	Circulatory (ACW) One Ahead	U	N/A	N/A	C4:E		1	20	-	474	2015	441	97.4%
7/2+7/1	Fairlee Road Entry Ahead Right	U	N/A	N/A	C4:H C4:G		1	61:96	-	1069	1665:1890	931+287	87.7 : 87.7%
8/1	Fairlee Road Exit	U	N/A	N/A	-		-	-	-	1310	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: HCA Tender IoW	-	-	393	219	0	105.4	169.2	0.0	274.7	-	-	-	-
J1: George Way NEW 35	-	-	362	162	0	4.9	2.8	0.0	7.7	-	-	-	-
1/1	515	515	-	-	-	0.5	0.9	-	1.4	10.1	4.9	0.9	5.8
1/2	456	456	-	-	-	0.6	0.7	-	1.4	10.7	8.4	0.7	9.1
2/1	82	82	82	0	0	0.0	0.0	-	0.0	1.7	0.0	0.0	0.0
3/1	293	293	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	488	488	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	89	89	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	78	78	78	0	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
7/1	100	100	92	8	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
7/2	264	264	110	154	0	0.0	0.2	-	0.2	3.1	0.0	0.2	0.2
8/1	1106	1106	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	875	875	-	-	-	3.8	0.8	-	4.5	18.6	8.1	0.8	8.8
J2: NEW 36	-	-	31	57	0	59.2	95.3	0.0	154.5	-	-	-	-
1/1	776	776	-	-	-	0.3	4.3	-	4.6	21.5	1.3	4.3	5.6
1/2	835	835	-	-	-	0.2	4.4	-	4.7	20.1	4.0	4.4	8.4
1/3	29	29	-	-	-	0.0	0.0	-	0.0	3.6	0.0	0.0	0.0
2/1	776	776	-	-	-	4.0	3.0	-	7.0	32.7	15.0	3.0	18.1
2/2	835	835	-	-	-	6.1	3.3	-	9.5	40.8	20.5	3.3	23.9
2/3	29	29	-	-	-	0.1	0.0	-	0.1	16.0	0.4	0.0	0.5
3/1	979	979	-	-	-	5.4	13.9	-	19.2	70.7	26.0	13.9	39.9
3/2	289	289	-	-	-	2.0	0.2	-	2.3	28.3	7.4	0.2	7.7
4/2+4/1	510	510	-	-	-	0.6	0.9	-	1.5	10.8	12.6	0.9	13.5
4/3	260	260	-	-	-	1.8	0.3	-	2.1	29.2	3.9	0.3	4.2
5/1	749	749	-	-	-	4.4	13.2	-	17.7	84.9	20.0	13.2	33.2

Full Input Data And Results

5/2	793	793	-	-	-	5.3	12.4	-	17.7	80.3	21.1	12.4	33.5
6/2+6/1	733	733	-	-	-	6.0	1.6	-	7.6	37.2	19.9	1.6	21.6
6/3	1078	1070	-	-	-	9.7	18.5	-	28.2	94.2	29.0	18.5	47.4
6/4	448	448	-	-	-	0.5	0.4	-	0.9	7.1	1.4	0.4	1.8
7/1	174	174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	562	562	-	-	-	3.9	1.1	-	5.1	32.4	11.0	1.1	12.2
8/2	824	818	-	-	-	1.5	16.0	-	17.5	76.3	22.1	16.0	38.1
9/1	457	457	-	-	-	1.7	0.5	-	2.2	17.2	9.5	0.5	9.9
9/2	422	422	-	-	-	1.5	0.4	-	1.9	15.8	3.9	0.4	4.3
10/1	510	510	-	-	-	2.7	0.7	-	3.3	23.6	9.9	0.7	10.6
10/2	260	260	-	-	-	1.2	0.2	-	1.4	19.0	4.3	0.2	4.5
11/1+11/2	44	44	31	57	0	0.1	0.0	-	0.1	6.3	0.2	0.0	0.2
12/1	45	45	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: New 43	-	-	0	0	0	15.5	43.8	0.0	59.3	-	-	-	-
1/1	811	811	-	-	-	0.1	0.8	-	1.0	4.3	1.2	0.8	2.0
1/2	331	331	-	-	-	0.1	0.2	-	0.3	3.3	0.8	0.2	1.0
2/1	407	407	-	-	-	3.0	6.6	-	9.6	84.9	10.7	6.6	17.3
2/2	410	410	-	-	-	5.1	6.3	-	11.4	100.1	10.9	6.3	17.2
3/1	1218	1218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	741	741	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	1600	1569	-	-	-	5.3	29.1	-	34.4	77.3	44.2	29.1	73.3
4/3	793	793	-	-	-	1.9	0.7	-	2.7	12.1	11.5	0.7	12.2
J4: New 37	-	-	0	0	0	25.8	27.3	0.0	53.2	-	-	-	-
1/1	820	820	-	-	-	3.1	1.0	-	4.1	18.1	12.3	1.0	13.3
2/2+2/1	1424	1332	-	-	-	12.3	13.9	-	26.2	66.3	43.9	13.9	57.8
3/2+3/1	639	639	-	-	-	1.1	0.5	-	1.6	8.8	5.9	0.5	6.4

Full Input Data And Results

4/1	915	915	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	252	252	-	-	-	2.1	0.6	-	2.8	39.5	5.9	0.6	6.5
6/1	429	429	-	-	-	4.3	7.9	-	12.1	101.9	11.4	7.9	19.3
7/2+7/1	1069	1069	-	-	-	2.9	3.4	-	6.4	21.4	19.1	3.4	22.5
8/1	1249	1249	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
			C1	PRC for Signalled Lanes (%)	38.5	Total Delay for Signalled Lanes (pcuHr)	7.31	Cycle Time (s)	96				
			C2	PRC for Signalled Lanes (%)	-11.9	Total Delay for Signalled Lanes (pcuHr)	154.42	Cycle Time (s)	96				
			C3	PRC for Signalled Lanes (%)	-13.3	Total Delay for Signalled Lanes (pcuHr)	59.29	Cycle Time (s)	96				
			C4	PRC for Signalled Lanes (%)	-10.0	Total Delay for Signalled Lanes (pcuHr)	53.17	Cycle Time (s)	96				
				PRC Over All Lanes (%)	-13.3	Total Delay Over All Lanes (pcuHr)	274.66						



Appendix B

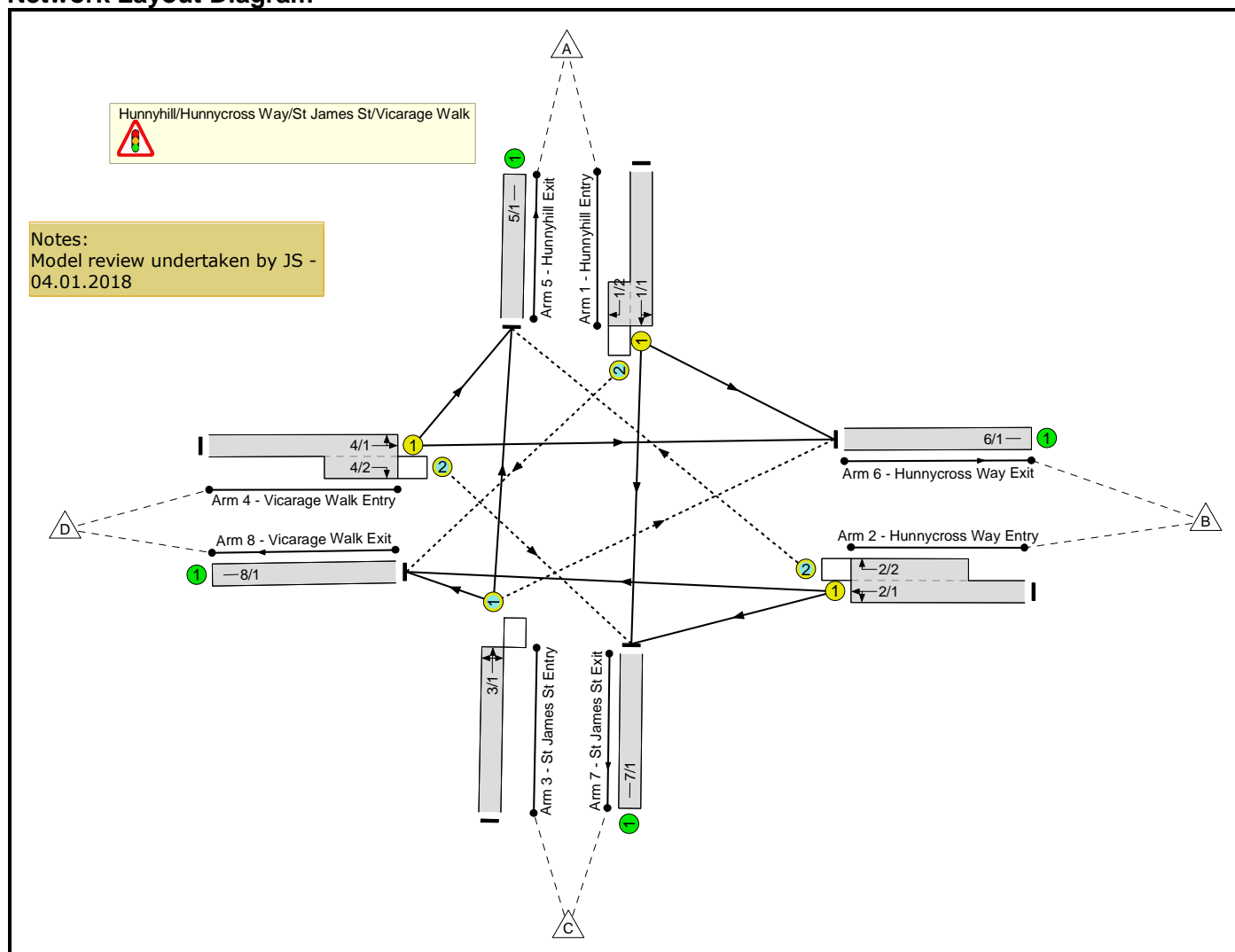
MODELLING OUTPUT RESULTS JUNCTION 3

Full Input Data And Results
Full Input Data And Results

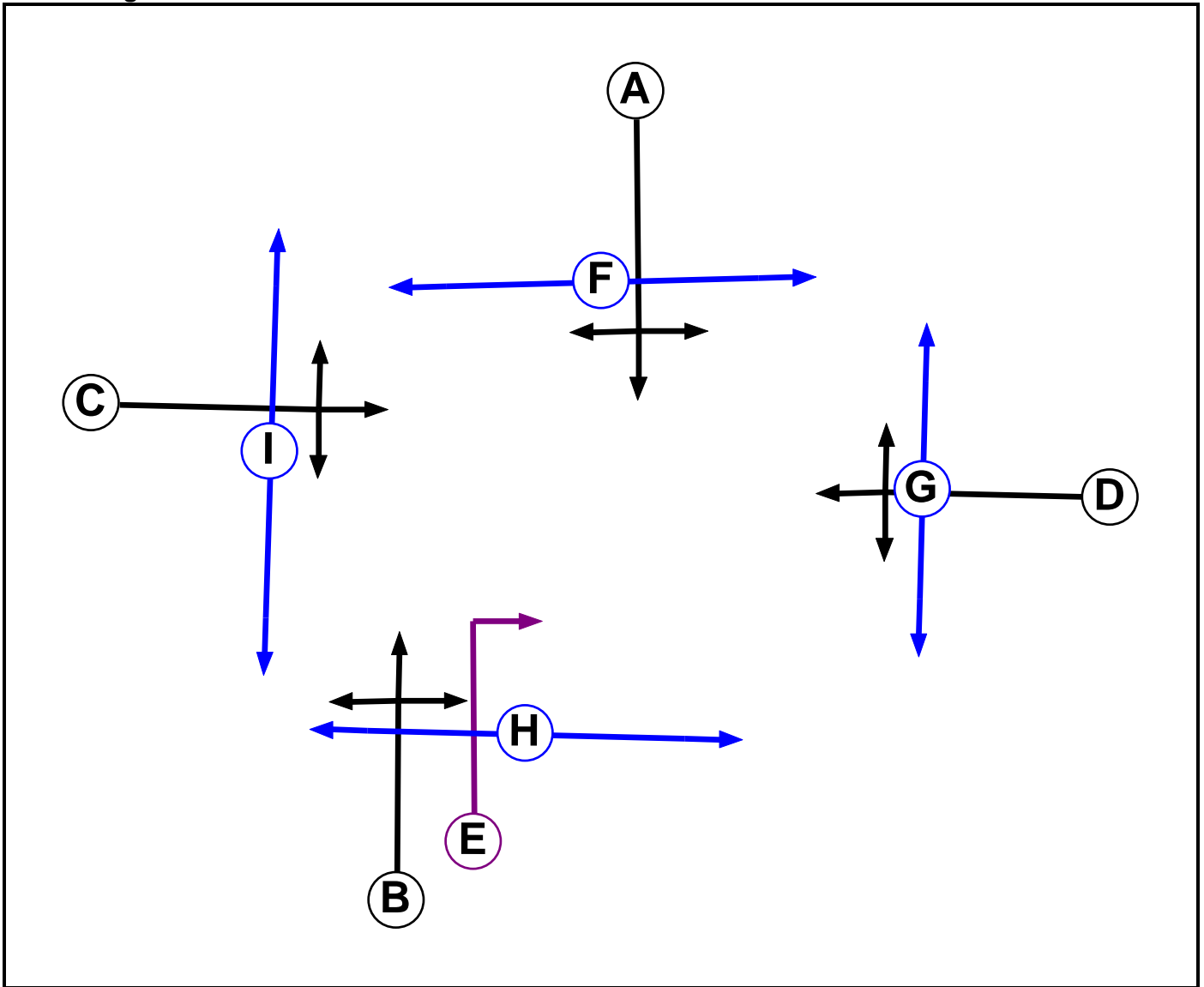
User and Project Details

Project:	A090129-99
Title:	IoW Junction Assessment and
Location:	Hunnyhill/Hunnycross Way/St James St/Vicarage Walk
Additional detail:	
File name:	Junction 3 - Hunnyhill Hunnycross Way - Existing Junction.lsg3x
Author:	Jack Smith
Company:	WYG
Address:	11 th Floor, 1 Angel Court, London, EC2R 7HJ

Network Layout Diagram



Phase Diagram



Phase Input Data

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

Full Input Data And Results

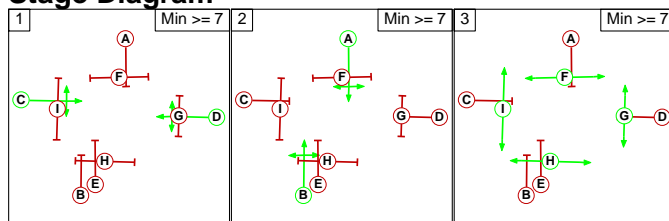
Phase Intergrens Matrix

Terminating Phase	Starting Phase									
		A	B	C	D	E	F	G	H	I
	A	-	7	7	7	9	9	9	9	9
	B	-	7	7	-	9	9	9	9	9
	C	7	7	-	7	9	9	9	9	9
	D	7	7	-	7	9	9	9	9	9
	E	7	-	7	7	-	9	9	9	9
	F	0	0	0	0	0	-	-	-	-
	G	0	0	0	0	0	-	-	-	-
	H	0	0	0	0	0	-	-	-	-
I	0	0	0	0	0	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	C D
2	A B
3	F G H I

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage			
	1	2	3	
	1	-	7	9
	2	7	-	9
3	2	2	-	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Hunnyhill/Hunnycross Way/St James St/Vicarage Walk											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (Hunnyhill Entry)	8/1 (Right)	1439	0	3/1	1.09	To 5/1 (Ahead) To 8/1 (Left)	2.00	-	0.50	2	2.00
2/2 (Hunnycross Way Entry)	5/1 (Right)	1439	0	4/1	1.09	All	2.00	-	0.50	2	2.00
3/1 (St James St Entry)	6/1 (Right)	1439	0	1/1	1.09	All	2.00	2.00	0.50	2	2.00
4/2 (Vicarage Walk Entry)	7/1 (Right)	1439	0	2/1	1.09	All	2.00	-	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Hunnyhill/Hunnycross Way/St James St/Vicarage Walk												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Hunnyhill Entry)	U	A	2	3	60.0	Geom	-	2.65	0.00	Y	Arm 6 Left	16.80
											Arm 7 Ahead	Inf
1/2 (Hunnyhill Entry)	O	A	2	3	3.0	Geom	-	2.65	0.00	N	Arm 8 Right	13.20
2/1 (Hunnycross Way Entry)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Left	9.20
											Arm 8 Ahead	Inf
2/2 (Hunnycross Way Entry)	O	D	2	3	8.0	Geom	-	3.00	0.00	Y	Arm 5 Right	15.90
											Arm 5 Ahead	Inf
3/1 (St James St Entry)	O	B E	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 6 Right	11.50
											Arm 8 Left	7.50
4/1 (Vicarage Walk Entry)	U	C	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 5 Left	7.50
											Arm 6 Ahead	Inf
4/2 (Vicarage Walk Entry)	O	C	2	3	5.0	Geom	-	3.30	0.00	Y	Arm 7 Right	9.90
5/1 (Hunnyhill Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Hunnycross Way Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (St James St Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Vicarage Walk Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2017 Base AM'	08:00	09:00	01:00	
2: '2017 Base PM'	17:00	18:00	01:00	
3: '2034 - AM - DN'	08:00	09:00	01:00	
4: '2034 - PM - DN'	17:00	18:00	01:00	
5: '2034 - AM - Reassignment INVALID'	08:00	09:00	01:00	
6: '2034 - PM - Reassignment INVALID'	17:00	18:00	01:00	

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

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	88	138	163	389
	B	37	0	58	226	321
	C	99	57	0	26	182
	D	100	338	35	0	473
	Tot.	236	483	231	415	1365

Traffic Lane Flows

Lane	Scenario 1: 2017 AM
Junction: Hunnyhill/Hunnycross Way/St James St/Vicarage Walk	
1/1 (with short)	389(In) 226(Out)
1/2 (short)	163
2/1 (with short)	321(In) 284(Out)
2/2 (short)	37
3/1	182
4/1 (with short)	473(In) 438(Out)
4/2 (short)	35
5/1	236
6/1	483
7/1	231
8/1	415

Full Input Data And Results

Lane Saturation Flows

Junction: Hunnyhill/Hunnycross Way/St James St/Vicarage Walk								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hunnyhill Entry)	2.65	0.00	Y	Arm 6 Left	16.80	38.9 %	1817	1817
				Arm 7 Ahead	Inf	61.1 %		
1/2 (Hunnyhill Entry)	2.65	0.00	N	Arm 8 Right	13.20	100.0 %	1814	1814
2/1 (Hunnycross Way Entry)	3.00	0.00	Y	Arm 7 Left	9.20	20.4 %	1853	1853
				Arm 8 Ahead	Inf	79.6 %		
2/2 (Hunnycross Way Entry)	3.00	0.00	Y	Arm 5 Right	15.90	100.0 %	1750	1750
3/1 (St James St Entry)	3.65	0.00	Y	Arm 5 Ahead	Inf	54.4 %	1851	1851
				Arm 6 Right	11.50	31.3 %		
				Arm 8 Left	7.50	14.3 %		
4/1 (Vicarage Walk Entry)	3.30	0.00	Y	Arm 5 Left	7.50	22.8 %	1860	1860
				Arm 6 Ahead	Inf	77.2 %		
4/2 (Vicarage Walk Entry)	3.30	0.00	Y	Arm 7 Right	9.90	100.0 %	1689	1689
5/1 (Hunnyhill Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Hunnycross Way Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (St James St Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Vicarage Walk Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2017 PM' (FG2: '2017 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	68	123	211	402
	B	80	0	27	327	434
	C	134	60	0	67	261
	D	151	204	39	0	394
	Tot.	365	332	189	605	1491

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2017 PM
Junction: Hunnyhill/Hunnycross Way/St James St/Vicarage Walk	
1/1 (with short)	402(In) 191(Out)
1/2 (short)	211
2/1 (with short)	434(In) 354(Out)
2/2 (short)	80
3/1	261
4/1 (with short)	394(In) 355(Out)
4/2 (short)	39
5/1	365
6/1	332
7/1	189
8/1	605

Lane Saturation Flows

Junction: Hunnyhill/Hunnycross Way/St James St/Vicarage Walk								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hunnyhill Entry)	2.65	0.00	Y	Arm 6 Left Arm 7 Ahead	16.80 Inf	35.6 % 64.4 %	1822	1822
1/2 (Hunnyhill Entry)	2.65	0.00	N	Arm 8 Right	13.20	100.0 %	1814	1814
2/1 (Hunnycross Way Entry)	3.00	0.00	Y	Arm 7 Left Arm 8 Ahead	9.20 Inf	7.6 % 92.4 %	1891	1891
2/2 (Hunnycross Way Entry)	3.00	0.00	Y	Arm 5 Right	15.90	100.0 %	1750	1750
3/1 (St James St Entry)	3.65	0.00	Y	Arm 5 Ahead Arm 6 Right Arm 8 Left	Inf 11.50 7.50	51.3 % 23.0 % 25.7 %	1831	1831
4/1 (Vicarage Walk Entry)	3.30	0.00	Y	Arm 5 Left Arm 6 Ahead	7.50 Inf	42.5 % 57.5 %	1793	1793
4/2 (Vicarage Walk Entry)	3.30	0.00	Y	Arm 7 Right	9.90	100.0 %	1689	1689
5/1 (Hunnyhill Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Hunnycross Way Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (St James St Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Vicarage Walk Exit Lane 1)	Infinite Saturation Flow						Inf	Inf