HIGHWAYS TECHNICAL NOTE

Toton West, Broxtowe

EMGM Scenario One - Junction Capacity Assessments

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Client:	Bloor Homes Ltd	File Reference:	260812_328827_TN005
Date:	12 August 2026	Job Number:	328827
Prepared by:	PM	Approved by:	JFN / BDF

1. Introduction

1.1 Overview

1.1.1 mode transport planning (mode) has been commissioned by Bloor Homes Ltd, to provide transport and highways advice in relation to the Outline Planning Application (Ref: 25/00371/OUT) for a new residential development at Toton West in Broxtowe, Nottinghamshire. The proposals comprise the following:

"Outline Planning Application for the construction of a residential development of up to 420 residential dwellings and associated open space and infrastructure."

1.1.2 The application has been lodged as an appeal and will be considered by the Planning Inspectorate commencing in August 2026 on the grounds of non-determination.

1.2 Purpose of Technical Note

1.2.1 It has been the maintained view of the appellant that the proposals at Toton West should be assessed on their own merits, independently to the delivery of the wider Toton allocation, so long as they do not prejudice the delivery of the other Toton sites.

1.2.2 Conversely, it remains the position of Nottinghamshire County Council (NCC) and National Highways (NH) that the proposals should be assessed cumulatively with the wider Toton allocation and Chetwynd Barracks, and subsequently, that the localised assessments presented within the appellant's TA and addendum TNs to date provide only a partial assessment in considering a scheme of this scale.

1.2.3 Furthermore, pages 25-33 of NCC's Proof of Evidence (document reference: 'NCC Proof of Evidence V.1.1 04-08-2026') also provides criticism of the methodology adopted within the submitted TA to assess the proposals with paragraph 6.4.78 setting out:

"The principle weakness of the assessment is not the junction modelling itself, but the extent to which the traffic flows supplied to those models are derived from broad growth assumptions, historic census travel patterns and manually assigned routing assumptions, rather than from direct strategic modelling of known development proposals."

1.2.4 Owing to the criticism of the manual methodology adopted within the appellant's submitted TA and addendum TNs to date, the appellant has completed further assessments based on the East Midlands Gateway Model (EMGM) to address the perceived deficiency and to provide the surety to NCC and NH that the assessment work presented to date is robust. Importantly the Toton West proposals are now supported by two evidence bases both drawing the conclusion that Toton West will not result in a severe impact on the operation of the local and strategic road networks.

1.2.5 Within NCC's submitted Proof of Evidence, it is agreed that the Scenario 1 outputs from the EMGM will provide the clearest assessment of the direct impact of the Toton West proposals, with paragraph 6.5.19 setting out:

"In the Highway Authority's view, the two scenarios of greatest relevance to the Inquiry are Scenario 1 and Scenario 4. Scenario 1 provides the clearest assessment of the direct impact arising from the appeal proposal itself."

1.2.6 The submitted TA and subsequent addendum TNs prepared to date demonstrate that Toton West will not result in a severe impact on the operation of the local highway network. It is now the purpose of this TN to utilise the EMGM evidence base to validate the conclusions reached within the appellant's supporting documents issued to date.

2. EMGM Assessment Methodology

2.1 Overview

2.1.1 This chapter provides a brief overview of the methodology considered to assess the proposals at Toton West utilising the outputs from the EMGM. The following sections should be read in conjunction with mode's PoE (Chapter 5).

2.2 Area of Influence

2.2.1 The Area of Influence (AOI) on the surrounding highway network was derived by adding the Toton developments into a future year EMGM Reference Case model with an estimate of trip generations and approximate access locations. The change in flow and congestion was compared to the Reference Case model without development associated traffic and links which demonstrated the following levels of impact by the development were highlighted:

- + / - 5% change in vehicle flow;

- + / - 30 change in PCUs; or,
- Link Volume / Capacity radio (V/C) exceeds 85% with the development included.

2.2.2 These criteria thresholds were considered to establish the AOI boundary, as illustrated in **Figure 2.1.**

Figure 2.1 Area of Influence Boundary



2.2.3 The purpose of defining this boundary was to empirically derive an assessment area where continuous impact is identified, enabling the opportunity to exclude model noise and impacts not conclusively attributable to the development proposals.

2.3 Assessment Scenarios

2.3.1 As detailed within the PoE (Chapter 5), the Appellant approached SYSTRA to discuss four potential "Development scenarios" to test the phasing of the development, which are as follows:

- Scenario 1 – Toton West only;
- Scenario 2 – Toton West and East;
- Scenario 3 – 'Full Scenario' (Toton West, East and North, including Toton Link Road); and,
- Scenario 4 – 'Full Scenario' plus Chetwynd sensitivity test.

2.3.2 It should be noted that Chetwynd Barracks is included in all scenarios, albeit that in Scenarios 1 – 3 this isn't connected directly to the Toton Link Road.

2.3.3 The connection to the Toton Link Road is included within Scenario 4 only to identify the impacts associated with this connection and the potential routing of traffic through the site from Chetwynd Barracks.

2.3.4 As identified within **Chapter 1**, it is the purpose of this TN to provide the results of the scenario 1 model as this represents the effective comparative position to the conclusions reached within the appellant's submitted TA.

2.3.5 In this regard, when considering the information below, and indeed that which has already been submitted for the purpose of the assessment of the current Appeal Site, attention should once again be brough back to the following question outlined in mode's PoE (Page 31):

> *"If Toton West does not require the Toton Link Road to satisfy paragraph 116, why should permission be withheld pending agreement of the infrastructure package for the whole allocation?"*

2.4 Assessment Methodology

2.4.1 mode has considered the AOI (as illustrated in **Figure 2.1** above) and identified junctions within the AOI which experience an increase in congestion in the relevant Do Something modelling scenarios.

2.4.2 Junction congestion is measured within the EMGM by determining the ratio of the volume of traffic to the capacity of traffic that can be accommodated by a junction. The EMGM has identified junctions as being >85% congested within the 'Reference Case or 'Do Something' scenarios, with the 'Do Something' scenario compared to the respective 2026 and 2041 'Reference Case' scenarios. The below figures (**Figure 2.2 - 2.5**) illustrate the change in congestion for identified junctions in the AM and PM periods between the Reference Case 2026 and 2041 scenarios within the respective 2026 and 2041 Do Something scenarios.

Figure 2.2 2026 Do Something vs Reference Case (AM Change in Congestion)

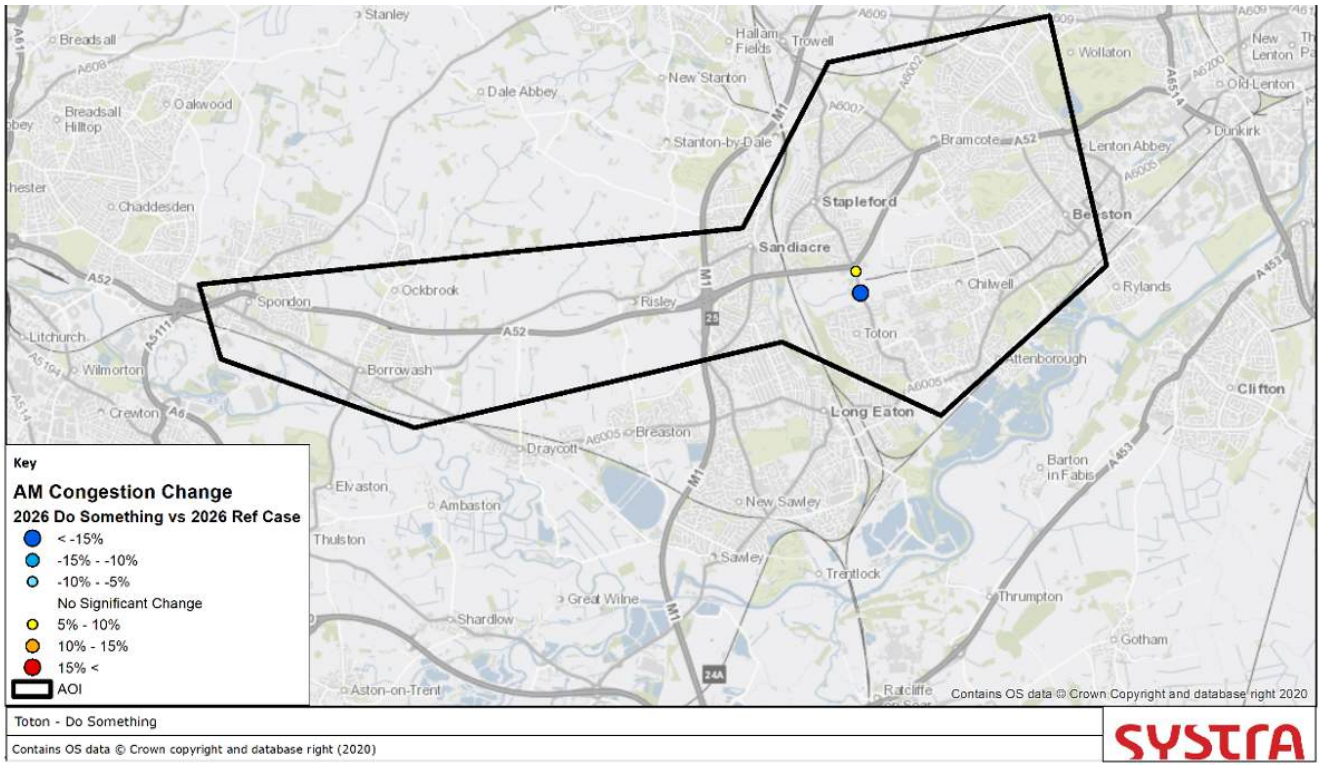


Figure 2.3 2026 Do Something vs Reference Case (PM Change in Congestion)

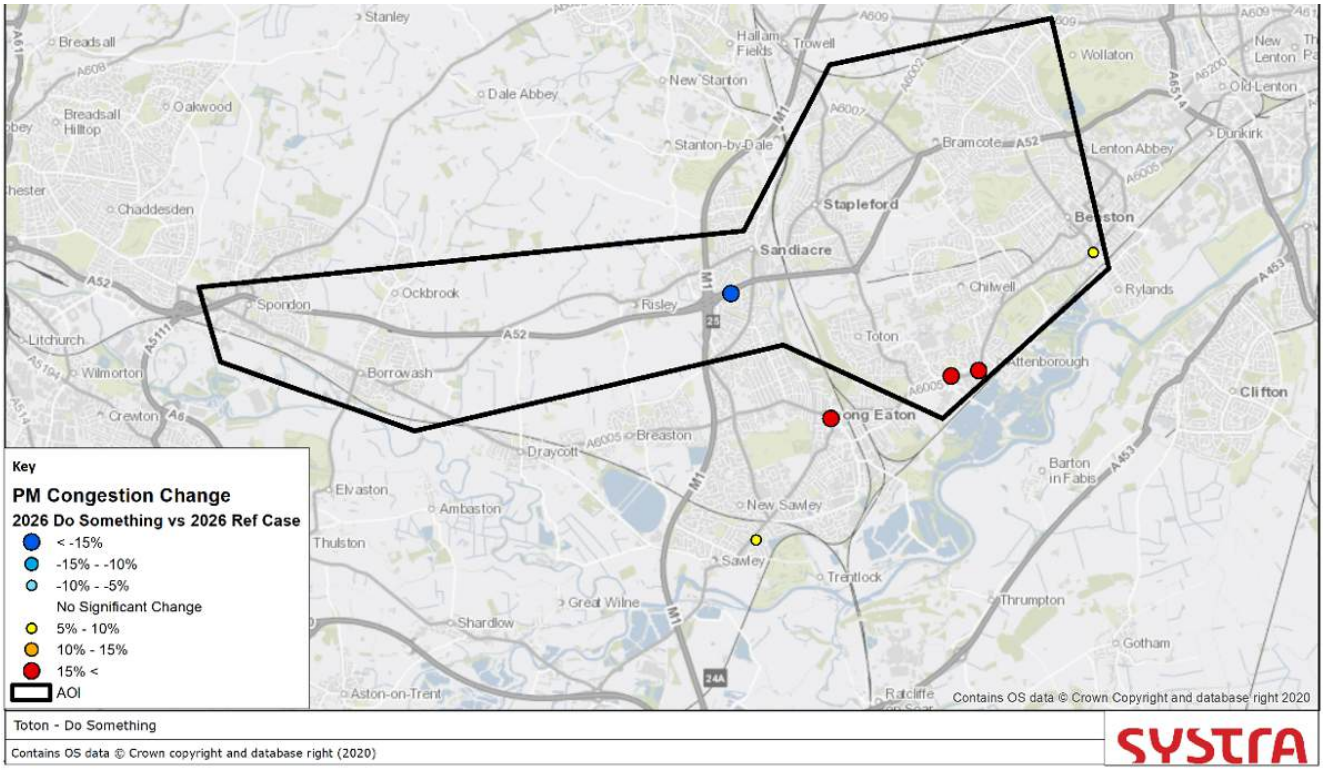


Figure 2.4 2041 Do Something vs Reference Case (AM Change in Congestion)

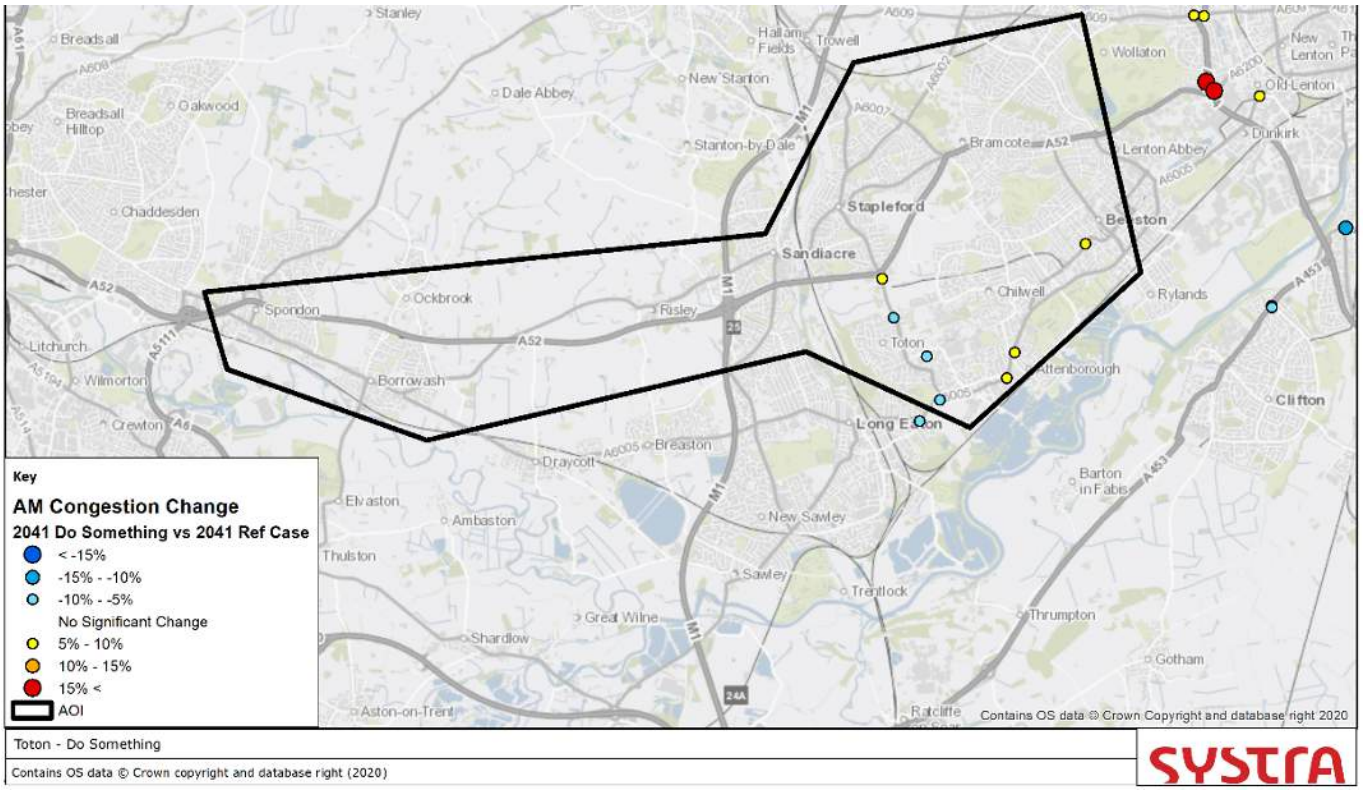
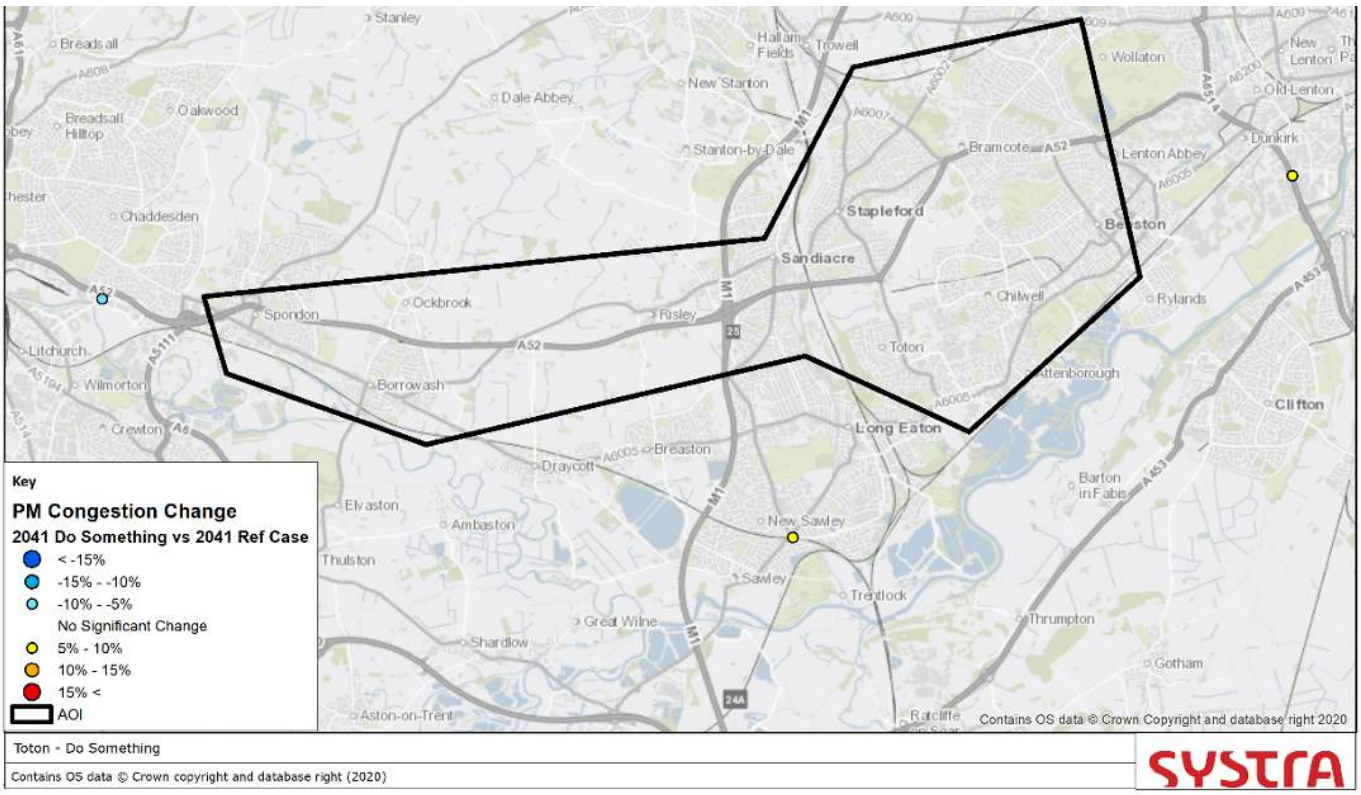


Figure 2.5 2041 Do Something vs Reference Case (PM Change in Congestion)



2.4.3 The 2026 opening year aligns with the requirements of DfT Circular 01/2022 (Paragraph 50), whereas the 2041 future year is consistent with the end of the emerging Greater Nottingham Strategic Plan.

It should be noted at this stage, that at paragraph 4.3.31 of NCC's Proof of Evidence document, the LHA refer to the requirement for *"Further assessment of locations where the model identified operational concerns in the 2041 scenario."*

2.4.4 As such, the following junctions which are situated on NCC's local highway network and have been identified as experiencing an increase in congestion in the AM peak period between the 2041 Do Something and 2041 Reference Case scenarios have been taking forward for further assessment:

- Nottingham Road / Barratt Lane Ghost Right T Junction;
- Nottingham Road / Bye Pass Road / Attenborough Lane Signalised Crossroads; and
- Imperial Road / Chilwell Road T Junction.

2.4.5 The following junction which is situated on NH's SRN has been identified as experiencing an increase in congestion in the AM peak period between both the 2026 Do Something and 2026 Reference Case scenarios and the 2041 Do Something and 2041 Reference Case scenarios, and has therefore been taken forward for further assessment:

- Bardills Roundabout.

2.5 Furnessing Technique

2.5.1 Following discussions with SYSTRA (who operate and maintain the EMGM), it was agreed that the following furnessing technique would be required to identify turning flows to be utilised in subsequent:

- Ascertain OD flows from the EMGM for the 2026 RC & DS and 2041 RC & DS scenarios;
- Identify the absolute difference (number of vehicles) between the 2026 RC and the respective 2026, 2041 DS scenarios and the 2041 RC scenario; and,
- Add this difference to ascertained Manual Classified Count (MCC) surveys.

2.5.2 MCC surveys for Bardills Roundabout were obtained for the purpose of the submitted TA. These surveys were undertaken covering the traditional highway peak periods of 07:00-10:00 and 16:00-19:00, on 06/11/25, a neutral working weekday outside of school holiday periods. The survey data for these junctions was growthed (using TEMPro) to a 2026 assessment year, for consistency with the 2026 RC, and to facilitate suitable flows to consider as part of the furnessing technique.

2.5.3 For the Nottingham Road / Barratt Lane Ghost Right T Junction, Nottingham Road / Bye Pass Road / Attenborough Lane Signalised Crossroads and Imperial Road / Chilwell Road T Junction, additional MCCs were undertaken on 16/07/2026. These were once again undertaken covering the traditional highway peak periods of 07:00-10:00 and 16:00-19:00, on a neutral working weekday outside of school holiday periods. The 2026 flows were used as part of the furnessing technique at these locations.

2.5.4 mode consulted SYSTRA to understand the typical methodology for the furnessing process. Owing to the requirement for additional survey data at junctions on their network, mode approached NCC to confirm the appropriateness of this methodology and as such, this approach has been taken forward and applied to all remaining junctions. A full copy of this communication is attached at **Appendix A**, with a summary provided below, for reference:

"For consistency purposes, please go ahead with the absolute method and add this to the observed 2026 turning flows for each junction."

2.5.5 For review and reference, mode's working spreadsheets used to calculate the furnessed origin-destination flows is attached at **Appendix B**, with the raw SYSTRA turning flows attached at **Appendix C** and the MCC data at **Appendix D**, for ease of reference.

3. Junction Capacity Assessment

3.1 Overview

3.1.1 This chapter provides the results of the revised local junction capacity assessments, owing to the furnessed EMGM turning flows.

3.2 Model Parameters

3.2.1 The industry standard software package 'Junctions 11 (PICADY) has been utilised to assess the capacity of the identified priority junction of Nottingham Road / Barratt Lane, with LinSig V3 utilised for signalised junctions.

3.2.2 Geometric parameters have been measured using OS base mapping and the signal plan information has been ascertained from NH and Via East Midlands (on behalf of NCC) for signal controlled locations (the full set of control signal specifications and network plans are included at **Appendix E**).

3.2.3 When assessing junction capacity within Junctions 11 and LinSig, it is generally accepted that a Ratio of Flow to Capacity (RFC) or Degree of Saturation (DoS) value of below 0.85 (RFC value for priority junctions / roundabouts) or 90% (DoS for signal junctions (LinSig) represents a junction that is considered to be operating satisfactorily and within practical capacity.

3.2.4 At junctions operating close to theoretical reserve capacity, which equates to an RFC or DoS value of approximately 1.00/100% or above, small reductions in capacity may result in exponential queuing and/or delay results.

3.3 Strategic Road Network Junction Capacity Results

3.3.1 The first section of this results overview presents junction capacity results for Bardills Roundabout, which is maintained and operated by NH. Results have been provided for both the 2026 and 2041 assessment years in accordance with NH's requirements for an opening year assessment.

3.3.2 A summary of the junction modelling results, with the furnessed EMGM flows for scenario 1 is presented below, with the full model output reports provided at Appendix F, for reference.

3.3.3 During the determination period, NH acting as custodians of the Strategic Road Network (SRN) have provided comments in relation to the submitted junction capacity assessment work. Comments were raised in relation to the LinSig models submitted as part of the revised TA, and amendments have been made to address these comments, where appropriate. TN004 (document reference: '260624_328827_TN004') sets out mode's response in relation to each to each of these comments in sequence, and where appropriate the changes which have been made to the junction models.

3.3.4 The updated LinSig junction models have been provided to NH, and have been utilised for the purpose of the assessment work presented in the following section.

Bardills Roundabout

3.3.5 The Bardills signalised roundabout is a five-arm 'hamburger' roundabout junction providing access to the key arterial route of the A52 Brian Clough Way running towards Nottingham City Centre to the east and Junction 25 of the M1 to the west.

3.3.6 A LinSig assessment has been undertaken for this junction. As noted within the TA, a limitation of LinSig software is that model runs cannot take into account the effect of MOVA (Microprocessor Optimised Vehicle Actuation), which is in place at this junction. MOVA creates an adaptive traffic signal control system that uses embedded detectors and microcomputers to dynamically adjust green times in order to ensure signal timings stages are more responsive to real time traffic flow, which improves junction efficiency.

3.3.7 TRL/Department for Transport research indicates that through the implementation of a MOVA system, the efficiency and operation of signalised junctions can be improved, and that up to an average 13% delay reduction may be achievable. However, the effects of these optimisation improvements cannot be simulated within the LinSig model.

3.3.8 In this regard, the junction will have capability to run more efficiently than is demonstrated in the following modelling results and the junction could therefore operate with a greater level of capacity than summarised below. A summary of the results of the LinSig assessment of the Bardills Roundabout is provided in **Table 3.1**.

Table 3.1 Bardills Signalised Roundabout Junction

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	DoS (%)	MMQ (PCU)	Delay /PCU (s)	DoS (%)	MMQ (PCU)	Delay /PCU (s)
2026 Reference Case						
A52 Brian Clough Way NE	83.2	14	22	68.4	8	16
Bardills Garden Centre Parking	1.2	0	19	2.9	0	19
B6003 Toton Lane S	57.7	5	30	75.9	7	33
A52 Brian Clough Way West	90.4	17	23	87.2	16	21
B6003 Toton Lane N	87.2	10	43	88.4	11	46
Junction PRC	-0.5% (70s cycle time)			1.8% (70s cycle time)		
2026 Do Something						
A52 Brian Clough Way NE	83.0	14	22	65.0	7	15
Bardills Garden Centre Parking	1.2	0	19	3.0	0	19
B6003 Toton Lane S	63.1	5	31	86.2	10	43
A52 Brian Clough Way West	90.3	17	22	87.3	16	21
B6003 Toton Lane N	89.2	11	46	92.4	13	55
Junction PRC	-0.3% (70s Cycle Time)			-2.7% (70s Cycle Time)		
2041 Reference Case						
A52 Brian Clough Way NE	87.2	18	29	66.3	8	16
Bardills Garden Centre Parking	1.2	0	18	2.9	0	19
B6003 Toton Lane S	79.8	8	37	91.4	12	52
A52 Brian Clough Way West	93.2	20	26	99.7	39	57

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	DoS (%)	MMQ (PCU)	Delay /PCU (s)	DoS (%)	MMQ (PCU)	Delay /PCU (s)
B6003 Toton Lane N	77.4	7	34	90.9	12	51
Junction PRC	-3.6% (70s Cycle Time)			-10.7 (70s Cycle Time)		
2041 Do Something						
A52 Brian Clough Way NE	88.9	18	29	65.6	8	16
Bardills Garden Centre Parking	1.2	0	18	3.0	0	19
B6003 Toton Lane S	88.9	10	45	93.1	13	57
A52 Brian Clough Way West	92.9	19	25	98.7	35	48
B6003 Toton Lane N	78.9	8	35	92.9	13	56
Junction PRC	-3.2% (70s Cycle Time)			-9.7% (70s Cycle Time)		

3.3.9 As set out within **Table 3.2**, the junction capacity assessment results indicate that in the 2041 Reference Case assessment scenario, the junction operates at practical capacity, with the DoS forecast as 93.2% and 99.7% on the A52 Brian Clough Way W approach arm during the respective AM and PM peak periods. The overall junction PRC is recorded as -3.6% and -10.7% during the respective AM and PM peak periods.

3.3.10 Following the introduction of development traffic, the DoS on the A52 Brian Clough Way W approach arm is forecast to decrease, to 92.9% and 98.7% during the respective AM and PM peak periods. It is concluded that this is due to the EMGM's dynamic flow re-assignment across modelled scenarios.

3.3.11 In summary, the results of the revised methodology demonstrate that the proposed development will not have a severe impact at this junction, and therefore no further analysis or mitigation is deemed necessary. This differs from the analysis presented as part of the TA, which had previously suggested that an improvement scheme would be required to mitigate the impact of the proposed development at this location.

3.4 Local Highway Network Junction Capacity Results

3.4.1 As referenced within Section 2.4, junction capacity assessments for the local road network (NCC's network) have been prepared for a 2041 horizon year; which is consistent with the end of the emerging Greater Nottingham Strategic Plan.

Nottingham Road / Barratt Lane Ghost Right Turn Lane Junction

3.4.2 A summary of the results of the PICADY assessment for the Nottingham Road / Barratt Lane Ghost Right Turn Lane Junction is provided in **Table 3.2**, below, with the full Junctions 11 output report attached at **Appendix F**.

Table 3.2 Nottingham Road / Barratt Lane Junction Capacity Results

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
2041 Reference Case						
Barratt Lane	0.3	11.40	0.21	0.2	10.78	0.16
Nottingham Road SW	0.2	8.96	0.14	0.2	10.84	0.20
2041 Do Something						
Barratt Lane	0.2	11.31	0.18	0.2	10.96	0.15
Nottingham Road SW	0.2	9.37	0.17	0.2	10.94	0.19

3.4.3 As demonstrated above, the junction is forecast to operate well within its practical capacity in the 2041 Reference Case scenario, with a maximum RFC value of 0.21 recorded on the Barratt Lane approach arm during the AM peak period and a value of 0.20 recorded on the Nottingham Road SW ghost right turn lane during the PM peak period.

3.4.4 Following the introduction of Toton West development traffic, the junction continues to operate well within it practical capacity. This denotes that this junction will operate with ample residual capacity and no further analysis is deemed necessary.

Nottingham Road / Attenborough Lane / Bye Pass Road Signalised Crossroads

3.4.5 A summary of the results of the LinSig assessment for the Nottingham Road / Attenborough Lane / Bye Pass Road Signalised Crossroads is provided in **Table 3.3**, below, with the full output report attached at **Appendix F**.

Table 3.3 Nottingham Road / Attenborough Road Junction Capacity Results

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	DoS (%)	MMQ (PCU)	Delay /PCU (s)	DoS (%)	MMQ (PCU)	Delay /PCU (s)
2041 Reference Case						
Bye Pass Road NE	44.7	4	18	79.2	12	22

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	DoS (%)	MMQ (PCU)	Delay /PCU (s)	DoS (%)	MMQ (PCU)	Delay /PCU (s)
Bye Pass Road (between junctions)	47.0	8	13	61.6	7	7
Attenborough Lane SE	32.1	2	30	36.0	2	35
Nottingham Road S	70.1	10	24	63.4	9	21
Bye Pass Road (between junctions)	63.7	3	2	60.0	5	2
Attenborough Lane (NW)	69.5	5	33	75.6	5	38
Junction PRC	28.4% (70s Cycle Time)			13.7% (70s Cycle Time)		
2041 Do Something						
Bye Pass Road NE	47.9	5	18	81.6	13	23
Bye Pass Road (between junctions)	49.2	8	13	63.2	8	7
Attenborough Lane SE	34.4	3	30	36.0	2	35
Nottingham Road S	75.0	12	26	64.8	10	21
Bye Pass Road (between junctions)	68.1	5	2	61.1	5	2
Attenborough Lane (NW)	70.3	6	33	76.7	5	38
Junction PRC	20.0% (70s Cycle Time)			10.3% (70s Cycle Time)		

3.4.6 Table 3.5 demonstrates that the junction is forecast to operate well within its practical capacity during both the AM and PM peak periods in the 2041 Reference Case assessment scenario. Queues are limited on all approach arms of the junction, with minimal forecast delays.

3.4.7 Following the onset of development traffic (as assessed in the 2041 Do Something scenario), the junction continues to operate satisfactorily and well within its practical capacity. On this basis, no further analysis is deemed necessary at this location.

Chilwell Road / Imperial Road Simple Priority T Junction

3.4.8 A summary of the results of the PICADY assessment for the Chilwell Road / Imperial Road Simple Priority T Junction is provided in Table 3.6, below, with the full Junctions 11 output report attached at Appendix F.

Table 3.4 Chilwell Road / Imperial Road Junction Capacity Results

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
2041 Reference Case						
Imperial Road	0.1	8.36	0.13	0.2	8.14	0.16
Chilwell Road NE	0.2	6.06	0.10	0.3	4.41	0.13
2041 Do Something						
Imperial Road	0.1	8.45	0.12	0.2	8.38	0.15
Chilwell Road NE	0.2	6.20	0.10	0.3	4.39	0.12

3.4.9 As demonstrated above, the junction is forecast to operate well within its practical capacity in the 2041 Reference Case scenario, with maximum RFC values of 0.13 and 0.16 forecast on the Imperial Road approach arms during the respective AM and PM peak periods.

3.4.10 Following the introduction of Toton West development traffic, the junction continues to operate well within it practical capacity. This denotes that this junction will operate with ample residual capacity and no further analysis is deemed necessary.

4. Summary and Conclusion

4.1 Summary

4.1.1 mode has been commissioned by Bloor Homes Ltd, to provide transport and highways advice in relation to the Outline Planning Application (Ref: 25/00371/OUT) for a new residential development of 420 dwellings at Toton West in Broxtowe, Nottinghamshire.

4.1.2 The outputs from Scenario 1 of the EMGM, and MCC Surveys at Junctions of Interest within the AOI have been used to calculate furnessed turning flows, which have in turn informed updated junction capacity assessments; the results of which have been compared with the conclusions drawn as part of the submitted TA.

4.1.3 A suite of junction capacity assessments have been undertaken utilising furnessed turning flows, providing a secondary evidence base to NCC and NH, demonstrating that the proposals will not a severe impact on the operation of the local highway network.

4.2 Conclusion

4.2.1 The purpose of this TN is to provide a further assessment of the proposals at Toton West, underpinned by the EMGM, providing a secondary evidence base for comparison to the conclusions drawn from the appellants submitted TA. This exercise has been undertaken to demonstrate that the development of Toton West can provide safe and suitable access and will not result in any severe residual impact on the operation of the highway network.

4.2.2 The modelling assessments for scenario 1 have produced results that are largely consistent with the conclusions reached within the applicant's submitted TA, and as such, sufficient evidence has been presented to demonstrate that the proposals will not result in a severe impact on the safety and/or operation of the local highway network.

4.2.3 The one exception to this is in relation to the impacts at Bardills Roundabout; whereby the furnessed flows from Scenario 1 demonstrate that the proposed development will not have a severe impact, and therefore no further analysis or mitigation is deemed necessary. This differs from the analysis presented as part of the TA, which had previously suggested that an improvement scheme would be required to mitigate the impact of the proposed development at this location.

4.2.4 Based on the information presented within this TN, it is not considered that the proposed development will result in any severe residual cumulative impact, and therefore the Appeal site should be considered acceptable in terms of transport and highways.

mode
transport planning

APPENDICES

APPENDIX A

Communications with NCC

Subject: RE: Jan Witko Leave
Date: Wednesday, 29 July 2026 at 10:41:04 British Summer Time
From: Tom Boylan
To: Josh Norris, Patrick Magner
CC: Ben Fairgrieve, David Frisby, Matt Leek
Attachments: image001.png, image002.png, image003.png, image004.png, image005.png, image006.png, image007.gif, image008.png, image009.png, image010.png, image011.png, image012.png, image013.gif, image014.png, image015.png, image016.png, image017.png, image018.png, image019.png, image020.png, image021.png, image022.png, image023.png, image024.jpg

Hi Josh,

For consistency purposes please go with the absolute method and add this to the observed 2026 turning flows for each junction.

Thanks

Tom Boylan
Principal Officer Transport Planning | Transport Programme Delivery
Place Department | Nottinghamshire County Council
County Hall | Loughborough Road | West Bridgford | NG2 7QP
Tel: 0115 9772918

From: Josh Norris [redacted]
Sent: 29 July 2026 08:10
To: Tom Boylan [redacted] Patrick Magner [redacted]
Cc: Ben Fairgrieve [redacted] David Frisby [redacted] att Leek [redacted]
Subject: Re: Jan Witko Leave

CAUTION: This email was sent by an external email address. Please do not click on any links or download any attachments unless you know it originates from a trusted source.

Hi Tom,

Thank you for this.

What is the stance from NCC with respect to use of the below process for assessing junctions on the local network? As you can appreciate we really need to progress this as soon as possible.

Many thanks in advance.

Kind Regards,

Josh Norris BSc (Hons) MSc MCIHT
Associate Director

0121 794 8390
07990 276 384
[redacted]

mode transport planning
Griffin House, 18-19 Ludgate Hill, Birmingham, B3 1DW

keep up with mode:



be green, keep it on the screen!

From: Tom Boyla [redacted]
Date: Tuesday, 28 July 2026 at 17:50
To: Patrick Magne [redacted]
Cc: Ben Fairgrieve [redacted] David Frisby [redacted] Josh Norris [redacted] Matt Leek [redacted]
Subject: RE: Jan Witko Leave

Hi Patrick,

I have also been led to believe that National Highways have a preference for absolute so I have reached out to a colleague from Aecom who covers this patch to find out if this is set in stone. How many junctions are you looking at in total and how many are on the SRN?

Thanks

Tom Boylan
Principal Officer Transport Planning | Transport Programme Delivery
Place Department | Nottinghamshire County Council
County Hall | Loughborough Road | West Bridgford | NG2 7QP
Tel: 0115 9772918

From: Patrick Magner [redacted]
Sent: 28 July 2026 16:19
To: Tom Boylan [redacted]
Cc: Ben Fairgrieve [redacted] David Frisby [redacted]; Josh Norris [redacted] Matt Lee [redacted]
Subject: Re: Jan Witko Leave

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Hi Tom

Please see the below correspondence between us and Helen at Systra, who has advised to use the following methodology:

"To use the % difference between the DM and DS and then add this difference to the count data to create the 'new DS'."

Which as I understand differs from the methodology outlined within option 4 as set out within the BWB TN.

Please can you advise on which approach is correct and how we should proceed, as I am now a little confused on how to derive the furnessed OD flows to inform our modelling.

Kind regards

Patrick Magner BA (Hons) MSc
Senior Transport Planner

[redacted]

mode transport planning
Griffin House, 18-19 Ludgate Hill, Birmingham, B3 1DW

keep up with mode:



be green, keep it on the screen

From: O'MARA Helen [redacted]
Date: Tuesday, 28 July 2026 at 15:57
To: Josh Norris [redacted] HARRHY Hu [redacted]
Cc: Ben Fairgrieve [redacted]; David Frisb [redacted]; Patrick Magner [redacted]
Subject: RE: Jan Witko Leave

Hi Josh,

Very well thank you, I hope you are too?

We don't have a spreadsheet unfortunately, we usually just hand over the turning flows. I'm sure you can adapt the turning flow spreadsheet we have provided fairly easily to calculate the difference and also incorporate the count data. As Jon has stated on the Whyburn project the normal approach used in previous studies and in the note below by BWB who have done junction modelling on several studies using EMGM outputs is to use the % difference between the DM and DS and then add this difference to the count data to create the 'new DS'.

We have been advised recently by the NH consultant at AECOM that absolute is better so you may get queries from them if you use %. I personally disagree with this as the % method works for both low and high flow links unlike the absolute method which has a large margin for error as an absolute difference of say 50 looks very different on a low flow vs high flow link.

I hope that makes sense but we're happy to help if needed.

Thanks,
Helen

From: Josh Norris [redacted]
Sent: Tuesday, July , :
To: O'MARA Helen [redacted]; HARRHY Huw [redacted]
Cc: Ben Fairgrieve [redacted]; David Frisb [redacted]; Patrick Magner [redacted]
Subject: FW: Jan Witko Leave

Afternoon Both,

I hope you're both keeping well.

Further to our discussions with NCC below, is there a spreadsheet available which can be shared for the purpose of the traffic flow furnessing process?

Kind Regards,

Josh Norris BSc (Hons) MSc MCIHT
Associate Director

0121 794 8390
07990 276 384
[redacted]

mode transport planning
Griffin House, 18-19 Ludgate Hill, Birmingham, B3 1DW

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From: Tom Boylan [redacted]
Date: Tuesday, 28 July 2026 at 11:55
To: Josh Norris [redacted] Patrick Magner [redacted]
Cc: David Frisby [redacted]; Ben Fairgrie [redacted] Matt Leek [redacted]
Subject: RE: Jan Witko Leave

Hi Josh,

I would try and reach out to Helen O'Mara at Systra to see if they've got a template that has been produced previously for a EMGM model run. I don't recall being supplied with a spreadsheet by another consultant but I will double check my inbox and forward on if I do find something.

Thanks

Tom Boylan
Principal Officer Transport Planning | Transport Programme Delivery
Place Department | Nottinghamshire County Council
County Hall | Loughborough Road | West Bridgford | NG2 7QP
Tel: 0115 9772918

From: Josh Norris [redacted]
Sent: 28 July 2026 10:39
To: Tom Boylan [redacted]; Patrick Magner [redacted]
Cc: David Frisb [redacted] Ben Fairgrieve [redacted] Matt Lee [redacted]
Subject: Re: Jan Witko Leave

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Hi Tom,

Thanks for this.

Do you have a working example you can share with us of the furnessing technique you would like us to use? We have received the initial data outputs and are in the process of working through this, however obviously want to ensure this is in line with NCC's required methodology before we proceed with further modelling work.

Happy to arrange a short call today to discuss if this would be helpful, only as you can appreciate, time is very much of the essence on this.

Kind Regards,

Josh Norris BSc (Hons) MSc MCIHT
Associate Director

0121 794 8390
07990 276 384
[redacted]

mode transport planning
Griffin House, 18-19 Ludgate Hill, Birmingham, B3 1DW

keep up with mode:



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From: Tom Boylan [redacted]
Date: Tuesday, 28 Jul 2026 at 10:10
To: Patrick Magne [redacted]
Cc: David Frisb [redacted] Josh Norris [redacted] Ben Fairgrieve [redacted] Matt Leek [redacted]
Subject: RE: Jan Witko Leave

> You don't often get email fro [redacted]

Hi Patrick,

Unfortunately I don't have a copy of the Excel file that was prepared by BWB.

Kind regards,

Tom Boylan
Principal Officer Transport Planning | Transport Programme Delivery
Place Department | Nottinghamshire County Council
County Hall | Loughborough Road | West Bridgford | NG2 7QP
Tel: 0115 9772918

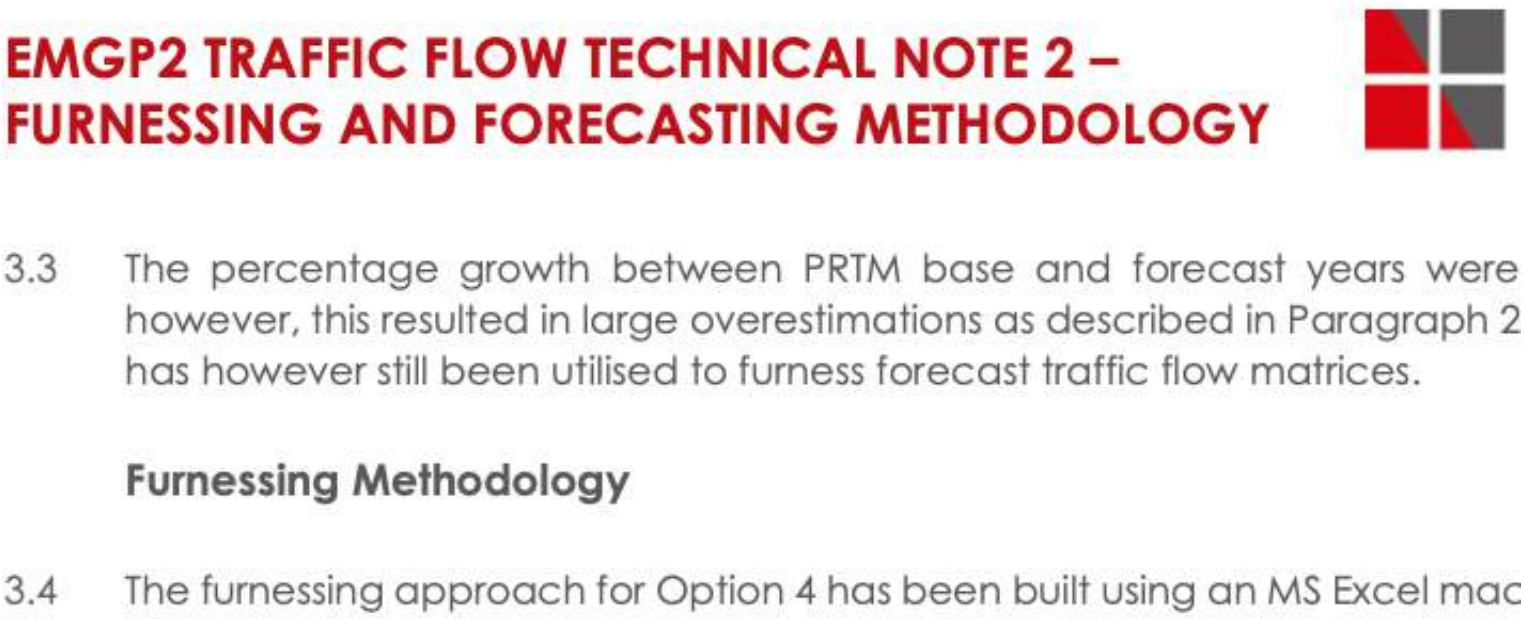
From: Patrick Magner [redacted]
Sent: 27 July 2026 16:29
To: Tom Boylan [redacted]
Cc: David Frisb [redacted] Josh Norris [redacted] Ben Fairgrieve [redacted] Matt Lee [redacted]
Subject: Re: Jan Witko Leave

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Hi Tom

I hope you are well.

I have been reviewing the BWB Furnessing TN and I note that in section 3.4, reference is made to an excel template available to prevent extensive spreadsheet work each time this process is required to be undertaken:


EMGP2 TRAFFIC FLOW TECHNICAL NOTE 2 – FURNESSING AND FORECASTING METHODOLOGY

3.3 The percentage growth between PRTM base and forecast years were however, this resulted in large overestimations as described in Paragraph 2 has however still been utilised to furness forecast traffic flow matrices.

Furnessing Methodology

3.4 The furnessing approach for Option 4 has been built using an MS Excel mac

I was just wondering if there is any chance you have access to this spreadsheet / are able to share this with us to aid in our furnessing work streams.

Apologies if I have interpreted this incorrectly and we need to just crack on ourselves, but I thought I should check!

Kind regards

Patrick Magner BA (Hons) MSc
Senior Transport Planner

0121 794 8390

[redacted]

mode transport planning
Griffin House, 18-19 Ludgate Hill, Birmingham, B3 1DW

keep up with mode:



[redacted]

APPENDIX B

Furnessed Turning Flows Working Spreadsheet

2025 MCC Data AM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	189	1505	601	5
B6003 N	242	0	100	265	2
A52 E	1350	73	0	257	3
B6003 S	463	229	212	0	0
Garden Cent	1	0	1	1	0

2025 MCC Data PM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	261	1409	469	0
B6003 N	209	0	89	287	0
A52 E	1006	82	0	264	0
B6003 S	514	305	252	0	1
Garden Cent	2	4	0	1	0

2026 MCC Data AM Growthed TEMPro 1.0122

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	191	1523	608	5
B6003 N	245	0	101	268	2
A52 E	1366	74	0	260	3
B6003 S	469	232	215	0	0
Garden Cent	1	0	1	1	0

2026 MCC Data PM Growthed TEMPro 1.0118

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	264	1426	475	0
B6003 N	211	0	90	290	0
A52 E	1018	83	0	267	0
B6003 S	520	309	255	0	1
Garden Cent	2	4	0	1	0

Absolute Difference Method

Systra Turning Counts: 2026 Reference Case AM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	489	1815	401	0
B6003 N	295	0	41	418	0
A52 E	1762	5	0	467	0
B6003 S	594	215	287	0	0
Garden Cent	0	0	0	0	0

Systra Turning Counts: 2041 Reference Case AM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	573	1785	497	0
B6003 N	353	0	47	363	0
A52 E	1967	10	0	327	0
B6003 S	776	218	260	0	0
Garden Cent	0	0	0	0	0

Systra Turning Counts: 2026 Do Something AM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	488	1805	419	0
B6003 N	285	0	41	428	0
A52 E	1750	5	0	477	0
B6003 S	636	228	326	0	0
Garden Cent	0	0	0	0	0

Systra Turning Counts: 2041 Do Something AM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	568	1771	526	0
B6003 N	349	0	47	370	0
A52 E	1959	11	0	351	0
B6003 S	848	231	256	0	0
Garden Cent	0	0	0	0	0

Systra Turning Counts: 2026 Reference Case PM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	419	1946	248	0
B6003 N	117	0	35	468	0
A52 E	1928	3	0	364	0
B6003 S	450	427	200	0	0
Garden Cent	0	0	0	0	0

Systra Turning Counts: 2041 Reference Case PM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	657	1988	359	0
B6003 N	109	0	48	467	0
A52 E	1889	1	0	365	0
B6003 S	540	491	206	0	0
Garden Cent	0	0	0	0	0

Systra Turning Counts: 2026 Do Something PM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	409	1933	316	0
B6003 N	111	0	40	482	0
A52 E	1829	0	0	408	0
B6003 S	512	469	201	0	0
Garden Cent	0	0	0	0	0

Systra Turning Counts: 2041 Do Something PM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	636	1969	429	0
B6003 N	112	0	48	476	0
A52 E	1866	1	0	373	0
B6003 S	565	497	209	0	0
Garden Cent	0	0	0	0	0

Furnessed Data: 2026 Reference Case AM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W					
B6003 N					
A52 E			Use MCC Data Growthed to 2026		
B6003 S					
Garden Cent					

Furnessed Data: 2041 Reference Case AM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	275	1494	705	5
B6003 N	303	0	107	213	2
A52 E	1571	80	0	120	3
B6003 S	650	235	187	0	0
Garden Cent	1	0	1	1	0

Furnessed Data: 2026 Do Something AM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	190	1514	627	5
B6003 N	236	0	101	278	2
A52 E	1354	74	0	270	3
B6003 S	511	244	253	0	0
Garden Cent	1	0	1	1	0

Furnessed Data: 2041 Do Something AM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	270	1480	733	5
B6003 N	299	0	107	220	2
A52 E	1563	80	0	144	3
B6003 S	722	248	183	0	0
Garden Cent	1	0	1	1	0

Furnessed Data: 2026 Reference Case PM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W					
B6003 N					
A52 E			Use MCC Data Growthed to 2026		
B6003 S					
Garden Cent					

Furnessed Data: 2041 Reference Case PM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	502	1468	585	0
B6003 N	204	0	103	289	0
A52 E	978	80	0	268	0
B6003 S	610	372	261	0	1
Garden Cent	2	4	0	1	0

Furnessed Data: 2026 Do Something PM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	255	1413	543	0
B6003 N	206	0	95	304	0
A52 E	918	80	0	310	0
B6003 S	582	351	256	0	1
Garden Cent	2	4	0	1	0

Furnessed Data: 2041 Do Something PM

Bardills Roundabout Junction

PCU Total

A52 Bardills	A52 W	B6003 N	A52 E	B6003 S	Garden Centre
A52 W	0	481	1449	656	0
B6003 N	207	0	103	298	0
A52 E	955	80	0	276	0
B6003 S	635	379	264	0	1
Garden Cent	2	4	0	1	0

2026 MCC Data AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	3	798
Barratt Lane	0	0	80
A6005 W	1024	77	0

2026 MCC Data AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	3	798
Barratt Lane	0	0	80
A6005 W	1024	77	0

Systra Turning Counts: 2026 Reference Case AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	76	965
Barratt Lane	22	0	91
A6005 W	1215	57	0

Systra Turning Counts: 2041 Reference Case AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	94	969
Barratt Lane	32	0	75
A6005 W	1298	37	0

Systra Turning Counts: 2026 Do Something AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	75	959
Barratt Lane	21	0	91
A6005 W	1240	58	0

Systra Turning Counts: 2041 Do Something AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	76	1022
Barratt Lane	28	0	69
A6005 W	1385	51	0

2026 MCC Data PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	4	1072
Barratt Lane	0	0	57
A6005 W	1045	95	0

2026 MCC Data PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	4	1072
Barratt Lane	0	0	57
A6005 W	1045	95	0

Systra Turning Counts: 2026 Reference Case PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	67	1149
Barratt Lane	7	0	50
A6005 W	1157	100	0

Systra Turning Counts: 2041 Reference Case PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	55	1255
Barratt Lane	0	0	49
A6005 W	1255	79	0

Systra Turning Counts: 2026 Do Something PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	17	1358
Barratt Lane	0	0	53
A6005 W	1218	93	0

Systra Turning Counts: 2041 Do Something PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	47	1289
Barratt Lane	0	0	47
A6005 W	1275	75	0

Absolute Difference Method

Furnessed Data: 2026 Reference Case AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E			
Barratt Lane			
A6005 W		Use MCC Data 2026	

Furnessed Data: 2041 Reference Case AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	21	801
Barratt Lane	10	0	64
A6005 W	1107	57	0

Furnessed Data: 2026 Do Something AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	2	792
Barratt Lane	-1	0	80
A6005 W	1049	78	0

Furnessed Data: 2041 Do Something AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	3	855
Barratt Lane	7	0	58
A6005 W	1194	70	0

Furnessed Data: 2026 Reference Case PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E			
Barratt Lane			
A6005 W		Use MCC Data 2026	

Furnessed Data: 2041 Reference Case PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	-8	1178
Barratt Lane	-7	0	56
A6005 W	1142	74	0

Furnessed Data: 2026 Do Something PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	-46	1280
Barratt Lane	-7	0	59
A6005 W	1106	87	0

Furnessed Data: 2041 Do Something PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

Total Vehicle

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	-16	1212
Barratt Lane	-7	0	54
A6005 W	1163	70	0

2026 MCC Data AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	33
Barratt Lane	0	0	1
A6005 W	47	4	0

2026 MCC Data AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	33
Barratt Lane	0	0	1
A6005 W	47	4	0

Systra Turning Counts: 2026 Reference Case AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	35
Barratt Lane	0	0	3
A6005 W	54	4	0

Systra Turning Counts: 2041 Reference Case AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	30
Barratt Lane	2	0	3
A6005 W	45	3	0

Systra Turning Counts: 2026 Do Something AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	35
Barratt Lane	0	0	3
A6005 W	54	4	0

Systra Turning Counts: 2041 Do Something AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	32
Barratt Lane	1	0	2
A6005 W	48	3	0

2026 MCC Data PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	19
Barratt Lane	0	0	1
A6005 W	16	0	0

2026 MCC Data PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	19
Barratt Lane	0	0	1
A6005 W	16	0	0

Systra Turning Counts: 2026 Reference Case PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	14
Barratt Lane	0	0	1
A6005 W	16	0	0

Systra Turning Counts: 2041 Reference Case PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	19
Barratt Lane	0	0	1
A6005 W	16	0	0

Systra Turning Counts: 2026 Do Something PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	22
Barratt Lane	0	0	1
A6005 W	17	0	0

Systra Turning Counts: 2041 Do Something PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	24
Barratt Lane	0	0	1
A6005 W	17	0	0

Absolute Difference Method

Furnessed Data: 2026 Reference Case AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E			
Barratt Lane			
A6005 W		Use MCC Data 2026	

Furnessed Data: 2041 Reference Case AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	28
Barratt Lane	2	0	1
A6005 W	37	3	0

Furnessed Data: 2026 Do Something AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	33
Barratt Lane	0	0	1
A6005 W	47	4	0

Furnessed Data: 2041 Do Something AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	30
Barratt Lane	1	0	1
A6005 W	41	3	0

Furnessed Data: 2026 Reference Case PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E			
Barratt Lane			
A6005 W		Use MCC Data 2026	

Furnessed Data: 2041 Reference Case PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	24
Barratt Lane	0	0	1
A6005 W	16	0	0

Furnessed Data: 2026 Do Something PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	27
Barratt Lane	0	0	1
A6005 W	17	0	0

Furnessed Data: 2041 Do Something PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Total

	A6005 E	Barratt Lane	A6005 W
A6005 E	0	0	29
Barratt Lane	0	0	1
A6005 W	17	0	0

Furnessed Data: 2026 Reference Case AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Percentage

	A6005 E	Barratt Lane	A6005 W
A6005 E			
Barratt Lane	Use MCC Data 2026		
A6005 W			

Furnessed Data: 2041 Reference Case AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Percentage

	A6005 E	Barratt Lane	A6005 W
A6005 E	0%	0%	3%
Barratt Lane	14%	0%	2%
A6005 W	3%	6%	0%

Furnessed Data: 2026 Do Something AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Percentage

	A6005 E	Barratt Lane	A6005 W
A6005 E	0%	0%	4%
Barratt Lane	-3%	0%	1%
A6005 W	4%	5%	0%

Furnessed Data: 2041 Do Something AM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Percentage

	A6005 E	Barratt Lane	A6005 W
A6005 E	0%	0%	3%
Barratt Lane	20%	0%	1%
A6005 W	3%	5%	0%

Furnessed Data: 2026 Reference Case PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Percentage

	A6005 E	Barratt Lane	A6005 W
A6005 E			
Barratt Lane	Use MCC Data 2026		
A6005 W			

Furnessed Data: 2041 Reference Case PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Percentage

	A6005 E	Barratt Lane	A6005 W
A6005 E	0%	0%	2%
Barratt Lane	0%	0%	2%
A6005 W	1%	0%	0%

Furnessed Data: 2026 Do Something PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Percentage

	A6005 E	Barratt Lane	A6005 W
A6005 E	0%	0%	2%
Barratt Lane	0%	0%	2%
A6005 W	2%	0%	0%

Furnessed Data: 2041 Do Something PM

Nottingham Road (A6005) / Barratt Lane Ghost Right Junction

HGV Percentage

	A6005 E	Barratt Lane	A6005 W
A6005 E	0%	0%	2%
Barratt Lane	0%	0%	2%
A6005 W	1%	0%	0%

2026 MCC Data AM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	35	467
Imperial Roa	18	0	40
Chilwell Roa	201	33	0

2026 MCC Data AM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	35	467
Imperial Roa	18	0	40
Chilwell Roa	201	33	0

Systra Turning Counts: 2026 Reference Case AM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	439	264
Imperial Roa	72	0	431
Chilwell Roa	261	295	0

Systra Turning Counts: 2041 Reference Case AM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	437	387
Imperial Roa	66	0	436
Chilwell Roa	256	303	0

Systra Turning Counts: 2026 Do Something AM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	439	305
Imperial Roa	72	0	428
Chilwell Roa	260	294	0

Systra Turning Counts: 2041 Do Something AM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	433	397
Imperial Roa	66	0	431
Chilwell Roa	249	303	0

2026 MCC Data PM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	24	251
Imperial Roa	32	0	36
Chilwell Roa	444	43	0

2026 MCC Data PM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	24	251
Imperial Roa	32	0	36
Chilwell Roa	444	43	0

Systra Turning Counts: 2026 Reference Case PM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	353	253
Imperial Roa	100	0	203
Chilwell Roa	416	332	0

Systra Turning Counts: 2041 Reference Case PM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	338	305
Imperial Roa	96	0	212
Chilwell Roa	471	337	0

Systra Turning Counts: 2026 Do Something PM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	354	256
Imperial Roa	105	0	197
Chilwell Roa	448	329	0

Systra Turning Counts: 2041 Do Something PM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	336	318
Imperial Roa	98	0	207
Chilwell Roa	470	333	0

Absolute Difference Method

Furnessed Data: 2026 Reference Case AM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa			
Imperial Roa			
Chilwell Roa		Use MCC Data Growthed to 2026	

Furnessed Data: 2041 Reference Case AM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	32	570
Imperial Roa	12	0	45
Chilwell Roa	195	41	0

Furnessed Data: 2026 Do Something AM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	34	488
Imperial Roa	18	0	37
Chilwell Roa	199	31	0

Furnessed Data: 2041 Do Something AM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	29	580
Imperial Roa	12	0	40
Chilwell Roa	188	40	0

Furnessed Data: 2026 Reference Case PM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa			
Imperial Roa			
Chilwell Roa		Use MCC Data Growthed to 2026	

Furnessed Data: 2041 Reference Case PM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	9	303
Imperial Roa	28	0	46
Chilwell Roa	498	48	0

Furnessed Data: 2026 Do Something PM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	25	254
Imperial Roa	36	0	31
Chilwell Roa	475	41	0

Furnessed Data: 2041 Do Something PM

Chilwell Road (B6464) / Imperial Road T Junction

Total Vehicle

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	8	316
Imperial Roa	30	0	41
Chilwell Roa	498	45	0

2026 MCC Data AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	1	25
Imperial Roa	0	0	0
Chilwell Roa	16	0	0

2026 MCC Data AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	1	25
Imperial Roa	0	0	0
Chilwell Roa	16	0	0

Systra Turning Counts: 2026 Reference Case AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	32	2
Imperial Roa	2	0	15
Chilwell Roa	14	7	0

Systra Turning Counts: 2041 Reference Case AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	33	4
Imperial Roa	1	0	18
Chilwell Roa	15	9	0

Systra Turning Counts: 2026 Do Something AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	32	2
Imperial Roa	2	0	15
Chilwell Roa	14	7	0

Systra Turning Counts: 2041 Do Something AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	32	4
Imperial Roa	1	0	18
Chilwell Roa	15	10	0

2026 MCC Data PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	0	11
Imperial Roa	0	0	0
Chilwell Roa	12	0	0

2026 MCC Data PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	0	11
Imperial Roa	0	0	0
Chilwell Roa	12	0	0

Systra Turning Counts: 2026 Reference Case PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	6	0
Imperial Roa	1	0	2
Chilwell Roa	7	5	0

Systra Turning Counts: 2041 Reference Case PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	7	5
Imperial Roa	1	0	1
Chilwell Roa	8	6	0

Systra Turning Counts: 2026 Do Something PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	6	1
Imperial Roa	1	0	1
Chilwell Roa	7	5	0

Systra Turning Counts: 2041 Do Something PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	7	5
Imperial Roa	1	0	1
Chilwell Roa	7	6	0

Absolute Difference Method

Furnessed Data: 2026 Reference Case AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa			
Imperial Roa			
Chilwell Roa		Use MCC Data Growthed to 2026	

Furnessed Data: 2041 Reference Case AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	2	27
Imperial Roa	-1	0	3
Chilwell Roa	17	2	0

Furnessed Data: 2026 Do Something AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	1	25
Imperial Roa	0	0	0
Chilwell Roa	16	0	0

Furnessed Data: 2041 Do Something AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	1	27
Imperial Roa	-1	0	3
Chilwell Roa	17	2	0

Furnessed Data: 2026 Reference Case PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa			
Imperial Roa			
Chilwell Roa		Use MCC Data Growthed to 2026	

Furnessed Data: 2041 Reference Case PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	0	15
Imperial Roa	0	0	0
Chilwell Roa	13	0	0

Furnessed Data: 2026 Do Something PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	0	11
Imperial Roa	0	0	0
Chilwell Roa	12	0	0

Furnessed Data: 2041 Do Something PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0	0	15
Imperial Roa	0	0	0
Chilwell Roa	13	0	0

HGV Percentage

Furnessed Data: 2026 Reference Case AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa			
Imperial Roa	Use MCC Data Growthed to 2026		
Chilwell Roa			

Furnessed Data: 2026 Reference Case PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa			
Imperial Roa	Use MCC Data Growthed to 2026		
Chilwell Roa			

Furnessed Data: 2041 Reference Case AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0%	6%	5%
Imperial Roa	-9%	0%	6%
Chilwell Roa	9%	4%	0%

Furnessed Data: 2041 Reference Case PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0%	5%	5%
Imperial Roa	1%	0%	0%
Chilwell Roa	-3%	1%	0%

Furnessed Data: 2026 Do Something AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0%	3%	5%
Imperial Roa	0%	0%	0%
Chilwell Roa	8%	0%	0%

Furnessed Data: 2026 Do Something PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0%	0%	4%
Imperial Roa	1%	0%	-1%
Chilwell Roa	-3%	0%	0%

Furnessed Data: 2041 Do Something AM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0%	5%	5%
Imperial Roa	-9%	0%	7%
Chilwell Roa	9%	6%	0%

Furnessed Data: 2041 Do Something PM

Chilwell Road (B6464) / Imperial Road T Junction

HGV

	Chilwell Roa	Imperial Roa	Chilwell Road E
Chilwell Roa	0%	6%	5%
Imperial Roa	1%	0%	0%
Chilwell Roa	-3%	1%	0%

2026 MCC Data AM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	15	501	29
Attenborough	35	0	29	20
A6005 W	828	29	0	207
Attenborough	33	37	301	0

2026 MCC Data AM Growthed TEMPro

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	15	501	29
Attenborough	35	0	29	20
A6005 W	828	29	0	207
Attenborough	33	37	301	0

Systra Turning Counts: 2026 Reference Case AM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	0	757	0
Attenborough	8	0	0	78
A6005 W	1123	0	0	173
Attenborough	0	72	317	0

Systra Turning Counts: 2041 Reference Case AM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	0	670	0
Attenborough	64	0	0	64
A6005 W	1211	0	0	162
Attenborough	0	83	415	0

Systra Turning Counts: 2026 Do Something AM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	0	766	0
Attenborough	8	0	0	77
A6005 W	1142	0	0	176
Attenborough	0	73	301	0

Systra Turning Counts: 2041 Do Something AM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	0	705	0
Attenborough	61	0	6	70
A6005 W	1282	0	0	177
Attenborough	0	92	412	0

2026 MCC Data PM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	20	750	29
Attenborough	27	0	34	43
A6005 W	697	30	0	310
Attenborough	28	33	319	0

2026 MCC Data PM Growthed TEMPro

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	20	750	29
Attenborough	27	0	34	43
A6005 W	697	30	0	310
Attenborough	28	33	319	0

Systra Turning Counts: 2026 Reference Case PM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	0	952	0
Attenborough	6	0	0	29
A6005 W	890	2	0	289
Attenborough	0	74	281	0

Systra Turning Counts: 2041 Reference Case PM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	0	1048	3
Attenborough	7	0	0	36
A6005 W	988	5	0	280
Attenborough	0	94	286	0

Systra Turning Counts: 2026 Do Something PM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	0	1130	0
Attenborough	7	0	0	35
A6005 W	959	7	0	270
Attenborough	0	127	269	0

Systra Turning Counts: 2041 Do Something PM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	0	1081	2
Attenborough	7	0	0	36
A6005 W	1007	5	0	282
Attenborough	0	105	282	0

Absolute Difference Method

Furnessed Data: 2026 Reference Case AM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E				
Attenborough				
A6005 W		Use MCC Data 2026		
Attenborough				

Furnessed Data: 2026 Reference Case PM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E				
Attenborough				
A6005 W		Use MCC Data 2026		
Attenborough				

Furnessed Data: 2041 Reference Case AM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	15	415	29
Attenborough	91	0	29	6
A6005 W	916	29	0	196
Attenborough	33	48	399	0

Furnessed Data: 2041 Reference Case PM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	20	846	32
Attenborough	29	0	34	50
A6005 W	795	33	0	301
Attenborough	28	53	323	0

Furnessed Data: 2026 Do Something AM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	15	511	29
Attenborough	35	0	29	19
A6005 W	848	29	0	210
Attenborough	33	38	285	0

Furnessed Data: 2026 Do Something PM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	20	928	29
Attenborough	28	0	34	49
A6005 W	766	35	0	291
Attenborough	28	87	307	0

Furnessed Data: 2041 Do Something AM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	15	449	29
Attenborough	88	0	35	12
A6005 W	988	29	0	211
Attenborough	33	57	396	0

Furnessed Data: 2041 Do Something PM

Nottingham Lane / Attenborough Lane

PCU Total

	A6005 E	Attenborough	A6005 W	Attenborough Lane N
A6005 E	0	20	879	31
Attenborough	29	0	34	50
A6005 W	814	34	0	303
Attenborough	28	64	319	0

APPENDIX C

Systra EMGM Turning Flows

2026 Reference case AM Peak

Lights

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		410	1399	329
B6003 N	162		41	405
A52 E	1361	5		412
B6003 S	520	197	274	

Heavies

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		39	208	36
B6003 N	66		0	6
A52 E	201	0		28
B6003 S	37	9	7	

Total

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		450	1607	365
B6003 N	228		41	412
A52 E	1562	5		439
B6003 S	557	206	280	

PCU Total

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W	0	489	1815	401
B6003 N	295	0	41	418
A52 E	1762	5	0	467
B6003 S	594	215	287	0

2026 Reference case PM Peak

Lights

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		385	1723	240
B6003 N	114		35	448
A52 E	1704	3		364
B6003 S	429	408	194	

Heavies

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		17	111	4
B6003 N	1		0	10
A52 E	112	0		0
B6003 S	11	9	3	

Total

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		402	1834	244
B6003 N	115		35	458
A52 E	1816	3		364
B6003 S	439	418	197	

PCU Total

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W	0	419	1946	248
B6003 N	117	0	35	468
A52 E	1928	3	0	364
B6003 S	450	427	200	0

2026 DS (Scenario 1) AM Peak

Lights

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		409	1392	347
B6003 N	154		41	416
A52 E	1362	5		420
B6003 S	565	210	313	

Heavies

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		40	206	36
B6003 N	66		0	6
A52 E	194	0		28
B6003 S	36	9	7	

Total

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		448	1599	383
B6003 N	220		41	422
A52 E	1556	5		448
B6003 S	601	219	319	

PCU Total

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W	0	488	1805	419
B6003 N	285	0	41	428
A52 E	1750	5	0	477
B6003 S	636	228	326	0

2026 DS (Scenario 1) PM Peak

Lights

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		381	1706	309
B6003 N	109		40	459
A52 E	1615	0		407
B6003 S	491	450	195	

Heavies

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		14	113	4
B6003 N	1		0	11
A52 E	107	0		0
B6003 S	10	10	3	

Total

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		395	1819	313
B6003 N	110		40	471
A52 E	1722	0		407
B6003 S	501	460	198	

PCU Total

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W	0	409	1933	316
B6003 N	111	0	40	482
A52 E	1829	0	0	408
B6003 S	512	469	201	0

2041 Reference case AM Peak

Lights

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		94	939
Barratt Lane	30		72
A6005 W	1253	34	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	615	0
Attenborough Lane S	63		0	51
A6005 W	1128	0		153
Attenborough Lane N	0	69	412	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		404	383
Imperial Road	66		419
Chilwell Road E	240	295	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		411	1421	373
B6003 N	204		46	351
A52 E	1676	10		325
B6003 S	690	209	245	

Heavies

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		0	30
Barratt Lane	2		3
A6005 W	45	3	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	28	0
Attenborough Lane S	1		0	6
A6005 W	42	0		4
Attenborough Lane N	0	7	2	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		33	4
Imperial Road	1		18
Chilwell Road E	15	9	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		81	182	62
B6003 N	75		0	6
A52 E	145	0		1
B6003 S	43	5	7	

Total

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		94	969
Barratt Lane	32		75
A6005 W	1298	37	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	643	0
Attenborough Lane S	64		0	58
A6005 W	1169	0		157
Attenborough Lane N	0	76	414	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		437	387
Imperial Road	66		436
Chilwell Road E	256	303	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		492	1603	435
B6003 N	278		47	357
A52 E	1822	10		326
B6003 S	733	214	252	

PCU Total

Total

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E	0	94	998
Barratt Lane	34	0	78
A6005 W	1342	40	0

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E	0	0	670	0
Attenborough Lane S	64	0	0	64
A6005 W	1211	0	0	162
Attenborough Lane N	0	83	415	0

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W	0	469	391
Imperial Road	67	0	454
Chilwell Road E	271	312	0

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W	0	573	1785	497
B6003 N	353	0	47	363
A52 E	1967	10	0	327
B6003 S	776	218	260	0

2041 Reference case PM Peak

Lights

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		55	1236
Barratt Lane	0		49
A6005 W	1238	79	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	1016	3
Attenborough Lane S	7		0	29
A6005 W	958	5		277
Attenborough Lane N	0	90	279	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		331	300
Imperial Road	95		211
Chilwell Road E	463	331	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		537	1782	350
B6003 N	106		48	446
A52 E	1692	1		364
B6003 S	518	470	199	

Heavies

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		0	19
Barratt Lane	0		1
A6005 W	16	0	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	16	0
Attenborough Lane S	0		0	4
A6005 W	15	0		2
Attenborough Lane N	0	2	4	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		7	5
Imperial Road	1		1
Chilwell Road E	8	6	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		60	103	4
B6003 N	1		0	10
A52 E	98	0		0
B6003 S	11	10	3	

Total

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		55	1255
Barratt Lane	0		49
A6005 W	1255	79	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	1032	3
Attenborough Lane S	7		0	32
A6005 W	973	5		279
Attenborough Lane N	0	92	282	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		338	305
Imperial Road	96		212
Chilwell Road E	471	337	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		597	1885	354
B6003 N	108		48	456
A52 E	1790	1		365
B6003 S	529	481	203	

PCU Total

Total

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E	0	55	1274
Barratt Lane	0	0	50
A6005 W	1271	80	0

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E	0	0	1048	3
Attenborough Lane S	7	0	0	36
A6005 W	988	5	0	280
Attenborough Lane N	0	94	286	0

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W	0	345	309
Imperial Road	97	0	214
Chilwell Road E	478	342	0

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W	0	657	1988	359
B6003 N	109	0	48	467
A52 E	1889	1	0	365
B6003 S	540	491	206	0

2041 DS (Scenario 1) AM Peak

Lights

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		76	991
Barratt Lane	27		67
A6005 W	1337	47	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	647	0
Attenborough Lane S	60		6	58
A6005 W	1194	0		167
Attenborough Lane N	0	78	408	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		401	394
Imperial Road	66		413
Chilwell Road E	233	293	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		409	1405	402
B6003 N	200		46	357
A52 E	1667	11		349
B6003 S	769	222	242	

Heavies

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		0	32
Barratt Lane	1		2
A6005 W	48	3	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	29	0
Attenborough Lane S	1		0	6
A6005 W	44	0		5
Attenborough Lane N	0	7	2	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		32	4
Imperial Road	1		18
Chilwell Road E	15	10	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		80	183	62
B6003 N	75		0	6
A52 E	146	0		1
B6003 S	39	5	7	

Total

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		76	1022
Barratt Lane	28		69
A6005 W	1385	51	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	676	0
Attenborough Lane S	61		6	64
A6005 W	1238	0		172
Attenborough Lane N	0	85	410	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		433	397
Imperial Road	66		431
Chilwell Road E	249	303	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		489	1588	464
B6003 N	274		47	363
A52 E	1813	11		350
B6003 S	808	227	249	

PCU Total

Total

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E	0	76	1054
Barratt Lane	30	0	71
A6005 W	1433	54	0

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E	0	0	705	0
Attenborough Lane S	61	0	6	70
A6005 W	1282	0	0	177
Attenborough Lane N	0	92	412	0

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W	0	465	401
Imperial Road	67	0	448
Chilwell Road E	264	312	0

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W	0	568	1771	526
B6003 N	349	0	47	370
A52 E	1959	11	0	351
B6003 S	848	231	256	0

2041 DS (Scenario 1) PM Peak

Lights

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		47	1265
Barratt Lane	0		47
A6005 W	1259	75	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	1042	2
Attenborough Lane S	7		0	28
A6005 W	977	5		279
Attenborough Lane N	0	101	274	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		330	314
Imperial Road	97		206
Chilwell Road E	463	328	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		531	1764	420
B6003 N	109		48	455
A52 E	1672	1		373
B6003 S	543	477	202	

Heavies

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		0	24
Barratt Lane	0		1
A6005 W	17	0	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	20	0
Attenborough Lane S	0		0	4
A6005 W	15	0		2
Attenborough Lane N	0	2	4	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		7	5
Imperial Road	1		1
Chilwell Road E	7	6	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		52	103	4
B6003 N	1		0	10
A52 E	97	0		0
B6003 S	11	10	3	

Total

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E		47	1289
Barratt Lane	0		47
A6005 W	1275	75	

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E		0	1062	2
Attenborough Lane S	7		0	32
A6005 W	992	5		280
Attenborough Lane N	0	103	278	

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W		336	318
Imperial Road	98		207
Chilwell Road E	470	333	

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W		583	1867	425
B6003 N	111		48	465
A52 E	1769	1		373
B6003 S	554	487	206	

PCU Total

Total

A6005 Nottingham Road/Barratt Lane	A6005 E	Barratt Lane	A6005 W
A6005 E	0	47	1312
Barratt Lane	0	0	48
A6005 W	1292	76	0

A6005 Nottingham Road/Attenborough Lane	A6005 E	Attenborough Lane S	A6005 W	Attenborough Lane N
A6005 E	0	0	1081	2
Attenborough Lane S	7	0	0	36
A6005 W	1007	5	0	282
Attenborough Lane N	0	105	282	0

Chilwell Road/Imperial Road priority junction	Chilwell Road W	Imperial Road	Chilwell Road E
Chilwell Road W	0	343	323
Imperial Road	99	0	209
Chilwell Road E	478	339	0

A52 Bardills Roundabout	A52 W	B6003 N	A52 E	B6003 S
A52 W	0	636	1969	429
B6003 N	112	0	48	476
A52 E	1866	1	0	373
B6003 S	565	497	209	0

APPENDIX D

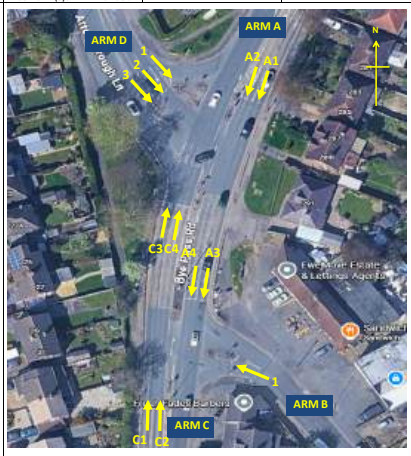
MCC Turning Flows

SITE:		DATE:
16	AUTO SURVEYS LTD	16/07/2026
LOCATION: NOTTINGHAM ROAD (NE) / BARRATT LANE / NOTTINGHAM ROAD (SW)		DAY: THURSDAY



JOB TITLE:		JOB NUMBER:
TOTON		15686

SITE:		DATE:
17	AUTO SURVEYS LTD	16/07/2026
LOCATION: BYE PASS ROAD (N) / ATTENBOROUGH LANE (SE) / BYE PASS ROAD (S) / ATTENBOROUGH		DAY: THURSDAY



JOB TITLE:		JOB NUMBER:
TOTON		15686

SITE:		DATE:
18	AUTO SURVEYS LTD	16/07/2026
LOCATION: B6464 CHILWELL ROAD (SW) / IMPERIAL ROAD / B6464 CHILWELL ROAD (NE)		DAY: THURSDAY



JOB TITLE:		JOB NUMBER:
TOTON		15686

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 16 **DATE:** 16/07/2026

LOCATION: NOTTINGHAM ROAD (NE) / BARRATT LANE / NOTTINGHAM ROAD (SW) **DAY:** THURSDAY

TIME	A TO B FROM NOTTINGHAM ROAD (NE) TO BARRATT LANE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	2	0	0	0	0	0	2
07:15	1	1	0	0	0	0	0	2
07:30	0	0	0	0	0	0	0	0
07:45	2	0	0	0	0	0	0	2
H/TOT	3	3	0	0	0	0	0	6
08:00	0	1	0	0	0	0	0	1
08:15	0	0	0	0	0	0	1	1
08:30	0	0	0	0	0	0	0	0
08:45	1	0	0	0	0	0	0	1
H/TOT	1	1	0	0	0	0	1	3
09:00	2	0	0	0	0	0	0	2
09:15	3	0	0	0	0	0	0	3
09:30	0	0	0	0	0	0	0	0
09:45	1	0	0	0	0	0	0	1
H/TOT	6	0	0	0	0	0	0	6
P/TOT	10	4	0	0	0	0	1	15

TIME	A TO C FROM NOTTINGHAM ROAD (NE) TO NOTTINGHAM ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	81	15	4	0	3	1	2	106
07:15	108	25	4	1	3	1	3	145
07:30	159	18	3	0	2	1	2	185
07:45	184	23	3	0	1	3	2	216
H/TOT	532	81	14	1	9	6	9	652
08:00	160	19	6	0	3	2	1	191
08:15	146	17	1	0	1	0	1	166
08:30	183	13	5	0	2	0	1	204
08:45	196	26	10	1	4	0	0	237
H/TOT	685	75	22	1	10	2	3	798
09:00	159	26	11	0	3	0	0	199
09:15	156	25	7	2	1	0	0	191
09:30	146	15	2	3	4	1	0	171
09:45	155	24	7	0	2	0	0	188
H/TOT	616	90	27	5	10	1	0	749
P/TOT	1833	246	63	7	29	9	12	2199

TIME	B TO A FROM BARRATT LANE TO NOTTINGHAM ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	1	0	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	1	0	0	0	0	0	0	1
H/TOT	1	0	0	0	0	0	0	1
P/TOT	1	1	0	0	0	0	0	2

TIME	B TO C FROM BARRATT LANE TO NOTTINGHAM ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	6	2	0	0	0	0	0	8
07:15	8	1	0	0	0	0	0	9
07:30	17	0	1	0	0	0	0	18
07:45	18	2	0	0	0	0	0	20
H/TOT	49	5	1	0	0	0	0	55
08:00	26	0	0	0	0	0	1	27
08:15	26	0	0	0	0	0	0	26
08:30	17	0	1	0	0	0	0	18
08:45	8	1	0	0	0	0	0	9
H/TOT	77	1	1	0	0	0	1	80
09:00	16	2	0	0	0	0	0	18
09:15	17	0	0	0	0	0	0	17
09:30	9	2	0	0	0	0	0	11
09:45	10	1	0	0	0	0	0	11
H/TOT	52	5	0	0	0	0	0	57
P/TOT	178	11	2	0	0	0	1	192

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 16 **DATE:** 16/07/2026

LOCATION: NOTTINGHAM ROAD (NE) / BARRATT LANE / NOTTINGHAM ROAD (SW) **DAY:** THURSDAY

TIME	A TO B FROM NOTTINGHAM ROAD (NE) TO BARRATT LANE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	1	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0
16:45	1	0	0	0	0	0	0	1
H/TOT	1	1	0	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	2	0	0	0	0	0	0	2
17:45	2	0	0	0	0	0	0	2
H/TOT	4	0	0	0	0	0	0	4
18:00	0	0	0	0	0	0	0	0
18:15	1	0	0	0	0	0	0	1
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
P/TOT	6	1	0	0	0	0	0	7

TIME	A TO C FROM NOTTINGHAM ROAD (NE) TO NOTTINGHAM ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	208	28	1	0	1	5	0	243
16:15	241	25	1	0	3	2	4	276
16:30	222	26	3	1	3	2	1	258
16:45	244	28	3	0	2	4	3	284
H/TOT	915	107	8	1	9	13	8	1061
17:00	281	22	2	0	4	6	5	320
17:15	241	16	3	0	2	3	3	268
17:30	221	12	3	0	1	1	4	242
17:45	225	9	0	0	4	2	2	242
H/TOT	968	59	8	0	11	12	14	1072
18:00	211	9	3	0	2	3	4	232
18:15	206	14	2	0	3	1	4	230
18:30	215	12	2	1	2	1	3	236
18:45	152	20	2	0	2	0	1	177
H/TOT	784	55	9	1	9	5	12	875
P/TOT	2667	221	25	2	29	30	34	3008

TIME	B TO A FROM BARRATT LANE TO NOTTINGHAM ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	1	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	1	0	0	0	0	0	0	1
H/TOT	1	0	1	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	1	0	0	0	0	0	0	1
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
P/TOT	2	0	1	0	0	0	0	3

TIME	B TO C FROM BARRATT LANE TO NOTTINGHAM ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	6	3	0	0	0	0	0	9
16:15	6	3	0	0	0	0	0	9
16:30	15	1	0	0	0	0	0	16
16:45	11	2	0	0	0	0	2	15
H/TOT	38	9	0	0	0	0	2	49
17:00	10	1	1	0	0	1	0	13
17:15	12	3	0	0	0	0	0	15
17:30	7	1	0	0	0	0	0	8
17:45	18	3	0	0	0	0	0	21
H/TOT	47	8	1	0	0	1	0	57
18:00	12	0	0	0	0	0	0	12
18:15	12	0	0	0	0	0	0	12
18:30	9	1	0	0	0	0	1	11
18:45	15	0	0	0	0	0	2	17
H/TOT	48	1	0	0	0	0	3	52
P/TOT	133	18	1	0	0	1	5	158

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 16 **DATE:** 16/07/2026

LOCATION: NOTTINGHAM ROAD (NE) / BARRATT LANE / NOTTINGHAM ROAD (SW) **DAY:** THURSDAY

TIME	C TO A FROM NOTTINGHAM ROAD (SW) TO NOTTINGHAM ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	132	26	3	0	3	2	1	167
07:15	220	31	9	0	3	1	1	265
07:30	219	26	9	0	4	0	1	259
07:45	215	27	3	0	2	3	2	252
H/TOT	786	110	24	0	12	6	5	943
08:00	210	32	4	1	4	2	2	255
08:15	238	30	10	0	3	0	5	286
08:30	222	24	10	0	2	0	5	263
08:45	184	17	9	2	2	4	2	220
H/TOT	854	103	33	3	11	6	14	1024
09:00	182	32	4	0	3	2	1	224
09:15	156	27	4	2	2	1	1	193
09:30	147	19	5	4	1	0	0	176
09:45	145	23	9	2	2	1	1	183
H/TOT	630	101	22	8	8	4	3	776
P/TOT	2270	314	79	11	31	16	22	2743

C TO B FROM NOTTINGHAM ROAD (SW) TO BARRATT LANE							
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
5	1	0	0	0	0	0	6
6	3	1	0	0	0	0	10
3	0	1	0	0	0	0	4
14	2	0	0	0	0	1	17
28	6	2	0	0	0	1	37
13	3	2	0	0	0	1	19
11	1	1	0	0	0	0	13
12	2	0	0	0	0	0	14
26	4	1	0	0	0	0	31
62	10	4	0	0	0	1	77
8	0	0	0	0	0	0	8
11	2	0	0	0	0	0	13
6	1	0	0	0	0	0	7
10	1	0	0	0	0	0	11
35	4	0	0	0	0	0	39
125	20	6	0	0	0	2	153

TIME	TO ARM A NOTTINGHAM ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	132	26	3	0	3	2	1	167
07:15	220	31	9	0	3	1	1	265
07:30	219	27	9	0	4	0	1	260
07:45	215	27	3	0	2	3	2	252
H/TOT	786	111	24	0	12	6	5	944
08:00	210	32	4	1	4	2	2	255
08:15	238	30	10	0	3	0	5	286
08:30	222	24	10	0	2	0	5	263
08:45	184	17	9	2	2	4	2	220
H/TOT	854	103	33	3	11	6	14	1024
09:00	182	32	4	0	3	2	1	224
09:15	156	27	4	2	2	1	1	193
09:30	147	19	5	4	1	0	0	176
09:45	146	23	9	2	2	1	1	184
H/TOT	631	101	22	8	8	4	3	777
P/TOT	2271	315	79	11	31	16	22	2745

FROM ARM A NOTTINGHAM ROAD (NE)							
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
81	17	4	0	3	1	2	108
109	26	4	1	3	1	3	147
159	18	3	0	2	1	2	185
186	23	3	0	1	3	2	218
535	84	14	1	9	6	9	658
160	20	6	0	3	2	1	192
146	17	1	0	1	0	2	167
183	13	5	0	2	0	1	204
197	26	10	1	4	0	0	238
686	76	22	1	10	2	4	801
161	26	11	0	3	0	0	201
159	25	7	2	1	0	0	194
146	15	2	3	4	1	0	171
156	24	7	0	2	0	0	189
622	90	27	5	10	1	0	755
1843	350	63	7	29	9	13	2214

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 16 **DATE:** 16/07/2026

LOCATION: NOTTINGHAM ROAD (NE) / BARRATT LANE / NOTTINGHAM ROAD (SW) **DAY:** THURSDAY

TIME	C TO A FROM NOTTINGHAM ROAD (SW) TO NOTTINGHAM ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	230	23	3	0	1	1	4	262
16:15	202	16	3	0	3	2	1	227
16:30	204	21	1	1	2	4	0	233
16:45	232	18	1	0	2	1	0	254
H/TOT	868	78	8	1	8	8	5	976
17:00	236	15	1	0	3	5	1	261
17:15	247	21	2	0	3	2	4	279
17:30	236	16	1	0	2	3	0	258
17:45	216	25	1	2	1	2	0	247
H/TOT	935	77	5	2	9	12	5	1045
18:00	212	15	2	0	5	2	0	236
18:15	195	10	2	0	1	4	0	212
18:30	198	12	2	0	3	1	0	216
18:45	176	11	1	0	2	10	0	200
H/TOT	781	48	7	0	11	17	0	864
P/TOT	2584	203	20	3	28	37	10	2885

C TO B FROM NOTTINGHAM ROAD (SW) TO BARRATT LANE							
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
19	2	1	0	0	0	0	22
13	1	0	0	0	0	0	14
27	4	0	0	0	0	0	31
19	1	0	0	0	0	0	20
78	8	1	0	0	0	0	87
23	3	0	0	0	0	1	27
20	0	0	0	0	0	0	20
22	0	0	0	0	0	0	22
22	4	0	0	0	0	0	26
87	7	0	0	0	0	1	95
20	2	0	0	0	0	2	24
18	0	1	0	0	0	1	20
17	1	0	0	0	0	0	18
19	1	0	0	0	0	0	20
74	4	1	0	0	0	3	82
239	19	2	0	0	0	4	264

TIME	TO ARM A NOTTINGHAM ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	230	23	4	0	1	1	4	263
16:15	202	16	3	0	3	2	1	227
16:30	204	21	1	1	2	4	0	233
16:45	233	18	1	0	2	1	0	255
H/TOT	869	78	9	1	8	8	5	978
17:00	236	15	1	0	3	5	1	261
17:15	247	21	2	0	3	2	4	279
17:30	236	16	1	0	2	3	0	258
17:45	216	25	1	2	1	2	0	247
H/TOT	935	77	5	2	9	12	5	1045
18:00	212	15	2	0	5	2	0	236
18:15	196	10	2	0	1	4	0	213
18:30	198	12	2	0	3	1	0	216
18:45	176	11	1	0	2	10	0	200
H/TOT	782	48	7	0	11	17	0	865
P/TOT	2586	203	21	3	28	37	10	2888

FROM ARM A NOTTINGHAM ROAD (NE)							
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
208	28	1	0	1	5	0	243
241	26	1	0	3	2	4	277
222	26	3	1	3	2	1	258
245	28	3	0	2	4	3	285
916	108	8	1	9	13	8	1063
281	22	2	0	4	6	5	320
241	16	3	0	2	3	3	268
223	12	3	0	1	1	4	244
227	9	0	0	4	2	2	244
972	59	8	0	11	12	14	1076
211	9	3	0	2	3	4	232
207	14	2	0	3	1	4	231
215	12	2	1	2	1	3	236
152	20	2	0	2	0	1	177
785	55	9	1	9	5	12	876
2673	222	25	2	29	30	34	3015

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 16 **DATE:** 16/07/2026

LOCATION: NOTTINGHAM ROAD (NE) / BARRATT LANE / NOTTINGHAM ROAD (SW) **DAY:** THURSDAY

TIME	TO ARM B BARRATT LANE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	5	3	0	0	0	0	0	8
07:15	7	4	1	0	0	0	0	12
07:30	3	0	1	0	0	0	0	4
07:45	16	2	0	0	0	0	1	19
H/TOT	31	9	2	0	0	0	1	43
08:00	13	4	2	0	0	0	1	20
08:15	11	1	1	0	0	0	1	14
08:30	12	2	0	0	0	0	0	14
08:45	27	4	1	0	0	0	0	32
H/TOT	63	11	4	0	0	0	2	80
09:00	10	0	0	0	0	0	0	10
09:15	14	2	0	0	0	0	0	16
09:30	6	1	0	0	0	0	0	7
09:45	11	1	0	0	0	0	0	12
H/TOT	41	4	0	0	0	0	0	45
P/TOT	135	24	6	0	0	0	3	168

TIME	FROM ARM B BARRATT LANE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	6	2	0	0	0	0	0	8
07:15	8	1	0	0	0	0	0	9
07:30	17	1	1	0	0	0	0	19
07:45	18	2	0	0	0	0	0	20
H/TOT	49	6	1	0	0	0	0	56
08:00	26	0	0	0	0	0	1	27
08:15	26	0	0	0	0	0	0	26
08:30	17	0	1	0	0	0	0	18
08:45	8	1	0	0	0	0	0	9
H/TOT	77	1	1	0	0	0	1	80
09:00	16	2	0	0	0	0	0	18
09:15	17	0	0	0	0	0	0	17
09:30	9	2	0	0	0	0	0	11
09:45	11	1	0	0	0	0	0	12
H/TOT	53	5	0	0	0	0	0	58
P/TOT	179	12	2	0	0	0	1	194

TIME	TO ARM C NOTTINGHAM ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	87	17	4	0	3	1	2	114
07:15	116	26	4	1	3	1	3	154
07:30	176	18	4	0	2	1	2	203
07:45	202	25	3	0	1	3	2	236
H/TOT	581	86	15	1	9	6	9	707
08:00	186	19	6	0	3	2	2	218
08:15	172	17	1	0	1	0	1	192
08:30	200	13	6	0	2	0	1	222
08:45	204	27	10	1	4	0	0	246
H/TOT	762	76	23	1	10	2	4	878
09:00	175	28	11	0	3	0	0	217
09:15	173	25	7	2	1	0	0	208
09:30	155	17	2	3	4	1	0	182
09:45	165	25	7	0	2	0	0	199
H/TOT	668	95	27	5	10	1	0	806
P/TOT	2011	257	65	7	29	9	13	2391

TIME	FROM ARM C NOTTINGHAM ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	137	27	3	0	3	2	1	173
07:15	226	34	10	0	3	1	1	275
07:30	222	26	10	0	4	0	1	263
07:45	229	29	3	0	2	3	3	269
H/TOT	814	116	26	0	12	6	6	980
08:00	223	35	6	1	4	2	3	274
08:15	249	31	11	0	3	0	5	299
08:30	234	26	10	0	2	0	5	277
08:45	210	21	10	2	2	4	2	251
H/TOT	916	113	37	3	11	6	15	1101
09:00	190	32	4	0	3	2	1	232
09:15	167	29	4	2	2	1	1	206
09:30	153	20	5	4	1	0	0	183
09:45	155	24	9	2	2	1	1	194
H/TOT	665	105	22	8	8	4	3	815
P/TOT	2395	334	85	11	31	16	24	2896

TIME	TO ARM B BARRATT LANE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	19	2	1	0	0	0	0	22
16:15	13	2	0	0	0	0	0	15
16:30	27	4	0	0	0	0	0	31
16:45	20	1	0	0	0	0	0	21
H/TOT	79	9	1	0	0	0	0	89
17:00	23	3	0	0	0	0	1	27
17:15	20	0	0	0	0	0	0	20
17:30	24	0	0	0	0	0	0	24
17:45	24	4	0	0	0	0	0	28
H/TOT	91	7	0	0	0	0	1	99
18:00	20	2	0	0	0	0	2	24
18:15	19	0	1	0	0	0	1	21
18:30	17	1	0	0	0	0	0	18
18:45	19	1	0	0	0	0	0	20
H/TOT	75	4	1	0	0	0	3	83
P/TOT	245	20	2	0	0	0	4	271

TIME	FROM ARM B BARRATT LANE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	6	3	1	0	0	0	0	10
16:15	6	3	0	0	0	0	0	9
16:30	15	1	0	0	0	0	0	16
16:45	12	2	0	0	0	0	2	16
H/TOT	39	9	1	0	0	0	2	51
17:00	10	1	1	0	0	1	0	13
17:15	12	3	0	0	0	0	0	15
17:30	7	1	0	0	0	0	0	8
17:45	18	3	0	0	0	0	0	21
H/TOT	47	8	1	0	0	1	0	57
18:00	12	0	0	0	0	0	0	12
18:15	13	0	0	0	0	0	0	13
18:30	9	1	0	0	0	0	1	11
18:45	15	0	0	0	0	0	2	17
H/TOT	49	1	0	0	0	0	3	53
P/TOT	135	18	2	0	0	1	5	161

TIME	TO ARM C NOTTINGHAM ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	214	31	1	0	1	5	0	252
16:15	247	28	1	0	3	2	4	285
16:30	237	27	3	1	3	2	1	274
16:45	255	30	3	0	2	4	5	299
H/TOT	953	116	8	1	9	13	10	1110
17:00	291	23	3	0	4	7	5	333
17:15	253	19	3	0	2	3	3	283
17:30	228	13	3	0	1	1	4	250
17:45	243	12	0	0	4	2	2	263
H/TOT	1015	67	9	0	11	13	14	1129
18:00	223	9	3	0	2	3	4	244
18:15	218	14	2	0	3	1	4	242
18:30	224	13	2	1	2	1	4	247
18:45	167	20	2	0	2	0	3	194
H/TOT	832	56	9	1	9	5	15	927
P/TOT	2800	239	26	2	29	31	39	3166

TIME	FROM ARM C NOTTINGHAM ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	249	25	4	0	1	1	4	284
16:15	215	17	3	0	3	2	1	241
16:30	231	25	1	1	2	4	0	264
16:45	251	19	1	0	2	1	0	274
H/TOT	946	86	9	1	8	8	5	1063
17:00	259	18	1	0	3	5	2	288
17:15	267	21	2	0	3	2	4	299
17:30	258	16	1	0	2	3	0	280
17:45	238	29	1	2	1	2	0	273
H/TOT	1022	84	5	2	9	12	6	1140
18:00	232	17	2	0	5	2	2	260
18:15	213	10	3	0	1	4	1	232
18:30	215	13	2	0	3	1	0	234
18:45	195	12	1	0	2	10	0	220
H/TOT	855	52	8	0	11	17	3	946
P/TOT	2823	222	22	3	28	37	14	3149

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 17

DATE: 16/07/2026

LOCATION: BYE PASS ROAD (N) / ATTENBOROUGH LANE (SE) / BYE PASS ROAD (S) / ATTENBOROUGH LANE (NW)

DAY: THURSDAY

TIME	A TO B FROM BYE PASS ROAD (N) TO ATTENBOROUGH LANE (SE)								A TO C FROM BYE PASS ROAD (N) TO BYE PASS ROAD (S)								A TO D FROM BYE PASS ROAD (N) TO ATTENBOROUGH LANE (NW)								B TO A FROM ATTENBOROUGH LANE (SE) TO BYE PASS ROAD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	1	0	0	0	0	0	1	51	10	3	0	1	1	0	66	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	2
07:15	4	0	0	0	0	0	0	4	72	21	2	1	2	1	1	100	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3
07:30	1	0	0	0	0	0	0	1	115	14	2	0	1	1	1	134	4	1	0	0	0	0	0	5	3	1	1	0	0	0	0	5
07:45	3	0	0	0	0	0	0	3	118	14	3	0	0	3	3	141	6	0	0	1	0	0	0	7	2	0	1	0	0	0	0	3
H/TOT	8	1	0	0	0	0	0	9	356	59	10	1	4	6	5	441	12	1	0	1	0	0	0	14	9	2	2	0	0	0	0	13
08:00	4	2	0	0	0	0	0	6	100	13	5	0	1	2	1	122	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1
08:15	3	1	0	0	0	0	0	4	85	12	1	0	1	0	1	100	4	0	1	0	0	0	0	5	10	0	0	0	0	0	0	10
08:30	2	0	0	0	0	0	0	2	117	11	3	1	0	0	0	132	14	1	0	0	0	0	0	15	13	0	1	0	0	0	0	14
08:45	3	0	0	0	0	0	0	3	101	18	7	0	1	0	0	127	6	0	0	0	0	0	0	6	6	1	1	0	0	0	0	8
H/TOT	12	3	0	0	0	0	0	15	403	54	16	1	3	2	2	481	26	1	1	0	0	0	0	28	30	1	2	0	0	0	0	33
09:00	7	1	0	0	0	0	0	8	86	16	7	0	1	0	0	110	4	1	0	0	0	0	0	5	2	1	0	0	0	0	0	3
09:15	3	0	0	0	0	0	0	3	88	16	7	2	0	0	0	113	3	0	0	0	0	0	0	3	5	0	1	0	0	0	0	6
09:30	1	0	0	0	0	0	0	1	95	10	2	3	1	1	0	112	3	3	0	0	0	0	0	6	8	0	0	0	0	0	0	8
09:45	0	0	0	0	0	0	0	0	86	18	4	0	1	0	1	110	6	0	0	0	0	0	0	6	7	0	0	0	0	0	0	7
H/TOT	11	1	0	0	0	0	0	12	355	60	20	5	3	1	1	445	16	4	0	0	0	0	0	20	22	1	1	0	0	0	0	24
P/TOT	31	5	0	0	0	0	0	36	1114	173	46	7	10	9	8	1367	54	6	1	1	0	0	0	62	61	4	5	0	0	0	0	70

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 17

DATE: 16/07/2026

LOCATION: BYE PASS ROAD (N) / ATTENBOROUGH LANE (SE) / BYE PASS ROAD (S) / ATTENBOROUGH LANE (NW)

DAY: THURSDAY

TIME	A TO B FROM BYE PASS ROAD (N) TO ATTENBOROUGH LANE (SE)								A TO C FROM BYE PASS ROAD (N) TO BYE PASS ROAD (S)								A TO D FROM BYE PASS ROAD (N) TO ATTENBOROUGH LANE (NW)								B TO A FROM ATTENBOROUGH LANE (SE) TO BYE PASS ROAD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	5	0	0	0	0	0	0	5	158	21	2	0	0	2	0	183	3	0	0	0	0	0	0	3	2	0	0	0	0	0	0	2
16:15	4	0	0	0	0	0	0	4	174	19	0	0	1	2	4	200	2	0	0	0	0	0	0	2	5	0	0	0	0	0	0	5
16:30	3	0	0	0	0	0	1	4	158	21	3	1	1	2	0	186	5	2	0	0	0	0	0	7	4	0	0	0	0	0	0	4
16:45	3	0	0	0	0	0	0	3	192	15	3	0	0	2	3	215	9	0	0	0	0	0	0	9	5	0	0	0	0	0	0	5
H/TOT	15	0	0	0	0	0	1	16	682	76	8	1	2	8	7	784	19	2	0	0	0	0	0	21	16	0	0	0	0	0	0	16
17:00	2	1	0	0	0	0	0	3	199	17	0	0	1	3	2	222	7	2	1	0	0	0	0	10	7	1	0	0	0	0	0	8
17:15	6	0	0	0	0	0	0	6	178	11	1	0	1	3	2	196	6	0	0	0	0	0	0	6	8	1	0	0	0	0	0	9
17:30	6	0	0	0	0	0	0	6	155	7	1	0	0	0	4	167	8	0	0	0	0	0	0	8	3	0	0	0	0	0	0	3
17:45	5	0	0	0	0	0	0	5	150	5	0	0	1	3	1	160	3	1	0	0	0	0	0	4	6	0	0	0	0	0	1	7
H/TOT	19	1	0	0	0	0	0	20	682	40	2	0	3	9	9	745	24	3	1	0	0	0	0	28	24	2	0	0	0	0	1	27
18:00	5	0	0	0	0	1	0	6	148	7	3	0	1	3	3	165	10	1	0	0	0	0	0	11	12	0	0	0	0	0	0	12
18:15	2	0	0	0	0	0	0	2	134	10	0	1	1	1	4	151	7	0	0	0	0	0	0	7	6	0	0	0	0	0	0	6
18:30	1	0	0	0	0	0	0	1	131	9	2	0	0	0	1	143	4	3	0	0	0	0	0	7	3	0	0	0	0	0	0	3
18:45	7	1	0	0	0	0	0	8	100	16	2	0	1	1	0	120	3	0	0	0	0	0	0	3	5	0	0	0	0	0	0	5
H/TOT	15	1	0	0	0	1	0	17	513	42	7	1	3	5	8	579	24	4	0	0	0	0	0	28	26	0	0	0	0	0	0	26
P/TOT	49	2	0	0	0	1	1	53	1877	158	17	2	8	22	24	2108	67	9	1	0	0	0	0	77	66	2	0	0	0	0	1	69

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 17

DATE: 16/07/2026

LOCATION: BYE PASS ROAD (N) / ATTENBOROUGH LANE (SE) / BYE PASS ROAD (S) / ATTENBOROUGH LANE (NW)

DAY: THURSDAY

TIME	B TO C FROM ATTENBOROUGH LANE (SE) TO BYE PASS ROAD (S)								B TO D FROM ATTENBOROUGH LANE (SE) TO ATTENBOROUGH LANE (NW)								C TO A FROM BYE PASS ROAD (S) TO BYE PASS ROAD (N)								C TO B FROM BYE PASS ROAD (S) TO ATTENBOROUGH LANE (SE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	6	1	0	0	0	0	0	7	1	1	0	0	0	0	0	2	07:00	121	25	3	0	2	1	1	153	1	0	0	0	0	0	0	1
07:15	2	2	0	0	0	0	0	4	3	0	0	0	0	0	0	3	07:15	182	25	7	1	1	2	3	221	0	0	0	0	0	0	0	0
07:30	5	0	0	0	0	0	0	5	1	0	0	0	0	0	0	1	07:30	210	21	6	0	2	0	1	240	0	0	0	0	0	0	0	0
07:45	9	1	0	0	0	0	0	10	9	2	0	0	0	0	0	11	07:45	181	26	3	0	0	2	2	214	1	0	0	0	0	0	0	1
H/TOT	22	4	0	0	0	0	0	26	14	3	0	0	0	0	0	17	H/TOT	694	97	19	1	5	5	7	828	2	0	0	0	0	0	0	2
08:00	2	1	0	0	0	0	0	3	8	0	0	0	0	0	1	9	08:00	178	23	3	1	1	2	2	210	3	1	0	0	1	0	0	5
08:15	6	1	0	0	0	0	0	7	3	0	0	0	0	0	0	3	08:15	195	14	9	0	1	0	2	221	3	1	0	0	0	0	0	4
08:30	11	2	0	0	0	0	0	13	6	0	0	0	0	0	0	6	08:30	164	21	8	0	0	0	4	197	3	1	0	0	0	0	0	4
08:45	2	0	1	0	1	0	0	4	2	0	0	0	0	0	0	2	08:45	140	9	9	2	1	3	1	165	14	0	0	0	0	1	0	15
H/TOT	21	4	1	0	1	0	0	27	19	0	0	0	0	0	1	20	H/TOT	677	67	29	3	3	5	9	793	23	3	0	0	1	1	0	28
09:00	4	0	0	0	0	0	0	4	7	0	0	0	0	0	0	7	09:00	133	32	5	0	0	2	2	174	3	0	0	0	0	0	0	3
09:15	14	1	0	0	0	0	0	15	5	2	0	0	0	0	0	7	09:15	113	26	3	2	1	1	1	147	7	0	0	0	0	0	0	7
09:30	8	1	0	0	0	0	0	9	5	0	0	0	0	0	0	5	09:30	117	17	5	3	1	0	0	143	5	1	0	0	0	0	0	6
09:45	8	2	0	0	0	0	0	10	6	1	0	0	0	0	0	7	09:45	107	14	8	1	0	1	1	132	6	1	0	1	1	0	0	9
H/TOT	34	4	0	0	0	0	0	38	23	3	0	0	0	0	0	26	H/TOT	470	89	21	6	2	4	4	596	21	2	0	1	1	0	0	25
P/TOT	77	12	1	0	1	0	0	91	56	6	0	0	0	0	1	63	P/TOT	1841	253	69	10	10	14	20	2217	46	5	0	1	2	1	0	55

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 17

DATE: 16/07/2026

LOCATION: BYE PASS ROAD (N) / ATTENBOROUGH LANE (SE) / BYE PASS ROAD (S) / ATTENBOROUGH LANE (NW)

DAY: THURSDAY

TIME	B TO C FROM ATTENBOROUGH LANE (SE) TO BYE PASS ROAD (S)								B TO D FROM ATTENBOROUGH LANE (SE) TO ATTENBOROUGH LANE (NW)								C TO A FROM BYE PASS ROAD (S) TO BYE PASS ROAD (N)								C TO B FROM BYE PASS ROAD (S) TO ATTENBOROUGH LANE (SE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	9	0	0	0	0	0	0	9	2	2	0	0	0	0	0	4	16:00	161	17	3	0	0	1	3	185	3	0	0	0	0	0	0	3
16:15	9	0	0	0	1	0	0	10	4	1	0	0	0	0	0	5	16:15	127	13	2	0	1	0	1	144	6	2	0	0	0	0	0	8
16:30	5	0	0	0	0	0	0	5	4	1	0	0	0	0	0	5	16:30	134	16	0	1	0	0	0	151	7	0	0	0	0	0	0	7
16:45	4	3	0	0	0	0	0	7	4	4	0	0	0	0	0	8	16:45	167	14	1	0	1	1	0	184	5	0	0	0	1	0	0	6
H/TOT	27	3	0	0	1	0	0	31	14	8	0	0	0	0	0	22	H/TOT	589	60	6	1	2	2	4	664	21	2	0	0	1	0	0	24
17:00	6	2	0	0	0	0	0	8	7	2	0	0	0	0	1	10	17:00	144	6	1	0	1	3	2	157	9	2	0	0	0	0	0	11
17:15	1	0	0	0	0	0	0	1	11	0	0	0	0	0	0	11	17:15	173	15	1	0	1	2	2	194	6	1	0	0	1	0	0	8
17:30	9	0	1	0	0	0	0	10	8	2	0	0	0	0	0	10	17:30	154	9	1	0	0	3	1	168	8	0	0	0	0	0	0	8
17:45	12	0	0	0	1	0	0	13	11	1	0	0	0	0	0	12	17:45	149	18	0	2	0	2	0	171	2	0	0	0	0	0	0	2
H/TOT	28	2	1	0	1	0	0	32	37	5	0	0	0	0	1	43	H/TOT	620	48	3	2	2	10	5	690	25	3	0	0	1	0	0	29
18:00	10	0	0	0	0	0	0	10	9	1	0	0	0	0	0	10	18:00	143	11	0	0	2	2	2	160	1	0	0	0	0	0	0	1
18:15	9	0	1	0	0	0	0	10	8	1	0	0	0	0	1	10	18:15	141	6	2	0	0	4	0	153	4	1	0	0	0	0	0	5
18:30	11	1	0	0	0	0	0	12	6	0	0	0	0	0	1	7	18:30	141	6	1	1	1	1	0	151	5	2	0	0	0	0	0	7
18:45	9	1	0	0	0	0	0	10	7	0	0	0	0	0	0	7	18:45	125	8	1	0	1	9	0	144	4	0	0	0	0	0	0	4
H/TOT	39	2	1	0	0	0	0	42	30	2	0	0	0	0	2	34	H/TOT	550	31	4	1	4	16	2	608	14	3	0	0	0	0	0	17
P/TOT	94	7	2	0	2	0	0	105	81	15	0	0	0	0	3	99	P/TOT	1759	139	13	4	8	28	11	1962	60	8	0	0	2	0	0	70

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 17 **DATE:** 16/07/2026

LOCATION: BYE PASS ROAD (N) / ATTENBOROUGH LANE (SE) / BYE PASS ROAD (S) / ATTENBOROUGH LANE (NW) **DAY:** THURSDAY

TIME	C TO D FROM BYE PASS ROAD (S) TO ATTENBOROUGH LANE (NW)								D TO A FROM ATTENBOROUGH LANE (NW) TO BYE PASS ROAD (N)								D TO B FROM ATTENBOROUGH LANE (NW) TO ATTENBOROUGH LANE (SE)								D TO C FROM ATTENBOROUGH LANE (NW) TO BYE PASS ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	12	1	0	0	1	0	0	14	2	0	1	0	0	0	0	3	07:00	1	0	0	0	0	0	0	1	31	6	2	0	2	0	2	43
07:15	28	2	0	0	2	0	0	32	2	1	1	0	0	0	0	4	07:15	1	0	0	0	0	0	0	1	32	2	0	0	1	0	2	37
07:30	23	5	1	0	2	0	0	31	10	0	0	0	0	0	0	10	07:30	4	0	0	0	0	0	0	4	49	6	0	0	1	0	0	56
07:45	33	4	0	0	2	1	0	40	5	1	0	0	0	0	0	6	07:45	6	0	0	0	0	0	0	6	66	4	0	0	1	0	1	72
H/TOT	96	12	1	0	7	1	0	117	19	2	2	0	0	0	0	23	H/TOT	12	0	0	0	0	0	0	12	178	18	2	0	5	0	5	208
08:00	35	6	1	0	2	0	1	45	4	1	0	0	0	0	0	5	08:00	8	0	0	0	0	0	0	8	50	5	1	0	2	0	0	58
08:15	34	11	2	0	2	0	1	50	9	0	0	0	0	0	0	9	08:15	7	2	1	0	0	0	0	10	60	3	1	0	1	0	1	66
08:30	44	2	2	0	2	0	0	50	7	1	0	0	0	0	0	8	08:30	2	0	1	0	0	0	0	3	66	1	2	0	2	0	1	72
08:45	41	8	0	0	1	0	0	50	9	0	1	0	0	0	0	10	08:45	10	2	1	0	0	0	0	13	87	5	1	0	1	0	0	94
H/TOT	154	27	5	0	7	0	2	195	29	2	1	0	0	0	0	32	H/TOT	27	4	3	0	0	0	0	34	263	14	5	0	6	0	2	290
09:00	41	3	0	0	2	0	0	46	8	1	0	0	0	0	0	9	09:00	7	0	0	0	0	0	0	7	66	9	4	0	2	0	0	81
09:15	29	3	1	0	2	0	0	35	5	1	0	0	0	0	0	6	09:15	9	2	0	0	0	0	0	11	55	9	0	0	1	0	0	65
09:30	35	3	0	1	0	0	0	39	6	1	0	0	0	0	0	7	09:30	4	0	0	0	0	0	0	4	46	3	1	0	3	0	0	53
09:45	36	8	1	0	1	0	0	46	4	1	0	0	0	0	0	5	09:45	4	1	0	0	0	0	0	5	66	5	2	0	1	0	0	74
H/TOT	141	17	2	1	5	0	0	166	23	4	0	0	0	0	0	27	H/TOT	24	3	0	0	0	0	0	27	233	26	7	0	7	0	0	273
P/TOT	391	56	8	1	19	1	2	478	71	8	3	0	0	0	0	82	P/TOT	63	7	3	0	0	0	0	73	674	58	14	0	18	0	7	771

TIME	C TO D FROM BYE PASS ROAD (S) TO ATTENBOROUGH LANE (NW)								D TO A FROM ATTENBOROUGH LANE (NW) TO BYE PASS ROAD (N)								D TO B FROM ATTENBOROUGH LANE (NW) TO ATTENBOROUGH LANE (SE)								D TO C FROM ATTENBOROUGH LANE (NW) TO BYE PASS ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	60	5	1	0	3	0	1	70	4	1	0	0	0	0	0	5	16:00	3	1	0	0	0	0	0	4	55	5	0	0	2	3	0	65
16:15	67	3	1	0	2	0	0	73	6	2	0	0	0	0	0	8	16:15	7	1	0	0	0	0	0	8	62	7	1	0	1	0	1	72
16:30	64	4	1	0	1	1	1	72	6	1	0	0	0	0	0	7	16:30	7	2	0	0	0	0	0	9	53	6	0	0	1	0	0	60
16:45	67	6	0	0	1	0	0	74	10	0	0	0	0	0	0	10	16:45	10	1	0	0	0	0	0	11	59	5	0	0	2	2	1	69
H/TOT	258	18	3	0	7	1	2	289	26	4	0	0	0	0	0	30	H/TOT	27	5	0	0	0	0	0	32	229	23	1	0	6	5	2	266
17:00	70	1	0	0	1	2	0	74	6	1	0	0	0	0	0	7	17:00	7	0	0	0	0	0	0	7	75	5	2	0	3	1	4	90
17:15	70	4	0	0	2	0	0	76	4	0	0	0	0	0	0	4	17:15	7	0	0	0	0	0	0	7	65	4	2	0	1	0	0	72
17:30	74	11	0	0	2	0	1	88	6	1	0	0	0	0	0	7	17:30	9	0	0	0	0	0	0	9	68	4	0	0	1	1	0	74
17:45	55	6	1	0	1	1	1	65	7	1	1	0	0	0	0	9	17:45	8	2	0	0	0	0	0	10	66	4	0	0	2	0	0	72
H/TOT	269	22	1	0	6	3	2	303	23	3	1	0	0	0	0	27	H/TOT	31	2	0	0	0	0	0	33	274	17	4	0	7	2	4	308
18:00	63	4	1	0	2	0	0	70	4	1	0	0	0	0	0	5	18:00	18	1	0	0	0	0	1	20	50	1	0	0	1	0	1	53
18:15	55	5	0	0	1	0	0	61	5	0	0	0	0	0	0	5	18:15	3	0	0	0	0	0	0	3	60	5	1	0	2	0	1	69
18:30	43	4	0	0	2	0	0	49	8	1	0	0	0	0	0	9	18:30	6	0	0	0	0	0	0	6	65	3	0	0	2	1	0	71
18:45	59	3	0	0	1	1	0	64	10	1	1	0	0	0	0	12	18:45	7	0	0	0	0	0	0	7	49	1	1	0	1	0	0	52
H/TOT	220	16	1	0	6	1	0	244	27	3	1	0	0	0	0	31	H/TOT	34	1	0	0	0	0	1	36	224	10	2	0	6	1	2	245
P/TOT	747	56	5	0	19	5	4	836	76	10	2	0	0	0	0	88	P/TOT	92	8	0	0	0	0	1	101	727	50	7	0	19	8	8	819

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 17 **DATE:** 16/07/2026

LOCATION: BYE PASS ROAD (N) / ATTENBOROUGH LANE (SE) / BYE PASS ROAD (S) / ATTENBOROUGH LANE (NW) **DAY:** THURSDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 17

DATE: 16/07/2026

LOCATION: BYE PASS ROAD (N) / ATTENBOROUGH LANE (SE) / BYE PASS ROAD (S) / ATTENBOROUGH LANE (NW)

DAY: THURSDAY

TIME	TO ARM A BYE PASS ROAD (N)								FROM ARM A BYE PASS ROAD (N)								TIME	TO ARM B ATTENBOROUGH LANE (SE)								FROM ARM B ATTENBOROUGH LANE (SE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	124	26	4	0	2	1	1	158	52	11	3	0	1	1	0	68	07:00	2	1	0	0	0	0	0	3	8	3	0	0	0	0	0	11
07:15	187	26	8	1	1	2	3	228	77	21	2	1	2	1	1	105	07:15	5	0	0	0	0	0	0	5	8	2	0	0	0	0	0	10
07:30	223	22	7	0	2	0	1	255	120	15	2	0	1	1	1	140	07:30	5	0	0	0	0	0	0	5	9	1	1	0	0	0	0	11
07:45	188	27	4	0	0	2	2	223	127	14	3	1	0	3	3	151	07:45	10	0	0	0	0	0	0	10	20	3	1	0	0	0	0	24
H/TOT	722	101	23	1	5	5	7	864	376	61	10	2	4	6	5	464	**H/TOT**	22	1	0	0	0	0	0	23	45	9	2	0	0	0	0	56
08:00	183	24	3	1	1	2	2	216	106	15	5	0	1	2	1	130	08:00	15	3	0	0	1	0	0	19	11	1	0	0	0	0	1	13
08:15	214	14	9	0	1	0	2	240	92	13	2	0	1	0	1	109	08:15	13	4	1	0	0	0	0	18	19	1	0	0	0	0	0	20
08:30	184	22	9	0	0	0	4	219	133	12	3	1	0	0	0	149	08:30	7	1	1	0	0	0	0	9	30	2	1	0	0	0	0	33
08:45	155	10	11	2	1	3	1	183	110	18	7	0	1	0	0	136	08:45	27	2	1	0	0	1	0	31	10	1	2	0	1	0	0	14
H/TOT	736	70	32	3	3	5	9	858	441	58	17	1	3	2	2	524	**H/TOT**	62	10	3	0	1	1	0	77	70	5	3	0	1	0	1	80
09:00	143	34	5	0	0	2	2	186	97	18	7	0	1	0	0	123	09:00	17	1	0	0	0	0	0	18	13	1	0	0	0	0	0	14
09:15	123	27	4	2	1	1	1	159	94	16	7	2	0	0	0	119	09:15	19	2	0	0	0	0	0	21	24	3	1	0	0	0	0	28
09:30	131	18	5	3	1	0	0	158	99	13	2	3	1	1	0	119	09:30	10	1	0	0	0	0	0	11	21	1	0	0	0	0	0	22
09:45	118	15	8	1	0	1	1	144	92	18	4	0	1	0	1	116	09:45	10	2	0	1	1	0	0	14	21	3	0	0	0	0	0	24
H/TOT	515	94	22	6	2	4	4	647	382	65	20	5	3	1	1	477	**H/TOT**	56	6	0	1	1	0	0	64	79	8	1	0	0	0	0	88
P/TOT	1973	265	77	10	10	14	20	2369	1199	184	47	8	10	9	8	1465	**P/TOT**	140	17	3	1	2	1	0	164	194	22	6	0	1	0	1	224

TIME	TO ARM A BYE PASS ROAD (N)								FROM ARM A BYE PASS ROAD (N)								TIME	TO ARM B ATTENBOROUGH LANE (SE)								FROM ARM B ATTENBOROUGH LANE (SE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	167	18	3	0	0	1	3	192	166	21	2	0	0	2	0	191	16:00	11	1	0	0	0	0	0	12	13	2	0	0	0	0	0	15
16:15	138	15	2	0	1	0	1	157	180	19	0	0	1	2	4	206	16:15	17	3	0	0	0	0	0	20	18	1	0	0	1	0	0	20
16:30	144	17	0	1	0	0	0	162	166	23	3	1	1	2	1	197	16:30	17	2	0	0	0	0	1	20	13	1	0	0	0	0	0	14
16:45	182	14	1	0	1	1	0	199	204	15	3	0	0	2	3	227	16:45	18	1	0	0	1	0	0	20	13	7	0	0	0	0	0	20
H/TOT	631	64	6	1	2	2	4	710	716	78	8	1	2	8	8	821	**H/TOT**	63	7	0	0	1	0	1	72	57	11	0	0	1	0	0	69
17:00	157	8	1	0	1	3	2	172	208	20	1	0	1	3	2	235	17:00	18	3	0	0	0	0	0	21	20	5	0	0	0	0	1	26
17:15	185	16	1	0	1	2	2	207	190	11	1	0	1	3	2	208	17:15	19	1	0	0	1	0	0	21	20	1	0	0	0	0	0	21
17:30	163	10	1	0	0	3	1	178	169	7	1	0	0	0	4	181	17:30	23	0	0	0	0	0	0	23	20	2	1	0	0	0	0	23
17:45	162	19	1	2	0	2	1	187	158	6	0	0	1	3	1	169	17:45	15	2	0	0	0	0	0	17	29	1	0	0	1	0	1	32
H/TOT	667	53	4	2	2	10	6	744	725	44	3	0	3	9	9	793	**H/TOT**	75	6	0	0	1	0	0	82	89	9	1	0	1	0	2	102
18:00	159	12	0	0	2	2	2	177	163	8	3	0	1	4	3	182	18:00	24	1	0	0	0	1	1	27	31	1	0	0	0	0	0	32
18:15	152	6	2	0	0	4	0	164	143	10	0	1	1	1	4	160	18:15	9	1	0	0	0	0	0	10	23	1	1	0	0	0	1	26
18:30	152	7	1	1	1	1	0	163	136	12	2	0	0	0	1	151	18:30	12	2	0	0	0	0	0	14	20	1	0	0	0	0	1	22
18:45	140	9	2	0	1	9	0	161	110	17	2	0	1	1	0	131	18:45	18	1	0	0	0	0	0	19	21	1	0	0	0	0	0	22
H/TOT	603	34	5	1	4	16	2	665	552	47	7	1	3	6	8	624	**H/TOT**	63	5	0	0	0	1	1	70	95	4	1	0	0	0	2	102
P/TOT	1901	151	15	4	8	28	12	2119	1993	169	18	2	8	23	25	2238	**P/TOT**	201	18	0	0	2	1	2	224	241	24	2	0	2	0	4	273

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 17 **DATE:** 16/07/2026

LOCATION: BYE PASS ROAD (N) / ATTENBOROUGH LANE (SE) / BYE PASS ROAD (S) / ATTENBOROUGH LANE (NW) **DAY:** THURSDAY

TIME	TO ARM C BYE PASS ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	88	17	5	0	3	1	2	116
07:15	106	25	2	1	3	1	3	141
07:30	169	20	2	0	2	1	1	195
07:45	193	19	3	0	1	3	4	223
H/TOT	556	81	12	1	9	6	10	675
08:00	152	19	6	0	3	2	1	183
08:15	151	16	2	0	2	0	2	173
08:30	194	14	5	1	2	0	1	217
08:45	190	23	9	0	3	0	0	225
H/TOT	687	72	22	1	10	2	4	798
09:00	156	25	11	0	3	0	0	195
09:15	157	26	7	2	1	0	0	193
09:30	149	14	3	3	4	1	0	174
09:45	160	25	6	0	2	0	1	194
H/TOT	622	90	27	5	10	1	1	756
P/TOT	1865	243	61	7	29	9	15	2229

TIME	FROM ARM C BYE PASS ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	134	26	3	0	3	1	1	168
07:15	210	27	7	1	3	2	3	253
07:30	233	26	7	0	4	0	1	271
07:45	215	30	3	0	2	3	2	255
H/TOT	792	109	20	1	12	6	7	947
08:00	216	30	4	1	4	2	3	260
08:15	232	26	11	0	3	0	3	275
08:30	211	24	10	0	2	0	4	251
08:45	195	17	9	2	2	4	1	230
H/TOT	854	97	34	3	11	6	11	1016
09:00	177	35	5	0	2	2	2	223
09:15	149	29	4	2	3	1	1	189
09:30	157	21	5	4	1	0	0	188
09:45	149	23	9	2	2	1	1	187
H/TOT	632	108	23	8	8	4	4	787
P/TOT	2278	314	77	12	31	16	22	2750

TIME	TO ARM C BYE PASS ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	222	26	2	0	2	5	0	257
16:15	245	26	1	0	3	2	5	282
16:30	216	27	3	1	2	2	0	251
16:45	255	23	3	0	2	4	4	291
H/TOT	938	102	9	1	9	13	9	1081
17:00	280	24	2	0	4	4	6	320
17:15	244	15	3	0	2	3	2	269
17:30	232	11	2	0	1	1	4	251
17:45	228	9	0	0	4	3	1	245
H/TOT	984	59	7	0	11	11	13	1085
18:00	208	8	3	0	2	3	4	228
18:15	203	15	2	1	3	1	5	230
18:30	207	13	2	0	2	1	1	226
18:45	158	18	3	0	2	1	0	182
H/TOT	776	54	10	1	9	6	10	866
P/TOT	2698	215	26	2	29	30	32	3032

TIME	FROM ARM C BYE PASS ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	224	22	4	0	3	1	4	258
16:15	200	18	3	0	3	0	1	225
16:30	205	20	1	1	1	1	1	230
16:45	239	20	1	0	3	1	0	264
H/TOT	868	80	9	1	10	3	6	977
17:00	223	9	1	0	2	5	2	242
17:15	249	20	1	0	4	2	2	278
17:30	236	20	1	0	2	3	2	264
17:45	206	24	1	2	1	3	1	238
H/TOT	914	73	4	2	9	13	7	1022
18:00	207	15	1	0	4	2	2	231
18:15	200	12	2	0	1	4	0	219
18:30	189	12	1	1	3	1	0	207
18:45	188	11	1	0	2	10	0	212
H/TOT	784	50	5	1	10	17	2	869
P/TOT	2566	203	18	4	29	33	15	2868

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 17 **DATE:** 16/07/2026

LOCATION: BYE PASS ROAD (N) / ATTENBOROUGH LANE (SE) / BYE PASS ROAD (S) / ATTENBOROUGH LANE (NW) **DAY:** THURSDAY

TIME	TO ARM D ATTENBOROUGH LANE (NW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	14	2	0	0	1	0	0	17
07:15	32	2	0	0	2	0	0	36
07:30	28	6	1	0	2	0	0	37
07:45	48	6	0	1	2	1	0	58
H/TOT	122	16	1	1	7	1	0	148
08:00	45	6	1	0	2	0	2	56
08:15	41	11	3	0	2	0	1	58
08:30	64	3	2	0	2	0	0	71
08:45	49	8	0	0	1	0	0	58
H/TOT	199	28	6	0	7	0	3	243
09:00	52	4	0	0	2	0	0	58
09:15	37	5	1	0	2	0	0	45
09:30	43	6	0	1	0	0	0	50
09:45	48	9	1	0	1	0	0	59
H/TOT	180	24	2	1	5	0	0	212
P/TOT	501	68	9	2	19	1	3	603

TIME	FROM ARM D ATTENBOROUGH LANE (NW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	34	6	3	0	2	0	2	47
07:15	35	3	1	0	1	0	2	42
07:30	63	6	0	0	1	0	0	70
07:45	77	5	0	0	1	0	1	84
H/TOT	209	20	4	0	5	0	5	243
08:00	62	6	1	0	2	0	0	71
08:15	76	5	2	0	1	0	1	85
08:30	75	2	3	0	2	0	1	83
08:45	106	7	3	0	1	0	0	117
H/TOT	319	20	9	0	6	0	2	356
09:00	81	10	4	0	2	0	0	97
09:15	69	12	0	0	1	0	0	82
09:30	56	4	1	0	3	0	0	64
09:45	74	7	2	0	1	0	0	84
H/TOT	280	33	7	0	7	0	0	327
P/TOT	808	73	20	0	18	0	7	926

TIME	TO ARM D ATTENBOROUGH LANE (NW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	65	7	1	0	3	0	1	77
16:15	73	4	1	0	2	0	0	80
16:30	73	7	1	0	1	1	1	84
16:45	80	10	0	0	1	0	0	91
H/TOT	291	28	3	0	7	1	2	332
17:00	84	5	1	0	1	2	1	94
17:15	87	4	0	0	2	0	0	93
17:30	90	13	0	0	2	0	1	106
17:45	69	8	1	0	1	1	1	81
H/TOT	330	30	2	0	6	3	3	374
18:00	82	6	1	0	2	0	0	91
18:15	70	6	0	0	1	0	1	78
18:30	53	7	0	0	2	0	1	63
18:45	69	3	0	0	1	1	0	74
H/TOT	274	22	1	0	6	1	2	306
P/TOT	895	80	6	0	19	5	7	1012

TIME	FROM ARM D ATTENBOROUGH LANE (NW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	62	7	0	0	2	3	0	74
16:15	75	10	1	0	1	0	1	88
16:30	66	9	0	0	1	0	0	76
16:45	79	6	0	0	2	2	1	90
H/TOT	282	32	1	0	6	5	2	328
17:00	88	6	2	0	3	1	4	104
17:15	76	4	2	0	1	0	0	83
17:30	83	5	0	0	1	1	0	90
17:45	81	7	1	0	2	0	0	91
H/TOT	328	22	5	0	7	2	4	368
18:00	72	3	0	0	1	0	2	78
18:15	68	5	1	0	2	0	1	77
18:30	79	4	0	0	2	1	0	86
18:45	66	2	2	0	1	0	0	71
H/TOT	285	14	3	0	6	1	3	312
P/TOT	895	68	9	0	19	8	9	1008

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 18 **DATE:** 16/07/2026

LOCATION: B6464 CHILWELL ROAD (SW) / IMPERIAL ROAD / B6464 CHILWELL ROAD (NE) **DAY:** THURSDAY

TIME	A TO B FROM B6464 CHILWELL ROAD (SW) TO IMPERIAL ROAD								A TO C FROM B6464 CHILWELL ROAD (SW) TO B6464 CHILWELL ROAD (NE)								TIME	B TO A FROM IMPERIAL ROAD TO B6464 CHILWELL ROAD (SW)								B TO C FROM IMPERIAL ROAD TO B6464 CHILWELL ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	0	0	0	0	0	0	0	31	6	0	0	2	0	4	43	07:00	2	1	0	0	0	0	2	5	3	0	0	0	0	0	2	5
07:15	3	0	0	0	0	0	0	3	45	2	2	0	3	2	4	58	07:15	3	1	0	0	0	0	0	4	4	0	0	0	0	0	0	4
07:30	5	1	0	0	0	0	0	6	93	13	2	0	3	0	7	118	07:30	3	0	0	0	0	0	0	3	6	1	0	0	0	0	0	7
07:45	6	1	0	0	0	0	0	7	95	17	0	0	4	0	5	121	07:45	6	0	1	0	0	0	0	7	3	1	0	0	0	0	0	4
H/TOT	14	2	0	0	0	0	0	16	264	38	4	0	12	2	20	340	H/TOT	14	2	1	0	0	0	2	19	16	2	0	0	0	0	2	20
08:00	2	1	1	0	0	0	0	4	80	5	3	1	4	0	3	96	08:00	2	1	0	0	0	0	0	3	11	2	0	0	0	0	2	15
08:15	7	0	0	0	0	0	0	7	93	5	1	0	3	0	9	111	08:15	4	0	0	0	0	0	0	4	3	3	0	0	0	0	1	7
08:30	6	1	0	0	0	0	0	7	91	10	7	0	1	0	12	121	08:30	6	0	0	0	0	0	0	6	9	0	0	0	0	0	0	9
08:45	17	0	0	0	0	0	0	17	117	5	2	0	3	1	11	139	08:45	5	0	0	0	0	0	0	5	7	2	0	0	0	0	0	9
H/TOT	32	2	1	0	0	0	0	35	381	25	13	1	11	1	35	467	H/TOT	17	1	0	0	0	0	0	18	30	7	0	0	0	0	3	40
09:00	6	2	0	0	0	0	0	8	69	15	1	0	4	0	4	93	09:00	5	1	0	0	0	0	0	6	5	0	1	0	0	0	0	6
09:15	5	1	0	0	0	0	1	7	55	8	2	0	2	0	6	73	09:15	5	1	0	0	0	0	0	6	3	0	0	0	0	0	0	3
09:30	3	0	0	0	0	0	0	3	53	6	0	0	2	0	5	66	09:30	2	0	0	0	0	0	0	2	5	0	0	0	0	0	0	5
09:45	5	2	1	0	0	0	0	8	53	2	1	0	1	0	3	60	09:45	6	1	0	0	0	0	0	7	7	1	0	0	0	0	0	8
H/TOT	19	5	1	0	0	0	1	26	230	31	4	0	9	0	18	292	H/TOT	18	3	0	0	0	0	0	21	20	1	1	0	0	0	0	22
P/TOT	65	9	2	0	0	0	1	77	875	94	21	1	32	3	73	1099	P/TOT	49	6	1	0	0	0	2	58	66	10	1	0	0	0	5	82

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 18 **DATE:** 16/07/2026

LOCATION: B6464 CHILWELL ROAD (SW) / IMPERIAL ROAD / B6464 CHILWELL ROAD (NE) **DAY:** THURSDAY

TIME	A TO B FROM B6464 CHILWELL ROAD (SW) TO IMPERIAL ROAD								A TO C FROM B6464 CHILWELL ROAD (SW) TO B6464 CHILWELL ROAD (NE)								TIME	B TO A FROM IMPERIAL ROAD TO B6464 CHILWELL ROAD (SW)								B TO C FROM IMPERIAL ROAD TO B6464 CHILWELL ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	3	0	1	0	0	0	1	5	51	3	1	0	6	0	2	63	16:00	4	0	0	0	0	0	0	4	7	2	0	0	0	0	0	9
16:15	0	0	0	0	0	0	1	1	52	6	2	0	2	0	0	62	16:15	6	0	1	0	0	0	0	7	5	1	0	0	0	0	0	6
16:30	4	0	0	0	0	0	0	4	47	6	0	0	3	1	2	59	16:30	7	2	0	0	0	0	0	9	5	0	0	0	0	0	0	5
16:45	9	0	0	0	0	0	0	9	49	5	1	0	3	0	2	60	16:45	8	0	0	0	0	0	0	8	6	0	0	0	0	0	0	6
H/TOT	16	0	1	0	0	0	2	19	199	20	4	0	14	1	6	244	H/TOT	25	2	1	0	0	0	0	28	23	3	0	0	0	0	0	26
17:00	3	0	0	0	0	0	0	3	59	5	1	0	3	1	2	71	17:00	7	0	0	0	0	0	0	7	17	0	0	0	0	0	0	17
17:15	10	0	0	0	0	0	0	10	59	3	0	0	2	1	1	66	17:15	8	0	0	0	0	0	0	8	7	0	0	0	0	0	0	7
17:30	7	0	0	0	0	0	1	8	52	5	0	0	3	1	1	62	17:30	9	0	0	0	0	0	0	9	4	0	0	0	0	0	0	4
17:45	2	1	0	0	0	0	0	3	45	3	0	0	2	0	2	52	17:45	8	0	0	0	0	0	0	8	8	0	0	0	0	0	0	8
H/TOT	22	1	0	0	0	0	1	24	215	16	1	0	10	3	6	251	H/TOT	32	0	0	0	0	0	0	32	36	0	0	0	0	0	0	36
18:00	4	1	0	0	0	0	0	5	51	2	0	0	4	0	2	59	18:00	5	0	0	0	0	0	0	5	4	2	0	0	0	0	0	6
18:15	8	0	0	0	0	0	1	9	60	2	0	0	4	0	3	69	18:15	6	0	0	0	0	0	0	6	5	2	0	0	0	0	0	7
18:30	7	0	0	0	0	0	0	7	41	3	0	0	2	1	3	50	18:30	8	0	0	0	0	0	0	8	11	0	0	0	0	0	0	11
18:45	9	1	0	0	0	0	1	11	54	2	0	0	2	0	1	59	18:45	5	2	0	0	0	0	0	7	10	1	0	0	0	0	0	11
H/TOT	28	2	0	0	0	0	2	32	206	9	0	0	12	1	9	237	H/TOT	24	2	0	0	0	0	0	26	30	5	0	0	0	0	0	35
P/TOT	66	3	1	0	0	0	5	75	620	45	5	0	36	5	21	732	P/TOT	81	4	1	0	0	0	0	86	89	8	0	0	0	0	0	97

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 18 **DATE:** 16/07/2026

LOCATION: B6464 CHILWELL ROAD (SW) / IMPERIAL ROAD / B6464 CHILWELL ROAD (NE) **DAY:** THURSDAY

TIME	C TO A FROM B6464 CHILWELL ROAD (NE) TO B6464 CHILWELL ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	12	1	0	0	2	0	0	15
07:15	14	4	0	0	4	0	2	24
07:30	26	1	1	0	1	0	3	32
07:45	37	3	1	0	3	0	2	46
H/TOT	89	9	2	0	10	0	7	117
08:00	35	5	5	0	0	4	0	49
08:15	43	5	0	0	3	0	0	51
08:30	43	3	2	1	1	0	1	51
08:45	42	4	1	0	3	0	0	50
H/TOT	163	17	8	1	7	4	1	201
09:00	36	2	2	0	3	0	0	43
09:15	39	6	3	0	4	0	1	53
09:30	42	6	0	0	2	0	2	52
09:45	51	5	3	0	2	0	3	64
H/TOT	168	19	8	0	11	0	6	212
P/TOT	420	45	18	1	28	4	14	530

TIME	C TO B FROM B6464 CHILWELL ROAD (NE) TO IMPERIAL ROAD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	2	1	0	0	0	0	0	3
07:15	0	0	0	0	0	0	0	0
07:30	5	0	0	0	0	0	1	6
07:45	11	4	0	0	0	0	0	15
H/TOT	18	5	0	0	0	0	1	24
08:00	8	0	0	0	0	0	0	8
08:15	9	1	0	0	0	0	0	10
08:30	7	2	0	0	0	0	0	9
08:45	6	0	0	0	0	0	0	6
H/TOT	30	3	0	0	0	0	0	33
09:00	3	1	0	0	0	0	0	4
09:15	3	1	1	0	0	0	0	5
09:30	2	1	0	0	0	0	0	3
09:45	4	1	0	0	0	0	0	5
H/TOT	12	4	1	0	0	0	0	17
P/TOT	60	12	1	0	0	0	1	74

TIME	TO ARM A B6464 CHILWELL ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	14	2	0	0	2	0	2	20
07:15	17	5	0	0	4	0	2	28
07:30	29	1	1	0	1	0	3	35
07:45	43	3	2	0	3	0	2	53
H/TOT	103	11	3	0	10	0	9	136
08:00	37	6	5	0	0	4	0	52
08:15	47	5	0	0	3	0	0	55
08:30	49	3	2	1	1	0	1	57
08:45	47	4	1	0	3	0	0	55
H/TOT	180	18	8	1	7	4	1	219
09:00	41	3	2	0	3	0	0	49
09:15	44	7	3	0	4	0	1	59
09:30	44	6	0	0	2	0	2	54
09:45	57	6	3	0	2	0	3	71
H/TOT	186	22	8	0	11	0	6	233
P/TOT	469	51	19	1	28	4	16	588

FROM ARM A B6464 CHILWELL ROAD (SW)								
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	
31	6	0	0	2	0	4	43	
48	2	2	0	3	2	4	61	
98	14	2	0	3	0	7	124	
101	18	0	0	4	0	5	128	
278	40	4	0	12	2	20	356	
82	6	4	1	4	0	3	100	
100	5	1	0	3	0	9	118	
97	11	7	0	1	0	12	128	
134	5	2	0	3	1	11	156	
413	27	14	1	11	1	35	502	
75	17	1	0	4	0	4	101	
60	9	2	0	2	0	7	80	
56	6	0	0	2	0	5	69	
58	4	2	0	1	0	3	68	
249	36	5	0	9	0	19	318	
940	103	23	1	32	3	74	1176	

TIME	C TO A FROM B6464 CHILWELL ROAD (NE) TO B6464 CHILWELL ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	77	11	0	0	3	5	3	99
16:15	70	4	2	0	3	1	4	84
16:30	81	8	0	0	3	0	7	99
16:45	102	6	2	0	4	0	10	124
H/TOT	330	29	4	0	13	6	24	406
17:00	100	8	1	0	3	0	7	119
17:15	95	5	0	0	3	0	8	111
17:30	111	2	0	0	3	0	4	120
17:45	83	1	0	0	2	1	7	94
H/TOT	389	16	1	0	11	1	26	444
18:00	67	3	0	0	4	1	5	80
18:15	62	2	0	0	4	0	4	72
18:30	69	4	0	0	3	1	3	80
18:45	54	5	0	0	2	1	4	66
H/TOT	252	14	0	0	13	3	16	298
P/TOT	971	59	5	0	37	10	66	1148

TIME	C TO B FROM B6464 CHILWELL ROAD (NE) TO IMPERIAL ROAD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	9	0	0	0	0	0	0	9
16:15	11	2	0	0	0	0	0	13
16:30	7	0	0	0	0	0	0	7
16:45	19	1	0	0	0	0	0	20
H/TOT	46	3	0	0	0	0	0	49
17:00	11	3	0	0	0	0	0	14
17:15	10	0	0	0	0	0	0	10
17:30	9	2	0	0	0	0	0	11
17:45	8	0	0	0	0	0	0	8
H/TOT	38	5	0	0	0	0	0	43
18:00	14	1	0	0	0	0	0	15
18:15	9	2	0	0	0	0	0	11
18:30	7	0	0	0	0	0	0	7
18:45	12	0	0	0	0	0	0	12
H/TOT	42	3	0	0	0	0	0	45
P/TOT	126	11	0	0	0	0	0	137

TIME	TO ARM A B6464 CHILWELL ROAD (SW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	81	11	0	0	3	5	3	103
16:15	76	4	3	0	3	1	4	91
16:30	88	10	0	0	3	0	7	108
16:45	110	6	2	0	4	0	10	132
H/TOT	355	31	5	0	13	6	24	434
17:00	107	8	1	0	3	0	7	126
17:15	103	5	0	0	3	0	8	119
17:30	120	2	0	0	3	0	4	129
17:45	91	1	0	0	2	1	7	102
H/TOT	421	16	1	0	11	1	26	476
18:00	72	3	0	0	4	1	5	85
18:15	68	2	0	0	4	0	4	78
18:30	77	4	0	0	3	1	3	88
18:45	59	7	0	0	2	1	4	73
H/TOT	276	16	0	0	13	3	16	324
P/TOT	1052	63	6	0	37	10	66	1234

FROM ARM A B6464 CHILWELL ROAD (SW)								
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	
54	3	2	0	6	0	3	68	
52	6	2	0	2	0	1	63	
51	6	0	0	3	1	2	63	
58	5	1	0	3	0	2	69	
215	20	5	0	14	1	8	263	
62	5	1	0	3	1	2	74	
69	3	0	0	2	1	1	76	
59	5	0	0	3	1	2	70	
47	4	0	0	2	0	2	55	
237	17	1	0	10	3	7	275	
55	3	0	0	4	0	2	64	
68	2	0	0	4	0	4	78	
48	3	0	0	2	1	3	57	
63	3	0	0	2	0	2	70	
234	11	0	0	12	1	11	269	
686	48	6	0	36	5	26	807	

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 18 **DATE:** 16/07/2026

LOCATION: B6464 CHILWELL ROAD (SW) / IMPERIAL ROAD / B6464 CHILWELL ROAD (NE) **DAY:** THURSDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 15686

JOB NAME: TOTON

SITE: 18 **DATE:** 16/07/2026

LOCATION: B6464 CHILWELL ROAD (SW) / IMPERIAL ROAD / B6464 CHILWELL ROAD (NE) **DAY:** THURSDAY

TIME	TO ARM B IMPERIAL ROAD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	2	1	0	0	0	0	0	3
07:15	3	0	0	0	0	0	0	3
07:30	10	1	0	0	0	0	1	12
07:45	17	5	0	0	0	0	0	22
H/TOT	32	7	0	0	0	0	1	40
08:00	10	1	1	0	0	0	0	12
08:15	16	1	0	0	0	0	0	17
08:30	13	3	0	0	0	0	0	16
08:45	23	0	0	0	0	0	0	23
H/TOT	62	5	1	0	0	0	0	68
09:00	9	3	0	0	0	0	0	12
09:15	8	2	1	0	0	0	1	12
09:30	5	1	0	0	0	0	0	6
09:45	9	3	1	0	0	0	0	13
H/TOT	31	9	2	0	0	0	1	43
P/TOT	125	21	3	0	0	0	2	151

TIME	FROM ARM B IMPERIAL ROAD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	5	1	0	0	0	0	4	10
07:15	7	1	0	0	0	0	0	8
07:30	9	1	0	0	0	0	0	10
07:45	9	1	1	0	0	0	0	11
H/TOT	30	4	1	0	0	0	4	39
08:00	13	3	0	0	0	0	2	18
08:15	7	3	0	0	0	0	1	11
08:30	15	0	0	0	0	0	0	15
08:45	12	2	0	0	0	0	0	14
H/TOT	47	8	0	0	0	0	3	58
09:00	10	1	1	0	0	0	0	12
09:15	8	1	0	0	0	0	0	9
09:30	7	0	0	0	0	0	0	7
09:45	13	2	0	0	0	0	0	15
H/TOT	38	4	1	0	0	0	0	43
P/TOT	115	16	2	0	0	0	7	140

TIME	TO ARM C B6464 CHILWELL ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	34	6	0	0	2	0	6	48
07:15	49	2	2	0	3	2	4	62
07:30	99	14	2	0	3	0	7	125
07:45	98	18	0	0	4	0	5	125
H/TOT	280	40	4	0	12	2	22	360
08:00	91	7	3	1	4	0	5	111
08:15	96	8	1	0	3	0	10	118
08:30	100	10	7	0	1	0	12	130
08:45	124	7	2	0	3	1	11	148
H/TOT	411	32	13	1	11	1	38	507
09:00	74	15	2	0	4	0	4	99
09:15	58	8	2	0	2	0	6	76
09:30	58	6	0	0	2	0	5	71
09:45	60	3	1	0	1	0	3	68
H/TOT	250	32	5	0	9	0	18	314
P/TOT	941	104	22	1	32	3	78	1181

TIME	FROM ARM C B6464 CHILWELL ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	14	2	0	0	2	0	0	18
07:15	14	4	0	0	4	0	2	24
07:30	31	1	1	0	1	0	4	38
07:45	48	7	1	0	3	0	2	61
H/TOT	107	14	2	0	10	0	8	141
08:00	43	5	5	0	0	4	0	57
08:15	52	6	0	0	3	0	0	61
08:30	50	5	2	1	1	0	1	60
08:45	48	4	1	0	3	0	0	56
H/TOT	193	20	8	1	7	4	1	234
09:00	39	3	2	0	3	0	0	47
09:15	42	7	4	0	4	0	1	58
09:30	44	7	0	0	2	0	2	55
09:45	55	6	3	0	2	0	3	69
H/TOT	180	23	9	0	11	0	6	229
P/TOT	480	57	19	1	28	4	15	604

TIME	TO ARM B IMPERIAL ROAD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	12	0	1	0	0	0	1	14
16:15	11	2	0	0	0	0	1	14
16:30	11	0	0	0	0	0	0	11
16:45	28	1	0	0	0	0	0	29
H/TOT	62	3	1	0	0	0	2	68
17:00	14	3	0	0	0	0	0	17
17:15	20	0	0	0	0	0	0	20
17:30	16	2	0	0	0	0	1	19
17:45	10	1	0	0	0	0	0	11
H/TOT	60	6	0	0	0	0	1	67
18:00	18	2	0	0	0	0	0	20
18:15	17	2	0	0	0	0	1	20
18:30	14	0	0	0	0	0	0	14
18:45	21	1	0	0	0	0	1	23
H/TOT	70	5	0	0	0	0	2	77
P/TOT	192	14	1	0	0	0	5	212

TIME	FROM ARM B IMPERIAL ROAD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	11	2	0	0	0	0	0	13
16:15	11	1	1	0	0	0	0	13
16:30	12	2	0	0	0	0	0	14
16:45	14	0	0	0	0	0	0	14
H/TOT	48	5	1	0	0	0	0	54
17:00	24	0	0	0	0	0	0	24
17:15	15	0	0	0	0	0	0	15
17:30	13	0	0	0	0	0	0	13
17:45	16	0	0	0	0	0	0	16
H/TOT	68	0	0	0	0	0	0	68
18:00	9	2	0	0	0	0	0	11
18:15	11	2	0	0	0	0	0	13
18:30	19	0	0	0	0	0	0	19
18:45	15	3	0	0	0	0	0	18
H/TOT	54	7	0	0	0	0	0	61
P/TOT	170	12	1	0	0	0	0	183

TIME	TO ARM C B6464 CHILWELL ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	58	5	1	0	6	0	2	72
16:15	57	7	2	0	2	0	0	68
16:30	52	6	0	0	3	1	2	64
16:45	55	5	1	0	3	0	2	66
H/TOT	222	23	4	0	14	1	6	270
17:00	76	5	1	0	3	1	2	88
17:15	66	3	0	0	2	1	1	73
17:30	56	5	0	0	3	1	1	66
17:45	53	3	0	0	2	0	2	60
H/TOT	251	16	1	0	10	3	6	287
18:00	55	4	0	0	4	0	2	65
18:15	65	4	0	0	4	0	3	76
18:30	52	3	0	0	2	1	3	61
18:45	64	3	0	0	2	0	1	70
H/TOT	236	14	0	0	12	1	9	272
P/TOT	709	53	5	0	36	5	21	829

TIME	FROM ARM C B6464 CHILWELL ROAD (NE)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	86	11	0	0	3	5	3	108
16:15	81	6	2	0	3	1	4	97
16:30	88	8	0	0	3	0	7	106
16:45	121	7	2	0	4	0	10	144
H/TOT	376	32	4	0	13	6	24	455
17:00	111	11	1	0	3	0	7	133
17:15	105	5	0	0	3	0	8	121
17:30	120	4	0	0	3	0	4	131
17:45	91	1	0	0	2	1	7	102
H/TOT	427	21	1	0	11	1	26	487
18:00	81	4	0	0	4	1	5	95
18:15	71	4	0	0	4	0	4	83
18:30	76	4	0	0	3	1	3	87
18:45	66	5	0	0	2	1	4	78
H/TOT	294	17	0	0	13	3	16	343
P/TOT	1097	70	5	0	37	10	66	1285

APPENDIX E

Signal Controller Specifications

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Administration

General Specifications

Customer Name	A-one+ / NCC	Customer Order No.	
Intersection/ General Description	A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)	Controller/ Serial Number	7024700
		S.T.S. /EM Number	J31311 Issue 10
Controller	○ New ◉ Modification	Equipment Installation by	
Area Specifications/ Customer Drawings		Slot Cutting by	
Specification Section		Civil Works by	
Contract/Tender Ref:		Customer's Engineer	Stuart Beniston
Quotation No.		Telephone Number	01623 886742
Works Order No.	E83071		

Signal Company Use Only

Signal Engineer: P M ROUSE / NICK RULE / SK/PJ

(IF PROM Label as >) PROM Number: 16700 PROM Variant: 2

Configuration Check Value: CB 8E AC 0

Controller Options

Hardware: T800 Firmware Type and Issue: PB800 ISS 31 Other Options: KTD LO

ST950/ST900/ST750 Series Cabinet Options

Cabinet/Rack Kit Type Options ○ ○ ○ ○

Cabinet/Rack Variant Cuckoo Options ☐

Mains Supply	240 Volts	50 Hz					
Peak Lamp Current	11 Amps	Dimming Voltage	None	Answer Issue	0	Date Created	30/07/07
Average Lamp Power	2612 Watts						
Total Average Power	2840 Watts	Low Inrush Transformer	☐	Edit Issue	45		

Power feed fuse rating: requires 30 Amp minimum for controller, 15 Amp minimum for pelican/lightly loaded controller

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phases, Stages and Streams

Phases, Stages and Streams

Add/Delete/Insert Streams:

Streams

(•) Current Number of Streams 3

Phases

( ) Current Total Number of Phases 18

(•) Number of Real Phases 15

( ) Number of Dummy Phases 3

Stages

( ) Current Number of stages (inc. ALL-RED stages) 14

Switched Signs

( ) Number of Switched Signs 0

Action

Add At | Delete At

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Facilities/Modes Enabled and Mode Priority Levels

Facilities

UTC
- [x] Serial/Internal UTMC OTU
- [ ] Free-standing OTU
- [ ] Integral TC12 OTU
- [x] Serial MOVA

- [x] Master Time Clock
- [ ] Holiday Clock
- [x] FT To Current MAX
- [ ] Linked Fixed Time

- [x] Lamp Monitoring
- [x] RED Lamp Monitoring
- [x] Pelican/Puffin/Toucan
- [ ] Standalone Manual

- [x] Extend All Red
- [x] Speed Measurement
- [ ] Ripple Change
- [ ] London IMU

- [ ] Non-UK
- [ ] Fail to Part Time
- [ ] Fail To Hardware Flashing
- [ ]
- [ ] Download To Level 3

8 Starting Intergreen

Mode Priority

	1	2	3	4	5	6	7	8	9	10	11	12	13
[ ] Part Time	○	○	○	○	○	○	○	○	○	○	○	○	○
[ ] Emergency Vehicles	○	○	○	○	○	○	○	○	○	○	○	○	○
[ ] Hurry Call	○	○	○	○	○	○	○	○	○	○	○	○	○
[ ]	○	○	○	○	○	○	○	○	○	○	○	○	○
[ ] Priority Vehicle	○	○	○	○	○	○	○	○	○	○	○	○	○
[x] Manual Control	◉	○	○	○	○	○	○	○	○	○	○	○	○
[ ] Manual Step On	○	○	○	○	○	○	○	○	○	○	○	○	○
[x] Selected FT or VA or CLF	○	◉	○	○	○	○	○	○	○	○	○	○	○
[x] UTC	○	○	◉	○	○	○	○	○	○	○	○	○	○
[ ]	○	○	○	○	○	○	○	○	○	○	○	○	○
[ ] CLF (Non-Base Time)	○	○	○	○	○	○	○	○	○	○	○	○	○
[x] CLF (Base Time)	○	○	○	◉	○	○	○	○	○	○	○	○	○
[x] Vehicle Actuated	○	○	○	○	◉	○	○	○	○	○	○	○	○
[x] Fixed Time	○	○	○	○	○	◉	○	○	○	○	○	○	○

Configuration Complexity

○ Low ○ Medium ○ High ◉ Maximum

standard.8DF

Default PROM data file

Correspondence Monitoring to inc.:

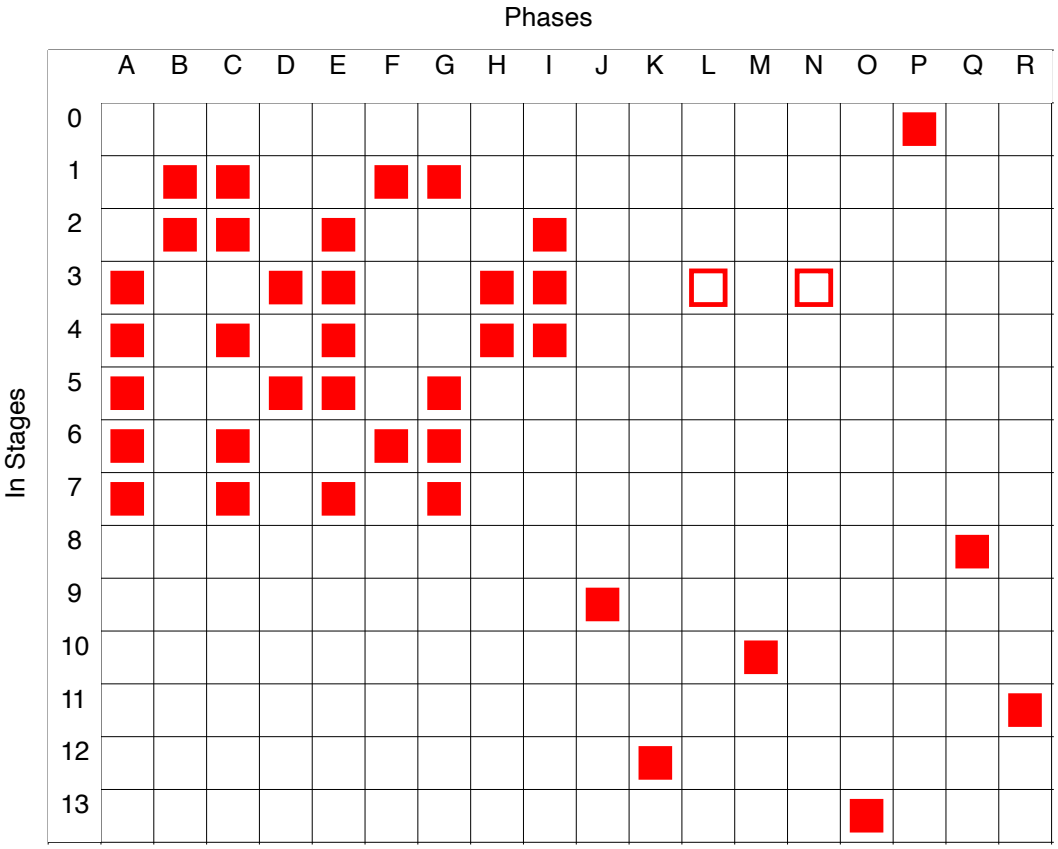
- [x] Reds
- [ ] Switched Signs
- [x] Ambers
- [ ] Ignore Reds and Ambers during Fault

Flash Rate (ms)

400 Off 400 On

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phases in Stages



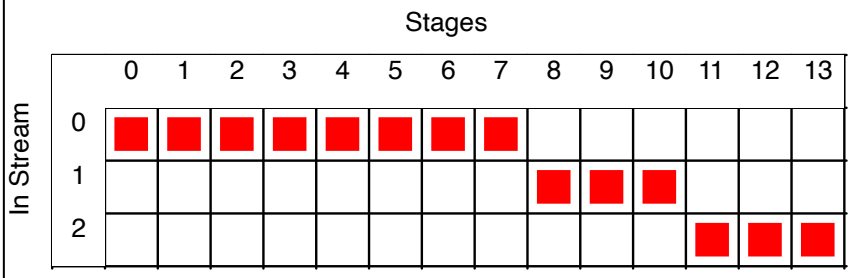
Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Stages in Streams

Stages in Streams

	0	1	2	3	4	5	6	7
Phase or Stage to revert to in absence of demands/extensions	7	9	12					
Startup Stage	7	9	12					
Switch Off Stage								
Standalone Pedestrian	☐	☑	☑	☐	☐	☐	☐	☐

Note: For a Stand-Alone Stream, the reversion must be to All Red stage or Traffic stage/phase to meet the relevant standard or specification.



Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase Type and Conditions

Phase Type and Conditions

(•) Phases A to P ( ) Phases Q to F2

Phase	Title	Type	App. Type	Term. Type	Assoc. Phase
A	WEST CIRCULAR	0 - UK Traffic	0	0 - E	
B	A52 EASTBOUND	0 - UK Traffic	0	0 - E	
C	NORTH CIRCULAR	0 - UK Traffic	0	0 - E	
D	B6003 SOUTHBOUND	0 - UK Traffic	0	0 - E	
E	EAST CIRCULAR	0 - UK Traffic	0	0 - E	
F	A52 WESTBOUND	0 - UK Traffic	0	0 - E	
G	SOUTH CIRCULAR	0 - UK Traffic	0	0 - E	
H	B6003 NORTHBOUND	0 - UK Traffic	0	0 - E	
I	A52 THROUGH-ABOUT	0 - UK Traffic	0	0 - E	
J	A52 WESTBOUND EXIT	0 - UK Traffic	0	0 - E	
K	A52 EASTBOUND EXIT	0 - UK Traffic	0	0 - E	
L	PED ACROSS A52 EASTBOUND	3 - UK Near Side Pedestrian	3	0 - E	
M	PED ACROSS A52 WESTBOUND EXIT	3 - UK Near Side Pedestrian	0	0 - E	
N	PED ACROSS A52 WESTBOUND	3 - UK Near Side Pedestrian	3	0 - E	
O	PED ACROSS A52 EASTBOUND EXIT	3 - UK Near Side Pedestrian	0	0 - E	
P	DUMMY STREAM 0	2 - UK GreenArrow	0	0 - E	

1) App Types: 0 = Always Appears, 1 = Appears if dem'd prior to interstage, 2 = If dem'd, 3 = If dem'd before end of window time
2) Term Types: 0 = Term's at end of stage, 1 = Term's when Assoc phase gains R.O.W, 2 = Term's when Assoc phase loses R.O.W.
3) The H/W Fail Flash fields are for information only on all but ST900ELV Controllers. For other controllers, physical switches or links (etc.) select which aspects flash and these need to be set up manually.

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase Type and Conditions

Phase Type and Conditions

○ Phases A to P ◉ Phases Q to F2

Phase	Title	Type	App. Type	Term. Type	Assoc. Phase
Q	DUMMY STREAM 1	2 - UK GreenArrow	0	0 - E	
R	DUMMY STREAM 2	2 - UK GreenArrow	0	0 - E	

1) App Types: 0 = Always Appears, 1 = Appears if dem'd prior to interstage, 2 = If dem'd, 3 = If dem'd before end of window time
2) Term Types: 0 = Term's at end of stage, 1 = Term's when Assoc phase gains R.O.W, 2 = Term's when Assoc phase loses R.O.W.
3) The H/W Fail Flash fields are for information only on all but ST900ELV Controllers. For other controllers, physical switches or links (etc.) select which aspects flash and these need to be set up manually.

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Opposing and Conflicting Phases

Select Stream(s) To Configure

○ All ○ 0 ○ 1 ○ 2 ○ ○ ○ ○ ○ ○

Initialise

To Phase

From Phase

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
A		Co	o	o	o	o	o	o	o			o		o		o		
B	Co		o	o	o	o	o	o	o			Co		o		o		
C	o	o		Co	o	o	o	o	o			o		o		o		
D	o	o	Co		o	o	o	o	o			o		o		o		
E	o	o	o	o		Co	o	o	o			o		o		o		
F	o	o	o	o	Co		o	o	o			o		Co		o		
G	o	o	o	o	o	o		Co	Co			o		o		o		
H	o	o	o	o	o	o	Co		o			o		o		o		
I	o	o	o	o	o	o	Co	o				o		o		o		
J													Co				o	
K															Co			o
L	o	Co	o	o	o	o	o	o	o					o		o		
M										Co							o	
N	o	o	o	o	o	Co	o	o	o			o				o		
O											Co							o
P	o	o	o	o	o	o	o	o	o			o		o				
Q										o			o					
R											o				o			

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase Minimums, Maximums, Extensions, Ped Leaving Periods

Phase Minimums, Maximums, Extensions, Ped Leaving Periods

(•) Phases A to P ( ) Phases Q to F2

Phase	Min Green	Min Ped Clr	Extensions	Maximums A	B	C	D	E	F	G	H	Pre-timed
A	7	0	0.0	0	0	0	0	0	0	0	0	☐
B	7	0	0.0	40	35	40	30	0	0	0	0	☐
C	7	0	0.0	0	0	0	0	0	0	0	0	☐
D	7	0	0.0	16	20	16	16	0	0	0	0	☐
E	7	0	0.0	0	0	0	0	0	0	0	0	☐
F	7	0	0.0	40	35	40	30	0	0	0	0	☐
G	7	0	0.0	0	0	0	0	0	0	0	0	☐
H	7	0	0.0	16	20	16	16	0	0	0	0	☐
I	7	0	0.0	16	20	16	16	0	0	0	0	☐
J	20	0	0.0	0	0	0	0	0	0	0	0	☐
K	20	0	0.0	0	0	0	0	0	0	0	0	☐
L	6	2	0.0	0	0	0	0	0	0	0	0	☐
M	5	2	0.0	0	0	0	0	0	0	0	0	☐
N	6	2	0.0	0	0	0	0	0	0	0	0	☐
O	5	2	0.0	0	0	0	0	0	0	0	0	☐
P	1	0	0.0	0	0	0	0	0	0	0	0	☐

Note: For Standalone Streams see Help for use of Max Sets.

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase Minimums, Maximums, Extensions, Ped Leaving Periods

Phase Minimums, Maximums, Extensions, Ped Leaving Periods

○ Phases A to P ◉ Phases Q to F2

Phase	Min Green	Min Ped Clr	Extensions	Maximums A	B	C	D	E	F	G	H	Pre-timed
Q	1	0	0.0	0	0	0	0	0	0	0	0	☐
R	1	0	0.0	0	0	0	0	0	0	0	0	☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐

Note: For Standalone Streams see Help for use of Max Sets.

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase Intergreen Times

Select Stream(s) To Configure

○ All ○ 0 ○ 1 ○ 2 ○ ○ ○ ○ ○ ○

Note: On a Stand Alone Pelican/Toucan/Puffin Stream the Intergreens between Pedestrian and Traffic Phases are controlled by the timings (PBT, PIT, CMX, CDY, CRD and PAR), therefore 0 should be entered for the appropriate intergreen times in grid below.

To Phase

From Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
A		5																
B	6											6						
C				5														
D			5															
E						5												
F					6									6				
G								7	5									
H							5											
I							6											
J													5					
K															5			
L		0																
M										0								
N						0												
O											0							
P																		
Q																		
R																		

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Intergreen Handset Limits

HIGH 199

Copy Intergreen Values

To Phase

From Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
A		5																
B	6											6						
C				5														
D			5															
E						5												
F					6									6				
G								7	5									
H							5											
I							6											
J													5					
K															5			
L																		
M																		
N																		
O																		
P																		
Q																		
R																		

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase Timing Handset Ranges

Phase Timing Handset Ranges

Initialise Min Green Limits

Phase	Min. Green Min.	Min. Green Max.
A	3	255
B	3	255
C	3	255
D	3	255
E	3	255
F	3	255
G	3	255
H	3	255
I	3	255
J	3	255
K	3	255
L	3	255
M	3	255
N	3	255
O	3	255
P	1	255

Phase	Min. Green Min.	Min. Green Max.
Q	1	255
R	1	255
S		
T		
U		
V		
W		
X		
Y		
Z		
A2		
B2		
C2		
D2		
E2		
F2		

Max. Green Min. 0 Max. 255

Vehicle Extension Min. 0.0 Max. 10.0

Phase Delay Min. 0 Max. 30

Starting I/G Min. 8 Max. 12

Min Pedestrian Clearance (PBT) Min. 2 Max. 3

Traffic Phase Leaving Min. 3.0 Max. 3.0

Traffic Phase Red/Amber Min. 2 Max. 2

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

VA Demand and Extend Definitions

VA Demand and Extend Definitions

(●) Phases A to P ( ) Phases Q to F2

Demands

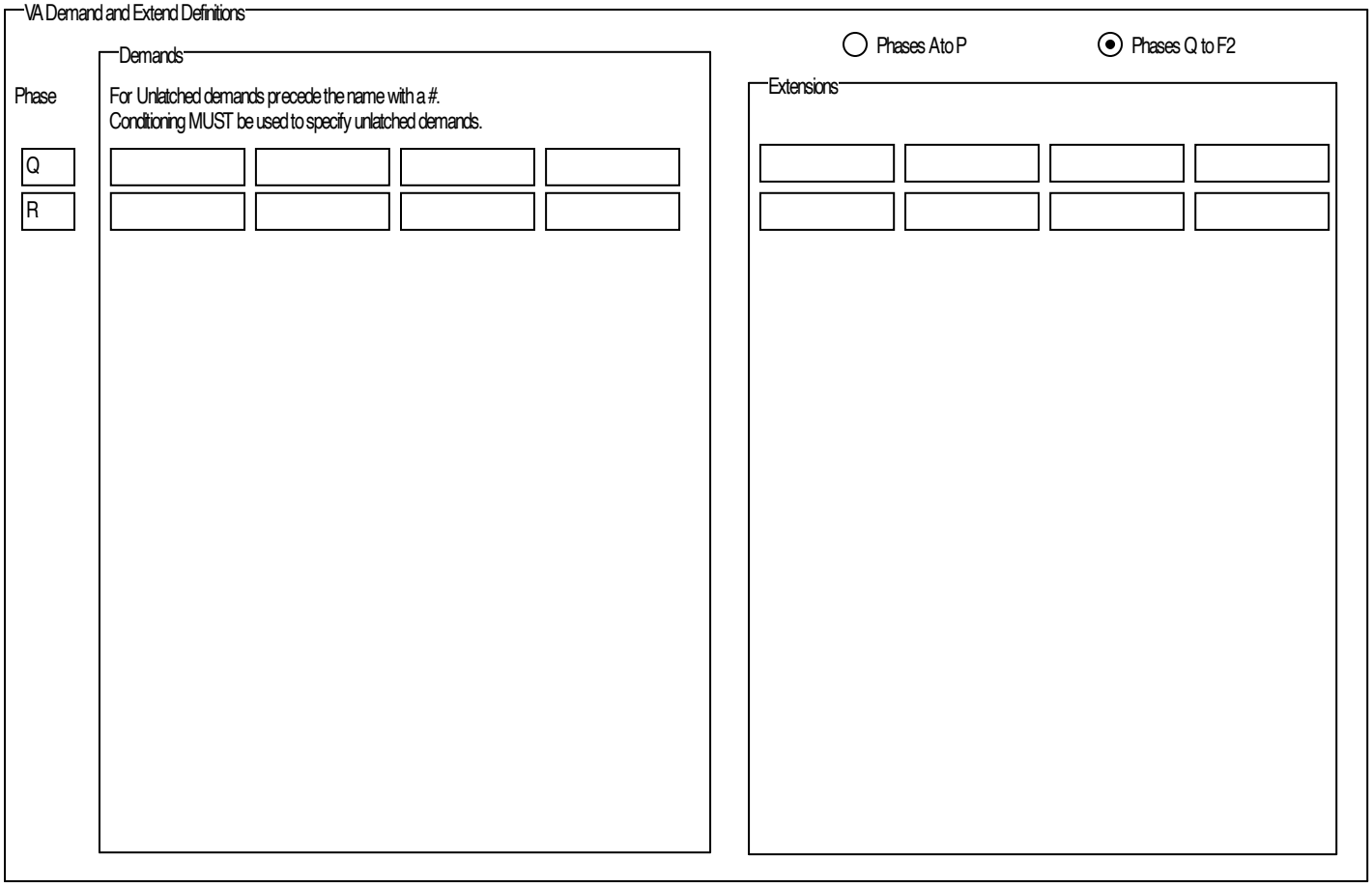
For Unlatched demands precede the name with a #.
Conditioning MUST be used to specify unlatched demands.

Extensions

Phase	Demands				Extensions			
A								
B	BX5	BX6	BX7		BX5	BX6	BX7	
C								
D	DX12	DX13	DSL14	DSL15	DX12	DX13	DSL14	DSL15
E								
F	FX37	FX38	FX39		FX37	FX38		
G								
H	HX44	HX45	HX46	HX22	HX44	HX45	HX46	HX22
I	IX50	ISL51	IX24	ISL25	IX50	ISL51	IX24	ISL25
J								
K								
L	PEDL							
M	PEDM							
N	PEDN							
O	PEDO							
P								

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

VA Demand and Extend Definitions



Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase Internal/Revertive Demands

Phase Internal/Revertive Demands

Start-up Vehicle Responsive Demands

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☐

Q	R
☐	☐

Demands Inserted When Leaving Manual and Fixed Time Modes

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☐

Q	R
☐	☐

Unlatched Demands that Start Max Timers

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑

Q	R
☑	☑

Revertive Phase Demands

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A	B	C	D	E	F	G	H	I	J	K					

Q	R	S	T	U	V	W	X	Y	Z	A2	B2	C2	D2	E2	F2

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase - On Crossing and Kerbside Detector Definitions

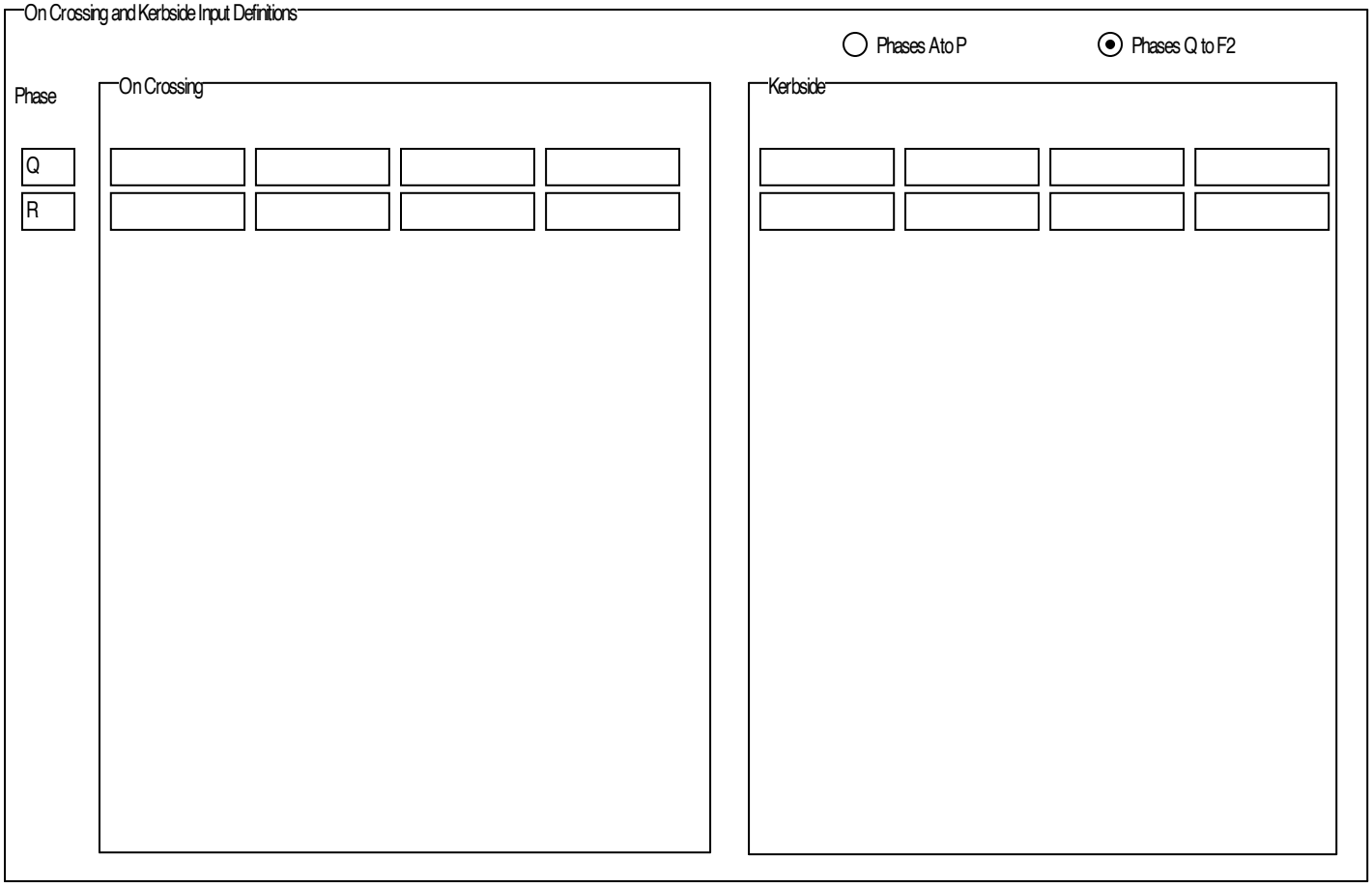
On Crossing and Kerbside Input Definitions

(●) Phases A to P ( ) Phases Q to F2

Phase	On Crossing				Kerbside			
A								
B								
C								
D								
E								
F								
G								
H								
I								
J								
K								
L	ONCRL1	ONCRL2						
M	ONCRM1	ONCRM2						
N	ONCRN1	ONCRN2						
O	ONCRO1	ONCRO2						
P								

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase - On Crossing and Kerbside Detector Definitions



Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Stream - Pelican/Puffin/Toucan Times

Stream - Pelican/Puffin/Toucan Times

Pedestrian Enable VA Mode (PEV)

Streams	0	1	2	3	4	5	6	7
		0-Disabled	0-Disabled					

Pedestrian All Red Times (Vehicle to Pedestrian)

Streams	0	1	2	3	4	5	6	7	Handset Range Limits Min	Handset Range Limits Max
(PAR n 0) VA Gap Change		0	0							
(PAR n 1) VA Max Change		0	0							
(PAR n 2) FVP Change		0	0						0	0
(PAR n 3) UTC Change		0	0							
(PAR n 4) Local Link Change		0	0							

Pelican Intergreen times

(PIT n 0) Veh Red/Ped Flash Green		0	0						0	0
(PIT n 1) Veh Flash Amber/Ped Flash Green		0	0						0	0
(PIT n 2) Veh Flash Amber/Ped red		0	0						0	0
(PIT n 3) Veh Flash Amber/Ped Red Quiescent		0	0						0	0

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase - Pelican, Puffin and Toucan Times

Phase - Pelican, Puffin and Toucan Times

Phase	PDD Ped Demand Delay	PDX Ped Demand Hold	CMX Clearance Maximum	CDY 0 Clearance Delay Gap Change	CDY 1 Clearance Delay Max Change	CRD Clearance Minimum Red
A	0	0.0	0	0	0	0
B	0	0.0	0	0	0	0
C	0	0.0	0	0	0	0
D	0	0.0	0	0	0	0
E	0	0.0	0	0	0	0
F	0	0.0	0	0	0	0
G	0	0.0	0	0	0	0
H	0	0.0	0	0	0	0
I	0	0.0	0	0	0	0
J	0	0.0	0	0	0	0
K	0	0.0	0	0	0	0
L	0	0.0	10	0	0	0
M	0	0.0	8	0	0	0
N	0	0.0	9	0	0	0
O	0	0.0	6	0	0	0
P	0	0.0	0	0	0	0

(●) Phases A to P ( ) Phases Q to F2

☐

☐

Pedestrian Handset Range Limits

	MIN	MAX
Demand Delay PDD	0	4
Demand Hold PDX	0.0	4.0
Clearance Maximum CMX	6	20
Clearance Delays CDY 0 and CDY1	0	0
Clearance Minimum Red CRD	0	0

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase - Pelican, Puffin and Toucan Times

Phase - Pelican, Puffin and Toucan Times

Phase	PDD Ped Demand Delay	PDX Ped Demand Hold	CMX Clearance Maximum	CDY 0 Clearance Delay Gap Change	CDY 1 Clearance Delay Max Change	CRD Clearance Minimum Red
Q	0	0.0	0	0	0	0
R	0	0.0	0	0	0	0

○ Phases A to P ◉ Phases Q to F2

☐

☐

Pedestrian Handset Range Limits

	MIN	MAX
Demand Delay PDD	0	4
Demand Hold PDX	0.0	4.0
Clearance Maximum CMX	6	20
Clearance Delays CDY 0 and CDY1	0	0
Clearance Minimum Red CRD	0	0

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

IO and Link - Pelican/Puffin/Toucan Times

I/O and Link - Pelican/Puffin/Toucan Times

Streams	0	1	2	3	4	5	6	7

Computer Control

PV		
Window Time UIE		0 0

Local Link

PV1		
Link Delay Time LKD		0 0
Link Window Time LKW		0 0
Link Override Time LKO		0 0

Kerbside Mat Test Output

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Stages - Prohibited, Alternative, Ignored Moves

Stages - Prohibited, Alternative, Ignored Moves

Sets
- (•) 1
- ( ) 2
- ( ) 3
- ( ) 4

Modes	Restrictions Apply To:	No Restrictions
	(•)	( )
Cableless Linking	(•)	( )
Vehicle Actuated	(•)	( )
	( )	( )
Fixed Time	(•)	( )
	( )	( )

Modes	Restrictions Apply To:	No Restrictions
Manual	( )	(•)
	( )	( )
	( )	( )
	( )	( )
	( )	( )

To Stage

From Stage	0	1	2	3	4	5	6	7	8	9	10	11	12	13
0			X	X	X	X	X	X						
1	X													
2	X													
3	X		1											
4	X		1											
5	X		1											
6	X		1	1	1	1								
7	X		1											
8											X			
9									X					
10									X					
11														X
12												X		
13												X		

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Stages - Prohibited, Alternative, Ignored Moves

Stages - Prohibited, Alternative, Ignored Moves

Sets
- ○ 1
- ◉ 2
- ○ 3
- ○ 4

Modes	Restrictions Apply To:	No Restrictions
Urban Traffic Control	◉	○
	◉	○
	◉	○
	○	○
	◉	○
	○	○

Modes	Restrictions Apply To:	No Restrictions
Manual	○	◉
	○	○
	○	○
	○	○
	○	○

To Stage

From Stage	0	1	2	3	4	5	6	7	8	9	10	11	12	13
0			X	X	X	X	X	X						
1	X													
2	X													
3	X		P											
4	X		P											
5	X		P											
6	X		P	P	P	P								
7	X		P											
8											X			
9									X					
10									X					
11														X
12												X		
13												X		

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Stage Internal Demands/Pedestrian Window Times

Stage Internal Demands/Pedestrian Window Times

Start-up Vehicle Responsive Demands

0	1	2	3	4	5	6	7	8	9	10	11	12	13		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Demands Inserted When Leaving Manual and Fixed Time Modes

0	1	2	3	4	5	6	7	8	9	10	11	12	13		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Unlatched Demands that Start Maximum Timers

0	1	2	3	4	5	6	7	8	9	10	11	12	13		
☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☐	☐

Window Times

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1	0	0	0	0	0	0	0	0	0	0	0	0		

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Exceptional Stages

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Phase Delays

Phase Delays

(●) Phase Delays 0-29 ( ) Phase Delays 30-59 ( ) Phase Delays 60-89 ( ) Phase Delays 90-119

No.	Delay Phase	On Change from Stage	To Stage	By (X) Seconds	No.	Delay Phase	On Change from Stage	To Stage	By (X) Seconds
0	A	3	1	6	15	B	1	3	5
1	A	4	1	3	16	G	1	3	7
2	A	4	2	3	17	C	1	3	9
3	C	1	3	4	18	A	3	1	6
4	C	1	5	4	19	E	3	1	3
5	C	2	3	4	20	H	3	1	3
6	C	2	5	4	21	I	3	1	3
7	E	3	1	3	22				0
8	E	3	6	3	23				0
9	E	5	1	3	24				0
10	E	5	6	3	25				0
11	G	1	2	7	26				0
12	G	1	3	7	27				0
13	G	1	4	7	28	A	3	1	12
14				0	29	E	3	1	6

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Fixed Time

Fixed Time

Stage Moves & Times (Not Fixed Time to Current Max)

Current Stage	0	1	2	3	4	5	6	7
Next Stage								
Time								
Current Stage	8	9	10	11	12	13	14	15
Next Stage								
Time								
Current Stage	16	17	18	19	20	21	22	23
Next Stage								
Time								
Current Stage	24	25	26	27	28	29	30	31
Next Stage								
Time								

Phases Demanded and Extended under Fixed Time to Current Max.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Demand	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	☑	☐	☐	☐	☐	☐
Extend	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	☑	☐	☐	☐	☐	☐

	Q	R	S	T	U	V	W	X	Y	Z	A2	B2	C2	D2	E2	F2
Demand	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Extend	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

CLF - Plan(s)

CLF - Plan(s)

0 Plan No.

Copy From

Plan Specifics

0 Influence Set

Copy From

Entry Point (secs) 255

Exit Point (secs) 255

Cycle Time (secs) 70

Smooth CLF

Slow 0

Fast 0

Group Offset Handset Range

Min. 0

Max. 255

Group/Influence

Group No.	Group Offset	Group Influence	Related Stage	Group No.	Group Offset	Group Influence	Related Stage
0	27	4	3	16			
1	37	1	3	17			
2	62	1	1	18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			

CLF Influences

0 - Go To VA

1 - Immediate Move

2 - Demand Dependent Move

3 - Hold

4 - Prevent Except To

5 - Add Immediate Move

6 - Add Demand Dependent Move

7 - Ignore

8 - Stand Alone Inhibited

9 - Stand Alone Ped Alowed

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

CLF - Plan(s)

CLF - Plan(s)

1 Plan No.

Copy From

Plan Specifics

1 Influence Set

Copy From

Entry Point (secs)	255
Exit Point (secs)	255
Cycle Time (secs)	60

Smooth CLF

Slow	0
Fast	0

Group Offset Handset Range

Min.	0
Max.	255

Group/Influence

Group No.	Group Offset	Group Influence	Related Stage	Group No.	Group Offset	Group Influence	Related Stage
0	17	4	3	16			
1	27	1	3	17			
2	52	1	1	18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			

CLF Influences

0 - Go To VA

1 - Immediate Move

2 - Demand Dependent Move

3 - Hold

4 - Prevent Except To

5 - Add Immediate Move

6 - Add Demand Dependent Move

7 - Ignore

8 - Stand Alone Inhibited

9 - Stand Alone Ped Alowed

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

CLF - Plan(s)

CLF - Plan(s)

Plan No. 2

Copy From

Plan Specifics

Influence Set 2

Copy From

Entry Point (secs)	255
Exit Point (secs)	255
Cycle Time (secs)	70

Smooth CLF

Slow	0
Fast	0

Group Offset Handset Range

Min.	0
Max.	255

Group/Influence

Group No.	Group Offset	Group Influence	Related Stage	Group No.	Group Offset	Group Influence	Related Stage
0	27	4	3	16			
1	37	1	3	17			
2	62	1	1	18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			

CLF Influences

0 - Go To VA

1 - Immediate Move

2 - Demand Dependent Move

3 - Hold

4 - Prevent Except To

5 - Add Immediate Move

6 - Add Demand Dependent Move

7 - Ignore

8 - Stand Alone Inhibited

9 - Stand Alone Ped Alowed

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

CLF - Plan(s)

CLF - Plan(s)

Plan No. 3

Copy From

Plan Specifics

Influence Set 3

Copy From

Entry Point (secs)	255
Exit Point (secs)	255
Cycle Time (secs)	60

Smooth CLF

Slow	0
Fast	0

Group Offset Handset Range

Min.	0
Max.	255

Group/Influence

Group No.	Group Offset	Group Influence	Related Stage	Group No.	Group Offset	Group Influence	Related Stage
0	18	4	3	16			
1	28	1	3	17			
2	52	1	1	18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			

CLF Influences

0 - Go To VA

1 - Immediate Move

2 - Demand Dependent Move

3 - Hold

4 - Prevent Except To

5 - Add Immediate Move

6 - Add Demand Dependent Move

7 - Ignore

8 - Stand Alone Inhibited

9 - Stand Alone Ped Alowed

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

CLF - Plan(s)

CLF - Plan(s)

4 Plan No.

Copy From

Plan Specifics

4 Influence Set

Copy From

Entry Point (secs)	255
Exit Point (secs)	255
Cycle Time (secs)	74

Smooth CLF

Slow	0
Fast	0

Group Offset Handset Range

Min.	0
Max.	255

Group/Influence

Group No.	Group Offset	Group Influence	Related Stage	Group No.	Group Offset	Group Influence	Related Stage
0	29	4	3	16			
1	39	1	3	17			
2	66	1	1	18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			

CLF Influences

0 - Go To VA

1 - Immediate Move

2 - Demand Dependent Move

3 - Hold

4 - Prevent Except To

5 - Add Immediate Move

6 - Add Demand Dependent Move

7 - Ignore

8 - Stand Alone Inhibited

9 - Stand Alone Ped Alowed

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

CLF - Base Time

CLF - Base Time

Controller Base Date: XX/XX/XX

Controller Base Time: 02:00:00

Plan Offset

	Minutes	Seconds		Minutes	Seconds
Plan 0	0	0	Plan 8	0	0
Plan 1	0	0	Plan 9	0	0
Plan 2	0	0	Plan 10	0	0
Plan 3	0	0	Plan 11	0	0
Plan 4	0	0	Plan 12	0	0
Plan 5	0	0	Plan 13	0	0
Plan 6	0	0	Plan 14	0	0
Plan 7	0	0	Plan 15	0	0

Handset Range Limits

	Minutes	Seconds
Min	0	0
Max	255	59

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

CLF - Demand Dependent Moves

Clear Grid Data

Notes:
If no data is entered for a stage then a demand for any phases in that stage will be considered. The data specified on this screen will also change the screen CLF - Demands to Consider with Demand Dependent Stage Moves.

Phases

Stages	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
0																		
1		■				■												
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

UTC General Data

UTC General Data

Type of UTC

(•) 106 ( ) 316

Integral OTU Address

4 Number of Control Words

4 Number of Reply Words

[ ] Controller to respond to TC bit.

[ ] Introduction of UTC to be disabled by Priority and LRT M

[ ] Non UTC RTC synchronisation input name

RTC Synchronisation Times

Clock Synchronise Time (UTC TS input)

Day	Time
Time Only	23:00:00

Clock Confirm Time (UTC RT output)

Day	Time
Time Only	23:00:02

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

UTC Control and Reply Data Format

UTC Control and Reply Data Format

Control Words

	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Bit 8
Word 1	F1	F2	F3	F4	F5	F6	F7	
Word 2					SO	TS		MOVAT0
Word 3								
Word 4	F9	F10	F12	F13				

Reply Words

Word 1	G1	G2	G3	G4	G5	G6	G7	GB
Word 2	GD	GF	GH	GI	DF	TF	DC	LF1
Word 3	LF2	PI	CC	CF	CO			
Word 4	G9	G10	G12	G13				
Word 5								
Word 6								
Word 7								
Word 8								
Word 9								
Word 10								
Word 11								
Word 12								
Word 13								
Word 14								

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

UTC Stage and Mode Data Definitions

UTC Stage and Mode Data Definitions

Stage	Force Bit	Green Confirm Bit	Demand Confirm Bit	Stage	Force Bit	Green Confirm Bit	Demand Confirm Bit
0				16			
1	F1	G1		17			
2	F2	G2		18			
3	F3	G3		19			
4	F4	G4		20			
5	F5	G5		21			
6	F6	G6		22			
7	F7	G7		23			
8				24			
9	F9	G9		25			
10	F10	G10		26			
11				27			
12	F12	G12		28			
13	F13	G13		29			
14				30			
15				31			

Mode Data Definitions

Manual Mode Operative:
☐ G1/G2 ☐ RR ☐

Manual Mode Selected:
☐ G1/G2 ☐ RR ☐

No Lamp Power, or Lamps Off due to RLM or Part Time:
☑ G1/G2 ☐ ☐

Detector Fault:
☐ ☐ ☑ DF

Normal NOT selected on the Manual Panel:
☐ G1/G2 ☐ RR ☐

RR Button Selected:
☐ G1/G2 ☐ RR ☐

If UTC Reply Confirms are required for a Controller Fault (CF) OR for separate MC and RR replies, Conditioning must be used.

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

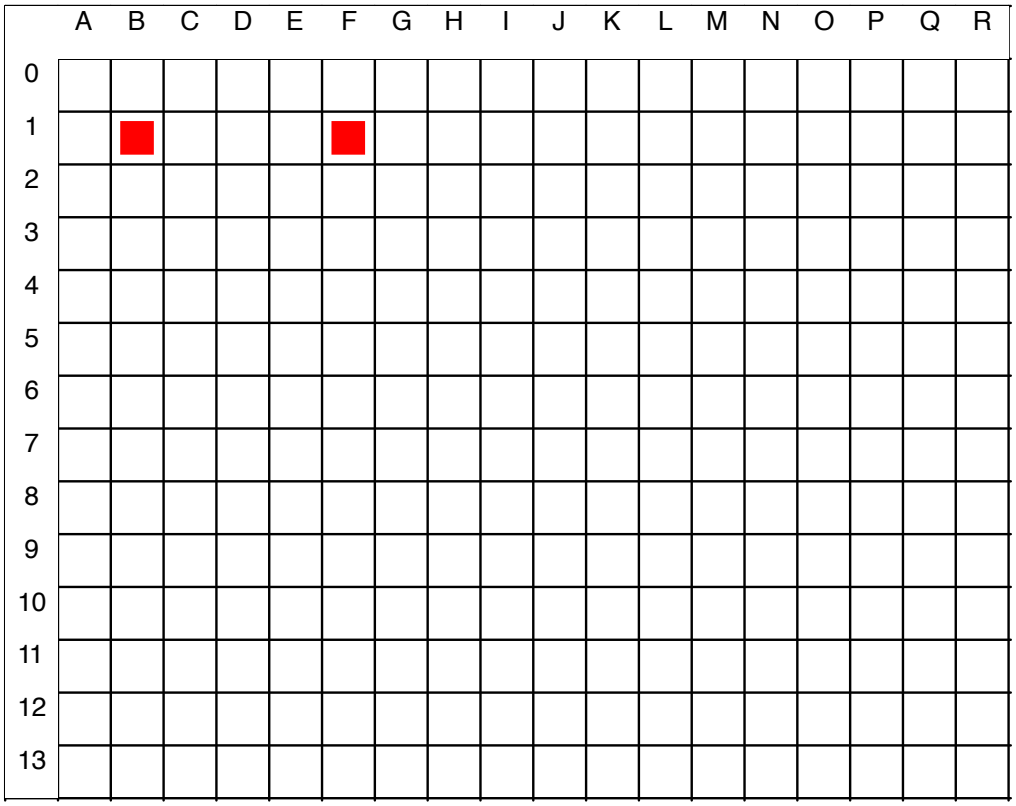
UTC Demand Dependent Forces

Clear Grid Data

Notes:
If no data is entered for a stage then a demand for any phases in that stage will be considered. The data specified on this screen will also change the screen CLF - Demands to Consider with Demand Dependent Stage Moves.

Phases

Stages



Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

UTC and MOVA Detectors

UTC and MOVA Detectors

Detector Mapping

☑ Combined

Set Selection

○ ○ ○ ○ ○

1	AX1	2	AX2	3	BIN3	4	BIN4	5	BX5	6	BX6	7	BX7	8	BSL8
9	BSL9	10	BSL10	11	DIN11	12	DX12	13	DX13	14	DSL14	15	DSL15	16	
17		18		19		20		21	HIN21	22	HX22	23	HSL23	24	IX24
25	ISL25	26		27		28		29		30		31		32	
33	EX33	34	EX34	35	FIN35	36	FIN36	37	FX37	38	FX38	39	FX39	40	FSL40
41	FSL41	42	FSL42	43	HIN43	44	HX44	45	HX45	46	HX46	47	HSL47	48	HSL48
49	HSL49	50	IX50	51	ISL51	52		53		54		55		56	
57		58		59		60		61		62		63		64	

Note - only 32 detectors available on MOVA 4.0

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

MTC - Time Switch Parameters

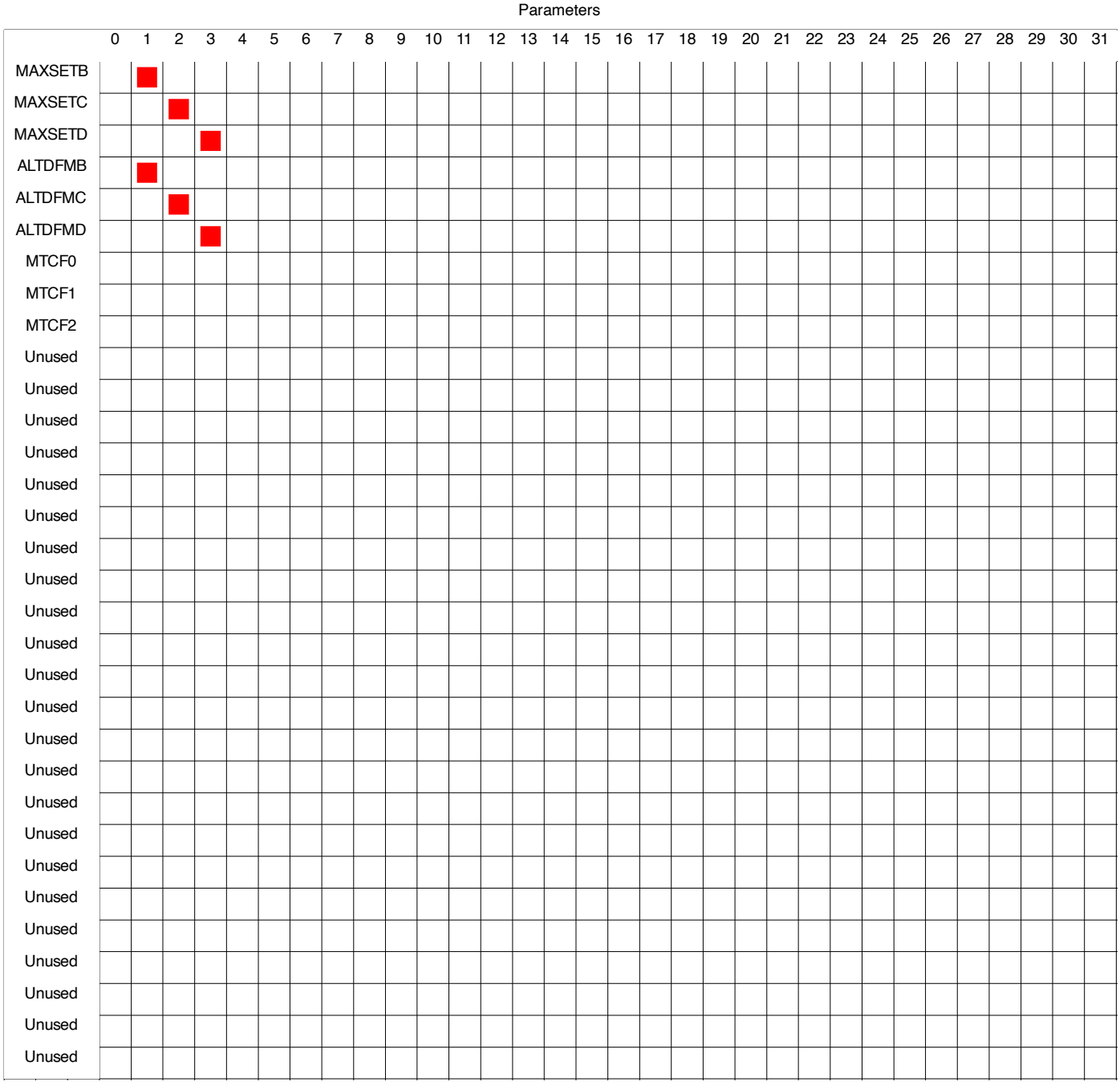
MTC - Time Switch Parameters

	Type	Event
0	Alternate Max	MAXSETB
1	Alternate Max	MAXSETC
2	Alternate Max	MAXSETD
3	Alternate DFM	ALTDFMB
4	Alternate DFM	ALTDFMC
5	Alternate DFM	ALTDFMD
6	Conditioning	MTCF0
7	Conditioning	MTCF1
8	Conditioning	MTCF2
9	No Action	
10	No Action	
11	No Action	
12	No Action	
13	No Action	
14	No Action	
15	No Action	

	Type	Event
16	No Action	
17	No Action	
18	No Action	
19	No Action	
20	No Action	
21	No Action	
22	No Action	
23	No Action	
24	No Action	
25	No Action	
26	No Action	
27	No Action	
28	No Action	
29	No Action	
30	No Action	
31	No Action	

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

MTC - Time Switch Parameters Array



Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

MTC - Day Type

MTC - Day Type

No.	Mon	Tue	Wed	Thu	Fri	Sat	Sun
0	☐	☐	☐	☐	☐	☑	☐
1	☐	☐	☐	☐	☐	☐	☑
2	☑	☐	☐	☐	☐	☐	☐
3	☐	☑	☐	☐	☐	☐	☐
4	☐	☐	☑	☐	☐	☐	☐
5	☐	☐	☐	☑	☐	☐	☐
6	☐	☐	☐	☐	☑	☐	☐
7	☑	☑	☑	☑	☑	☑	☑
8	☑	☑	☑	☑	☑	☑	☐
9	☑	☑	☑	☑	☑	☐	☐
10	☐	☐	☐	☐	☐	☑	☑
11	☐	☐	☐	☐	☐	☐	☐
12	☐	☐	☐	☐	☐	☐	☐
13	☐	☐	☐	☐	☐	☐	☐
14	☐	☐	☐	☐	☐	☐	☐
15	☐	☐	☐	☐	☐	☐	☐

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

MTC - Timetable

MTC - Timetable

View Timetable Settings

(•) 0 - 15 ( ) 16 - 31 ( ) 32 - 47 ( ) 48 - 63

No.	Day Type	Time	Description	Function Code	Plan/ Parameter
0	9	07:00:00	INTRODUCE MAXSET A	2	0
1	9	09:30:00	INTRODUCE MAXSET B	2	1
2	9	15:30:00	INTRODUCE MAXSET C	2	2
3	7	19:00:00	INTRODUCE MAXSET D	2	3
4	0	08:00:00	INTRODUCE MAXSET B	2	1
5	1	09:00:00	INTRODUCE MAXSET B	2	1
6	9	07:00:00	INTRODUCE CLF PLAN 0	1	0
7	9	09:30:00	INTRODUCE CLF PLAN 1	1	1
8	9	15:30:00	INTRODUCE CLF PLAN 2	1	2
9	7	19:00:00	INTRODUCE CLF PLAN 3	1	3
10	0	08:00:00	INTRODUCE CLF PLAN 1	1	1
11	1	09:00:00	INTRODUCE CLF PLAN 1	1	1
12	10	09:00:00	ENABLE ALL RED GDNQ59	4	7
13	10	18:00:00	DISABLE ALL RED GDNQ59	3	7
14	9	08:15:00	DISABLE MOVA CRB AM PEAK	3	8
15	9	08:50:00	ENABLE MOVA CRB AM PEAK	4	8

Function Codes:

0 = Isolate From CLF

1 = Introduce a CLF Plan

2 = Introduce a Parameter (Combination of event switches)

3 = Selects an Individual event switch to be set

4 = Selects an Individual event switch to be cleared.

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

MTC - Timetable

MTC - Timetable

View Timetable Settings

○ 0 - 15 ◉ 16 - 31 ○ 32 - 47 ○ 48 - 63

No.	Day Type	Time	Description	Function Code	Plan/ Parameter
16	9	15:15:00	DISABLE MOVA CRB PM PEAK	3	8
17	9	15:50:00	ENABLE MOVA CRB PM PEAK	4	8
18	9	08:30:00	INTRODUCE CLF PLAN 4	1	4
19	0			0	0
20	0			0	0
21	0			0	0
22	0			0	0
23	0			0	0
24	0			0	0
25	0			0	0
26	0			0	0
27	0			0	0
28	0			0	0
29	0			0	0
30	0			0	0
31	0			0	0

Function Codes:

0 = Isolate From CLF

1 = Introduce a CLF Plan

2 = Introduce a Parameter (Combination of event switches)

3 = Selects an Individual event switch to be set

4 = Selects an Individual event switch to be cleared.

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

LMU - General

LMU - General

Lamp Monitoring - LMU Voltage

- (•) 200-240
- ( )
- ( ) 50-0-50, 100-120
- ( ) 230 CLS

Red Lamp Monitoring

Max Red Bulb Wattage: 50

First Red Lamp Fault Speed: 0

- [x] RLF2 Cancels RLM additional Intergreens
- [ ] RLF2 Only Cleared by RFL = 1
- [ ] RLF1 Only Cleared by RFL = 1

RLM Additional Intergreen Handset Limits

Minimum	Maximum
0	10

Streams with Phase BlackOut on RLF2

0	1	2	3				
[ ]	[x]	[x]	[x]	[ ]	[ ]	[ ]	[ ]

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

LMU - Sensors

LMU - Sensors

Onboard Sensors

Sensor\ Phase	Sensor Type	Bulb Watts	Sensor\ Phase	Sensor Type	Bulb Watts
1\A	As Seq.	40	17\Q		
2\B	As Seq.	40	18\R		
3\C	As Seq.	40	19\S		
4\D	As Seq.	40	20\T		
5\E	As Seq.	40	21\U		
6\F	As Seq.	40	22\V		
7\G	As Seq.	40	23\W		
8\H	As Seq.	40	24\X		
9\I	As Seq.	40	25\Y		
10\J	As Seq.	40	26\Z		
11\K	As Seq.	40	27\A2		
12\L	None	40	28\B2		
13\M	None	40	29\C2		
14\N	None	40	30\D2		
15\O	None	40	31\E2		
16\P	As Seq.	40	32\F2		

External Sensors

Sensor\ Pin	Drive	Sensor Type	Bulb Watts
33\b14		Regulatory Sign	7
34\z16		Regulatory Sign	7
35\z14		Regulatory Sign	7
36\z12		Regulatory Sign	7
37\b14		Regulatory Sign	7
38\z16		Regulatory Sign	7
39\z14		Regulatory Sign	7
40\z12		Regulatory Sign	7
41\b14			
42\z16			
43\z14			
44\z12			
45\b14			
46\z16			
47\z14			
48\z12			

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

LMU Sensor Load Types

LMU Sensor Load Types

Screen Select

1 of 2

Sensor	Phase	Sensor Type	LED R+W	Load Type	LLF Profile
1	A	As Seq.	Auto		
2	B	As Seq.	Auto		
3	C	As Seq.	Auto		
4	D	As Seq.	Auto		
5	E	As Seq.	Auto		
6	F	As Seq.	Auto		
7	G	As Seq.	Auto		
8	H	As Seq.	Auto		
9	I	As Seq.	Auto		
10	J	As Seq.	Auto		
11	K	As Seq.	Auto		
16	P	As Seq.	Auto		
33	N/A	Regulatory Sign	Auto		
34	N/A	Regulatory Sign	Auto		
35	N/A	Regulatory Sign	Auto		
36	N/A	Regulatory Sign	Auto		

Works Order : E83071
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LMU Sensor Load Types

LMU Sensor Load Types

Screen Select

2 of 2

Sensor	Phase	Sensor Type	LED R+W	Load Type	LLF Profile
37	N/A	Regulatory Sign	Auto		
38	N/A	Regulatory Sign	Auto		
39	N/A	Regulatory Sign	Auto		
40	N/A	Regulatory Sign	Auto		

Works Order : E83071
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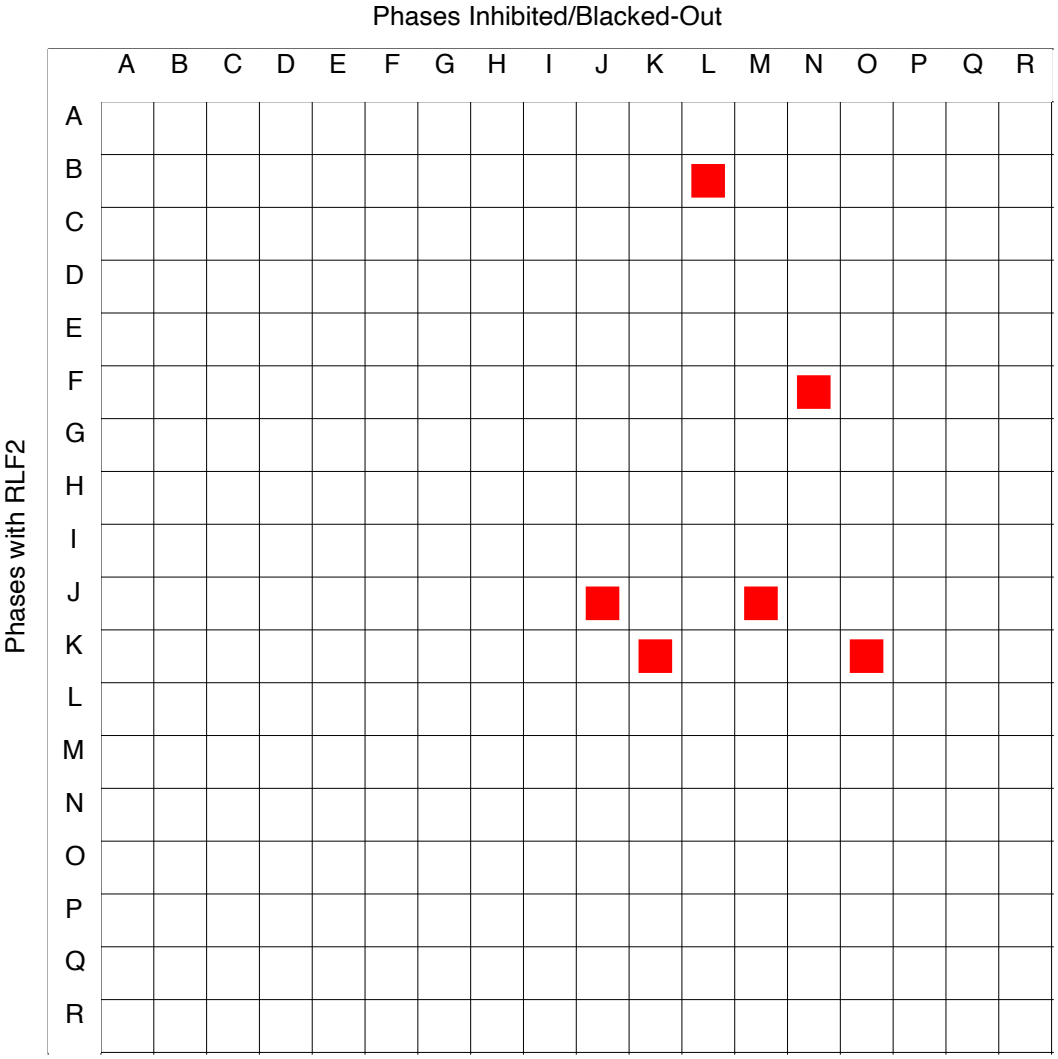
RLM Additional Intergreens

Phases Delayed

Phases with RLF1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
A																		
B												2						
C																		
D																		
E																		
F														2				
G																		
H																		
I																		
J													2					
K															2			
L																		
M																		
N																		
O																		
P																		
Q																		
R																		

Works Order : E83071
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RLM Phase Inhibits



Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Manual Panel

Manual Panel

Stage Buttons and LEDs

Button No.	Title	Called Stage for Stream 0	1	2	3	4	5	6	7
0	ALL RED	0	8	11					
1	A52 E/B + W/B	1	9	12					
2	A52 E/B RIGHT TURN	2	9	12					
3	B6003 N/B + S/B + PEDS L + N	3	9	12					
4	B6003 N/B RIGHT TURN	4	9	12					
5	B6003 S/B RIGHT TURN	5	9	12					
6	A52 W/B RIGHT TURN	6	9	12					
7	ALL CIRCULATORY	7	9	12					

General LEDs

	AUX 1	AUX 2	AUX 3	AUX 4 (Hurry Call)	AUX 5 (Higher Priority)
Conditioned	☑	☑	☑	☑	☑

General Buttons

	None	SW1	SW2	SW3
Momentary		☑	☑	☑
Dim Override	◉	○	○	○
RR	◉	○	○	○

Manual Signals On

- ○ Immediate Signals On
- ◉ As Start-Up

Manual Mode Enable

- ○ Always
- ○ When Handset Plugged in (Note 1)
- ◉ When 'MND' Command Entered

NOTE:
For this to operate Special Conditioning is required.

Mode Select Switches Disabled

☐ VA ☐ Fixed Time ☐ CLF

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EM Number : J31311
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Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Manual Mode - Optional Phases Appearance

Manual Mode - Optional Phases Appearance

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Never Appears	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Demand Dependant	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Always Appears	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉

	Q	R	S	T	U	V	W	X	Y	Z	A2	B2	C2	D2	E2	F2
Never Appears	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Demand Dependant	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Always Appears	◉	◉	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Extend All Red - General

Extend All Red - General

Auto Extend to Max

Part Time	☐
Emergency Vehicle	☐
Hurry Call	☐
LRT	☐
Priority	☐
Manual	☐
Manual Step On	☐
UTC	☐
MOVA	☐
CLF	☐
VA*	☐
Fixed Time	☐

All Red Timings

Stream	0	1	2	3	4	5	6	7
Extension Time	1.0	0.0	0.0					
Max Time	3	0	0					

* Selecting Extend to Max on VA mode will also cause Extend to Max on CLF, UTC and Priority modes.

Detectors Associated with All Red Extension Units

Unit	Associated Detectors							
1	GDNQ59							
2	GDNQ59							
3								
4								
5								
6								
7								

The association between detectors and extension units must be performed in special conditioning.

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Extend All Red - Stage To Stage Moves

To Stage

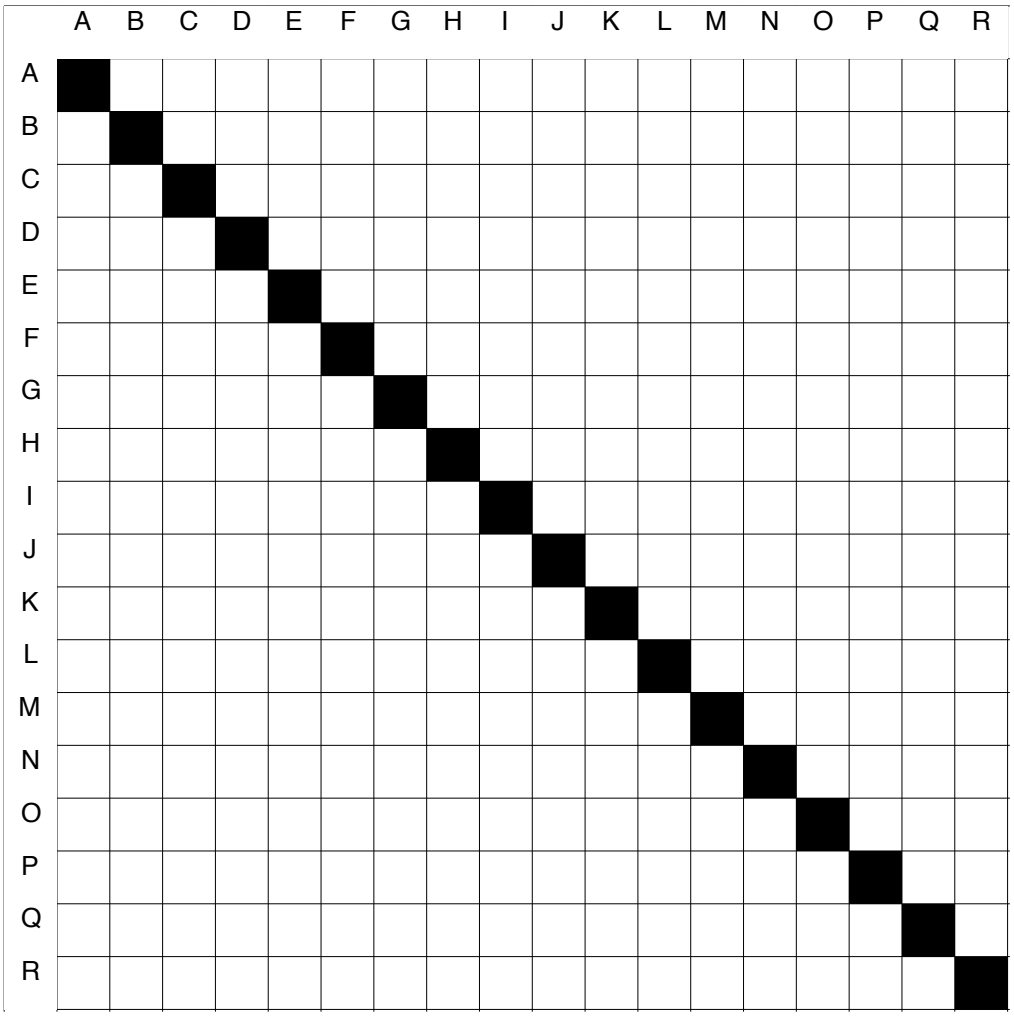
From Stage	0	1	2	3	4	5	6	7	8	9	10	11	12	13
0														
1			2	2	2	2		2						
2		1					1							
3		1					1							
4		1					1							
5		1					1							
6			2	2	2	2		2						
7		1					1							
8														
9														
10														
11														
12														
13														

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Extend All Red - Independent Intergreens

Phase Not Affected by Hold

Phase Terminating



Works Order : E83071
EM Number : J31311
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Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Speed Discrimination / Speed Assessment Equipment

Speed Discrimination / Speed Assessment Equipment

(●) SDE/SA Card
( ) Internal SDE/SA

Equipment Type
(●) SDE ( ) SA

Loop Spacing
( ) 3.05m (●) 3.66m

Note:
3.05m is Non-Standard

Number of Assessors
0

*
Assessor Types:
1 = Double SDE
2 = Triple SDE Inner
3 = Triple SDE Outer
4 = Speed Assessment

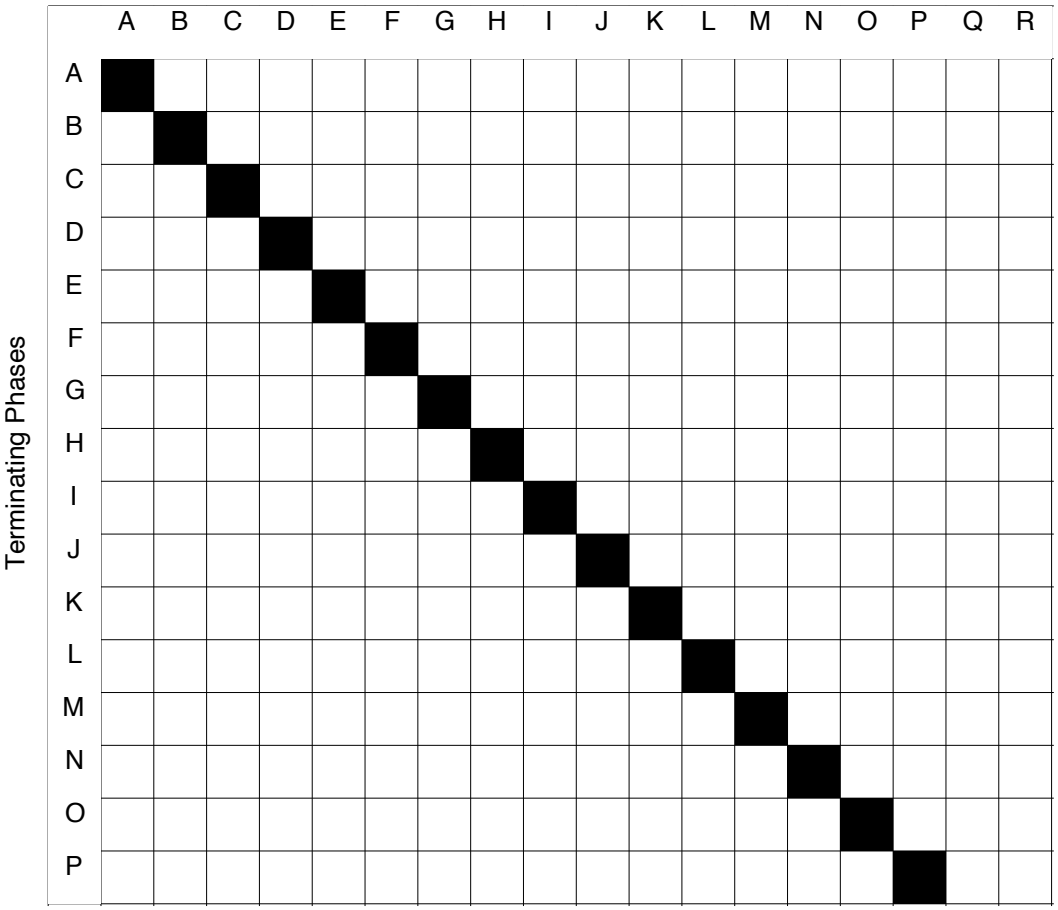
Assessor Number	Assessor Input Name	Assessor Type *	Associated Phase
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Phase Terminated	Extra Intergreen	Curtailed VA Extensions to Force Extra IGN	Phase Terminated	Extra Intergreen	Curtailed VA Extensions to Force Extra IGN
A		☐	Q		☐
B		☐	R		☐
C		☐	S		☐
D		☐	T		☐
E		☐	U		☐
F		☐	V		☐
G		☐	W		☐
H		☐	X		☐
I		☐	Y		☐
J		☐	Z		☐
K		☐	A2		☐
L		☐	B2		☐
M		☐	C2		☐
N		☐	D2		☐
O		☐	E2		☐
P		☐	F2		☐

Works Order : E83071
EM Number : J31311
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Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

SDE - Gaining Phase Delays Affected

Gaining Phase Delays to be Increased



Works Order : E83071
EM Number : J31311
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Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Special Conditioning

```
; 1. MANUAL PANEL
; ===============

(CCTO3+CCTO4+CCTO0+CCTO1)=MIL22                    ; BQ16 OR BQ17 OR FQ52 OR FQ53 ACTIVE LIGHT AUX 1 LED
CCTO5=MIL23                                       ; IQ18 ACTIVE LIGHT AUX 2 LED
CCTO2=MIL05                                       ; EXITQ54 ACTIVE LIGHT AUX 3 LED
(MODE0 EQL<6>).MOVAT0=MIL07                       ; MOVA ACTIVE LIGHT HURRY CALL LED
(MODE0 EQL<6>).NOT(MOVAT0)=MIL17                  ; UTC ACTIVE LIGHT HIGHER PRIORITY LED
MAUXSW1=SCRT7                                     ; SWITCH 1 PRESSED PULSES MOVADET'S 16,17,52 AND 53.
MAUXSW2=SCRT8                                     ; SWITCH 2 PRESSED PULSES MOVADET18 ( IQ18 )
MAUXSW3=SCRT9                                     ; SWITCH 3 PRESSED PULSES MOVADET54 ( EXITQ54 )

; 2. CONTROLLER REPLIES
; =====================
NOT(DSRACC)=TF                  ; HANDSET SETS TF FLAG.
NOT(LMPDIM)=DC                  ; LAMPS DIMMED SETS DC.
NOT(FLF55)=LF1                  ; ANY LAMP FAILURE REPLY LF1.
NOT(FLF22B0)=LF2                ; FIRST RED LAMP FAILURE REPLY LF2.
NOT(FLF22B1)=PI                 ; PEDS LOCKED OUT REPLIES PI.
NOT(FLFCOM)=CF                  ; FAULT REPLIES CF.
DOORSW=CO                       ; DOOR OPEN REPLIES CO.


; 3. DETECTION
; ============

(BSL8+BSL9+BSL10)=+LCPHB                          ; EXTRA DETECTION TO DEMAND AND EXTEND PHASES
BSL8_EXT:=+EXOB
        *=+EXCB
BSL9_EXT:=+EXOB
        *=+EXCB
BSL10_EXT:=+EXOB
         *=+EXCB

(FSL40+FSL41+FSL42)=+LCPHF                        ; EXTRA DETECTION TO DEMAND AND EXTEND PHASES
FSL40_EXT:=+EXOF
         *=+EXCF
FSL41_EXT:=+EXOF
         *=+EXCF
FSL42_EXT:=+EXOF
         *=+EXCF

(HSL47+HSL48+HSL49+HSL23)=+LCPHH                  ; EXTRA DETECTION TO DEMAND AND EXTEND PHASES
HSL47_EXT:=+EXOH
         *=+EXCH
HSL48_EXT:=+EXOH
         *=+EXCH
HSL49_EXT:=+EXOH
         *=+EXCH
HSL23_EXT:=+EXOH
         *=+EXCH




; 4. EXTEND ALL RED UNIT 1                          ; GDNQ59 LOOP
; ========================                          ; ============

CFE8.NOT(MTCF1).CCTO6=IGEO1             ; LOOP ACTIVE EXTEND THE ALL BETWEEN STAGES MARKED
```

Works Order : E83071
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Special Conditioning

```
HLDON0=+MOVADET59                          ; SET MOVADET59 WHILE THE LOOP IS ACTIVE
CFE9.NOT(MTCF1).CCTO6=IGEO2                ; LOOP ACTIVE EXTEND THE ALL BETWEEN STAGES 6 and 5


; 5. MOVA OUTPUT PULSES
; =====================

; BQ16
; ====
IFT (SCRT7+CCTO3).NOT(CNDTMA11).NOT(1SCRT236).NOT(CNDTMA12) THN        ; BQ16 AFTER THE CALL DELAY
    RUN<11>                                                            ; SET BIT TO STOP THE O/P FROM PULSING
    RUN<12>                                                            ; RUN OUTPUT TIMER
END                                                                    ; RUN OVERRIDE TIMER
CNDTMA11=+MOVADET16                                                    ; SET OUTPUT PULSE MOVADET16
CCTO3=1SCRT236                                                         ; CLEAR BIT WHEN LOOPS HAVE CLEARED

; BQ17
; ====
IFT (SCRT7+CCTO4).NOT(CNDTMA13).NOT(1SCRT237).NOT(CNDTMA12) THN        ; BQ17 AFTER THE CALL DELAY
    RUN<13>                                                            ; SET BIT TO STOP THE O/P FROM PULSING
    RUN<12>                                                            ; RUN OUTPUT TIMER
END                                                                    ; RUN OVERRIDE TIMER
CNDTMA13=+MOVADET17                                                    ; SET OUTPUT PULSE MOVADET17
CCTO4=1SCRT237                                                         ; CLEAR BIT WHEN LOOPS HAVE CLEARED

; IQ18
; ====
IFT SCRT8 THN                                                          ; IQ18 ACTIVE AFTER THE CALL DELAY SET
    RUN<19>                                                            ; MOVADET18, IF SWITCH 2 IS PRESSED PULSE
END                                                                    ; MOVADET18 FOR 2 SECS
(CCTO5+CNDTMA19)=+MOVADET18

; FQ52
; ====
  IFT (SCRT7+CCTO0).NOT(CNDTMA14).NOT(1SCRT238).NOT(CNDTMA15) THN        ; FQ52 AFTER THE CALL DELAY
    RUN<14>                                                            ; SET BIT TO STOP THE O/P FROM PULSING
    RUN<15>                                                            ; RUN OUTPUT TIMER
END                                                                    ; RUN OVERRIDE TIMER
CNDTMA14=+MOVADET52                                                    ; SET OUTPUT PULSE MOVADET52
CCTO0=1SCRT238                                                         ; CLEAR BIT WHEN LOOPS HAVE CLEARED

; FQ53
; ====
 IFT (SCRT7+CCTO1.NOT(CNDTMA16).NOT(1SCRT239).NOT(CNDTMA15)) THN        ; FQ53 AFTER THE CALL DELAY
    RUN<16>                                                            ; SET BIT TO STOP THE O/P FROM PULSING
    RUN<15>                                                            ; RUN OUTPUT TIMER
END                                                                    ; RUN OVERRIDE TIMER
CNDTMA16=+MOVADET53                                                    ; SET OUTPUT PULSE MOVADET53
CCTO1=1SCRT239                                                         ; CLEAR BIT WHEN LOOPS HAVE CLEARED

; EXITQ54
; =======
 IFT (SCRT9+CCTO2).NOT(CNDTMA17).NOT(1SCRT242).NOT(CNDTMA18) THN        ; EXITQ54 AFTER THE CALL DELAY
    RUN<17>                                                            ; SET BIT TO STOP THE O/P FROM PULSING
    RUN<18>                                                            ; RUN OUTPUT TIMER
END                                                                    ; RUN OVERRIDE TIMER
CNDTMA17=+MOVADET54                                                    ; SET OUTPUT PULSE MOVADET54
CCTO2=1SCRT242                                                         ; CLEAR BIT WHEN LOOPS HAVE CLEARED
```

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Special Conditioning

```
; 6. PHASE CONFIRMS TO MOVA
; =========================

NOT(PHASEB)=GB                                                  ; PHASE OVERLAP CONFIRMS
NOT(PHASED)=GD
NOT(PHASEF)=GF
NOT(PHASEH)=GH
NOT(PHASEI)=GI
PRSLMPAL.NOT(LMUINHL)=+MOVADET19                                ; PED WAIT LAMP CONFIRMS
PRSLMPAM.NOT(LMUINHM)=+MOVADET20
PRSLMPAN.NOT(LMUINHN)=+MOVADET55
PRSLMPAO.NOT(LMUINHO)=+MOVADET56



; 7. MOVA CRB STREAM 0
; ====================

IFT (PRSLMPRA+PRSLMPAA+PRSLMPGA) THN                            ; MIN LAMPS OFF TIMER TO STOP THE CRB'S BEING
    RUN<94>                                                     ; PULSED WHEN THE LAMP RELAYS ARE TESTED
END
IFT NOT(MODE0 EQL<6>).NOT(CNDTMA95).SSNRM THN                   ; NOT IN MOVA MODE AND IN NORMAL RUN TIMER
    RUN<95>
END
IFT CNDTER95+((PRVMOD0 EQL<6>).NOT(MODE0 EQL<6>)) THN
    LOD<10> 1SCRTCH0
    TRUE=2SCRT1
END                                                             ; START A 2 SEC INTERNAL TIMER FOR CRB TOGGLE
NOT(1SCRTST0 EQL<0>)=.2SCRT1
IFT (1SCRTST0 GRT<0>) THN
    DEC 1SCRTCH0
END
SSNRM.(NOT(2SCRT1)+(MODE0 EQL<6>)).CNDTMA94.NOT(MTCF2.CFE1)=MOVACRB    ; WHEN TIMER TERMINATES TOGGLE CRB



; 8. SPECIAL CONDITIONING FOR MODES OF OPERATION
; ==============================================

NOT((MODE0 EQL<6>)+(MODE0 EQL<2>)+(MODE0 EQL<4>))=SCRT4

SCRT4::::::::::::::=PHDLAY000
                   *=PHDLAY001
                   *=PHDLAY002
                   *=PHDLAY003
                   *=PHDLAY004
                   *=PHDLAY005
                   *=PHDLAY006
                   *=PHDLAY007
                   *=PHDLAY008
                   *=PHDLAY009
                   *=PHDLAY010
                   *=PHDLAY011
                   *=PHDLAY012
                   *=PHDLAY013

NOT(MODE0 EQL<3>)::::::=PHDLAY015
                        *=PHDLAY016
                        *=PHDLAY017
                        *=PHDLAY018
                        *=PHDLAY019
```

Special Conditioning

```
                      *=PHDLAY020
                      *=PHDLAY021



; 9. CLF ENABLED / DISABLED BY CFE SWITCH
; ========================================

CFE7=DISCLF0                                                    ; CLF DISABLED BY CFE7=1



; 10. PED TERMINATION
; ===================

STAGE3.NOT(MINL)=1AUXCMDL4
STAGE3.NOT(PHASEL).PRSLMPAL.NOT(LCPHB+UCPHB+LCPHC+UCPHC+LCPHF+UCPHF+LCPHG+UCPHG $
+LCST1+UCST1+LCST2+UCST2+LCST4+UCST4+LCST5+UCST5+LCST6+UCST6)=+UCST1


PHASEN.NOT(MINN)=1AUXCMDN4
STAGE3.NOT(PHASEN).PRSLMPAN.NOT(LCPHB+UCPHB+LCPHC+UCPHC+LCPHF+UCPHF+LCPHG+UCPHG $
+LCST1+UCST1+LCST2+UCST2+LCST4+UCST4+LCST5+UCST5+LCST6+UCST6)=+UCST1



; 11. STREAM 0 MIN ON START UP/MOVA INIALISATION
; ==============================================

IFT (MODE0 EQL<8>)+((PRVMOD0 EQL<6>).NOT(MODE0 EQL<6>)) THN
    RUN<93>
END
CNDTMA93::::::::=+UCPHA
                 *=+UCPHB
                 *=+UCPHC
                 *=+UCPHD
                 *=+UCPHE
                 *=+UCPHF
                 *=+UCPHG
                 *=+UCPHH
                 *=+UCPHI

NOT(CNDTMA93):::::::::=.EXOA
                       *=.EXCA
                       *=.EXOB
                       *=.EXCB
                       *=.EXOC
                       *=.EXCC
                       *=.EXOD
                       *=.EXCD
                       *=.EXOE
                       *=.EXCE

NOT(CNDTMA93):::::::=.EXOF
                     *=.EXCF
                     *=.EXOG
                     *=.EXCG
                     *=.EXOH
                     *=.EXCH
                     *=.EXOI
```

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Special Conditioning

```
                    *=.EXCI


 ; 12. STAGE PREVENTS
 ; ==================

 (MODE0 EQL<2>):=PRVST2
                *=PRVST6

 (MODE0 EQL<2>).NOT((LCPHD+UCPHD.LCPHH+UCPHH)+(LCPHD+UCPHD.LCPHI+UCPHI))=PRVST3
```

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Special Conditioning

```
; 13. STREAM 1 + 2 PED PREVENTS
; ============================

; PED LINK PHASE M
; ================

IFT TERME THN                                       ; WHEN PHASE "E" LOSES RIGHT OF WAY SET SCRT5 TO HOLD
    TRUE=SCRT5                                      ; OUTPUT
    RUN<36>                                         ; RUN OVERRIDE TIMER
END
IFT TERMF THN                                       ; WHEN DELAY TIMER TERMINATES LIFT THE PREVENT ON STAGE 10
    RUN<37>
END
LMPON.SCRT5.CNDTMA36=PRVST10                        ; PREVENT STAGE 10 IF PHASE F IS AT RIGHT OF WAY
IFT CNDTER37 THN
    FALSE=SCRT5
END


; PED LINK PHASE O
; ================

IFT TERMA THN                                       ; WHEN PHASE "A" LOSES RIGHT OF WAY SET SCRT5 TO HOLD
    TRUE=SCRT6                                      ; OUTPUT
    RUN<38>                                         ; RUN OVERRIDE TIMER
END
IFT TERMB THN                                       ; WHEN DELAY TIMER TERMINATES LIFT THE PREVENT ON STAGE 13
    RUN<39>
END
LMPON.SCRT6.CNDTMA38=PRVST13                        ; PREVENT STAGE 13 IF PHASE B IS AT RIGHT OF WAY
IFT CNDTER39 THN
    FALSE=SCRT6
END



; 14 AX2 QUEUE LOOP ( CONTROLLED PHASE DELAY AND MOVADET60 PULSE )
; =================

IFT STAGE3.AX2.(NOT CNDTMA0) THN                        ; AX2 CALL / CANCEL TIMERS USING AUXILIARY TIMERS
    RUN <1>
    TRUE=+1SCRT240
END
IFT NOT(STAGE3.AX2).(NOT CNDTMA1) THN                   ; TIMERS 0 (CALL) AND 1 (CANCEL).
    RUN <0>
    FALSE=.1SCRT240
END
NOT((MODE0 EQL<6>).1SCRT240)=PHDLAY028
1SCRT240=MOVADET60



; 15. EX33 AND EX34 QUEUE LOOPS ( CONTROLLED PHASE DELAY AND MOVADET61 PULSE )
; ============================

IFT STAGE3.(EX33).(NOT CNDTMA2) THN      ; EX33 CALL/CANCEL TIMERS USING AUXILIARY TIMERS
    RUN <3>
    TRUE=+1SCRT241
END
IFT NOT(STAGE3.EX33).(NOT CNDTMA3) THN
    RUN <2>
```

Special Conditioning

```
    FALSE=.1SCRT241
END

IFT STAGE3.(EX34).(NOT CNDTMA49) THN      ; EX34 CALL/CANCEL TIMERS USING AUXILIARY TIMERS
    RUN <50>
    TRUE=+2SCRT242
END
IFT NOT(STAGE3.EX34).(NOT CNDTMA50) THN
    RUN <49>
    FALSE=.2SCRT242
END


NOT((MODE0 EQL<6>).1SCRT241+2SCRT242)=PHDLAY029
1SCRT241+2SCRT242=MOVADET61




; 16. EX33 AND EX34 QUEUE LOOPS ( CONTROLLED PHASE DELAY AND MOVADET61 PULSE )
; ============================

;IFT STAGE3.(EX33+EX34).(NOT CNDTMA2) THN      ; EX34 AND EX34 CALL/CANCEL TIMERS USING AUXILIARY TIMERS
;    RUN <3>
;    TRUE=+1SCRT241
;END
;IFT NOT(STAGE3.EX33+EX34).(NOT CNDTMA3) THN
;    RUN <2>
;    FALSE=.1SCRT241
;END
;NOT((MODE0 EQL<6>).1SCRT241)=PHDLAY029
;1SCRT241=MOVADET61


; 17. STAGE 1 TO RIGHT OF WAY
; ===========================

IFT STAGE1.NOT(1SCRT251) THN                    ; STAGE 1 AT RIGHT OF ALLOW TIMES OF THE CALL DELAYS
    TRUE=1SCRT251
    RUN<8>
END
IFT CNDTER8 THN                                 ; TIMER EXPIRED SETS SCRT BIT TO STOP REPULSING
    TRUE=1SCRT250
END

     :=.1SCRT250                                ; STAGE 1 ENDED RESETS SCRT BITS
     *=.1SCRT251



; 18. CQ62 QUEUE LOOP TO MOVADET 62
; =================================

IFT 1SCRT250.CQ62.(NOT CNDTMA4) THN               ; CQ62 CALL/CANCEL TIMERS USING AUXILIARY TIMERS
    RUN <5>
    TRUE=+1SCRT252
END
IFT NOT(1SCRT250.CQ62).(NOT CNDTMA5) THN          ; TIMERS 4 (CALL) AND 5 (CANCEL).
    RUN <4>
    FALSE=.1SCRT252
```

Special Conditioning

```
END
IFT 1SCRT250.1SCRT252.NOT(CNDTMA33).NOT(1SCRT253) THN
    RUN<32>
    RUN<33>
END
CNDTMA32.NOT(FLD22B1)=MOVADET62                    ; PULSE MOVADET62 WHEN CQ62 IS ACTIVE AFTER THE CALL DELAY
1SCRT252=1SCRT253


; 19. GQ63 QUEUE LOOP TO MOVADET 63
; =================================

IFT 1SCRT250.GQ63.(NOT CNDTMA6) THN                  ; GQ63 CALL/CANCEL TIMERS USING AUXILIARY TIMERS
    RUN <7>
    TRUE=+1SCRT243
END
IFT NOT(1SCRT250.GQ63).(NOT CNDTMA7) THN            ; TIMERS 6 (CALL) AND 7 (CANCEL).
    RUN <6>
    FALSE=.1SCRT243
END

IFT 1SCRT250.1SCRT243.NOT(CNDTMA35).NOT(1SCRT254) THN
    RUN<34>
    RUN<35>
END
CNDTMA34.NOT(FLD27B0)=MOVADET63                    ; PULSE MOVADET63 WHEN GQ63 IS ACTIVE AFTER THE CALL DELAY
1SCRT243=1SCRT254

;-----------------------------------------------------------------------------------------------------------

; 20. MOVADET 64 CALLS
; ====================

; AX1 QUEUE LOOP
; ==============

IFT AX1.(NOT CNDTMA9) THN                                ; AX1 CALL/CANCEL TIMERS USING AUXILIARY TIMERS
    RUN <10>
    TRUE=+1SCRT255
END
IFT NOT(AX1).(NOT CNDTMA10) THN                          ; TIMERS 9 (CALL) AND 10 (CANCEL).
    RUN <9>
    FALSE=.1SCRT255
END


; AX2 QUEUE LOOP
; ==============

IFT AX2.(NOT CNDTMA20) THN                                ; AX2 CALL/CANCEL TIMERS USING AUXILIARY TIMERS
    RUN <21>
    TRUE=+1SCRT244
END
IFT NOT(AX2).(NOT CNDTMA21) THN                          ; TIMERS 20 (CALL) AND 21 (CANCEL).
    RUN <20>
    FALSE=.1SCRT244
END

; EX33 QUEUE LOOP
; ===============
```

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```
IFT EX33.(NOT CNDTMA22) THN                          ; EX33 CALL/CANCEL TIMERS USING AUXILIARY TIMERS
    RUN <23>
    TRUE=+1SCRT245
END
IFT NOT(EX33).(NOT CNDTMA23) THN                      ; TIMERS 22 (CALL) AND 23 (CANCEL).
    RUN <22>
    FALSE=.1SCRT245
END

; EX34 QUEUE LOOP
; ================

IFT EX34.(NOT CNDTMA24) THN                          ; EX34 CALL/CANCEL TIMERS USING AUXILIARY TIMERS
    RUN <25>
    TRUE=+1SCRT246
END
IFT NOT(EX34).(NOT CNDTMA25) THN                      ; TIMERS 24 (CALL) AND 25 (CANCEL).
    RUN <24>
    FALSE=.1SCRT246
END

; CQ62 QUEUE LOOP
; =============

IFT CQ62.(NOT CNDTMA26) THN                           ; CQ62 CALL/CANCEL TIMERS USING AUXILIARY TIMERS
    RUN <27>
    TRUE=+1SCRT247
END
IFT NOT(CQ62).(NOT CNDTMA27) THN                      ; TIMERS 26 (CALL) AND 27 (CANCEL).
    RUN <26>
    FALSE=.1SCRT247
END

; GQ63 QUEUE LOOP
; =============

IFT GQ63.(NOT CNDTMA28) THN                           ; GQ63 CALL/CANCEL TIMERS USING AUXILIARY TIMERS
    RUN <29>
    TRUE=+1SCRT248
END
IFT NOT(GQ63).(NOT CNDTMA29) THN                      ; TIMERS 28 (CALL) AND 29 (CANCEL).
    RUN <28>
    FALSE=.1SCRT248
END

IFT (1SCRT244+1SCRT255).1SCRT247.1SCRT248.(1SCRT245+1SCRT246).NOT(CNDTMA31).NOT(1SCRT249) THN
    RUN<30>
    RUN<31>
END
CNDTMA30=+MOVADET64
(1SCRT244+1SCRT255).1SCRT247.1SCRT248.(1SCRT245+1SCRT246)=1SCRT249
```

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```
; MOVA LINKING FROM TOTON PARK _RIDE
; ==================================


;21. MOVADET 32 PULSE INPUT
;==========================
   IFT TOTB.NOT(2SCRT2).NOT(CNDTMA44) THN                    ; WHEN INPUT ACTIVE RUN PULSE DELAY TIMER
        RUN<42>
   END

   IFT CNDTER42 THN                                          ; WHEN PULSE DELAY TIMER EXPIRES RUN PULSE TIMER
        RUN<43>
   END

  TOTB=2SCRT2                                                ;  SET FLAG WHILST INPUT IS ACTIVE

  TOTB.CNDTMA43.CFE32=+MOVADET32                             ; PULSE MOVADET 32 WHILST PULSE TIMER ACTIVE


   IFT CNDTER42 THN
   RUN<44>
   END


;22. MOVADET 31 HOLD INPUT
;=========================

   IFT NOT(CFE2) THN                                         ; IF CFE2=0 THEN USE TOTBX AS MOVA LINKING
      TOTBX=2SCRT15                                          ; INPUT. IF CFE1=1 THEN USE TOTB AS INPUT
   ELS
      TOTB=2SCRT15
   END


  IFT (2SCRT15.NOT(2SCRT4)).NOT(CNDTMA48) THN                ; WHEN INPUT ACTIVE RUN HOLD DELAY TIMER
        RUN<45>
  END

   IFT CNDTER45 THN                                          ; WHEN HOLD DELAY TIMER EXPIRES SET FLAG
        TRUE=2SCRT5
   END


   2SCRT15.2SCRT5.NOT(2SCRT7)=+2SCRT6

    IFT CNDTER45 THN                                         ; START PREVENT TIMER AFTER FLAG IS SET
    RUN<48>
    END



   IFT (NOT(2SCRT15)).2SCRT6.(NOT(CNDTMA46)) THN             ; WHEN INPUT TERMINATES RUN CANCEL DELAY
        RUN<46>
   END

   NOT(CNDTER46+CNDTER47)=.2SCRT6                            ; RESET INPUT FLAG WHEN DELAY TIMER EXPIRES

   CNDTER47=+2SCRT7

   2SCRT6.CFE31=+MOVADET31                                   ; SET MOVA DET 31 IF CFE31=1
```

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```
   IFT CNDTER45 THN                                    ; START OVERRIDE TIMER AFTER FLAG IS SET
        RUN<47>
   END


   NOT(CNDTMA47)=.2SCRT7

   IFT NOT(2SCRT15) THN
        FALSE=2SCRT5
   END

   2SCRT15=2SCRT4

; 23. MOVA LINKING OUTPUTS TO TOTON PARK _RIDE
; ============================================


   PHASED=BARD                                         ; OUTPUT WHILST PHASE D IS AT RIGHT OF WAY


   IFT PHASED.(DX12_EXT).NOT(2SCRT8) THN               ; IF PHASE D IS AT ROW AND EXTENTIONS ACTIVE
     TRUE:=+BARDX                                      ; ON DETECTOR DX12 THEN SET OUPUT
        *=2SCRT8
   END


   NOT(FROMD)=.2SCRT8                                  ; CANCEL OUTOUT IF PHASE D LOSES ROW
   (DX12_EXT)=.BARDX                                   ; OR EXTENSION ON DX12 CEASE

   PHASEF=BARF                                         ; OUTPUT WHILST PHASE F IS AT RIGHT OF WAY


   IFT PHASEF.(FX39_EXT).NOT(2SCRT9) THN               ; IF PHASE F IS AT ROW AND EXTENSIONS ACTIVE
     TRUE:=+BARFX                                      ; ON DETECTOR FX39 THEN SET OUPUT
        *=2SCRT9
   END


   NOT(FROMF)=.2SCRT9                                  ; CANCEL OUTOUT IS PHASE F LOSES ROW
   (FX39_EXT)=.BARFX                                   ; OR EXTENSION ON FX39 CEASE


   PHASEi=BARI                                         ; OUTPUT WHILST PHASE I IS AT RIGHT OF WAY


   IFT PHASEI.EXTAI.NOT(2SCRT10) THN                   ; IF PHASE I IS AT ROW AND EXTENSIONS ACTIVE
     TRUE:=+BARIX                                      ; ON PHASE I THEN SET OUPUT
        *=2SCRT10
   END


   NOT(FROMI)=.2SCRT10                                 ; CANCEL OUTOUT IS PHASE I LOSES ROW
   EXTAI=.BARIX                                        ; OR EXTENSION ON PHASE I CEASE
```

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Special Conditioning Timers

Special Conditioning Timers

Timers: 0-31

No	Value	Min	Max	200ms	Description	No	Value	Min	Max	200ms	Description
0	3	0	255	☐	DELAY CALL AX2	16	2	0	10	☐	O/P PULSE MOVADET53
1	4	0	255	☐	CANCEL DELAY AX2	17	2	0	10	☐	O/P PULSE MOVADET54
2	3	0	255	☐	DELAY CALL EX33	18	40	0	255	☐	OVERRIDE TMER MOVADET54
3	4	0	255	☐	CANCEL DELAY EX33	19	2	0	10	☐	O/P PULSE MOVADET18
4	5	0	255	☐	DELAY CALL CQ MOVA 62	20	10	0	255	☐	DELAY CALL AX2 MOVA 64
5	1	0	255	☐	CANCEL DELAY CQ MOVA 62	21	1	0	255	☐	CANCEL CALL AX2 MOVA 64
6	5	0	255	☐	DELAY CALL GQ MOVA 63	22	10	0	255	☐	DELAY CALL EX33 MOVA 64
7	1	0	255	☐	CANCEL DELAY GQ MOVA 63	23	1	0	255	☐	CANCEL CALL EX33 MOVA 64
8	15	0	255	☐	DELAY O/P MOVA 62_63	24	10	0	255	☐	DELAY CALL EX34 MOVA 64
9	10	0	255	☐	DELAY CALL AX1 MOVA 64	25	1	0	255	☐	CANCEL CALL EX34 MOVA 64
10	1	0	255	☐	CANCEL CALL AX1 MOVA 64	26	10	0	255	☐	DELAY CALL CQ MOVA 64
11	2	0	10	☐	O/P PULSE MOVADET16	27	1	0	255	☐	CANCEL CALL CQ MOVA 64
12	40	0	255	☐	O/RIDE TMER MOVADET16 / 17	28	10	0	255	☐	DELAY CALL GQ MOVA 64
13	2	0	10	☐	O/P PULSE MOVADET17	29	1	0	255	☐	CANCEL CALL GQ MOVA 64
14	2	0	10	☐	O/P PULSE MOVADET52	30	2	0	10	☐	PULSE O/P MOVADET64
15	40	0	255	☐	O/RIDE TMER MOVADET52 / 53	31	60	0	255	☐	OVERRIDE TIMER MOVADET64

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Special Conditioning Timers

Special Conditioning Timers

Timers: 32-63

No	Value	Min	Max	200ms	Description	No	Value	Min	Max	200ms	Description
32	2	0	10	☐	O/P PULSE MOVADET62	48	90	0	255	☐	MOVA DET 31 INHIBIT TIMER
33	60	0	255	☐	OVERRIDE TIMER MOVADET62	49	3	0	255	☐	DELAY CALL EX34
34	2	0	10	☐	O/P PULSE MOVADET63	50	4	0	255	☐	CANCEL DELAY EX34
35	60	0	255	☐	OVERRIDE TIMER MOVADET63	51		0	255	☐	
36	70	0	255	☐	PHASE M INHIBIT OVERRIDE	52		0	255	☐	
37	15	0	255	☐	PHASE M DELAY RELEASE	53		0	255	☐	
38	70	0	255	☐	PHASE O INHIBIT OVERRIDE	54		0	255	☐	
39	9	0	255	☐	PHASE O DELAY RELEASE	55		0	255	☐	
40		0	255	☐		56		0	255	☐	
41		0	255	☐		57		0	255	☐	
42	20	0	255	☐	MOVA DET 32 CALL DELAY	58		0	255	☐	
43	2	0	255	☐	MOVA DET 32 PULSE	59		0	255	☐	
44	90	0	255	☐	MOVA DET 32 INHIBIT TIMER	60		0	255	☐	
45	20	0	255	☐	MOVA DET 31 CALL DELAY	61		0	255	☐	
46	20	0	255	☐	MOVA DETE 31 CANCEL DELAY	62		0	255	☐	
47	30	0	255	☐	MOVA DET 31 OVERRIDE TIMER	63		0	255	☐	

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Special Conditioning Timers

Special Conditioning Timers

Timers

64-95

No	Value	Min	Max	200ms	Description	No	Value	Min	Max	200ms	Description
64		0	255	☐		80		0	255	☐	
65		0	255	☐		81		0	255	☐	
66		0	255	☐		82		0	255	☐	
67		0	255	☐		83		0	255	☐	
68		0	255	☐		84		0	255	☐	
69		0	255	☐		85		0	255	☐	
70		0	255	☐		86		0	255	☐	
71		0	255	☐		87		0	255	☐	
72		0	255	☐		88		0	255	☐	
73		0	255	☐		89		0	255	☐	
74		0	255	☐		90		0	255	☐	
75		0	255	☐		91		0	255	☐	
76		0	255	☐		92		0	255	☐	
77		0	255	☐		93	120	0	255	☐	START UP MINS STREAM 0
78		0	255	☐		94	1	1	5	☐	MIN LAMPS OFF TIMER
79		0	255	☐		95	120	0	255	☐	CRB TOGGLE BIT STREAM 0

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Fault Log Flags

Fault Log Flags

Fault No	Cond Flag	Act Flag
0	☑	☐
1	☑	☐
2	☑	☐
3	☑	☐
4	☑	☐
5	☑	☐
6	☑	☐
7	☑	☐
8	☑	☐
9	☑	☐
10	☑	☐
11	☑	☐
12	☐	☐
13	☑	☐
14	☑	☐
15	☑	☐

Fault No	Cond Flag	Act Flag
16	☑	☐
17	☑	☐
18	☑	☐
19	☑	☐
20	☑	☐
21	☑	☐
22	☐	☐
23	☑	☐
24	☑	☐
25	☑	☐
26	☑	☐
27	☑	☐
28	☑	☐
29	☑	☐
30	☑	☐
31	☑	☐

Fault No	Cond Flag	Act Flag
32	☑	☐
33	☑	☐
34	☑	☐
35	☑	☐
36	☑	☐
37	☑	☐
38	☑	☐
39	☑	☐
40	☑	☐
41	☑	☐
42	☑	☐
43	☑	☐
44	☑	☐
45	☑	☐
46	☑	☐
47	☐	☐

Fault No	Cond Flag	Act Flag
48	☑	☐
49	☑	☐
50	☑	☐
51	☑	☐
52	☑	☐
53	☑	☐
54	☑	☐
55	☐	☐
56	☑	☐
57	☑	☐
58	☑	☐
59	☑	☐
60	☑	☐
61	☑	☐
62	☑	☐
63	☑	☐

Note:

Cond Flag -
If a fault occurs which sets a fault log flag that has been checked for this Cond flag option then a flag will be set that can be read in Conditioning.

Act Flag -
If a fault occurs which sets a fault log flag that has been checked for this Act flag option then firstly the lamps

will be switched OFF and secondly a flag will be set that can be read in conditioning, to allow any further actions required to be performed by conditioning.

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Special Instructions

Manual Panel Configuration.

Aux 1 - Presence on MOVA Detectors 16,17,52 AND 53 (A52 E+W approach Queue Loops).
Aux 2 - Presence on MOVA Detector 18 (A52 to B6003 SB Slip Queue Loop).
Aux 3 - Presence on MOVA Detector 54 (A52 Exit to Bramcote Queue Loops).

HC LED - Site is under MOVA control.
HP LED - Site is under UTC control.

SWITCH 1 Sends a pules to MOVA Detectors 16,17,52 AND 53 (A52 E+W approach Queue Loops).
SWITCH 2 Sends a pules to MOVA Detector 18 (A52 to B6003 SB Slip Queue Loop).
SWITCH 3 Sends a pules to MOVA Detector 54 (A52 Exit to Bramcote Queue Loops).

==========

J31311

Board	Position	Skt	Port	Type I or O	Line	Cable	Block
CPU	A	X3I	0	I	00 - 07	101	1TBG
CPU	A	X3I	1	I	08 - 15		1TBH
CPU	A	X3O	11	O	88 - 91	105	1TBX
IO1	B	B	2	I	16 - 23	103	1TBJ
IO1	B	E	4	O	32 - 39		1TBK
IO1	B	C	3	I	24 - 31	103	1TBL
IO1	B	D	5	O	40 - 47		1TBM
SDE	F	B	6	I	48 - 55	104	1TBN
SDE	F	B	7	I	56 - 63		1TBP
SDE	F	C	8	I	64 - 71	104	1TBR
SDE	F	C	9	I	72 - 79		1TBS

The socket X3 on the CPU pcb is the double stacked one
X3I = Inner (nearest the board)
X3O = Outer

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Special Instructions

ST800 CONTROLLER ITEMS LIST SHEET 1 (*I*L*)

ITEM	DRAWING NUMBER	DESCRIPTION	QTY	TOT	REMARKS
1					
2	667/1/27000/003	Cabinet 8 Phase wired 8 Phase	1		
3	667/1/27000/002	Cabinet 24 Phase wired 32 Phase			
4	667/1/27001/001	Rack 8 Phase wired 16 Phase			
5	667/1/27001/002	Rack 24 Phase wired 32 Phase			
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23	667/1/27072/001	Cableform 8 Phase (long)	1		
24	667/1/27002/000	Lamp Switch Kit 8 Phase	1		
25	667/1/27003/000	I/O Kit	1		
26	667/1/27005/000	SDE Facility Kit	1		
27	667/1/27004/000	Integral OTU Kit			
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39	667/1/16260/000	Configuration Eprom (Issue 10. 0)	1		
40					

Note 1:
Please refer to special instruction pages for additional information on items marked with an '*'.

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Special Instructions

ST800 CONTROLLER ITEMS LIST SHEET 2 (*I*L*)

ITEM	DRAWING NUMBER	DESCRIPTION	QTY	TOT	REMARKS
41					
42	667/1/27056/001	Manual Panel Assy (Intersection Cont)			
43	667/1/27056/010	Manual Panel Assy (Sigs on/off)			
44	667/1/27056/000	Manual Panel Blanking Kit			
45					
46					Note 2:
47					Ancillary Processor PLD
48					Variants
49					101 OTU & LMU
50					102 OTU Only
51					103 LMU Only
52	667/7/25171/000	Current Transformer			104 OTU & LMU + Up/Download
53					105 OUT Only + Up/DownLoad
54					NB Controller Has built in LMU
55					So LMU on Ancillary Processor
56					Not required included for info
57					only.
58					
59					
60					Note 3:
61	667/1/27000/101	Cabinet Export 8 Phase wired 16 Phase			Fit Current Transformer
62	667/1/27000/102	Cabinet Export 24 Phase wired 32 Phase			starting from position
63	667/1/27001/101	Rack Export 8 Phase wired 16 Phase			TLB/z/16 on the first phase
64	667/1/27001/102	Rack Export 24 Phase wired 32 Phase			driver PCB. if more than 3
65	667/1/27002/100	Export Lamp Switch Kit			sensors are called up fit the
66	667/1/27084/001	Dimming Assembly (1.5KVA)(Fit Std UK)			4th sensor to the second
67	667/1/27084/002	Dimming Assembly (2.0KVA)			Phases driver PCB, and so on
68	667/1/27084/003	Dimming Assembly (3.0KVA)			until all sensors have been
69	667/1/27130/000	30A Controller Kit			used up.
70					TLB/b/14 - 1st sensor terminal
71	667/1/27001/310	ST800 SE Export Rack up to 8 Phase			TLB/z/16 - 2nd sensor terminal
72	667/1/27223/003	ST800 SE 8 Phase Driver No LMU			TLB/z/14 - 3rd sensor terminal
73	667/1/27223/403	ST800 SE 4 Phase Driver No LMU			TLB/z/12 - 4th sensor terminal
74					TLB/z/12 - 4th sensor terminal
75					
76					
77	667/1/27000/301	ST800 P In a Cabinet 4Ph 1 Stream PED			TLB/z/12 - 4th sensor terminal
78	667/1/27012/000	PED 2nd Stream Kit for ST800 P			
79	667/1/27001/300	ST800 P Rack Only 4Ph 1 Stream PED			

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Special Instructions

```
; DETECTOR PACK INSTALLATION DETAILS
; ==================================

PACK 1  PACK 2  PACK 3  PACK 4  PACK 5  PACK 6  PACK 7  PACK 8  PACK 9  PACK 10  PACK 11 PACK 12 PACK 13 PACK 14

AX1     BX5     BSL8    DIN11   DSL14   EX33    FX37    FSL40   HIN43   HSL47    IX50    EXITQ54  HIN21  IX24
AX2     BX6     BSL9    DX12    DSL15   EX34    FX38    FSL41   HX44    HSL48    ISL51   GQ       HX22   ISL25
BIN3    BX7     BSL10   DX13    BQ16    FIN35   FX39    FSL42   HX45    HSL49    FQ52    IQ18     HSL23
BIN4    SPARE   SPARE   CQ      BQ17    FIN36   SPARE   SPARE   HX46    SPARE    FQ53    SPARE    SPARE


; HANDSET CFE SOFTWARE SWITCHES
; =============================

CFE1=1 TO ENABLE FACILITY                   ; REMOVE CRB (MOVA) BY TIME OF DAY

CFE7=1 TO ENABLE FACILITY                   ; CLF NOT USED IF CFE7=1

CFE8=1 TO ENABLE FACILITY                   ; EXTEND ALL RED FROM PHASE E TO PHASE F

CFE9=1 TO ENABLE FACILITY                   ; EXTEND ALL RED FROM PHASE F TO PHASE E

CFE2=1 TO TOGGLE INPUTS                     ; Toggles between TOTB and TOTBX as an input for MOVADET31

CFE31=1 TO ENABLE FACILITY                   ; Enables Hold Link from Toton Park + Ride (MOVADET31)

CFE32=1 TO ENABLE FACILITY                   ; Enables Pulse Link from Toton Park + Ride (MOVADET32)
```

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Call Cancel

Call Cancel

Unit No.	Input Name	Call Delay	Cancel Delay	Phase Demanded (Unlatched Demand)
0	FQ52	6	0	
1	FQ53	6	0	
2	EXITQ54	10	0	
3	BQ16	6	0	
4	BQ17	6	0	
5	IQ18	7	1	
6	GDNQ59	20	1	
7		0	0	

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

Port Number & Type

Port: 0

○ ○ ◉ Inputs & Outputs

	DET No	Bit No	Type I or O	Name	Reqd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	0	0	I	AX1	☑	☐	☐	☐	☐	I	2	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBG	1
○	1	1	I	AX2	☑	☐	☐	☐	☐	I	2	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBG	2
○	2	2	I	BIN3	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBG	3
○	3	3	I	BIN4	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBG	4
○	4	4	I	BX5	☑	☐	☐	☐	☐	A	1	4.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBG	5
○	5	5	I	BX6	☑	☐	☐	☐	☐	A	1	4.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBG	6
○	6	6	I	BX7	☑	☐	☐	☐	☐	A	1	4.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBG	7
○	7	7	I	BSL8	☑	☐	☐		☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBG	8

Add | Delete | Move | Clear Used By

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

Port Number & Type

Port: 1

○ ○ ◉ Inputs & Outputs

	DET No	Bit No	Type I or O	Name	Reqd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	8	0	I	BSL9	☑	☐	☐	☐	☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBH	1
○	9	1	I	BSL10	☑	☐	☐	☐	☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBH	2
○	10	2	I	DIN11	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBH	3
○	11	3	I	DX12	☑	☐	☐	☐	☐	A	1	2.6	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBH	4
○	12	4	I	DX13	☑	☐	☐	☐	☐	A	1	2.6	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBH	5
○	13	5	I	DSL14	☑	☐	☐	☐	☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBH	6
○	14	6	I	DSL15	☑	☐	☐	☐	☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBH	7
○	15	7	I	BQ16	☑	☐	☐		☐	I	2	0.0	☐	☐	☐	☐	☐	☑	☐	☐	☐	1TBH	8

Add | Delete | Move | Clear Used By

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

Port Number & Type

Port: 2

○ ○ ◉ Inputs & Outputs

	DET No	Bit No	Type I or O	Name	Reqd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	16	0	I	BQ17	☑	☐	☐	☐	☐	I	2	0.0	☐	☐	☐	☐	☐	☑	☐	☐	☐	1TBJ	1
○	17	1	I	CQ62	☑	☐	☐	☐	☐	I	2	0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBJ	2
○	18	2	I	EX33	☑	☐	☐	☐	☐	I	2	2.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBJ	3
○	19	3	I	EX34	☑	☐	☐	☐	☐	I	2	2.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBJ	4
○	20	4	I	FIN35	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBJ	5
○	21	5	I	FIN36	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBJ	6
○	22	6	I	FX37	☑	☐	☐	☐	☐	A	1	4.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBJ	7
○	23	7	I	FX38	☑	☐	☐		☐	A	1	4.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBJ	8

Add | Delete | Move | Clear Used By

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

Port Number & Type

Port: 3

○ ○ ◉ Inputs & Outputs

	DET No	Bit No	Type I or O	Name	Reqd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	24	0	I	FX39	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBL	1
○	25	1	I	FSL40	☑	☐	☐	☐	☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBL	2
○	26	2	I	FSL41	☑	☐	☐	☐	☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBL	3
○	27	3	I	FSL42	☑	☐	☐	☐	☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBL	4
○	28	4	I	HIN43	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBL	5
○	29	5	I	HX44	☑	☐	☐	☐	☐	A	1	3.6	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBL	6
○	30	6	I	HX45	☑	☐	☐	☐	☐	A	1	3.6	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBL	7
○	31	7	I	HX46	☑	☐	☐		☐	A	1	3.6	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBL	8

Add | Delete | Move | Clear Used By

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

Port Number & Type

Port: 4

○ ○ ◉ Inputs & Outputs

	DET No	Bit No	Type I or O	Name	Reqd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	32	0	O	BARD	☑	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBJ	9+10
○	33	1	O	BARDX	☑	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBJ	11+12
○	34	2	O	BARF	☑	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBK	1+2
○	35	3	O	BARFX	☑	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBK	3+4
○	36	4	O	BARI	☑	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBK	5+6
○	37	5	O	BARIX	☑	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBK	7+8
○	38	6	O		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBK	9+10
○	39	7	O		☐	☐	☐		☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBK	11+12

Add | Delete | Move | Clear Used By

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

Port Number & Type

Port: 6

○ ○ ◉ Inputs & Outputs

	DET No	Bit No	Type I or O	Name	Reqd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	48	0	I	HSL47	☑	☐	☐	☐	☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBN	1
○	49	1	I	HSL48	☑	☐	☐	☐	☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBN	2
○	50	2	I	HSL49	☑	☐	☐	☐	☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBN	3
○	51	3	I	IX50	☑	☐	☐	☐	☐	A	1	2.6	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBN	4
○	52	4	I	ISL51	☑	☐	☐	☐	☐	A	1	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBN	5
○	53	5	I	FQ52	☑	☐	☐	☐	☐	I	2	0.0	☐	☐	☐	☐	☐	☑	☐	☐	☐	1TBN	6
○	54	6	I	FQ53	☑	☐	☐	☐	☐	I	2	0.0	☐	☐	☐	☐	☐	☑	☐	☐	☐	1TBN	7
○	55	7	I	EXITQ54	☑	☐	☐		☐	I	2	0.0	☐	☐	☐	☐	☐	☑	☐	☐	☐	1TBN	8

Add | Delete | Move | Clear Used By

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

Port Number & Type

Port: 7

○ ○ ◉ Inputs & Outputs

	DET No	Bit No	Type I or O	Name	Reqd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	56	0	I	GQ63	☑	☐	☐	☐	☐	I	2	0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBP	1
○	57	1	I	IQ18	☑	☐	☐	☐	☐	I	2	0.0	☐	☐	☐	☐	☐	☑	☐	☐	☐	1TBP	2
○	58	2	I	GDNQ59	☑	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☑	☑	☐	☐	1TBP	3
○	59	3	I	PEDL	☑	☐	☐	☐	☐	A	3	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBP	4
○	60	4	I	PEDM	☑	☐	☐	☐	☐	A	3	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBP	5
○	61	5	I	PEDN	☑	☐	☐	☐	☐	A	3	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBP	6
○	62	6	I	PEDO	☑	☐	☐	☐	☐	A	3	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBP	7
○	63	7	I	ONCRL1	☑	☐	☐		☐	A	1	2.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBP	8

Add | Delete | Move | Clear Used By

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

Port Number & Type

Port: 8

○ ○ ◉ Inputs & Outputs

	DET No	Bit No	Type I or O	Name	Reqd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	64	0	I	ONCRL2	☑	☐	☐	☐	☐	A	1	2.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBR	1
○	65	1	I	ONCRM1	☑	☐	☐	☐	☐	A	1	2.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBR	2
○	66	2	I	ONCRM2	☑	☐	☐	☐	☐	A	1	2.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBR	3
○	67	3	I	ONCRN1	☑	☐	☐	☐	☐	A	1	2.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBR	4
○	68	4	I	ONCRN2	☑	☐	☐	☐	☐	A	1	2.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBR	5
○	69	5	I	ONCRO1	☑	☐	☐	☐	☐	A	1	2.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBR	6
○	70	6	I	ONCRO2	☑	☐	☐	☐	☐	A	1	2.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBR	7
○	71	7	I		☐	☐	☐		☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBR	8

Add | Delete | Move | Clear Used By

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

Port Number & Type

Port: 9

○ ○ ◉ Inputs & Outputs

	DET No	Bit No	Type I or O	Name	Reqd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	72	0	I	HIN21	☑	☐	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBS	1
○	73	1	I	HX22	☑	☐	☐	☐	☐	A	0	3.6	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBS	2
○	74	2	I	HSL23	☑	☐	☐	☐	☐	A	0	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBS	3
○	75	3	I	SPARE1	☑	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBS	4
○	76	4	I	IX24	☑	☐	☐	☐	☐	A	0	2.6	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBS	5
○	77	5	I	ISL25	☑	☐	☐	☐	☐	A	0	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1TBS	6
○	78	6	I	TOTB	☑	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBS	7
○	79	7	I	TOTBX	☑	☐	☐		☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1TBS	8

Add | Delete | Move | Clear Used By

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Aspect Drives

Aspect Drives

(●) A-L ( ) M-X ( ) Y-F2

Phase Driver Card 1

	Used For	Term Block	Term No
A - Red	Phase	1TBA	1
A - Amber	Phase	1TBA	2
A - Green	Phase	1TBA	3
B - Red	Phase	1TBA	4
B - Amber	Phase	1TBA	5
B - Green	Phase	1TBA	6
C - Red	Phase	1TBA	7
C - Amber	Phase	1TBA	8
C - Green	Phase	1TBA	9
D - Red	Phase	1TBA	10
D - Amber	Phase	1TBA	11
D - Green	Phase	1TBA	12

Phase Driver Card 1

	Used For	Term Block	Term No
E - Red	Phase	1TBB	1
E - Amber	Phase	1TBB	2
E - Green	Phase	1TBB	3
F - Red	Phase	1TBB	4
F - Amber	Phase	1TBB	5
F - Green	Phase	1TBB	6
G - Red	Phase	1TBB	7
G - Amber	Phase	1TBB	8
G - Green	Phase	1TBB	9
H - Red	Phase	1TBB	10
H - Amber	Phase	1TBB	11
H - Green	Phase	1TBB	12

Phase Driver Card 2

	Used For	Term Block	Term No
I - Red	Phase	1TBC	1
I - Amber	Phase	1TBC	2
I - Green	Phase	1TBC	3
J - Red	Phase	1TBC	4
J - Amber	Phase	1TBC	5
J - Green	Phase	1TBC	6
K - Red	Phase	1TBC	7
K - Amber	Phase	1TBC	8
K - Green	Phase	1TBC	9
L - Red	Phase	1TBC	10
L - Amber	Phase	1TBC	11
L - Green	Phase	1TBC	12

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

Aspect Drives

Aspect Drives

○ A-L ◉ M-X ○ Y-F2

Phase Driver Card 2

	Used For	Term Block	Term No
M - Red	Phase	1TBD	1
M - Amber	Phase	1TBD	2
M - Green	Phase	1TBD	3
N - Red	Phase	1TBD	4
N - Amber	Phase	1TBD	5
N - Green	Phase	1TBD	6
O - Red	Phase	1TBD	7
O - Amber	Phase	1TBD	8
O - Green	Phase	1TBD	9
P - Red			
P - Amber			
P - Green			

Phase Driver Card 3

	Used For	Term Block	Term No
Q - Red			
Q - Amber			
Q - Green			
R - Red			
R - Amber			
R - Green			
S - Red			
S - Amber			
S - Green			
T - Red			
T - Amber			
T - Green			

Phase Driver Card 3

	Used For	Term Block	Term No
U - Red			
U - Amber			
U - Green			
V - Red			
V - Amber			
V - Green			
W - Red			
W - Amber			
W - Green			
X - Red			
X - Amber			
X - Green			

Works Order : E83071
EM Number : J31311
Engineer : P M ROUSE / NICK RULE / SK/PJ
Intersection : A52 / B6003 BARDILLS ROUNDABOUT (Ex J31195)

I/O - DFM Group Timings

I/O - DFM Group Timings

Input Group	State	SET A	SET B	SET C	SET D
Group 0	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 1	Active (Mins)	120	120	120	120
	InActive (Hrs)	18	18	18	18
Group 2	Active (Mins)	30	30	30	30
	InActive (Hrs)				
Group 3	Active (Mins)	60	60	60	60
	InActive (Hrs)				
Group 4	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 5	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 6	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 7	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18

Note - 255 or blank disables DFM monitoring of that state (active or inactive) during that timeset (A to D)

Handset Limiting Values

State	Min	Max
Active (Mins)	0	254
InActive (Hrs)	0	254

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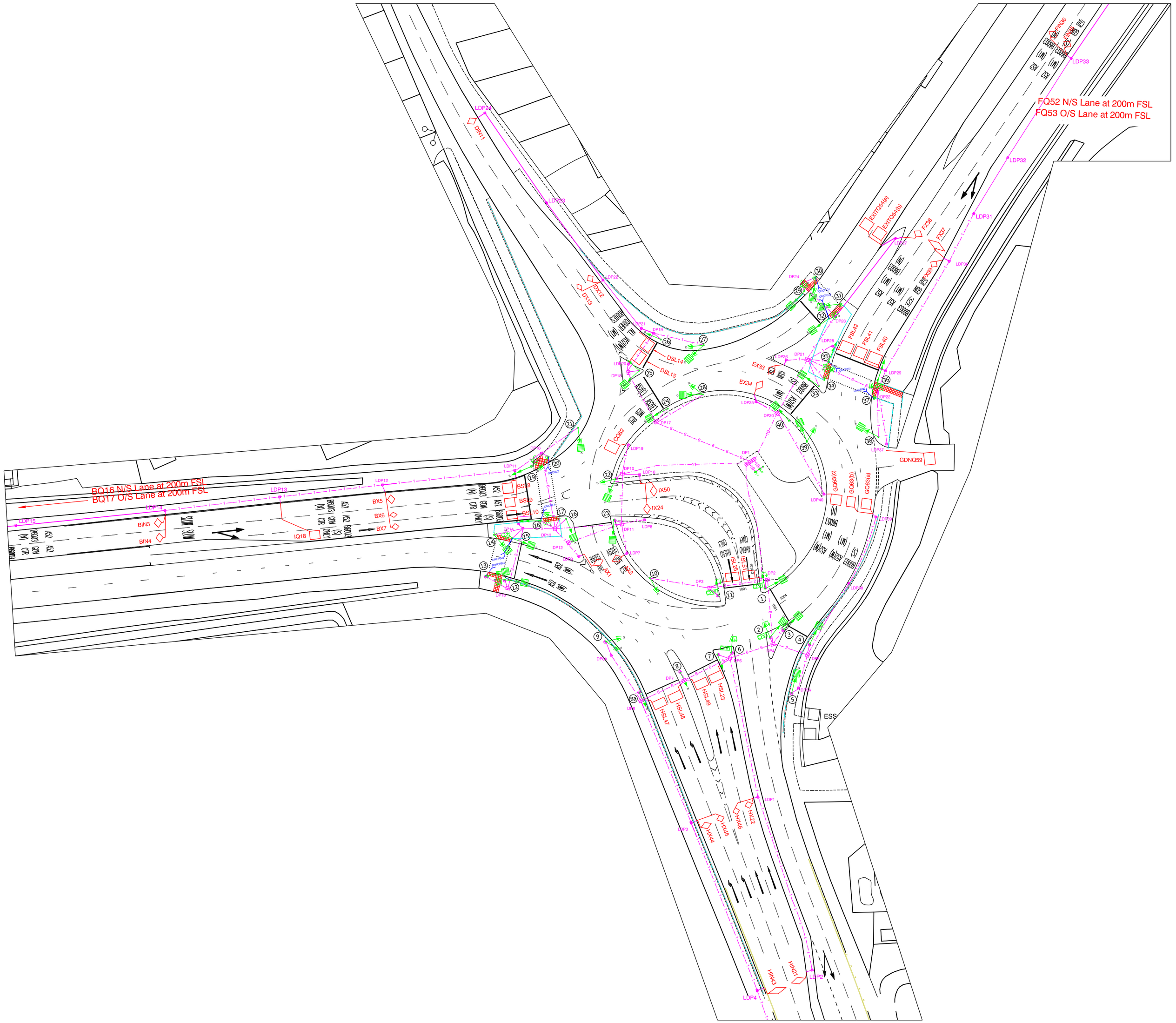
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DETECTOR LOOP FEEDER CABLE DETAILS

MEC	1 pair	LDP9	LOOP AX1
MEC	1 pair	LDP7	LOOP AX2
MEC	1 pair	LDP14	LOOP BIN3
MEC	1 pair	LDP14	LOOP BIN4
MEC	1 pair	LDP12	LOOP BX5
MEC	1 pair	LDP12	LOOP BX6
MEC	1 pair	LDP12	LOOP BX7
MEC	1 pair	LDP11	LOOP BSL8
MEC	1 pair	LDP11	LOOP BSL9
MEC	1 pair	LDP10	LOOP BSL10
MEC	1 pair	LDP24	LOOP DIN11
MEC	1 pair	LDP22	LOOP DX12
MEC	1 pair	LDP22	LOOP DX13
MEC	1 pair	LDP21	LOOP DSL14
MEC	1 pair	LDP20	LOOP DSL15
MEC	1 pair	LDP17	LOOP BQ16
MEC	1 pair	LDP17	LOOP BQ17
MEC	1 pair	LDP19	LOOP CQ62
MEC	1 pair	LDP26	LOOP EX33
MEC	1 pair	LDP25	LOOP EX34
MEC	1 pair	LDP33	LOOP FIN35
MEC	1 pair	LDP33	LOOP FIN36
MEC	1 pair	LDP30	LOOP FX37
MEC	1 pair	LDP27	LOOP FX38
MEC	1 pair	LDP30	LOOP FX39
MEC	1 pair	LDP29	LOOP FSL40
MEC	1 pair	LDP29	LOOP FSL41
MEC	1 pair	LDP28	LOOP FSL42
C	1 pair	LDP4	LOOP HIN43
C	1 pair	LDP3	LOOP HX44
C	1 pair	LDP3	LOOP HX45
C	1 pair	LDP1	LOOP HX46
C	1 pair	DP8	LOOP HSL47
C	1 pair	DP7	LOOP HSL48
C	1 pair	DP7	LOOP HSL49
C	1 pair	LDP18	LOOP IX50
C	1 pair	DP2	LOOP ISL51
MEC	1 pair	LDP36	LOOP FQ52
MEC	1 pair	LDP36	LOOP FQ53
MEC	1 pair	LDP27	LOOP EXITQ54
MEC	1 pair	LDP39	LOOP GQ63 (A)
MEC	1 pair	LDP39	LOOP GQ63 (B)
MEC	1 pair	LDP40	LOOP GQ63 (C)
MEC	1 pair	LDP13	LOOP IQ18
MEC	1 pair	LDP37	LOOP GDNQ59
C	1 pair	LDP2	LOOP HIN21
C	1 pair	LDP1	LOOP HX22
C	1 pair	DP6	LOOP HSL23
C	1 pair	LDP18	LOOP IX24
C	1 pair	DP3	LOOP ISL25

NORTH

Rev Status	Description	Drawn	Ch'kd	Auth	Date

Project

A52 BRIAN CLOUGH WAY / B6003 TOTON LANE, BARDILLS ISLAND (SCN J31151)

Property No.	Project No.

Title

DETECTOR LOOP LOCATIONS

Scale	Drawn	Date
1:500	R DEAN	12/2018
	Ch'kd CG	Date 12/2018
	Auth	Traced

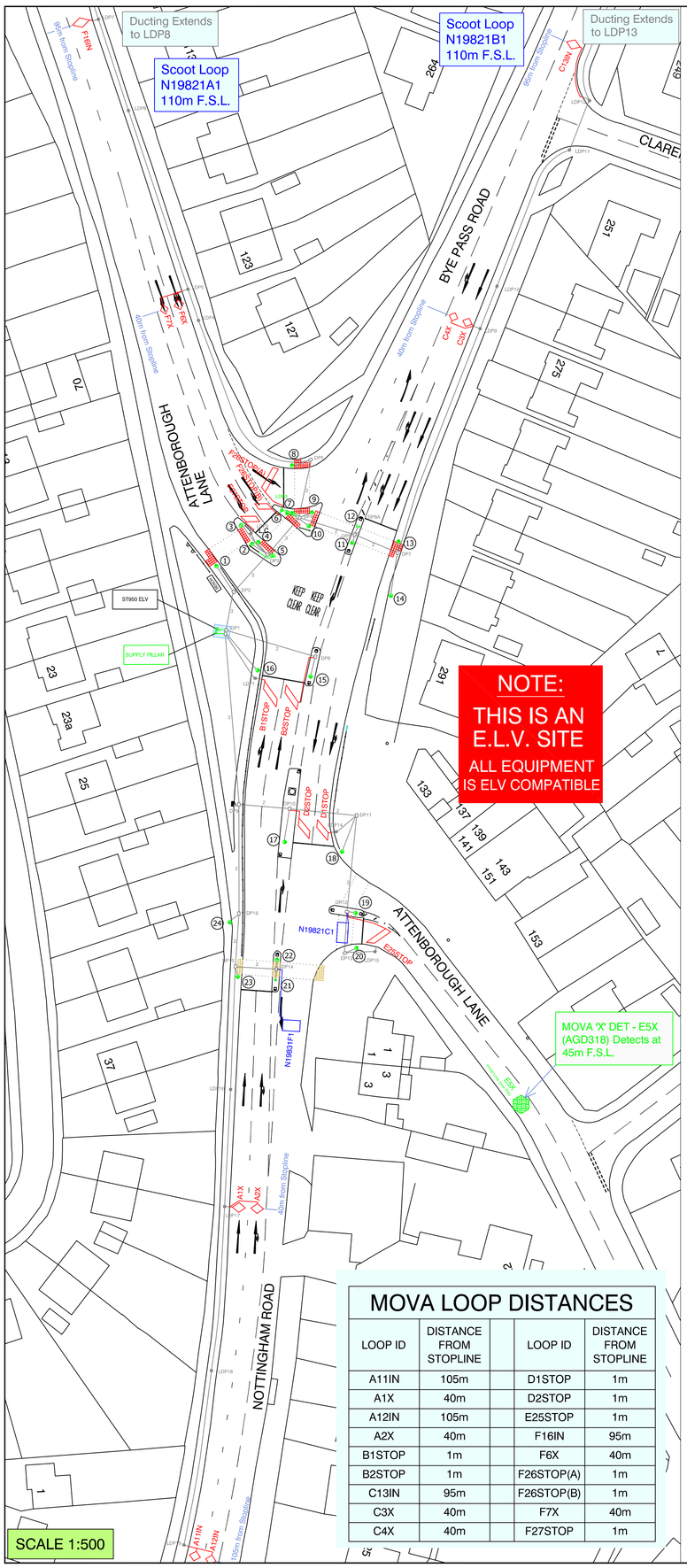
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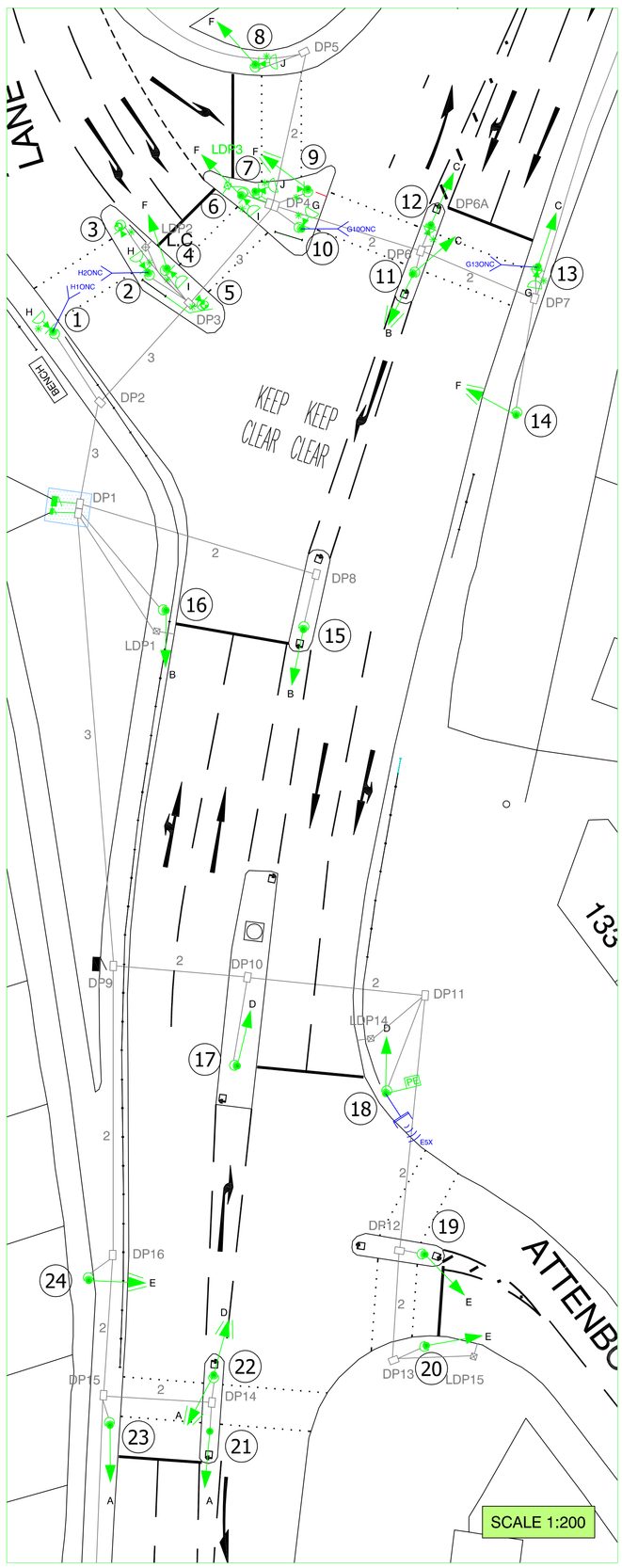
Doc 18.2018 - 10:43am I:\Highways\Old\N Drive\Highways\Traffic\Traffic Eng Team\SCN\Trunk\A52\J31151\Sketch\CAD\J31151 As Built in progress.dwg

A1



MOVA LOOP DISTANCES

LOOP ID	DISTANCE FROM STOPLINE		LOOP ID	DISTANCE FROM STOPLINE
A11IN	105m		D1STOP	1m
A1X	40m		D2STOP	1m
A12IN	105m		E25STOP	1m
A2X	40m		F16IN	95m
B1STOP	1m		F6X	40m
B2STOP	1m		F26STOP(A)	1m
C13IN	95m		F26STOP(B)	1m
C3X	40m		F7X	40m
C4X	40m		F27STOP	1m



NEW CABLE DETAILS

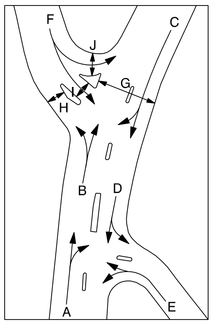
CABLE 1A 16 x 1.5 Sq.mm	C	1A/16/1	1		
CABLE 2A 16 x 1.5 Sq.mm	C	2A/16/2	2	2A/16/3	3
CABLE 4 20 x 1.5 Sq.mm	C	4/20/4	4	4/16/5	5
CABLE 6 20 x 1.5 Sq.mm	C	6/20/6	6		
CABLE 8 20 x 1.5 Sq.mm	C	8/20/8	8		
CABLE 9 20 x 1.5 Sq.mm	C	9/20/9	9	9/20/7	7
CABLE 10A 16 x 1.5 Sq.mm	C	10A/16/10	10		
CABLE 11 12 x 1.5 Sq.mm	C	11/12/11	11		
CABLE 12 20 x 1.5 Sq.mm	C	12/20/12	12		
CABLE 13 20 x 1.5 Sq.mm	C	13/20/13	13		
CABLE 14 12 x 1.5 Sq.mm	C	14/12/14	14		
CABLE 15 12 x 1.5 Sq.mm	C	15/12/15	15		
CABLE 16 12 x 1.5 Sq.mm	C	16/12/16	16		
CABLE 17 12 x 1.5 Sq.mm	C	17/12/17	17		
CABLE 18 12 x 1.5 Sq.mm	C	18/12/18	18		
CABLE 19 12 x 1.5 Sq.mm	C	19/12/19	19		
CABLE 20 12 x 1.5 Sq.mm	C	20/12/20	20		
CABLE 21 12 x 1.5 Sq.mm	C	21/12/21	21		
CABLE 22 12 x 1.5 Sq.mm	C	22/12/22	22		
CABLE 23 12 x 1.5 Sq.mm	C	23/12/23	23		
CABLE 24 12 x 1.5 Sq.mm	C	24/12/24	24		

CIVILS WORKS KEY:

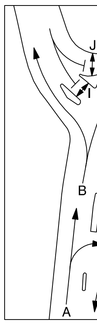
- (1) POLE NUMBER
- SIGNAL POLE INSTALLED IN NAL SOCKET
- SIGNAL POLE PLANTED IN GROUND
- 100mm DIA. DUCTING & NUMBER
- SINGLE DRAWPIT
- DOUBLE DRAWPIT
- PREFABRICATED DRAWPIT
- DP7 DRAWPIT NUMBER

SIGNALS KEY:

- (X) POLE NUMBER
- 4m SIGNAL POLE
- 2m SIGNAL POLE
- ON CROSSING DET (AGD 226)
- MOVA 'X' DET, E5X, POLE 18 (AGD 318)
- I150NC DET. INPUT NAME
- SUPPLY PILLAR
- ST950 ELV CONTROLLER
- B PHASE LETTER
- TACTILE ROTATING CONE
- PE PHOTO ELECTRIC CELL (POLE 18)
- MOVA LOOPS
- SCOOT LOOPS



PHASE IDENTIFICATION



STA

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Administration

General Specifications

Customer Name	N.C.C	Customer Order No.	3500251205
Intersection/ General Description	Nottingham Rd /Attenborough Ln, Chilwell J19821	Controller/ Serial Number	
		S.T.S. /EM Number	J19821 Issue 4
Controller	(•) New ( ) Modification	Equipment Installation by	
Area Specifications/ Customer Drawings		Slot Cutting by	
Specification Section		Civil Works by	
Contract/Tender Ref:		Customer's Engineer	C GOUGH
Quotation No.		Telephone Number	01159774366
Works Order No.			

Signal Company Use Only

Signal Engineer: C GOUGH

(IF PROM Label as >) PROM Number: 16260 PROM Variant: 0

Configuration Check Value: DE 5A 5B C3

Controller Options

Hardware: ST950 ELV | Firmware Type and Issue: 46059 ISS 11 | Other Options

ST950/ST900/ST750 Series Cabinet Options

Cabinet/Rack: Cabinet | Kit Type Options: (•) UK-Std ( ) Non-UK ( ) ( )

Cabinet/Rack Variant: Grey | Cuckoo Options: None | Gemini Unit Fitted: ☐

Mains Supply	240	Volts	50	Hz			
Peak Lamp Current	2	Amps	Dimming Voltage	27.5	Answer Issue	0	Date Created 21/11/03
Average Lamp Power	315	Watts					
Total Average Power	375	Watts	Low Inrush Transformer	☑	Edit Issue	12	

Power feed fuse rating: requires 30 Amp minimum for controller, 15 Amp minimum for pelican/lightly loaded controller

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Phases, Stages and Streams

Phases, Stages and Streams

Add/Delete/Insert Streams:

Streams

(•) Current Number of Streams [1]

Phases

( ) Current Total Number of Phases [10]

(•) Number of Real Phases [10]

( ) Number of Dummy Phases [0]

Stages

( ) Current Number of stages (inc. ALL-RED stages) [3]

Switched Signs

( ) Number of Switched Signs [0]

Action

[Add At] [Delete At]

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Facilities/Modes Enabled and Mode Priority Levels

Facilities

UTC
- [x] Serial/Internal UTMC OTU
- [ ] Free-standing OTU
- [ ]
- [ ]

- [x] Master Time Clock
- [ ] Holiday Clock
- [x] FT To Current MAX
- [ ] Linked Fixed Time

- [x] Lamp Monitoring
- [x] RED Lamp Monitoring
- [x] Pelican/Puffin/Toucan
- [ ] Standalone Manual

- [ ] Extend All Red
- [ ] Speed Measurement
- [ ] Ripple Change
- [ ]

- [ ] Non-UK
- [ ] Fail to Part Time
- [ ] Fail To Hardware Flashing
- [ ]
- [ ] Download To Level 3

8 Starting Intergreen

Mode Priority

	1	2	3	4	5	6	7	8	9	10	11	12	13
[ ] Part Time	○	○	○	○	○	○	○	○	○	○	○	○	○
[ ] Emergency Vehicles	○	○	○	○	○	○	○	○	○	○	○	○	○
[ ] Hurry Call	○	○	○	○	○	○	○	○	○	○	○	○	○
[ ] LRT	○	○	○	○	○	○	○	○	○	○	○	○	○
[ ] Priority Vehicle	○	○	○	○	○	○	○	○	○	○	○	○	○
[x] Manual Control	◉	○	○	○	○	○	○	○	○	○	○	○	○
[ ] Manual Step On	○	○	○	○	○	○	○	○	○	○	○	○	○
[x] Selected FT or VA or CLF	○	◉	○	○	○	○	○	○	○	○	○	○	○
[x] UTC	○	○	◉	○	○	○	○	○	○	○	○	○	○
[x] MOVA Mode	○	○	○	◉	○	○	○	○	○	○	○	○	○
[ ] CLF (Non-Base Time)	○	○	○	○	○	○	○	○	○	○	○	○	○
[x] CLF (Base Time)	○	○	○	○	◉	○	○	○	○	○	○	○	○
[x] Vehicle Actuated	○	○	○	○	○	◉	○	○	○	○	○	○	○
[x] Fixed Time	○	○	○	○	○	○	◉	○	○	○	○	○	○

Configuration Complexity

○ Low ○ Medium ○ High ◉ Maximum

standard46059.8df

Default PROM data file

Correspondence Monitoring to inc.

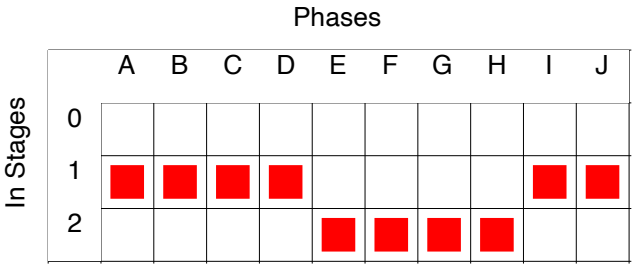
- [x] Reds
- [ ] Switched Signs
- [x] Ambers
- [ ] Ignore Reds and Ambers during

Flash Rate (ms)

400 Off 400 On

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Phases in Stages



Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Stages in Streams

Stages in Streams

	0	1	2	3	4	5	6	7
Phase or Stage to revert to in absence of demands/extensions	1							
Startup Stage	1							
Switch Off Stage	1							
Standalone Pedestrian	☐	☐	☐	☐	☐	☐	☐	☐

Note: For a Stand-Alone Stream, the reversion must be to All Red stage or Traffic stage/phase to meet the relevant standard or specification.

Stages

In Stream

	0	1	2
0	■	■	■

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Phase Type and Conditions

Phase Type and Conditions

(●) Phases A to P ( ) Manual Output Allocation [☑] Improved GA Appearance [☐]

Phase	Title	Type	App. Type	Term. Type	Assoc. Phase	No. of Drive Outputs "R"	"A"	"G"
A	NOTTINGHAM RD SOUTH NORTHBOUND	0 - UK Traffic	0	0 - E		1	1	1
B	NOTTINGHAM RD NORTH NORTHBOUND	0 - UK Traffic	0	0 - E		1	1	1
C	NOTTINGHAM RD NORTH SOUTHBOUND	0 - UK Traffic	0	0 - E		1	1	1
D	NOTTINGHAM RD SOUTH SOUTHBOUND	0 - UK Traffic	0	0 - E		1	1	1
E	ATTENBOROUGH LN EAST	0 - UK Traffic	0	0 - E		1	1	1
F	ATTENBOROUGH LN WEST	0 - UK Traffic	0	0 - E		1	1	1
G	PEDS ACROSS NOTTINGHAM RD NORTH	3 - UK Near Side Pedestrian	0	0 - E		1	1	2
H	PEDS X ATTENBORO LN WEST WESTBOUND	3 - UK Near Side Pedestrian	0	0 - E		1	1	2
I	PEDS X ATTENBORO LN WEST EASTBOUND	3 - UK Near Side Pedestrian	0	0 - E		1	1	2
J	PEDS X ATTENBORO LN WEST LEFT TURN	3 - UK Near Side Pedestrian	0	0 - E		1	1	2

1) App Types: 0 = Always Appears, 1 = Appears if dem'd prior to interstage, 2 = If dem'd, 3 = If dem'd before end of window time
2) Term Types: 0 = Term's at end of stage, 1 = Term's when Assoc phase gains R.O.W, 2 = Term's when Assoc phase loses R.O.W.
3) The H/W Fail Flash fields are for information only on all but ST900ELV Controllers. For other controllers, physical switches or links (etc.) select which aspects flash and these need to be set up manually.

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Opposing and Conflicting Phases

Select Stream(s) To Configure

○ All ○ 0 ○ ○ ○ ○ ○ ○ ○ ○

Initialise

☑ Amber Conflict Monitoring

To Phase

From Phase	A	B	C	D	E	F	G	H	I	J
A		o	o	o	Co	o	Co	Co	o	o
B	o		o	o	o	Co	Co	Co	o	o
C	o	o		o	o	Co	Co	Co	o	o
D	o	o	o		Co	o	Co	Co	o	o
E	Co	o	o	Co		o	o	o	o	o
F	o	Co	Co	o	o		o	o	Co	Co
G	Co	Co	Co	Co	o	o		o	o	o
H	Co	Co	Co	Co	o	o	o		o	o
I	o	o	o	o	o	Co	o	o		o
J	o	o	o	o	o	Co	o	o	o	

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Phase Minimums, Maximums, Extensions, Ped Leaving Periods

Phase Minimums, Maximums, Extensions, Ped Leaving Periods

(•) Phases A to P ( )

Phase	Min Green	Min Ped Clr	Extensions	Maximums A	B	C	D	E	F	G	H	Pre-timed
A	7	0	5.0	45	31	45	30	0	0	0	0	☐
B	1	0	5.0	45	31	45	30	0	0	0	0	☐
C	7	0	5.0	45	31	45	30	0	0	0	0	☐
D	1	0	5.0	45	31	45	30	0	0	0	0	☐
E	7	0	4.0	15	15	15	15	0	0	0	0	☐
F	7	0	5.0	15	15	15	15	0	0	0	0	☐
G	5	2	0.0	0	0	0	0	0	0	0	0	☐
H	5	2	0.0	0	0	0	0	0	0	0	0	☐
I	5	0	0.0	0	0	0	0	0	0	0	0	☐
J	5	0	0.0	0	0	0	0	0	0	0	0	☐

Note: For Standalone Streams see Help for use of Max Sets.

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Phase Intergreen Times

Select Stream(s) To Configure

○ All ○ 0 ○ ○ ○ ○ ○ ○ ○ ○

Note: On a Stand Alone Pelican/Toucan/Puffin Stream the Intergreens between Pedestrian and Traffic Phases are controlled by the timings (PBT, PIT, CMX, CDY, CRD and PAR), therefore 0 should be entered for the appropriate intergreen times in grid below.

To Phase

From Phase	A	B	C	D	E	F	G	H	I	J
A					13		14	14		
B						8	8	8		
C						14	14	14		
D					7		8	8		
E	5			5						
F		5	5						5	5
G	0	0	0	0						
H	0	0	0	0						
I						7				
J						8				

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Intergreen Handset Limits

HIGH 199

Copy Intergreen Values

To Phase

From Phase

	A	B	C	D	E	F	G	H	I	J
A					13		14	14		
B						8	8	8		
C						14	14	14		
D					7		8	8		
E	5			5						
F		5	5						5	5
G										
H										
I						7				
J						8				

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Phase Timing Handset Ranges

Phase Timing Handset Ranges

Initialise Min Green Limits

Phase	Min. Green Min.	Min. Green Max.	Phase	Min. Green Min.	Min. Green Max.
A	7	255	Q		
B	1	255	R		
C	7	255	S		
D	1	255	T		
E	7	255	U		
F	7	255	V		
G	5	255	W		
H	5	255	X		
I	5	255	Y		
J	5	255	Z		
K			A2		
L			B2		
M			C2		
N			D2		
O			E2		
P			F2		

Max. Green — Min. 0 Max. 255

Vehicle Extension — Min. 0.0 Max. 10.0

Phase Delay — Min. 0 Max. 255

Starting I/G — Min. 8 Max. 12

Min Pedestrian Clearance (PBT) — Min. 2 Max. 3

Traffic Phase Leaving — Min. 3.0 Max. 3.0

Traffic Phase Red/Amber — Min. 2 Max. 2

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

VA Demand and Extend Definitions

VA Demand and Extend Definitions

(●) Phases A to P ( )

Demands

For Unlatched demands precede the name with a #.
Conditioning MUST be used to specify unlatched demands.

Phase				
A	A1X	A2X		
B	B21STOP	B22STOP		
C	C3X	C4X		
D	D23STOP	D24STOP		
E	E25STOP	E5X		
F	F26STOPA	F26STOPB	F27STOP	F6X
G	G10PPB	G12PPB	G13PPB	
H	H1PPB	H2PPB		
I	I4PPB	I6PPB		
J	J7PPB	J8PPB		

Extensions

A1X	A2X		
C3X	C4X		
E5X			
F6X	F7X		

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Phase Internal/Revertive Demands

Phase Internal/Revertive Demands

Start-up Vehicle Responsive Demands

A	B	C	D	E	F	G	H	I	J						
☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Demands Inserted When Leaving Manual and Fixed Time Modes

A	B	C	D	E	F	G	H	I	J						
☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Unlatched Demands that Start Max Timers

A	B	C	D	E	F	G	H	I	J						
☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Revertive Phase Demands

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A	B	C	D	E	F										

Q	R	S	T	U	V	W	X	Y	Z	A2	B2	C2	D2	E2	F2

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Phase - On Crossing and Kerbside Detector Definitions

On Crossing and Kerbside Input Definitions

(●) Phases A to P ( )

Phase	On Crossing				Kerbside			
A								
B								
C								
D								
E								
F								
G	G10ONC	G13ONC						
H	H1ONC	H2ONC						
I								
J								

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Stream - Pelican/Puffin/Toucan Times

Stream - Pelican/Puffin/Toucan Times

Pedestrian Enable VA Mode (PEV)

Streams

0	1	2	3	4	5	6	7

Pedestrian All Red Times (Vehicle to Pedestrian)

Streams	0	1	2	3	4	5	6	7
(PAR n 0) VA Gap Change								
(PAR n 1) VA Max Change								
(PAR n 2) FVP Change								
(PAR n 3) UTC Change								
(PAR n 4) Local Link Change								

Handset Range Limits

	Min	Max
(PAR n 2) FVP Change	0	0

Pelican Intergreen times

	Min	Max
(PIT n 0) Veh Red/Ped Flash Green	0	0
(PIT n 1) Veh Flash Amber/Ped Flash Green	0	0
(PIT n 2) Veh Flash Amber/Ped red	0	0
(PIT n 3) Veh Flash Amber/Ped Red Quiescent	0	0

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Phase - Pelican, Puffin and Toucan Times

Phase - Pelican, Puffin and Toucan Times

Phase	PDD Ped Demand Delay	PDX Ped Demand Hold	CMX Clearance Maximum	CDY 0 Clearance Delay Gap Change	CDY 1 Clearance Delay Max Change	CRD Clearance Minimum Red
A	0	0.0	0	0	0	0
B	0	0.0	0	0	0	0
C	0	0.0	0	0	0	0
D	0	0.0	0	0	0	0
E	0	0.0	0	0	0	0
F	0	0.0	0	0	0	0
G	0	0.0	14	0	0	0
H	0	0.0	6	0	0	0
I	0	0.0	0	0	0	0
J	0	0.0	0	0	0	0

(●) Phases A to P ( )

☐

☐

Pedestrian Handset Range Limits

	MIN	MAX
Demand Delay PDD	0	0
Demand Hold PDX	0.0	0.0
Clearance Maximum CMX	6	16
Clearance Delays CDY 0 and CDY1	0	0
Clearance Minimum Red CRD	0	0

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

IO and Link - Pelican/Puffin/Toucan Times

I/O and Link - Pelican/Puffin/Toucan Times

Streams 0 1 2 3 4 5 6 7

Computer Control

PV

Window Time
UIE

Local Link

PV1

Link Delay Time
LKD

Link Window Time
LKW

Link Override Time
LKO

Kerbside Mat Test
Output

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Pelican, Puffin, Toucan Pushbutton/Kerbside Associations

Pelican, Puffin, Toucan Pushbutton/Kerbside Associations

	Phase	Demand	KBS
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Phase	Demand	KBS
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			

	Phase	Demand	KBS
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			

	Phase	Demand	KBS
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			

Note: Any association pushed off the screen will have any previous association blanked.

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Stages - Prohibited, Alternative, Ignored Moves

Stages - Prohibited, Alternative, Ignored Moves

Sets
- (•) 1
- ( ) 2
- ( ) 3
- ( ) 4

Modes	Restrictions Apply To:	No Restrictions
	(•)	( )
	(•)	( )
	(•)	( )
	( )	( )
	(•)	( )
	( )	( )

Modes	Restrictions Apply To:	No Restrictions
Manual	(•)	( )
	( )	( )
	( )	( )
	( )	( )
	(•)	( )

To Stage

From Stage

	0	1	2
0	■		
1		■	
2			■

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Stages - Prohibited, Alternative, Ignored Moves

Stages - Prohibited, Alternative, Ignored Moves

Sets
- ○ 1
- ◉ 2
- ○ 3
- ○ 4

Modes	Restrictions Apply To:	No Restrictions
Urban Traffic Control	◉	○
Cableless Linking	◉	○
Vehicle Actuated	◉	○
	○	○
Fixed Time	◉	○
	○	○

Modes	Restrictions Apply To:	No Restrictions
	◉	○
	○	○
	○	○
	○	○
MOVA	◉	○

To Stage / From Stage

From Stage \ To Stage	0	1	2
0	■		X
1	X	■	
2	X		■

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Stage Internal Demands/Pedestrian Window Times

Stage Internal Demands/Pedestrian Window Times

Start-up Vehicle Responsive Demands

0	1	2														
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Demands Inserted When Leaving Manual and Fixed Time Modes

0	1	2														
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Unlatched Demands that Start Maximum Timers

0	1	2														
☑	☑	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Window Times

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	0	0													

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Exceptional Stages

0	1	2														
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Phase Delays

Phase Delays

(●) Phase Delays 0-29 ( ) Phase Delays 30-59 ( ) Phase Delays 60-89 ( ) Phase Delays 90-119

No.	Delay Phase	On Change from Stage	To Stage	By (X) Seconds	No.	Delay Phase	On Change from Stage	To Stage	By (X) Seconds
0	B	1	2	6	15				0
1	D	1	2	6	16				0
2	I	1	2	6	17				0
3	J	1	2	6	18				0
4				0	19				0
5				0	20				0
6				0	21				0
7				0	22				0
8				0	23				0
9				0	24				0
10				0	25				0
11				0	26				0
12				0	27				0
13				0	28				0
14				0	29				0

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Fixed Time

Fixed Time

Stage Moves & Times (Not Fixed Time to Current Max)

Current Stage	0	1	2	3	4	5	6	7
Next Stage	1	2	1					
Time	0	40	0					

Current Stage	8	9	10	11	12	13	14	15
Next Stage								
Time								

Current Stage	16	17	18	19	20	21	22	23
Next Stage								
Time								

Current Stage	24	25	26	27	28	29	30	31
Next Stage								
Time								

Note:
Fixed Time mode may be used by the Reserve State, therefore, the Stage Moves and Times section should always be configured (unless Linked Fixed Time is selected instead).

Phases Demanded and Extended under Fixed Time to Current Max.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Demand	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☐	☐	☐	☐	☐	☐
Extend	☑	☑	☑	☑	☑	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Q	R	S	T	U	V	W	X	Y	Z	A2	B2	C2	D2	E2	F2
Demand	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Extend	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

CLF - Base Time

CLF - Base Time

Controller Base Date: XX/XX/XX

Controller Base Time: 23:00:00

Plan Offset

	Minutes	Seconds		Minutes	Seconds
Plan 0	0	0	Plan 8	0	0
Plan 1	0	0	Plan 9	0	0
Plan 2	0	0	Plan 10	0	0
Plan 3	0	0	Plan 11	0	0
Plan 4	0	0	Plan 12	0	0
Plan 5	0	0	Plan 13	0	0
Plan 6	0	0	Plan 14	0	0
Plan 7	0	0	Plan 15	0	0

Handset Range Limits

	Minutes	Seconds
Min	0	0
Max	255	59

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

UTC General Data

UTC General Data

Type of UTC

○ 106 ◉ 316

Integral OTU Address

4 Number of Control Words

4 Number of Reply Words

☐ Controller to respond to TC bit.

☐ Introduction of UTC to be disabled by Priority and L

Non UTC RTC synchronisation input name

RTC Synchronisation Times

Clock Synchronise Time (UTC TS input)

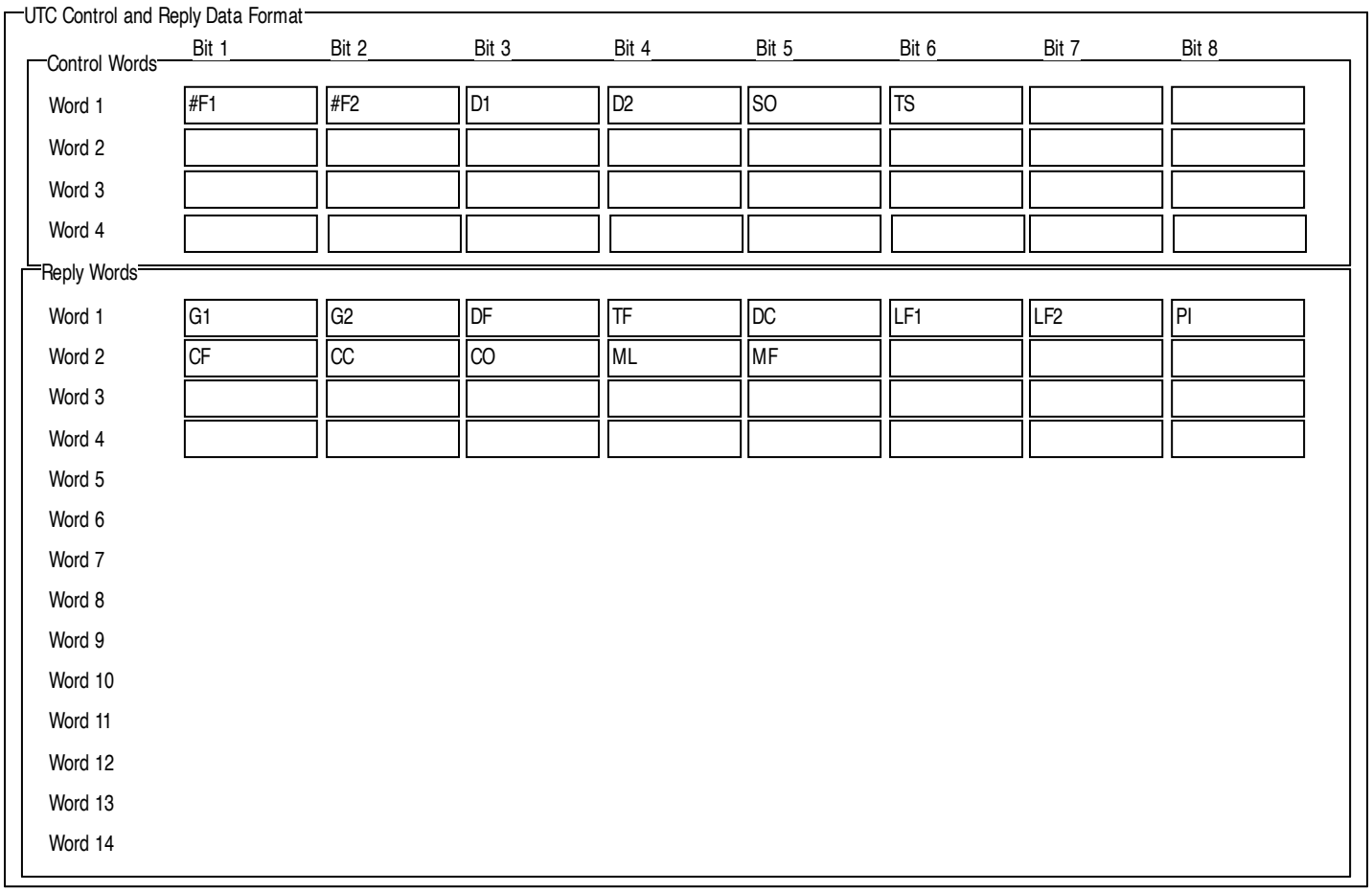
Day	Time
Time Only	23:00:00

Clock Confirm Time (UTC RT output)

Day	Time
Time Only	23:00:02

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

UTC Control and Reply Data Format



Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

UTC Phase Demand and Extend Definitions

UTC Demand and Extend Definitions

(●) Phases A to P ( )

Demands

For Unlatched demands, preceed the name with a #.
Conditioning MUST be used to specify unlatched demands.

Phase				
A	#D1			
B	#D1			
C	#D1			
D	#D1			
E	#D2			
F	#D2			
G	#D2			
H	#D2			
I	#D1			
J	#D1			

Extensions

D1			
D1			
D1			
D1			
D2			
D2			
D2			
D2			
D1			
D1			

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

UTC Stage and Mode Data Definitions

UTC Stage and Mode Data Definitions

Stage	Force Bit	Green Confirm Bit	Demand Confirm Bit	Stage	Force Bit	Green Confirm Bit	Demand Confirm Bit
0				16			
1	#F1	G1		17			
2	#F2	G2		18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			

Mode Data Definitions

Manual Mode Operative:
☐ G1/G2 ☐ RR ☐

Manual Mode Selected:
☐ G1/G2 ☐ RR ☐

No Lamp Power, or Lamps Off due to RLM or Part Time:
☑ G1/G2 ☐ ☐

Detector Fault:
☐ ☐ ☑ DF

Normal NOT selected on the Manual Panel:
☐ G1/G2 ☐ RR ☐

RR Button Selected:
☐ G1/G2 ☐ RR ☐

If UTC Reply Confirms are required for a Controller Fault (CF) OR for separate MC and RR replies, Conditioning must be used.

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

MOVA Stages

MOVA Stages

Stage	Force Bit	Green Confirm Bit	Stage	Force Bit	Green Confirm Bit
0			16		
1	MOVA0F1	MOVA0CON1	17		
2	MOVA0F2	MOVA0CON2	18		
3			19		
4			20		
5			21		
6			22		
7			23		
8			24		
9			25		
10			26		
11			27		
12			28		
13			29		
14			30		
15			31		

NOTE: If a MOVA Kernel does not map to the same numbered stream (0-3), refer to the help.

Mode Data Definitions

Manual Mode Operative:
☐ G1/G2 ☐ RR/CRB

Manual Mode Selected:
☐ G1/G2 ☐ RR/CRB

No Lamp Power, or Lamps Off due to RLM or Part Time:
☐ G1/G2 ☐ RR/CRB

Normal NOT selected on the Manual Panel:
☐ G1/G2 ☐ RR/CRB

RR Button Selected:
☐ G1/G2 ☐ RR/CRB

Report as UTC Mode ☐

MOVA Control Timer (x10): 24

MOVA Deactivate Timer: 2.0

MOVA Release Timer: 1

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

UTC and MOVA Detectors

UTC and MOVA Detectors

Detector Mapping

☐ Combined

Set Selection

◉ UTC ○ MOVA 0 ○ MOVA 1 ○ MOVA 2 ○ MOVA 3

1		2		3		4		5		6		7		8	
9		10		11		12		13		14		15		16	
17		18		19		20		21		22		23		24	
25		26		27		28		29		30		31		32	
33		34		35		36		37		38		39		40	
41		42		43		44		45		46		47		48	
49		50		51		52		53	BD4	54	BD3	55	BD2	56	BD1
57	SCOOT8	58	SCOOT7	59	SCOOT6	60	SCOOT5	61	SCOOT4	62	SCOOT3	63	SCOOT2	64	SCOOT1

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

UTC and MOVA Detectors

UTC and MOVA Detectors

Detector Mapping

☐ Combined

Set Selection

○ UTC ◉ MOVA 0 ○ MOVA 1 ○ MOVA 2 ○ MOVA 3

1	A1X	2	A2X	3	C3X	4	C4X	5	E5X	6	F6X	7	F7X	8	
9		10		11	A11IN	12	A12IN	13	C13IN	14		15		16	F16IN
17		18		19		20		21	B21STOP	22	B22STOP	23	D23STOP	24	D24STOP
25	E25STOP	26		27	F27STOP	28		29		30		31		32	
33		34		35		36		37		38		39		40	
41		42		43		44		45		46		47		48	
49		50		51		52		53	BD4	54	BD3	55	BD2	56	BD1
57		58		59		60		61		62		63		64	

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

MTC - Time Switch Parameters

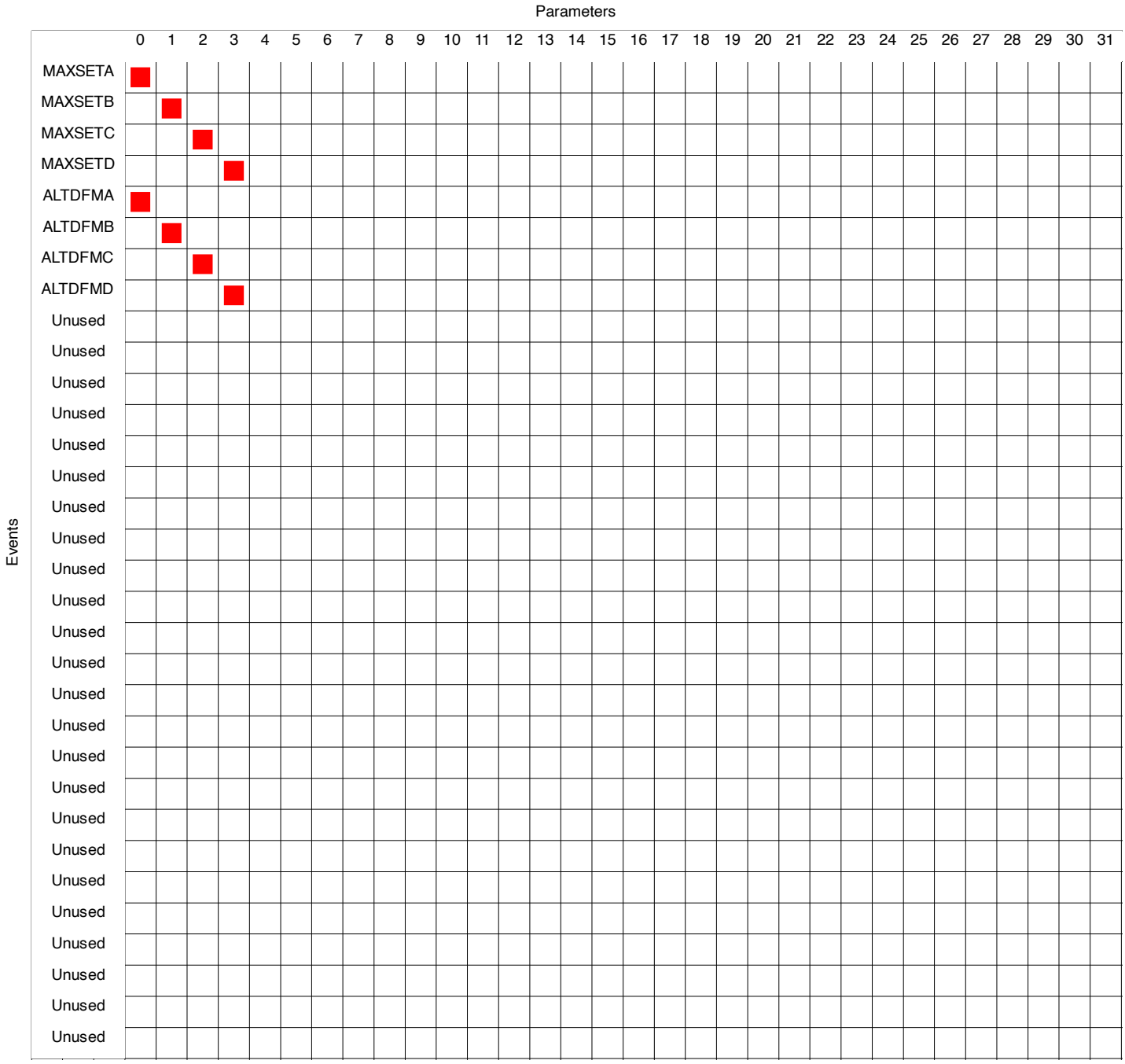
MTC - Time Switch Parameters

	Type	Event
0	Alternate Max	MAXSETA
1	Alternate Max	MAXSETB
2	Alternate Max	MAXSETC
3	Alternate Max	MAXSETD
4	Alternate DFM	ALTDFMA
5	Alternate DFM	ALTDFMB
6	Alternate DFM	ALTDFMC
7	Alternate DFM	ALTDFMD
8	No Action	
9	No Action	
10	No Action	
11	No Action	
12	No Action	
13	No Action	
14	No Action	
15	No Action	

	Type	Event
16	No Action	
17	No Action	
18	No Action	
19	No Action	
20	No Action	
21	No Action	
22	No Action	
23	No Action	
24	No Action	
25	No Action	
26	No Action	
27	No Action	
28	No Action	
29	No Action	
30	No Action	
31	No Action	

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

MTC - Time Switch Parameters Array



Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

MTC - Day Type

MTC - Day Type

No.	Mon	Tue	Wed	Thu	Fri	Sat	Sun
0	☐	☐	☐	☐	☐	☑	☐
1	☐	☐	☐	☐	☐	☐	☑
2	☑	☐	☐	☐	☐	☐	☐
3	☐	☑	☐	☐	☐	☐	☐
4	☐	☐	☑	☐	☐	☐	☐
5	☐	☐	☐	☑	☐	☐	☐
6	☐	☐	☐	☐	☑	☐	☐
7	☑	☑	☑	☑	☑	☑	☑
8	☑	☑	☑	☑	☑	☑	☐
9	☑	☑	☑	☑	☑	☐	☐
10	☐	☐	☐	☐	☐	☑	☐
11	☐	☐	☐	☐	☐	☐	☐
12	☐	☐	☐	☐	☐	☐	☐
13	☐	☐	☐	☐	☐	☐	☐
14	☐	☐	☐	☐	☐	☐	☐
15	☐	☐	☐	☐	☐	☐	☐

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

MTC - Timetable

MTC - Timetable

View Timetable Settings

(•) 0 - 15 ( ) 16 - 31 ( ) 32 - 47 ( ) 48 - 63

No.	Day Type	Time	Description	Function Code	Plan/ Parameter
0	7	07:00:00	MAXSETA	2	0
1	7	09:30:00	MAXSETB	2	1
2	7	16:00:00	MAXSETC	2	2
3	7	18:00:00	MAXSETD	2	3
4	7	07:00:00	ALTDFMA	2	0
5	7	09:30:00	ALTDFMB	2	1
6	7	16:00:00	ALTDFMC	2	2
7	7	18:00:00	ALTDFMD	2	3
8	0			0	0
9	0			0	0
10	0			0	0
11	0			0	0
12	0			0	0
13	0			0	0
14	0			0	0
15	0			0	0

Function Codes:

0 = Isolate From CLF

1 = Introduce a CLF Plan

2 = Introduce a Parameter (Combination of event switches)

3 = Selects an Individual event switch to be set

4 = Selects an Individual event switch to be cleared.

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

LMU - General

LMU - General

Lamp Monitoring - LMU Voltage

○ ◉ 48
○ ○

Red Lamp Monitoring

Max Red Bulb Wattage

First Red Lamp Fault Speed 0

☐ RLF2 Cancels RLM additional Intergreens

☐ RLF2 Only Cleared by RFL = 1

☐ RLF1 Only Cleared by RFL = 1

RLM Additional Intergreen Handset Limits

Minimum	Maximum
2	10

Streams with Phase BlackOut on RLF2

☐ 0 ☐ ☐ ☐ ☐ ☐ ☐ ☐

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Integral LMU Onboard Sensors

Integral LMU Onboard Sensors

No. of LSLS cards fitted	HPU Connection
2	1

Sensor Configuration For LSLS 1 (Cabinet 1)

Phase	Aspect	Sensor #	Sensor Type	Phase	Aspect	Sensor #	Sensor Type
A	Red	1	As Seq.	F	Amber	6	As Seq.
A	Amber	1	As Seq.	F	Green	6	As Seq.
A	Green	1	As Seq.	G	Red	7	R,G
B	Red	2	As Seq.	G	Amber	8	Wait
B	Amber	2	As Seq.	G	Green	7	R,G
B	Green	2	As Seq.	G	Green	N/A	
C	Red	3	As Seq.	H	Red	9	R,G
C	Amber	3	As Seq.	H	Amber	10	Wait
C	Green	3	As Seq.	H	Green	9	R,G
D	Red	4	As Seq.	H	Green	N/A	
D	Amber	4	As Seq.	I	Red	11	R,G
D	Green	4	As Seq.	I	Amber	12	Wait
E	Red	5	As Seq.	I	Green	11	R,G
E	Amber	5	As Seq.	I	Green	N/A	
E	Green	5	As Seq.	J	Red	13	R,G
F	Red	6	As Seq.	J	Amber	14	Wait

Note : A (*) character next to a sensor number indicates that the sensor would also be available on the External sensors screen. Please be sure you wish to use these sensors here, as they will then become unavailable for Regulatory Signs.

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Integral LMU Onboard Sensors

Integral LMU Onboard Sensors

No. of LSLS cards fitted	HPU Connection
2	1

Sensor Configuration For LSLS 2 (Cabinet 1)

Phase	Aspect	Sensor #	Sensor Type	Phase	Aspect	Sensor #	Sensor Type
J	Green	13	R,G	N/A	N/A		
J	Green	N/A		N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		

Note : A (*) character next to a sensor number indicates that the sensor would also be available on the External sensors screen. Please be sure you wish to use these sensors here, as they will then become unavailable for Regulatory Signs.

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Integral LMU External Sensors for Regulatory Signs

Integral LMU External Sensors for Regulatory Signs

External Sensors (1)

Sensor	Sensor Type
96	Regulatory Sign
95	Regulatory Sign
94	Regulatory Sign
93	Regulatory Sign

External Sensors (2)

Sensor	Sensor Type
92	Regulatory Sign
91	Regulatory Sign
90	Regulatory Sign
89	Regulatory Sign

External Sensors (3)

Sensor	Sensor Type

External Sensors (4)

Sensor	Sensor Type

External Sensors (5)

Sensor	Sensor Type

External Sensors (6)

Sensor	Sensor Type

Note: Sensors which have been used as Onboard sensors will not be available here.

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

LMU Sensor Load Types

LMU Sensor Load Types

Screen Select

1 of 2

Sensor	Phase	Sensor Type	LED R+W	Load Type	LLF Profile
1	A	As Seq.	Auto	1: Siemens Helios ELV	
2	B	As Seq.	Auto	1: Siemens Helios ELV	
3	C	As Seq.	Auto	1: Siemens Helios ELV	
4	D	As Seq.	Auto	1: Siemens Helios ELV	
5	E	As Seq.	Auto	1: Siemens Helios ELV	
6	F	As Seq.	Auto	1: Siemens Helios ELV	
7	G	R,G	Auto	3: Siemens LED Near Side Indicator	
8	G	Wait	Auto	2: Siemens LED Demand Indicator	
9	H	R,G	Auto	3: Siemens LED Near Side Indicator	
10	H	Wait	Auto	2: Siemens LED Demand Indicator	
11	I	R,G	Auto	3: Siemens LED Near Side Indicator	
12	I	Wait	Auto	2: Siemens LED Demand Indicator	
13	J	R,G	Auto	3: Siemens LED Near Side Indicator	
14	J	Wait	Auto	2: Siemens LED Demand Indicator	
89	N/A	Regulatory Sign	Auto	0: Disabled	
90	N/A	Regulatory Sign	Auto	0: Disabled	

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

LMU Sensor Load Types

LMU Sensor Load Types

Screen Select

2 of 2

Sensor	Phase	Sensor Type	LED R+W	Load Type	LLF Profile
91	N/A	Regulatory Sign	Auto	0: Disabled	
92	N/A	Regulatory Sign	Auto	0: Disabled	
93	N/A	Regulatory Sign	Auto	0: Disabled	
94	N/A	Regulatory Sign	Auto	0: Disabled	
95	N/A	Regulatory Sign	Auto	0: Disabled	
96	N/A	Regulatory Sign	Auto	0: Disabled	

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

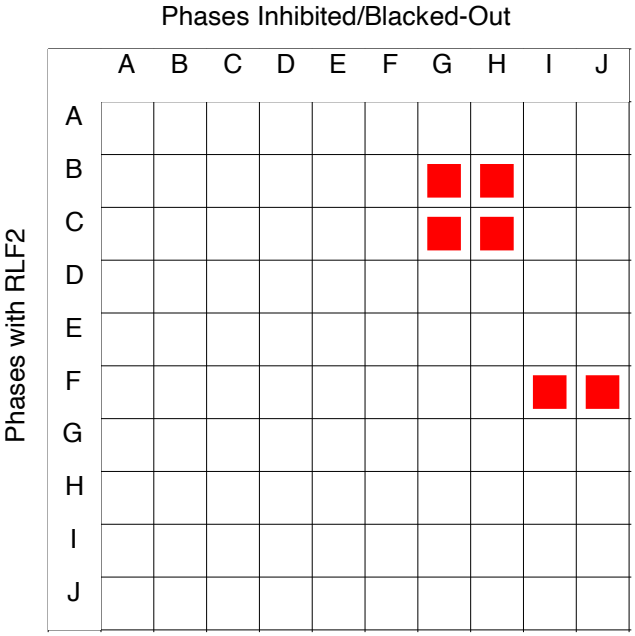
RLM Additional Intergreens

Phases Delayed

Phases with RLF1	A	B	C	D	E	F	G	H	I	J
A										
B							2	2		
C							2	2		
D										
E										
F									2	2
G										
H										
I										
J										

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

RLM Phase Inhibits



Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Manual Panel

Manual Panel

Stage Buttons and LEDs

Button No.	Title	Called Stage for Stream 0	1	2	3	4	5	6	7
0	CONTROLLER ALL RED	0							
1	NOTTINGHAM RD AND PEDS X ATTENBOROUGH LN WEST	1							
2	ATTENBORO LN + PEDS X ATT LN WST WSTBND + PEDS X NOTT	2							
3									
4									
5									
6									
7									

General LEDs

	AUX 1	AUX 2	AUX 3	AUX 4 (Hurry Call)	AUX 5 (Higher Priority)
Conditioned	☑	☑	☑	☐	☑

Manual Mode Enable

- ○ Always
- ○ When Handset Plugged in (Note 1)
- ◉ When 'MND' Command Entered

NOTE:
For this to operate Special Conditioning is required.

General Buttons

	None	SW1	SW2	SW3
Momentary		☐	☐	☐
Dim Override	○	◉	○	○
RR	◉	○	○	○

Manual Signals On

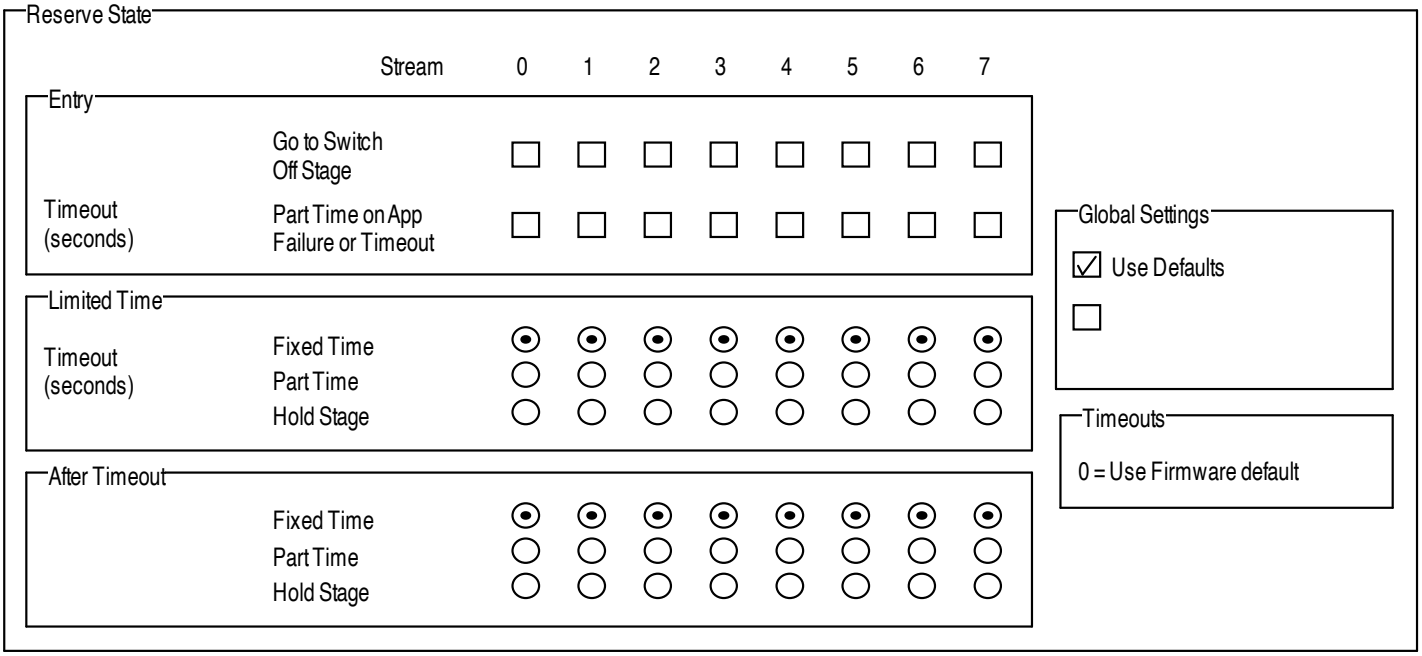
- ○ Immediate Signals On
- ◉ As Start-Up

Mode Select Switches Disabled

☐ VA ☐ Fixed Time ☐ CLF

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Reserve State



Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Special Conditioning

```
; UTC D-BIT UNLATCHED STAGE DEMANDS AND EXTENSIONS.
; -------------------------------------------------

   D1:=+UCST1                          ; D1 DEMANDS STAGE 1 AND
     *=+EXOA                           ; EXTENDS AN EXCLUSIVE PHASE.
   D1=+EXCA

   D2:=+UCST2                          ; D2 DEMANDS STAGE 2 AND
     *=+EXOG                           ; EXTENDS AN EXCLUSIVE PHASE.
   D2=+EXCG


; MODES DISABLED BY CERTAIN CONDITIONS.
; -------------------------------------

    SSVA.(F1+F2)=VACONT                                  ; FORCE BIT AND IN VA SWITCH
                                                         ; POSITION DISABLES VA MODE.

    SSFIX.NOT(DSRACC)::=FTCONT                           ; NO HANDSET AND IN FIXED TIME
                       *=SSCONT                          ; SWITCH POSITION DISABLES FT MODE.
                       *=1SCRT255                        ; FIXED TIME MODE DISABLE FLAG.


; DIM CONFIRM REPLY BIT.
; ======================

NOT(NOT(SO).NOT(SOLBRGHT).NOT(MAUXSW1))=DC               ; SOLAR DIM OR DIM OVERRIDE REPLIES DC.
MAUXSW1=MIL22                                            ; Dim override via manual panel


; CONTROLLER REPLIES
; ==================

IFT NOT(DSRACC) THN                                      ; HANDSET PLUGGED IN SETS TF
    TRUE=TF
ELS
    FALSE=TF
END

NOT(FLFCOM)=CF                                           ; FAULT REPLIES CF
NOT(FLF55)=LF1                                           ; ANY LAMP FAILURE REPLY LF1
NOT(FLF22B0)=LF2                                         ; FIRST RED LAMP FAILURE REPLY LF2
NOT(FLF22B1)=PI                                          ; PEDS LOCKED OUT REPLIES PI
DOORSW=CO                                                ; DOOR OPEN REPLIES CO


NOT(MODE0 EQL<16>)=ML                                    ; ML REPLIES MOVA MODE OPERATING

NOT(MOVA0MF)=MF                                          ; MF REPLIES MOVA FAULT



; MANUAL PANEL
; ============

(BD1.BD2.BD3.BD4)=MIL23                                  ; ANY BUS ACTIVE LIGHT AUX 2 LED
(MODE0 EQL<6>)=MIL17                                     ; UTC ACTIVE LIGHT HIGHER PRIORITY LED
(MODE0 EQL<16>)=MIL05                                    ; MOVA ACTIVE LIGHT AUX 3 LED

;F26STOP COMMONED LOOPS FOR MOVA
;===============================
```

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Special Conditioning

```
F26STOPA+F26STOPB=MOVA0DET26

;PEDESTRIAN DEMANDS INTO MOVA DETECTORS
;======================================


PRSLMPAG.NOT(LMUINHG)=MOVA0DET33
PRSLMPAH.NOT(LMUINHH)=MOVA0DET34
PRSLMPAI.NOT(LMUINHI)=MOVA0DET35
PRSLMPAJ.NOT(LMUINHJ)=MOVA0DET36
```

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Fault Log Flags

Fault Log Flags

Fault No	Cond Flag	Act Flag
0	☑	☐
1	☑	☐
2	☑	☐
3	☑	☐
4	☑	☐
5	☑	☐
6	☑	☐
7	☑	☐
8	☑	☐
9	☑	☐
10	☑	☐
11	☑	☐
12	☐	☐
13	☑	☐
14	☑	☐
15	☑	☐

Fault No	Cond Flag	Act Flag
16	☑	☐
17	☑	☐
18	☑	☐
19	☑	☐
20	☑	☐
21	☑	☐
22	☐	☐
23	☑	☐
24	☑	☐
25	☑	☐
26	☑	☐
27	☑	☐
28	☑	☐
29	☑	☐
30	☑	☐
31	☑	☐

Fault No	Cond Flag	Act Flag
32	☑	☐
33	☑	☐
34	☑	☐
35	☑	☐
36	☑	☐
37	☑	☐
38	☑	☐
39	☑	☐
40	☑	☐
41	☑	☐
42	☑	☐
43	☑	☐
44	☑	☐
45	☑	☐
46	☑	☐
47	☑	☐

Fault No	Cond Flag	Act Flag
48	☑	☐
49	☑	☐
50	☑	☐
51	☑	☐
52	☑	☐
53	☑	☐
54	☑	☐
55	☐	☐
56	☑	☐
57	☑	☐
58	☑	☐
59	☑	☐
60	☑	☐
61	☑	☐
62	☑	☐
63	☑	☐

Note:

Cond Flag -
If a fault occurs which sets a fault log flag that has been checked for this Cond flag option then a flag will be set that can be read in Conditioning.

Act Flag -
If a fault occurs which sets a fault log flag that has been checked for this Act flag option then firstly the lamps
will be switched OFF and secondly a flag will be set that can be read in conditioning, to allow any further actions required to be performed by conditioning.

Clearance of Special Con ☐

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Special Instructions

MANUAL PANEL LABELLING:

LED	LABEL
HIGHER PRIORITY	UTC
AUX2	BUS1 DET
AUX3	MOVA

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port: 0

○ Inputs ○ Outputs ◉ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0
Card Address: 1

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	0	0	I	A11IN	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	A1
○	1	1	I	A1X	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	A2
○	2	2	I	A12IN	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	A3
○	3	3	I	A2X	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	A4
○	4	4	I	B21STOP	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	B1
○	5	5	I	B22STOP	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	B2
○	6	6	I	C13IN	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	B3
○	7	7	I	C3X	☑	☑	☐		☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	B4

Add | Delete | Move | Clear Used By | Move to/from backplane

Manual Map Optimisation

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port: 1

○ Inputs ○ Outputs ◉ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0
Card Address: 1

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	8	0	I	C4X	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	C1
○	9	1	I	D23STOP	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	C2
○	10	2	I	D24STOP	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	C3
○	11	3	I	E25STOP	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	C4
○	12	4	I	F16IN	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	D1
○	13	5	I	F6X	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	D2
○	14	6	I	F7X	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	D3
○	15	7	I	F26STOPA	☑	☑	☐		☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	D4

Add | Delete | Move | Clear Used By | Move to/from backplane

Manual Map Optimisation

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port: 2

○ Inputs ○ Outputs ◉ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0
Card Address: 2

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	16	0	I	F26STOPB	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	A1
○	17	1	I	F27STOP	☑	☑	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	A2
○	18	2	I	SCOOT1	☑	☑	☐	☐	☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	A3
○	19	3	I	SCOOT2	☑	☑	☐	☐	☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	A4
○	20	4	I	SCOOT3	☑	☑	☐	☐	☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	B1
○	21	5	I	SCOOT4	☑	☑	☐	☐	☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	B2
○	22	6	I	SCOOT5	☑	☑	☐	☐	☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	B3
○	23	7	I	SCOOT6	☑	☑	☐		☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	B4

Add | Delete | Move | Clear Used By | Move to/from backplane

Manual Map Optimisation

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port: 3

○ Inputs ○ Outputs ◉ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0
Card Address: 2

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
○	24	0	I	SCOOT7	☑	☑	☐	☐	☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	C1
○	25	1	I	SCOOT8	☑	☑	☐	☐	☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	C2
○	26	2	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	C3
○	27	3	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	C4
○	28	4	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	D1
○	29	5	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	D2
○	30	6	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	D3
○	31	7	I		☐	☐	☐		☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	D4

Add | Delete | Move | Clear Used By | Move to/from backplane

Manual Map Optimisation

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port: 4

○ Inputs ○ Outputs ◉ Inputs & Outputs

Card Type & Address

Serial IO 24/16
Card Address: 3

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Line No
○	32	0	I	E5X	☑	☐	☐	☐	☐	A	0	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-0
○	33	1	I	G10PPB	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-1
○	34	2	I	G12PPB	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-2
○	35	3	I	G13PPB	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-3
○	36	4	I	H1PPB	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-4
○	37	5	I	H2PPB	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-5
○	38	6	I	I4PPB	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-6
○	39	7	I	I6PPB	☑	☐	☐		☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-7

Add | Delete | Move | Clear Used By | Move to/from backplane

Manual Map Optimisation

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port: 5

○ Inputs ○ Outputs ◉ Inputs & Outputs

Card Type & Address

Serial IO 24/16
Card Address: 3

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Line No
○	40	0	I	J7PPB	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-8
○	41	1	I	J8PPB	☑	☐	☐	☐	☐	A	1	0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-9
○	42	2	I	G10ONC	☑	☐	☐	☐	☐	A	0	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-10
○	43	3	I	G13ONC	☑	☐	☐	☐	☐	A	0	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-11
○	44	4	I	H1ONC	☑	☐	☐	☐	☐	A	0	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-12
○	45	5	I	H2ONC	☑	☐	☐	☐	☐	A	0	1.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-13
○	46	6	I	BD1	☑	☐	☐	☐	☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-14
○	47	7	I	BD2	☑	☐	☐		☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-15

Add | Delete | Move | Clear Used By | Move to/from backplane

Manual Map Optimisation

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port: 6

○ Inputs ○ Outputs ◉ Inputs & Outputs

Card Type & Address

Serial IO 24/16
Card Address: 3

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Used By Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Line No
○	48	0	I	BD3	☑	☐	☐	☐	☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-16
○	49	1	I	BD4	☑	☐	☐	☐	☐	N		0.0	☑	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-17
○	50	2	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-18
○	51	3	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-19
○	52	4	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-20
○	53	5	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-21
○	54	6	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-22
○	55	7	I		☐	☐	☐		☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-23

Add | Delete | Move | Clear Used By | Move to/from backplane

Manual Map Optimisation

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Aspect Drives (ELV Controllers)

Aspect Drives (ELV Controllers)

☐ Card Reversed

HPU Connection 1

Aspect Drive Configuration for LSLS 1 of 2 cards (Cabinet 1)

Output	Phase	Aspect	Use	Output	Phase	Aspect	Use
32	A	Red	Phase	16	F	Amber	Phase
31	A	Amber	Phase	15	F	Green	Phase
30	A	Green	Phase	14	G	Red	Phase
29	B	Red	Phase	13	G	Amber	Phase
28	B	Amber	Phase	12	G	Green	Phase
27	B	Green	Phase	11	G	Green	Phase
26	C	Red	Phase	10	H	Red	Phase
25	C	Amber	Phase	9	H	Amber	Phase
24	C	Green	Phase	8	H	Green	Phase
23	D	Red	Phase	7	H	Green	Phase
22	D	Amber	Phase	6	I	Red	Phase
21	D	Green	Phase	5	I	Amber	Phase
20	E	Red	Phase	4	I	Green	Phase
19	E	Amber	Phase	3	I	Green	Phase
18	E	Green	Phase	2	J	Red	Phase
17	F	Red	Phase	1	J	Amber	Phase

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

Aspect Drives (ELV Controllers)

Aspect Drives (ELV Controllers)

☐ Card Reversed

HPU Connection 1

Aspect Drive Configuration for LSLS 2 of 2 cards (Cabinet 1)

Output	Phase	Aspect	Use	Output	Phase	Aspect	Use
32	J	Green	Phase	16	N/A	N/A	N/A
31	J	Green	Phase	15	N/A	N/A	N/A
30	N/A	N/A	N/A	14	N/A	N/A	N/A
29	N/A	N/A	N/A	13	N/A	N/A	N/A
28	N/A	N/A	N/A	12	N/A	N/A	N/A
27	N/A	N/A	N/A	11	N/A	N/A	N/A
26	N/A	N/A	N/A	10	N/A	N/A	N/A
25	N/A	N/A	N/A	9	N/A	N/A	N/A
24	N/A	N/A	N/A	8	N/A	N/A	N/A
23	N/A	N/A	N/A	7	N/A	N/A	N/A
22	N/A	N/A	N/A	6	N/A	N/A	N/A
21	N/A	N/A	N/A	5	N/A	N/A	N/A
20	N/A	N/A	N/A	4	N/A	N/A	N/A
19	N/A	N/A	N/A	3	N/A	N/A	N/A
18	N/A	N/A	N/A	2	N/A	N/A	N/A
17	N/A	N/A	N/A	1	N/A	N/A	N/A

Works Order :
EM Number : J19821
Engineer : C GOUGH
Intersection : Nottingham Rd / Attenborough Ln, Chilwell J19821

I/O - DFM Group Timings

I/O - DFM Group Timings

Input Group	State	SET A	SET B	SET C	SET D
Group 0	Active (Mins)	120	120	120	120
	InActive (Hrs)	18	18	18	18
Group 1	Active (Mins)	60	60	60	60
	InActive (Hrs)				
Group 2	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 3	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 4	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 5	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 6	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 7	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18

Note - 255 or blank disables DFM monitoring of that state (active or inactive) during that timeset (A to D)

Handset Limiting Values

State	Min	Max
Active (Mins)	0	254
InActive (Hrs)	0	254

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MOVA Tools

Site Configuration

Version: 3.2.0.482 [3-Dec-2019]
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Filename: J19821BUS.mova
Path: \\nccadmin\nccdata\Highways\Old N Drive\Highways\Traffic\Traffic Eng Team\SCN\Broxtowe (09693-10751&19621-32196)\J19821 Nottingham Rd, Attenborough Lane\MOVA
Report generation date: 18/01/2021 18:01:13

Site diagram



Data Plan 1 - 1

Controller details

MOVA Controller 1

ID	1
MOVA Version	M7.0
Name	(untitled)
Description	
Main Stage [MAINST]	1
Total Green Limit [TOTALG] (s)	90
Detector ON [DETON]	Closed circuit
Stage Confirm ON [STAGON]	Open circuit
Phase Confirm ON [PHASON]	Open circuit
Stage Demand ON [STGDEM]	Closed circuit
Dataset Filename	J19821M7BUS
Checksum Of All Site Data	66 223

Phases

Phases

Phase ID	**A**	**C**	**E**	**F**	**G**	**H**	**I**	**J**
Name	A6005 Nottingham Rd	A6005 Bye Pass Rd	Attenborough Ln South	Attenborough Ln North	Peds X A6005 North	Peds X Attenborough Ln North Exit	Peds X Attenborough Ln North Right Turn	Peds X Attenborough Ln Left Turn
Phase Type	Traffic	Traffic	Traffic	Traffic	Pedestrian	Pedestrian	Pedestrian	Pedestrian
Associated Phase								
Minimum Green (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0
Interstage Behaviour [LPHASE]	Never runs during interstage	Never runs during interstage	Never runs during interstage	Never runs during interstage	Never runs during interstage	Never runs during interstage	Never runs during interstage	Never runs during interstage
Phase Confirm Channel [LPHASE]								

Phase Intergreen Matrix for Controller 1

		To							
		A	C	E	F	G	H	I	J
From	A	-		13		14	14		
	C		-		14	14	14		
	E	5		-	5	0	0		
	F		5	5	-	0	0	5	5
	G	4	4	4	4	-			
	H	4	4	4	4		-		
	I				8			-	
	J				8				-

Stages

Stages

Stage	1	2
Description		
Phases In Stage	A,C,I,J	E,F,G,H
Auto Set Stage Minimum	✓	✓
Stage Minimum [MIN] (s)	7.0	7.0
Stage Maximum [MAX] (s)	80.0	20.0
All Red Pedestrian Stage [REDPED]		

Stages: Pedestrians

Stage	1	2
Enable Pedestrian Short Cycling		
PEDMAX1 (s)		
PEDMAX2 (%)		

Stages: Emergency And Priority

Stage	1	2
Priority Facility Code [PFACIL]	3	3
Max green extension (Emergency) [EMXMAX] (s)	0	0
Max green extension (Priority) [PRXMAX] (s)	10	10

Stages: Bonus

Stage	1	2
Auto Set	✓	✓
Short-cycle stage max [LOWMAX] (s)	80.0	20.0

Stages: Alerts

Stage	1	2
Occupancy alert threshold (ON) [OCCUAL on]	9.90	9.90
Occupancy alert threshold (OFF) [OCCUAL off]	9.90	9.90

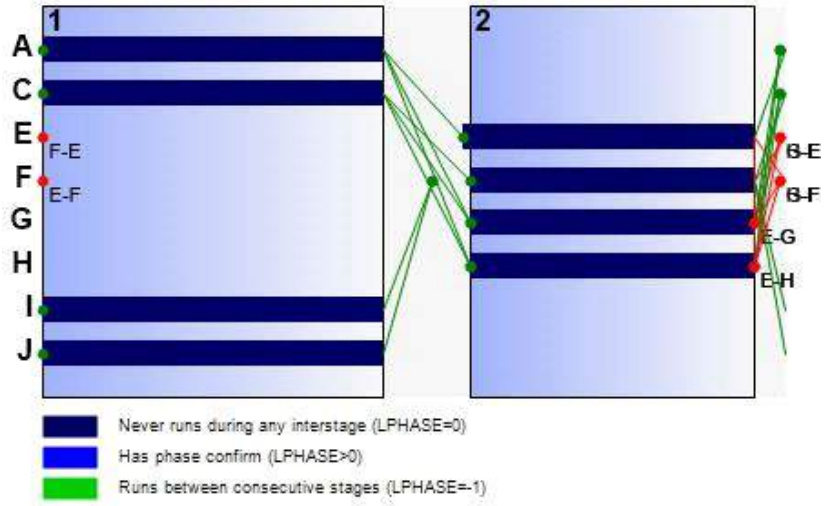
Interstage Matrix for Controller 1

		To	
		1	2
From	1	-	14
	2	5	-

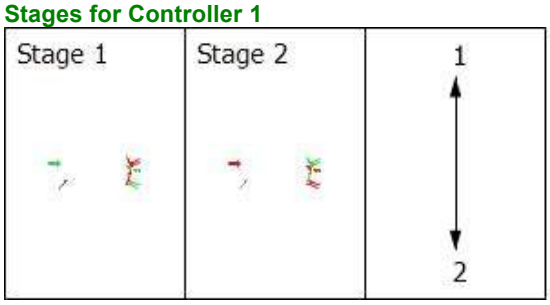
Banned Stage transitions for Controller 1

		To	
		1	2
From	1	-	Allow
	2	Allow	-

Stages and phases for Controller 1



Stages for Controller 1



LGREEN and SDCODE Matrix

LGREEN matrix

	Link													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Stage	1	1	1	1	1	0	0	0	0	0	1	1	1	1	0
	2	0	0	0	0	1	1	1	1	1	0	0	0	0	1

SDCODE matrix

	Link													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Stage	1	1	1	1	1						1	1	1	1	
	2					1	1	1	1	1					1

Links

Links

Link	1	2	3	4	5	6	7	8	9	10	11
Name	A6005 Nottingham Rd Lane 1	A6005 Nottingham Rd Lane 2	A6005 Bye Pass Rd Lane 1	A6005 Bye Pass Rd Lane 2	Attenborough Ln South	Attenborough Ln North Lane 1	Attenborough Ln North Lane 2	Peds X A6005 North	Peds X Attenborough Ln North Exit	Peds X Attenborough Ln North Right Turn	Peds Attenbor Ln Left
Description											
Lanes	1	2	3	4	5	6	7				
Phase	A	A	C	C	E	F	F	G	H	I	J
Link Type [LTYPE]	Traffic	Traffic	Traffic	Traffic	Traffic	Traffic	Traffic	Pedestrian	Pedestrian	Pedestrian	Pedest
Demand Channel								33	34	35	36
Latched								✓	✓	✓	✓
Volumetric Detection											
Use Wait Channel											
Wait Channel [WAITCH]											
LPHASE_ RAW	0	0	0	0	0	0	0	0	0	0	0
LTYPE_ RAW	0	0	0	0	0	0	0	33	34	35	36

Links (continued)

Link	13	14
Name	A6005 Outbound	Attenborough Ln North
Description		
Lanes		
Phase	C	F
Link Type [LTYPE]	Priority	Priority
Demand Channel		
Latched		
Volumetric Detection		
Use Wait Channel		
Wait Channel [WAITCH]		
LPHASE_ RAW	0	0
LTYPE_ RAW	99	99

Link: Modelling

Link	1	2	3	4	5	6	7	8	9	10	11	12
Auto Set Link Minimum Green	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Link Minimum Green [LMIN] (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	7.0
Auto Set Stop Penalty												
Heavy Vehicles (%)												

Stop Penalty [STOPEN] (s)	20.0	15.0	20.0	15.0	4.0	6.0	9.0					
Auto-set End of Saturation Time	✓	✓	✓	✓	✓	✓	✓					
End of Saturation Time [ESLMAX] (s)	80.0	80.0	80.0	80.0	20.0	20.0	20.0					
Auto Set Lost Time	✓	✓	✓	✓	✓	✓	✓					
Lost Time [LOSTIM] (s)	17.0	17.0	17.0	17.0	16.0	17.0	17.0					

Link: Modelling (continued)

Link	**13**	**14**
Auto Set Link Minimum Green	✓	✓
Link Minimum Green [LMIN] (s)	7.0	7.0

Link: Offside Turners

Link	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Auto set MIXOUT	✓	✓	✓	✓	✓	✓	✓					
Early cut-off demand type [MIXOUT]	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	-	-	-	-	-
Vehicles between X and OUT dets [MIXOUT] (veh)												

Link: Emergency and Priority

Link	12	13	14
Use Bus Weighting?			
EP1: Has Detector?	✓	✓	✓
EP1: Detector ID [EPDET1]	41	42	43
EP1: Extension [EPEXT1] (s)	10	10	10
EP2: Has Detector?			
EP2: Detector ID [EPDET2]			
EP2: Extension [EPEXT2] (s)			
Hold Time [HOLDTM] (s)	10	10	10
Cancel Detector Type	None	None	None
Cancel Detector ID [CANDET]			

Link: Bonus

Link	3	6
Link Has Bonus	✓	✓
Reason	Short lane 4 provides IN-SINK	Short lane 7 provides IN-SINK
Auto Set	✓	✓
Max Distance (m)	50.00	50.00
BONTIM (s)	20.0	20.0
Allow Cutting Of Maximum Greens [BONCUT]	No	No
Link N [BONCUT]		

Link: Constants

Link	1	2	3	4	5	6	7	8	9	10	11	12
Auto Set	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MINPCS	50	50	50	50	50	50	50	50	50	50	50	50
Is Short Link [SHORTL]				✓			✓					
Number Of Main Lanes [NMAINL]	1	1	1	1	1	1	1	0	0	0	0	0

Link: Constants (continued)

Link	13	14
Auto Set	✓	✓
MINPCS	50	50
Is Short Link [SHORTL]		
Number Of Main Lanes [NMAINL]	0	0

Lanes

Lanes

Lane	1	2	3	4	5	6	7
Name	A6005 Nottingham Rd Lane 1	A6005 Nottingham Rd Lane 2	A6005 Bye Pass Rd Lane 1	A6005 Bye Pass Rd Lane 2	Attenborough Ln South	Attenborough Ln North Lane 1	Attenborough Ln North Lane 2
Description							
Lane Type	Normal	Normal	Normal	Short	Compact MOVA	Normal	Short
Short Lane Length [DSHORT] (m)				50.00			50.00
Lane Weighting Factor [LANEWF]	1	1	1	1	1	1	1
Cruise Speed [CSPEED] (m/s)	11.0	11.0	10.0	10.0	8.0	9.0	9.0
Enter headway?	✓	✓	✓	✓	✓	✓	✓
Headway [SATINC] (s)	2.0	1.8	2.0	1.8	2.0	2.0	2.0
Saturation Flow (veh/hr)	1800	2000	1800	2000	1800	1800	1800
Start-up Lost Time [STLOST] (s)	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Saturation Flow Feedback [USESF]	Off	Off	Off	Off	Off	Off	Off
Start-up Lost Time Feedback [USEST]	Off	Off	Off	Off	Off	Off	Off

Lane: Detectors

Lane	1	2	3	4	5	6	7
X Detector ID [X]	1	2	3	4	5	6	7
X Detector distance [DX] (m)	40.0	40.0	40.0	40.0	45.0	40.0	40.0
IN Detector?	✓	✓	✓			✓	
IN Detector ID [IN]	11	12	13			16	
IN Detector distance [DIN] (m)	105.0	105.0	95.0			95.0	
Auto Set	✓	✓	✓	✓	✓	✓	✓
X Detector cruise time [CRUSX] (s)	3.0	3.0	3.5	3.5	5.0	4.0	4.0
X Detector queue clear time [MOVEQX] (s)	16.5	16.0	16.5	16.0	18.5	16.5	16.5
IN Detector cruise time [CRUSIN] (s)	9.0	9.0	9.0			10.0	
IN Detector queue clear time [MOVQIN] (s)	34.5	34.5	31.5			31.5	
Queue Detection Time [QMINON] (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0

Lane: Combination Detectors

Lane	1	2	3	4	5	6	7
COMB-X Detector present?							
COMB-X Detector ID [COMBX]							
Associated X Det 1 [ASSOCD-1]							
Associated X Det 2?							
Associated X Det 2 [ASSOCD-2]							
Auto Set COMTIM	✓	✓	✓	✓	✓	✓	✓
Time To Use Combination [COMTIM] (s)							

Lane: Other Detectors

Lane	1	2	3	4	5	6	7
OUT Detector?							
OUT Detector ID							
IN-SINK Detector?			✓			✓	
IN-SINK Detector ID			4			7	
X-SINK Detector?							
X-SINK Detector ID							
STOPLINE Detector?	✓	✓	✓	✓	✓	✓	✓
STOPLINE Detector ID	21	22	23	24	25	26	27
AutoSet ALT-UP	✓	✓		✓	✓	✓	✓
ALT-UP Detector?	✓	✓				✓	
ALT-UP Detector ID	11	12				16	
ALT-DOWN Detector?						✓	✓
ALT-DOWN Detector ID						26	27

Lane: Oversaturation

Lane	1	2	3	4	5	6	7
Auto Set Critical Vehicle Count							
Detector For Oversaturation Checking [XOSAT]	IN detector	IN detector	IN detector	X detector	X detector	IN detector	X detector
Critical Vehicle Count [OSATCC] (veh)	20	20	20	20	15	10	12
Critical Vehicle Count Compact [OSATCX] (veh)	5	5	5	15	15	5	15
Critical Vehicle Time [OSATTM]				12.5	14.5		12.5

Lane: Bonus

Lane	3	6
Small bay/slip road		
Has Bonus	✓	✓
Reason	Short lane 4 provides IN-SINK	Short lane 7 provides IN-SINK
Distance (m)	50.00	50.00
Auto Set Bonus Base Count	✓	✓
Bonus Base Count [BONBC] (veh)	11	11

Lane: Alerts

Lane	1	2	3	4	5	6	7
Enable Oversaturation Alert							
Oversaturation Cycles [OSATAL]							
Enable Exit Blocking Alert							
Exit Blocking Cycles [EXITAL]							

Lane: Advanced

Lane	1	2	3	4	5	6	7
Auto set Advanced Values	✓	✓	✓	✓	✓	✓	✓
Max Minimum Green [MAXMIN] (s)	13.5	12.5	13.5	12.5	15.5	13.5	13.5
Utilised Amber Time [GAMBER] (s)	2.0	2.0	2.0	2.0	1.0	1.5	1.5
Saturation Flow Gap [SATGAP] (s)	1.4	1.3	1.4	1.3	1.4	1.4	1.4
Critical Gap [CRITG] (s)	3.4	3.3	3.4	3.3	3.4	3.4	3.4

Logging

Logging

Telephone Number	
TMA Logging Period [TMAPRD]	60

Logging: Error weighting

Error type	Weighting
Auto Set	✓
Faulty detector [2]	0
Stage not ended [3]	5
Intergreen not ended [4]	5
Invalid stage demanded [5]	5
Wrong stage confirmed [6]	5
Multiple stage confirms [14]	0
Watchdog routine [8]	5
Divide error [16]	5
Program error [11]	0

Logging: Saturation Flow Logs

Time Period	Start Time (HH:mm)	End Time (HH:mm)
Weekday Period 1	07:30	09:30
Weekday Period 2	16:30	18:30
Weekday Period 3	09:30	16:30
Weekday Period 4	18:30	22:00
Saturday	09:00	17:00
Sunday	10:00	16:00

Constants

Constants

Auto Set	SCAN	MINEXT (s)	MAXEXT (s)	ADDGAP	SUBGAP	NDETS	STAGES	NLINKS	NLANES
✓	0.5	3.0	10.5	0.5	0.5	43	2	14	7

Summary of Detectors and Confirms

Detectors

Detector	Detector Type	Link	Lane	Data Plan
1	X		1	
2	X		2	
3	X		3	
4	INSINK		3	
4	X		4	
5	X		5	
6	X		6	
7	X		7	
7	INSINK		6	
11	N		1	
12	N		2	
13	N		3	
16	N		6	
21	Stopline		1	
22	Stopline		2	
23	Stopline		3	
24	Stopline		4	
25	Stopline		5	
26	Stopline		6	
27	Stopline		7	
33	Pedestrian	8		
34	Pedestrian	9		
35	Pedestrian	10		
36	Pedestrian	11		
41	E/P	12		
42	E/P	13		
43	E/P	14		

Confirms

Confirm	Stage	Phase
1	1	
2	2	

Special Conditioning

No rules have been defined

APPENDIX F

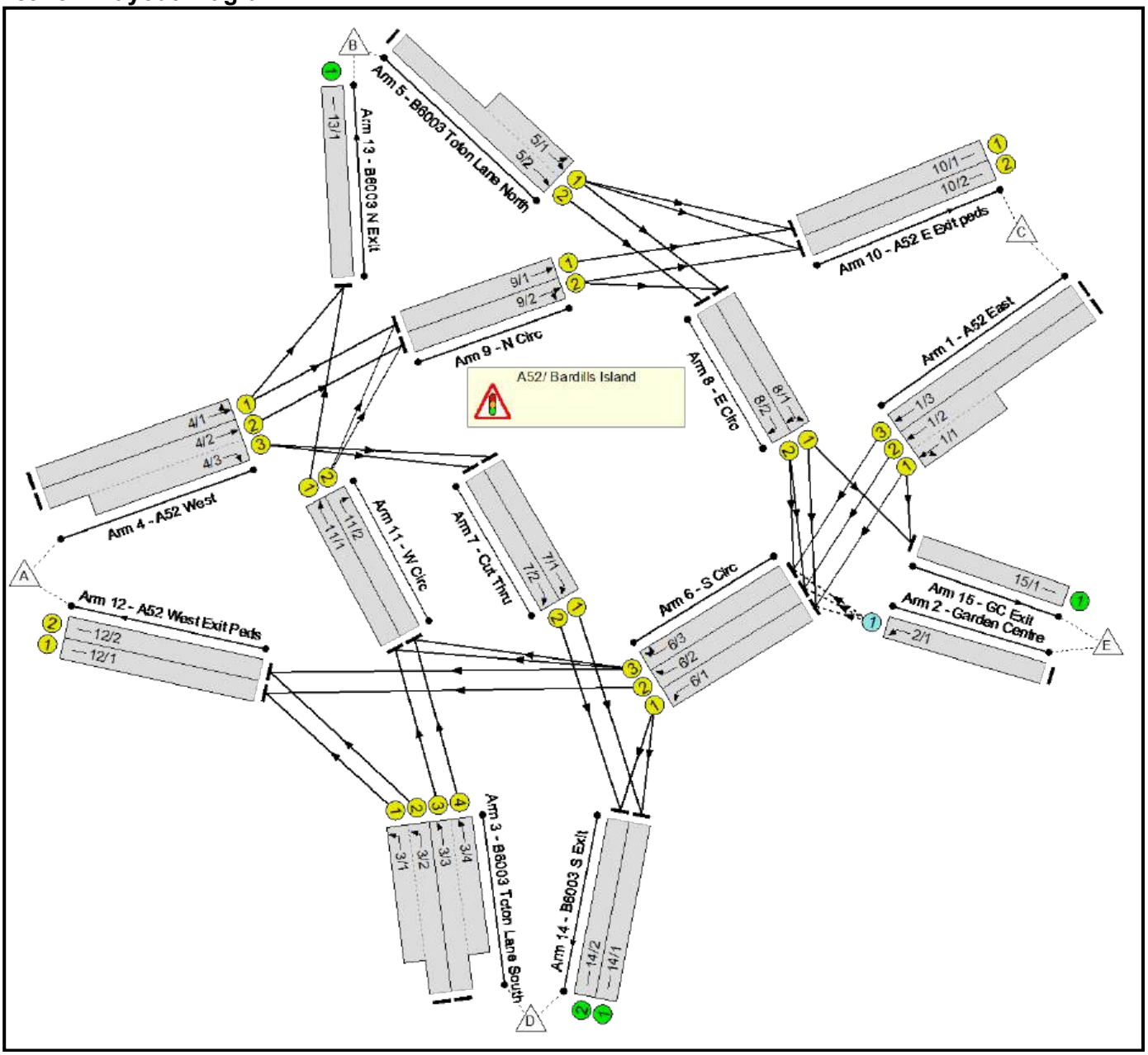
Model Output Reports

Detailed Input Data And Results

User and Project Details

Project:	
Title:	**A52 / Bardills Island**
Location:	Nottingham
Additional detail:	Existing network
File name:	S1 A52 Bardills Island v2.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 2, 44, 1

Network Layout Diagram



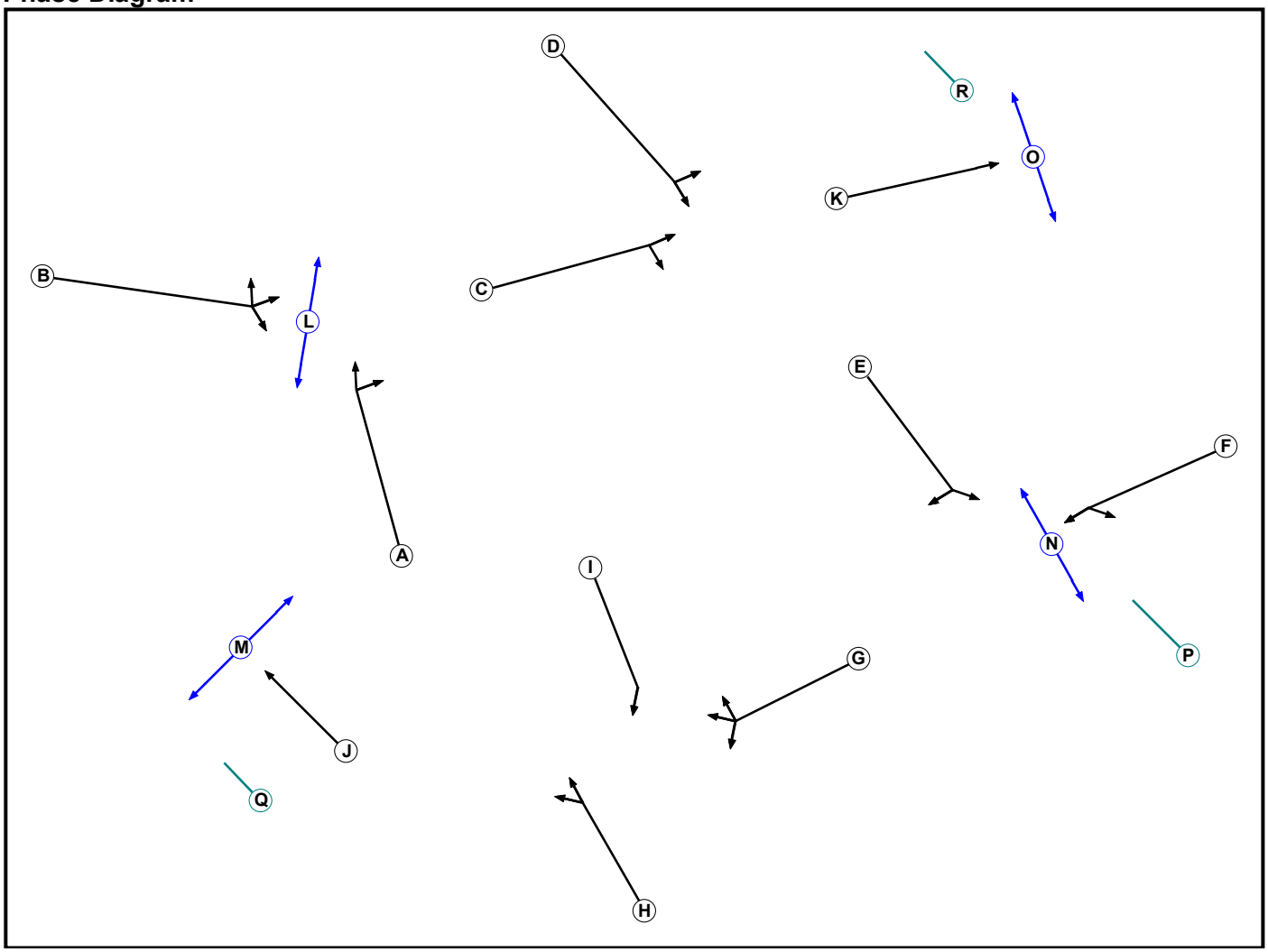
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	Scenario 1	2026 Reference Case AM	Network Control Plan 2	08:00 - 09:00	70	-0.5	51.03
2	Scenario 1	2026 Reference Case PM	Network Control Plan 2	17:00 - 18:00	70	1.8	46.14
3	Scenario 1	2041 Reference Case AM	Network Control Plan 2	08:00 - 09:00	70	-3.6	61.92
4	Scenario 1	2041 Reference Case PM	Network Control Plan 2	17:00 - 18:00	70	-10.7	81.10
5	Scenario 1	2026 Do Something	Network Control Plan 2	08:00 - 09:00	70	-0.3	53.93
6	Scenario 1	2026 Do Something	Network Control Plan 2	17:00 - 18:00	70	-2.7	50.91
7	Scenario 1	2041 So Something AM	Network Control Plan 2	08:00 - 09:00	70	-3.2	64.62
8	Scenario 1	2041 Do Something PM	Network Control Plan 2	17:00 - 18:00	70	-9.7	78.44

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1 - A52 / B6003 Bardills	Sms	J31311	Stage Stream 1	12	8	A52/ Bardills Island	
			Stage Stream 2	3	3	A52/ Bardills Island	
			Stage Stream 3	3	3	A52/ Bardills Island	

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Traffic	1		7	7
E	Traffic	1		7	7
F	Traffic	1		7	7
G	Traffic	1		7	7
H	Traffic	1		7	7
I	Traffic	1		7	7
J	Traffic	2		20	20
K	Traffic	3		20	20
L	Pedestrian	1		6	6
M	Pedestrian	2		5	5
N	Pedestrian	1		6	6
O	Pedestrian	3		5	5
P	Dummy	1		1	1
Q	Dummy	2		1	1
R	Dummy	3		1	1

Phase Intergreens Matrix

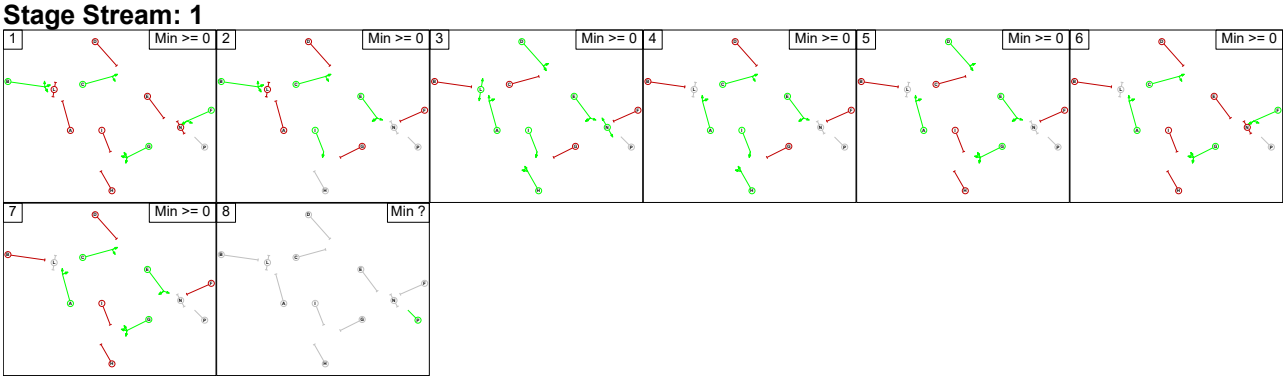
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
A		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	6		-	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-
C	-	-		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	-	-	5		-	-	-	-	-	-	-	-	-	-	-	-	-	-
E	-	-	-	-		5	-	-	-	-	-	-	-	-	-	-	-	-
F	-	-	-	-	6		-	-	-	-	-	-	-	6	-	-	-	-
G	-	-	-	-	-	-		7	5	-	-	-	-	-	-	-	-	-
H	-	-	-	-	-	-	5		-	-	-	-	-	-	-	-	-	-
I	-	-	-	-	-	-	6	-		-	-	-	-	-	-	-	-	-
J	-	-	-	-	-	-	-	-	-		-	-	5	-	-	-	-	-
K	-	-	-	-	-	-	-	-	-	-		-	-	-	5	-	-	-
L	-	10	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
M	-	-	-	-	-	-	-	-	-	7	-	-		-	-	-	-	-
N	-	-	-	-	-	10	-	-	-	-	-	-	-		-	-	-	-
O	-	-	-	-	-	-	-	-	-	-	7	-	-	-		-	-	-
P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Phases in Stage

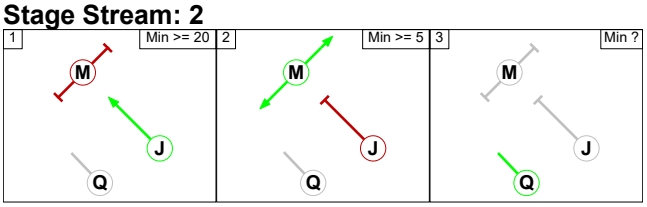
Stream	Stage No.	Phases in Stage
1	1	B C F G
1	2	B C E I
1	3	A D E H I L N
1	4	A C E H I
1	5	A D E G
1	6	A C F G
1	7	A C E G
1	8	P
2	1	J
2	2	M
2	3	Q
3	1	K
3	2	O
3	3	R

Stage Diagram

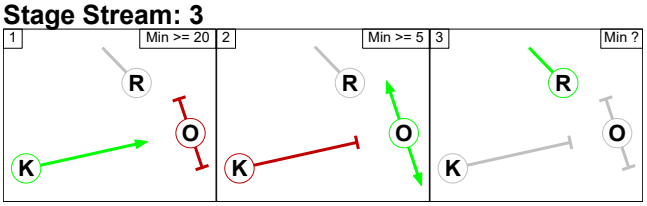
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	G	Losing	7	7
1	3	B	Losing	5	5
1	3	C	Losing	4	4
1	3	G	Losing	7	7
1	4	G	Losing	7	7
1	5	C	Losing	4	4
2	3	C	Losing	4	4
2	5	C	Losing	4	4
3	1	A	Losing	6	6
3	1	E	Losing	3	3
3	1	H	Losing	3	3
3	1	I	Losing	3	3
3	6	E	Losing	3	3
4	1	A	Losing	3	3
4	2	A	Losing	3	3
5	1	E	Losing	3	3
5	6	E	Losing	3	3

Stage Stream: 2

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

Stage Stream: 3

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

Prohibited Stage Change

Stage Stream: 1

From Stage \ To Stage	1	2	3	4	5	6	7	8
1		12	14	14	9	6	6	X
2	6		9	6	9	6	6	X
3	11	10		5	6	10	6	X
4	8	8	5		6	6	6	X
5	8	5	7	7		8	5	X
6	5	6	7	7	6		6	X
7	5	5	7	7	5	5		X
8	2	X	X	X	X	X	X	

Stage Stream: 2

From Stage \ To Stage	1	2	3
1		5	X
2	7		X
3	2	X	

Stage Stream: 3

From Stage \ To Stage	1	2	3
1		5	X
2	7		X
3	2	X	

Lane Input Data

Junction: A52/ Bardills Island

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 (A52 East)	U	F	2	3	7.0	User	1900	-	-	-	-	-
1/2 (A52 East)	U	F	2	3	60.0	User	1900	-	-	-	-	-
1/3 (A52 East)	U	F	2	3	60.0	User	1900	-	-	-	-	-
2/1 (Garden Centre)	O		2	3	60.0	User	1800	-	-	-	-	-
3/1 (B6003 Toton Lane South)	U	H	2	3	16.5	User	1900	-	-	-	-	-
3/2 (B6003 Toton Lane South)	U	H	2	3	38.3	User	1900	-	-	-	-	-
3/3 (B6003 Toton Lane South)	U	H	2	3	38.3	User	1900	-	-	-	-	-
3/4 (B6003 Toton Lane South)	U	H	2	3	12.2	User	1900	-	-	-	-	-
4/1 (A52 West)	U	B	2	3	60.0	User	1900	-	-	-	-	-
4/2 (A52 West)	U	B	2	3	60.0	User	1900	-	-	-	-	-
4/3 (A52 West)	U	B	2	3	12.2	User	1900	-	-	-	-	-
5/1 (B6003 Toton Lane North)	U	D	2	3	7.0	User	1900	-	-	-	-	-
5/2 (B6003 Toton Lane North)	U	D	2	3	60.0	User	1900	-	-	-	-	-
6/1 (S Circ)	U	G	2	3	11.3	User	1900	-	-	-	-	-
6/2 (S Circ)	U	G	2	3	11.3	User	1900	-	-	-	-	-
6/3 (S Circ)	U	G	2	3	11.3	User	1900	-	-	-	-	-
7/1 (Cut Thru)	U	I	2	3	8.9	User	1900	-	-	-	-	-
7/2 (Cut Thru)	U	I	2	3	7.3	User	1900	-	-	-	-	-
8/1 (E Circ)	U	E	2	3	7.0	User	1900	-	-	-	-	-
8/2 (E Circ)	U	E	2	3	7.0	User	1900	-	-	-	-	-

9/1 (N Circ)	U	C	2	3	7.1	User	1900	-	-	-	-	-
9/2 (N Circ)	U	C	2	3	7.1	User	1900	-	-	-	-	-
10/1 (A52 E Exit peds)	U	K	2	3	7.5	User	1900	-	-	-	-	-
10/2 (A52 E Exit peds)	U	K	2	3	7.5	User	1900	-	-	-	-	-
11/1 (W Circ)	U	A	2	3	8.0	User	1900	-	-	-	-	-
11/2 (W Circ)	U	A	2	3	8.0	User	1900	-	-	-	-	-
12/1 (A52 West Exit Peds)	U	J	2	3	12.2	User	1900	-	-	-	-	-
12/2 (A52 West Exit Peds)	U	J	2	3	12.2	User	1900	-	-	-	-	-
13/1 (B6003 N Exit)	U		2	3	5.0	Inf	-	-	-	-	-	-
14/1 (B6003 S Exit)	U		2	3	3.5	Inf	-	-	-	-	-	-
14/2 (B6003 S Exit)	U		2	3	3.5	Inf	-	-	-	-	-	-
15/1 (GC Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: A52/ Bardills Island

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1 (Garden Centre)	6/1 (Left)	1000	0	1/1	1.00	All	-	-	-	-	-
				8/1	1.00	All					
	6/2 (Left)	1000	0	1/1	1.00	All					
				1/2	1.00	All					
				8/1	1.00	All					
				8/2	1.00	All					
	6/3 (Left)	1000	0	8/1	1.00	All					
				8/2	1.00	All					
				1/1	1.00	All					
				1/2	1.00	All					
				1/3	1.00	All					

Lane Connector Input Data

Detailed Input Data And Results

Junction: A52/ Bardills Island				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
1/1	6/1	Internal	7	35
1/1	15/1	Internal	5	35
1/2	6/2	Internal	7	35
1/3	6/3	Internal	7	35
2/1	6/1	Internal	5	35
2/1	6/2	Internal	5	35
2/1	6/3	Internal	5	35
3/1	12/1	Internal	5	35
3/2	12/2	Internal	5	35
3/3	11/1	Internal	5	35
3/4	11/2	Internal	5	35
4/1	9/1	Internal	4	35
4/1	13/1	Internal	3	N/A
4/2	9/2	Internal	4	35
4/3	7/1	Internal	7	35
4/3	7/2	Internal	6	35
5/1	8/1	Internal	4	35
5/1	10/1	Internal	4	35
5/1	10/2	Internal	4	35
5/2	8/2	Internal	4	35
6/1	14/1	Internal	2	N/A
6/1	14/2	Internal	2	N/A
6/2	12/1	Internal	7	35
6/3	11/1	Internal	6	35
6/3	11/2	Internal	6	35
6/3	12/2	Internal	7	35
7/1	14/1	Internal	2	N/A
7/2	14/2	Internal	2	N/A
8/1	6/1	Internal	6	35
8/1	15/1	Internal	5	35
8/2	6/2	Internal	6	35
8/2	6/3	Internal	6	35
9/1	10/1	Internal	4	35
9/2	8/1	Internal	4	35
9/2	10/2	Internal	4	35
11/1	13/1	Internal	3	N/A
11/2	9/1	Internal	4	35

11/2	9/2	Internal	4	35

Scenario 1: 'Scenario 1' (FG1: '2026 Reference Case AM', Plan 2: 'Network Control Plan 2')

Lane Saturation Flows

Junction: A52/ Bardills Island

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 (A52 East Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A52 East Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A52 East Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (Garden Centre Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (B6003 Toton Lane South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (B6003 Toton Lane South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (B6003 Toton Lane South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/4 (B6003 Toton Lane South Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (A52 West Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A52 West Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/3 (A52 West Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (B6003 Toton Lane North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
5/2 (B6003 Toton Lane North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/1 (S Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (S Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (S Circ Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (Cut Thru Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
7/2 (Cut Thru Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (E Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (E Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (N Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (N Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (A52 E Exit peds Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900

10/2 (A52 E Exit peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/1 (W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A52 West Exit Peds Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A52 West Exit Peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (B6003 N Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/1 (B6003 S Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/2 (B6003 S Exit Lane 2)	Infinite Saturation Flow	Inf	Inf
15/1 (GC Exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Bonus Green Times

No Bonus Green Data For This Scenario

Scenario 2: 'Scenario 1' (FG2: '2026 Reference Case PM', Plan 2: 'Network Control Plan 2')

Lane Saturation Flows

Junction: A52/ Bardills Island

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 (A52 East Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A52 East Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A52 East Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (Garden Centre Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (B6003 Toton Lane South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (B6003 Toton Lane South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (B6003 Toton Lane South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/4 (B6003 Toton Lane South Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (A52 West Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A52 West Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/3 (A52 West Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (B6003 Toton Lane North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
5/2 (B6003 Toton Lane North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/1 (S Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (S Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (S Circ Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (Cut Thru Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
7/2 (Cut Thru Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (E Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (E Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (N Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (N Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (A52 E Exit peds Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900

10/2 (A52 E Exit peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/1 (W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A52 West Exit Peds Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A52 West Exit Peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (B6003 N Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/1 (B6003 S Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/2 (B6003 S Exit Lane 2)	Infinite Saturation Flow	Inf	Inf
15/1 (GC Exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Bonus Green Times

No Bonus Green Data For This Scenario

Scenario 3: 'Scenario 1' (FG5: '2041 Reference Case AM', Plan 2: 'Network Control Plan 2')

Lane Saturation Flows

Junction: A52/ Bardills Island

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 (A52 East Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A52 East Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A52 East Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (Garden Centre Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (B6003 Toton Lane South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (B6003 Toton Lane South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (B6003 Toton Lane South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/4 (B6003 Toton Lane South Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (A52 West Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A52 West Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/3 (A52 West Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (B6003 Toton Lane North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
5/2 (B6003 Toton Lane North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/1 (S Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (S Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (S Circ Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (Cut Thru Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
7/2 (Cut Thru Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (E Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (E Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (N Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (N Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (A52 E Exit peds Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900

10/2 (A52 E Exit peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/1 (W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A52 West Exit Peds Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A52 West Exit Peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (B6003 N Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/1 (B6003 S Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/2 (B6003 S Exit Lane 2)	Infinite Saturation Flow	Inf	Inf
15/1 (GC Exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Bonus Green Times

No Bonus Green Data For This Scenario

Scenario 4: 'Scenario 1' (FG6: '2041 Reference Case PM', Plan 2: 'Network Control Plan 2')

Lane Saturation Flows

Junction: A52/ Bardills Island

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 (A52 East Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A52 East Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A52 East Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (Garden Centre Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (B6003 Toton Lane South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (B6003 Toton Lane South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (B6003 Toton Lane South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/4 (B6003 Toton Lane South Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (A52 West Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A52 West Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/3 (A52 West Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (B6003 Toton Lane North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
5/2 (B6003 Toton Lane North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/1 (S Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (S Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (S Circ Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (Cut Thru Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
7/2 (Cut Thru Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (E Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (E Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (N Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (N Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (A52 E Exit peds Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900

10/2 (A52 E Exit peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/1 (W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A52 West Exit Peds Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A52 West Exit Peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (B6003 N Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/1 (B6003 S Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/2 (B6003 S Exit Lane 2)	Infinite Saturation Flow	Inf	Inf
15/1 (GC Exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Bonus Green Times

No Bonus Green Data For This Scenario

Scenario 5: 'Scenario 1' (FG3: '2026 Do Something', Plan 2: 'Network Control Plan 2')

Lane Saturation Flows

Junction: A52/ Bardills Island

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 (A52 East Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A52 East Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A52 East Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (Garden Centre Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (B6003 Toton Lane South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (B6003 Toton Lane South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (B6003 Toton Lane South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/4 (B6003 Toton Lane South Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (A52 West Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A52 West Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/3 (A52 West Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (B6003 Toton Lane North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
5/2 (B6003 Toton Lane North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/1 (S Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (S Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (S Circ Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (Cut Thru Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
7/2 (Cut Thru Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (E Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (E Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (N Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (N Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (A52 E Exit peds Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900

10/2 (A52 E Exit peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/1 (W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A52 West Exit Peds Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A52 West Exit Peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (B6003 N Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/1 (B6003 S Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/2 (B6003 S Exit Lane 2)	Infinite Saturation Flow	Inf	Inf
15/1 (GC Exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Bonus Green Times

No Bonus Green Data For This Scenario

Scenario 6: 'Scenario 1' (FG4: '2026 Do Something', Plan 2: 'Network Control Plan 2')

Lane Saturation Flows

Junction: A52/ Bardills Island

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 (A52 East Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A52 East Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A52 East Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (Garden Centre Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (B6003 Toton Lane South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (B6003 Toton Lane South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (B6003 Toton Lane South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/4 (B6003 Toton Lane South Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (A52 West Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A52 West Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/3 (A52 West Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (B6003 Toton Lane North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
5/2 (B6003 Toton Lane North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/1 (S Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (S Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (S Circ Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (Cut Thru Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
7/2 (Cut Thru Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (E Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (E Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (N Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (N Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (A52 E Exit peds Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900

10/2 (A52 E Exit peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/1 (W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A52 West Exit Peds Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A52 West Exit Peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (B6003 N Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/1 (B6003 S Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/2 (B6003 S Exit Lane 2)	Infinite Saturation Flow	Inf	Inf
15/1 (GC Exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Bonus Green Times
No Bonus Green Data For This Scenario

Scenario 7: 'Scenario 1' (FG7: '2041 So Something AM', Plan 2: 'Network Control Plan 2')
Lane Saturation Flows

Junction: A52/ Bardills Island

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 (A52 East Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A52 East Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A52 East Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (Garden Centre Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (B6003 Toton Lane South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (B6003 Toton Lane South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (B6003 Toton Lane South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/4 (B6003 Toton Lane South Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (A52 West Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A52 West Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/3 (A52 West Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (B6003 Toton Lane North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
5/2 (B6003 Toton Lane North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/1 (S Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (S Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (S Circ Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (Cut Thru Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
7/2 (Cut Thru Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (E Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (E Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (N Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (N Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (A52 E Exit peds Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900

10/2 (A52 E Exit peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/1 (W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A52 West Exit Peds Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A52 West Exit Peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (B6003 N Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/1 (B6003 S Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/2 (B6003 S Exit Lane 2)	Infinite Saturation Flow	Inf	Inf
15/1 (GC Exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Bonus Green Times

No Bonus Green Data For This Scenario

Scenario 8: 'Scenario 1' (FG8: '2041 Do Something PM', Plan 2: 'Network Control Plan 2')

Lane Saturation Flows

Junction: A52/ Bardills Island

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 (A52 East Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A52 East Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A52 East Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (Garden Centre Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (B6003 Toton Lane South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (B6003 Toton Lane South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (B6003 Toton Lane South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/4 (B6003 Toton Lane South Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (A52 West Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A52 West Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/3 (A52 West Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (B6003 Toton Lane North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
5/2 (B6003 Toton Lane North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/1 (S Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (S Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (S Circ Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (Cut Thru Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
7/2 (Cut Thru Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/1 (E Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (E Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (N Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (N Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (A52 E Exit peds Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900

10/2 (A52 E Exit peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/1 (W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A52 West Exit Peds Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A52 West Exit Peds Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (B6003 N Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/1 (B6003 S Exit Lane 1)	Infinite Saturation Flow	Inf	Inf
14/2 (B6003 S Exit Lane 2)	Infinite Saturation Flow	Inf	Inf
15/1 (GC Exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Bonus Green Times

No Bonus Green Data For This Scenario

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2026 Reference Case AM'	08:00	09:00	01:00	
2: '2026 Reference Case PM'	17:00	18:00	01:00	
3: '2026 Do Something'	08:00	09:00	01:00	
4: '2026 Do Something'	17:00	18:00	01:00	
5: '2041 Reference Case AM'	08:00	09:00	01:00	
6: '2041 Reference Case PM'	17:00	18:00	01:00	
7: '2041 So Something AM'	08:00	09:00	01:00	
8: '2041 Do Something PM'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2026 Reference Case AM'

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	191	1523	608	5	2327
	B	245	0	101	268	2	616
	C	1366	74	0	260	3	1703
	D	469	232	215	0	0	916
	E	1	0	1	1	0	3
	Tot.	2081	497	1840	1137	10	5565

FG2: '2026 Reference Case PM'

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	264	1426	475	0	2165
	B	211	0	90	290	0	591
	C	1018	83	0	267	0	1368
	D	520	309	255	0	1	1085
	E	2	4	0	1	0	7
	Tot.	1751	660	1771	1033	1	5216

FG3: '2026 Do Something'

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	190	1514	627	5	2336
	B	236	0	101	278	2	617
	C	1354	74	0	270	3	1701
	D	511	244	253	0	0	1008
	E	1	0	1	1	0	3
	Tot.	2102	508	1869	1176	10	5665

FG4: '2026 Do Something'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	255	1413	543	0	2211
	B	206	0	95	304	0	605
	C	918	80	0	310	0	1308
	D	582	351	256	0	1	1190
	E	2	4	0	1	0	7
	Tot.	1708	690	1764	1158	1	5321

FG5: '2041 Reference Case AM'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	275	1492	705	5	2477
	B	303	0	107	213	2	625
	C	1571	80	0	120	0	1771
	D	650	235	187	0	0	1072
	E	1	0	1	1	0	3
	Tot.	2525	590	1787	1039	7	5948

FG6: '2041 Reference Case PM'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	502	1468	585	0	2555
	B	204	0	103	289	0	596
	C	978	80	0	268	0	1326
	D	610	372	261	0	1	1244
	E	2	4	0	1	0	7
	Tot.	1794	958	1832	1143	1	5728

FG7: '2041 So Something AM'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	270	1480	733	5	2488
	B	299	0	107	220	2	628
	C	1563	80	0	144	3	1790
	D	722	248	183	0	0	1153
	E	1	0	1	1	0	3
	Tot.	2585	598	1771	1098	10	6062

FG8: '2041 Do Something PM'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	481	1449	656	0	2586
	B	207	0	103	298	0	608
	C	955	80	0	276	0	1311
	D	635	379	264	0	1	1279
	E	2	4	0	1	0	7
	Tot.	1799	944	1816	1231	1	5791

Scenario 1: 'Scenario 1' (FG1: '2026 Reference Case AM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	191	1523	608	5	2327
	B	245	0	101	268	2	616
	C	1366	74	0	260	3	1703
	D	469	232	215	0	0	916
	E	1	0	1	1	0	3
	Tot.	2081	497	1840	1137	10	5565

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 2: 'Scenario 1' (FG2: '2026 Reference Case PM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	264	1426	475	0	2165
	B	211	0	90	290	0	591
	C	1018	83	0	267	0	1368
	D	520	309	255	0	1	1085
	E	2	4	0	1	0	7
	Tot.	1751	660	1771	1033	1	5216

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 3: 'Scenario 1' (FG5: '2041 Reference Case AM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	275	1492	705	5	2477
	B	303	0	107	213	2	625
	C	1571	80	0	120	0	1771
	D	650	235	187	0	0	1072
	E	1	0	1	1	0	3
	Tot.	2525	590	1787	1039	7	5948

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 4: 'Scenario 1' (FG6: '2041 Reference Case PM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	502	1468	585	0	2555
	B	204	0	103	289	0	596
	C	978	80	0	268	0	1326
	D	610	372	261	0	1	1244
	E	2	4	0	1	0	7
	Tot.	1794	958	1832	1143	1	5728

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 5: 'Scenario 1' (FG3: '2026 Do Something', Plan 2: 'Network Control Plan 2')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	190	1514	627	5	2336
	B	236	0	101	278	2	617
	C	1354	74	0	270	3	1701
	D	511	244	253	0	0	1008
	E	1	0	1	1	0	3
	Tot.	2102	508	1869	1176	10	5665

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 6: 'Scenario 1' (FG4: '2026 Do Something', Plan 2: 'Network Control Plan 2')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	255	1413	543	0	2211
	B	206	0	95	304	0	605
	C	918	80	0	310	0	1308
	D	582	351	256	0	1	1190
	E	2	4	0	1	0	7
	Tot.	1708	690	1764	1158	1	5321

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 7: 'Scenario 1' (FG7: '2041 So Something AM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	270	1480	733	5	2488
	B	299	0	107	220	2	628
	C	1563	80	0	144	3	1790
	D	722	248	183	0	0	1153
	E	1	0	1	1	0	3
	Tot.	2585	598	1771	1098	10	6062

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 8: 'Scenario 1' (FG8: '2041 Do Something PM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	481	1449	656	0	2586
	B	207	0	103	298	0	608
	C	955	80	0	276	0	1311
	D	635	379	264	0	1	1279
	E	2	4	0	1	0	7
	Tot.	1799	944	1816	1231	1	5791

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Traffic Lane Flows

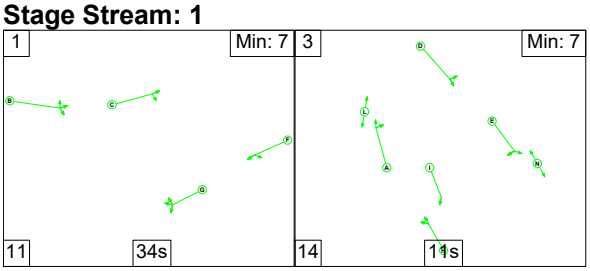
Lane	Scenario 1: Scenario 1	Scenario 2: Scenario 1	Scenario 3: Scenario 1	Scenario 4: Scenario 1	Scenario 5: Scenario 1	Scenario 6: Scenario 1
Junction: A52/ Bardills Island						
1/1 (short)	263	267	120	268	273	310
1/2 (with short)	936(In) 673(Out)	797(In) 530(Out)	919(In) 799(Out)	778(In) 510(Out)	939(In) 666(Out)	791(In) 481(Out)
1/3	767	571	852	548	762	517
2/1	3	7	3	7	3	7
3/1 (short)	235	260	325	305	257	291
3/2 (with short)	469(In) 234(Out)	520(In) 260(Out)	650(In) 325(Out)	610(In) 305(Out)	511(In) 254(Out)	582(In) 291(Out)
3/3 (with short)	447(In) 232(Out)	565(In) 309(Out)	422(In) 235(Out)	634(In) 372(Out)	497(In) 244(Out)	608(In) 351(Out)
3/4 (short)	215	256	187	262	253	257
4/1	916	893	958	1068	911	884
4/2 (with short)	1411(In) 803(Out)	1272(In) 797(Out)	1519(In) 814(Out)	1487(In) 902(Out)	1425(In) 798(Out)	1327(In) 784(Out)
4/3 (short)	608	475	705	585	627	543
5/1 (short)	371	380	322	392	381	399
5/2 (with short)	616(In) 245(Out)	591(In) 211(Out)	625(In) 303(Out)	596(In) 204(Out)	617(In) 236(Out)	605(In) 206(Out)
6/1	529	558	334	558	549	615
6/2	796	639	952	616	789	588
6/3	891	679	1004	652	877	622
7/1	313	247	362	302	323	281
7/2	295	228	343	283	304	262
8/1	275	291	220	290	285	305
8/2	245	211	303	204	236	206
9/1	845	776	793	735	860	767
9/2	899	906	892	995	913	903
10/1	899	820	854	813	912	808
10/2	941	951	933	1019	957	956
11/1	306	396	315	456	318	435
11/2	216	256	188	262	254	257
12/1	1031	899	1277	921	1046	879
12/2	1050	852	1248	873	1056	829
13/1	497	660	590	958	508	690
14/1	577	525	528	580	597	588
14/2	560	508	511	563	579	570
15/1	10	1	7	1	10	1

Lane	Scenario 7: Scenario 1	Scenario 8: Scenario 1
Junction: A52/ Bardills Island		
1/1 (short)	147	276
1/2 (with short)	935(In) 788(Out)	776(In) 500(Out)
1/3	855	535
2/1	3	7
3/1 (short)	362	318
3/2 (with short)	722(In) 360(Out)	635(In) 317(Out)
3/3 (with short)	431(In) 248(Out)	644(In) 379(Out)
3/4 (short)	183	265
4/1	949	1052
4/2 (with short)	1539(In) 806(Out)	1534(In) 878(Out)
4/3 (short)	733	656
5/1 (short)	329	401
5/2 (with short)	628(In) 299(Out)	608(In) 207(Out)
6/1	365	575
6/2	938	607
6/3	1006	641
7/1	376	337
7/2	357	319
8/1	227	299
8/2	299	207
9/1	788	737
9/2	881	977
10/1	849	810
10/2	922	1006
11/1	328	463
11/2	184	265
12/1	1300	925
12/2	1285	874
13/1	598	944
14/1	558	624
14/2	540	607
15/1	10	1

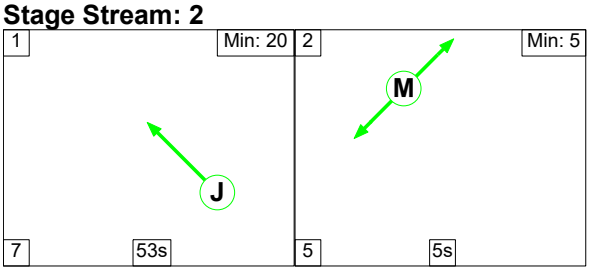
Scenario 1: 'Scenario 1' (FG1: '2026 Reference Case AM', Plan 2: 'Network Control Plan 2')

Stage Sequence Diagram

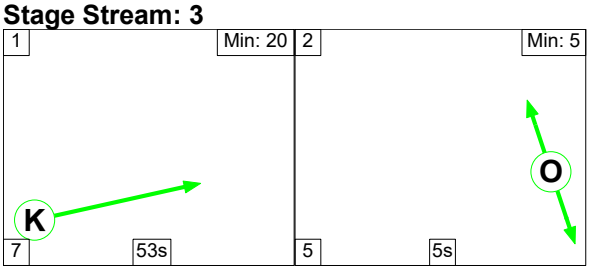
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	3
Duration	34	11
Change Point	62	37

Stage Stream: 2

Stage	1	2
Duration	53	5
Change Point	3	63

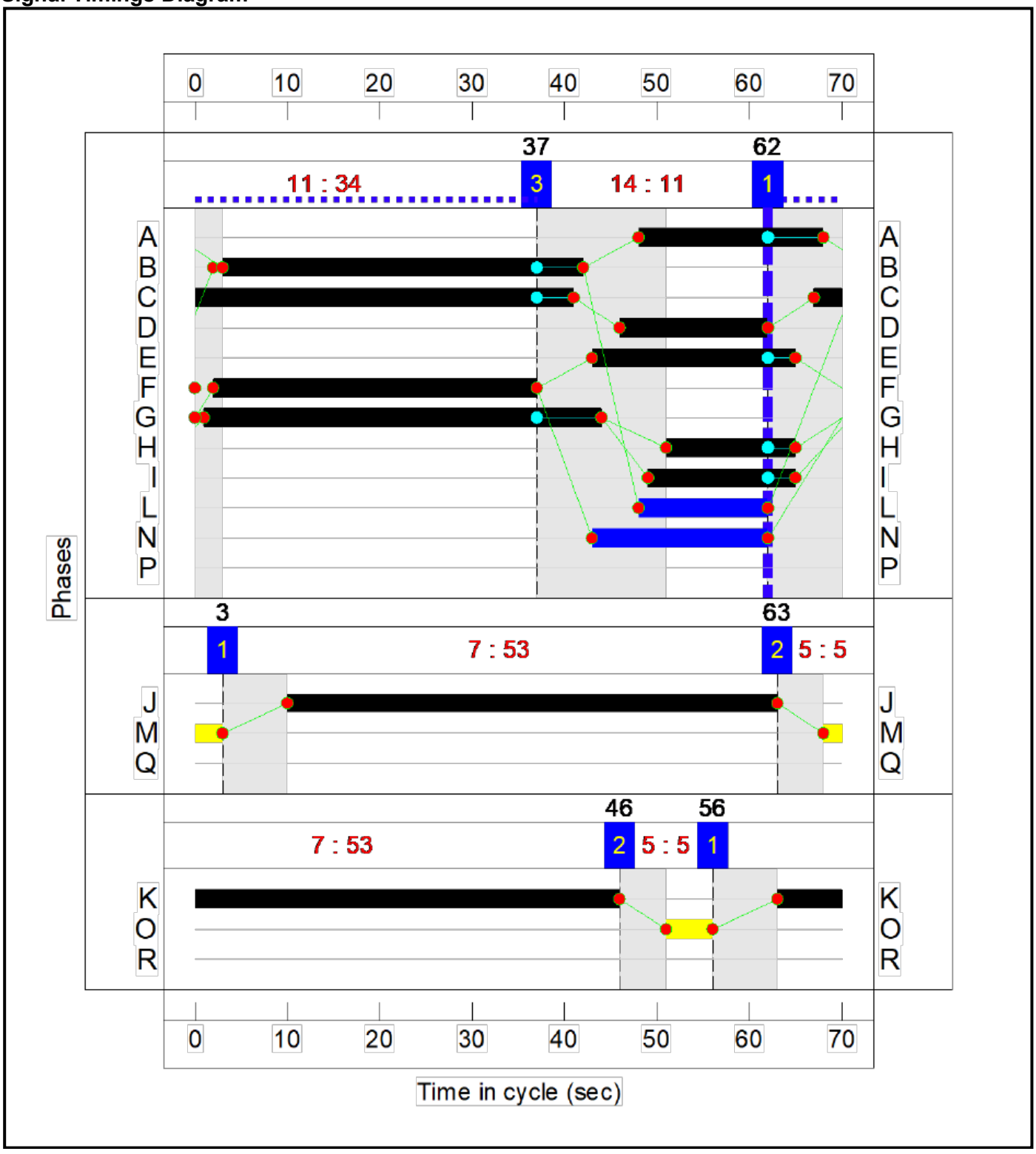
Stage Stream: 3

Stage	1	2
Duration	53	5
Change Point	56	46

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	W Circ Right Ahead	Traffic	1	20	48	68
B	A52 West Right Ahead Left	Traffic	1	39	3	42
C	N Circ Right Ahead	Traffic	1	44	67	41
D	B6003 Toton Lane North Ahead Left	Traffic	1	16	46	62
E	E Circ Right Ahead	Traffic	1	22	43	65
F	A52 East Ahead Left	Traffic	1	35	2	37
G	S Circ Right Ahead Left (25)	Traffic	1	43	1	44
H	B6003 Toton Lane South Ahead Left (21)	Traffic	1	14	51	65
I	Cut Thru Ahead (29)	Traffic	1	16	49	65
J	A52 West Exit Peds	Traffic	2	53	10	63
K	A52 E Exit peds	Traffic	3	53	63	46
L	Pedestrians across	Pedestrian	1	14	48	62
M	Pedestrians across	Pedestrian	2	5	68	3
N	Pedestrians across	Pedestrian	1	19	43	62
O	Pedestrians across	Pedestrian	3	5	51	56
P	Dummy	Dummy	1			
Q	Dummy	Dummy	2			
R	Dummy	Dummy	3			

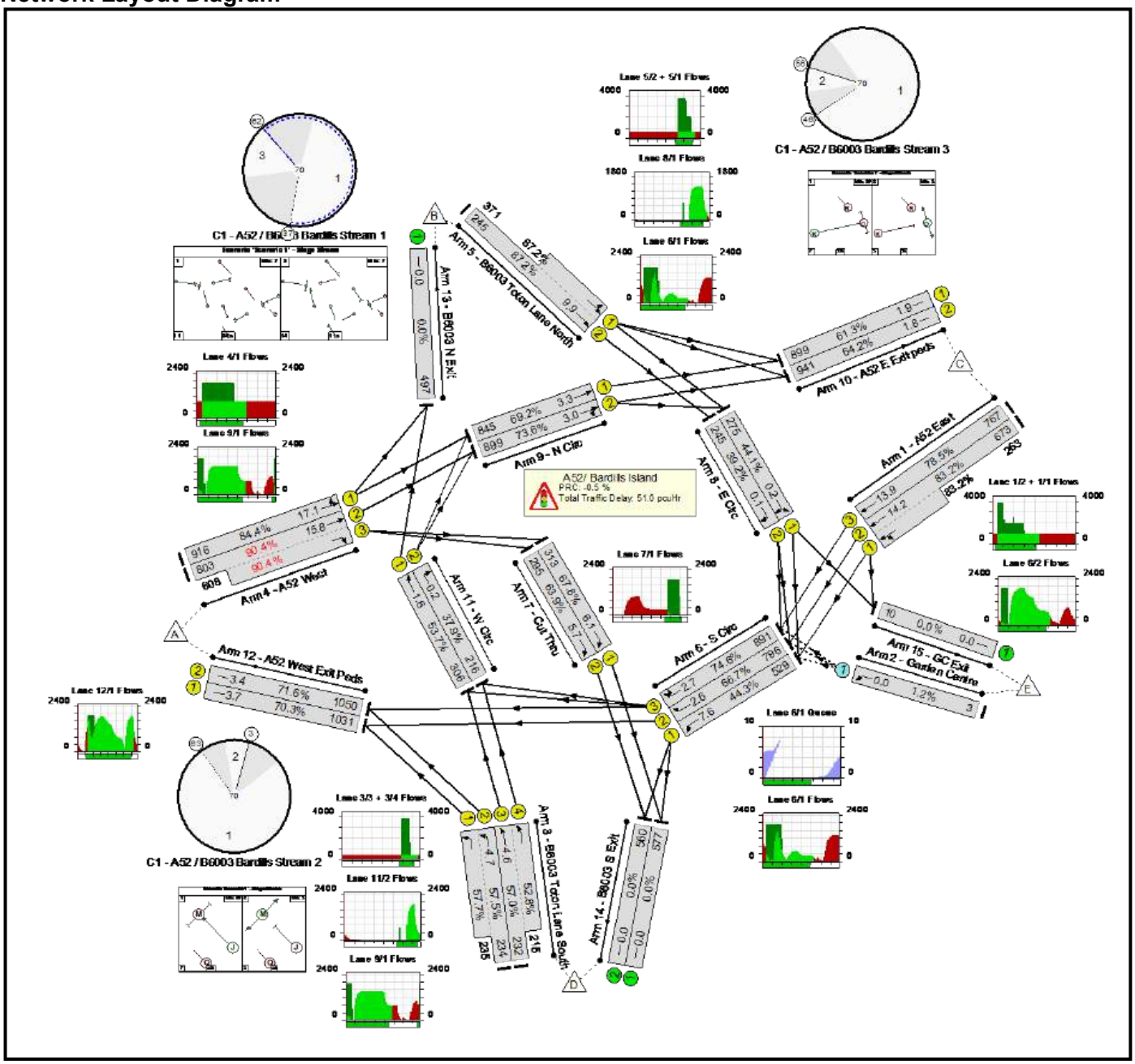
Signal Timings Diagram



Lane Green Times

Junction: A52/ Bardills Island					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	A52 East Ahead Left	U	F	2	37
1/2	A52 East Ahead	U	F	2	37
1/3	A52 East Ahead	U	F	2	37
3/1	B6003 Toton Lane South Left	U	H	51	65
3/2	B6003 Toton Lane South Left	U	H	51	65
3/3	B6003 Toton Lane South Ahead	U	H	51	65
3/4	B6003 Toton Lane South Ahead	U	H	51	65
4/1	A52 West Ahead Left	U	B	3	42
4/2	A52 West Ahead	U	B	3	42
4/3	A52 West Right	U	B	3	42
5/1	B6003 Toton Lane North Ahead Left	U	D	46	62
5/2	B6003 Toton Lane North Ahead	U	D	46	62
6/1	S Circ Left	U	G	1	44
6/2	S Circ Ahead	U	G	1	44
6/3	S Circ Right Ahead	U	G	1	44
7/1	Cut Thru Ahead	U	I	49	65
7/2	Cut Thru Ahead	U	I	49	65
8/1	E Circ Right Ahead	U	E	43	65
8/2	E Circ Right	U	E	43	65
9/1	N Circ Ahead	U	C	67	41
9/2	N Circ Right Ahead	U	C	67	41
10/1	A52 E Exit peds	U	K	63	46
10/2	A52 E Exit peds	U	K	63	46
11/1	W Circ Ahead	U	A	48	68
11/2	W Circ Right	U	A	48	68
12/1	A52 West Exit Peds	U	J	10	63
12/2	A52 West Exit Peds	U	J	10	63

Network Layout Diagram



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)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 / Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.4%**
A52/ Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.4%**
1/2+1/1	A52 East Ahead Left	U	1	N/A	F		1	35	-	-	936	1900:1900	809+316	83.2 : 83.2%
1/3	A52 East Ahead	U	1	N/A	F		1	35	-	-	767	1900	977	78.5%
2/1	Garden Centre Left	O	N/A	N/A	-		-	-	-	-	3	1800	245	1.2%
3/2+3/1	B6003 Toton Lane South Left	U	1	N/A	H		1	14	-	-	469	1900:1900	407+407	57.5 : 57.7%
3/3+3/4	B6003 Toton Lane South Ahead	U	1	N/A	H		1	14	-	-	447	1900:1900	407+407	57.0 : 52.8%
4/1	A52 West Ahead Left	U	1	N/A	B		1	39	-	-	916	1900	1086	84.4%
4/2+4/3	A52 West Right Ahead	U	1	N/A	B		1	39	-	-	1411	1900:1900	888+672	90.4 : 90.4%
5/2+5/1	B6003 Toton Lane North Ahead Left	U	1	N/A	D		1	16	-	-	616	1900:1900	281+425	87.2 : 87.2%
6/1	S Circ Left	U	1	N/A	G		1	43	-	-	529	1900	1194	44.3%
6/2	S Circ Ahead	U	1	N/A	G		1	43	-	-	796	1900	1194	66.7%
6/3	S Circ Right Ahead	U	1	N/A	G		1	43	-	-	891	1900	1194	74.6%
7/1	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	313	1900	461	67.8%
7/2	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	295	1900	461	63.9%

8/1	E Circ Right Ahead	U	1	N/A	E		1	22	-	-	275	1900	624	44.1%
8/2	E Circ Right	U	1	N/A	E		1	22	-	-	245	1900	624	39.2%
9/1	N Circ Ahead	U	1	N/A	C		1	44	-	-	845	1900	1221	69.2%
9/2	N Circ Right Ahead	U	1	N/A	C		1	44	-	-	899	1900	1221	73.6%
10/1	A52 E Exit peds	U	3	N/A	K		1	53	-	-	899	1900	1466	61.3%
10/2	A52 E Exit peds	U	3	N/A	K		1	53	-	-	941	1900	1466	64.2%
11/1	W Circ Ahead	U	1	N/A	A		1	20	-	-	306	1900	570	53.7%
11/2	W Circ Right	U	1	N/A	A		1	20	-	-	216	1900	570	37.9%
12/1	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	1031	1900	1466	70.3%
12/2	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	1050	1900	1466	71.6%
13/1	B6003 N Exit	U	N/A	N/A	-		-	-	-	-	497	Inf	Inf	0.0%
14/1	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	577	Inf	Inf	0.0%
14/2	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	560	Inf	Inf	0.0%
15/1	GC Exit	U	N/A	N/A	-		-	-	-	-	10	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	Item
Network: A52 / Bardills Island	**-**	**-**	**1**	**2**	**0**	**33.6**	**17.4**	**0.0**	**51.0**	**-**	**-**	**-**	**-**	**Network: A52 / Bardills Island**
A52/ Bardills Island	**-**	**-**	**1**	**2**	**0**	**33.6**	**17.4**	**0.0**	**51.0**	**-**	**-**	**-**	**-**	**A52/ Bardills Island**
1/2+1/1	936	936	-	-	-	3.2	2.4	-	5.6	21.7	11.8	2.4	14.2	1/2+1/1
1/3	767	767	-	-	-	3.0	1.8	-	4.7	22.3	12.1	1.8	13.9	1/3
2/1	3	3	1	2	0	0.0	0.0	-	0.0	18.5	0.0	0.0	0.0	2/1
3/2+3/1	469	469	-	-	-	3.2	0.7	-	3.9	29.9	4.0	0.7	4.7	3/2+3/1
3/3+3/4	447	447	-	-	-	3.0	0.6	-	3.6	29.4	4.0	0.6	4.6	3/3+3/4
4/1	916	916	-	-	-	3.2	2.6	-	5.8	22.7	14.5	2.6	17.1	4/1
4/2+4/3	1411	1411	-	-	-	4.1	4.5	-	8.5	21.8	11.4	4.5	15.8	4/2+4/3
5/2+5/1	616	616	-	-	-	4.1	3.2	-	7.3	42.8	6.7	3.2	9.9	5/2+5/1
6/1	529	529	-	-	-	1.0	0.0	-	1.0	7.1	7.6	0.0	7.6	6/1
6/2	796	796	-	-	-	0.5	0.0	-	0.5	2.3	2.6	0.0	2.6	6/2
6/3	891	891	-	-	-	0.5	0.0	-	0.5	2.2	2.7	0.0	2.7	6/3
7/1	313	313	-	-	-	2.5	0.0	-	2.5	29.2	6.1	0.0	6.1	7/1
7/2	295	295	-	-	-	2.5	0.0	-	2.5	30.2	5.7	0.0	5.7	7/2
8/1	275	275	-	-	-	0.1	0.0	-	0.1	1.2	0.2	0.0	0.2	8/1
8/2	245	245	-	-	-	0.0	0.0	-	0.0	0.7	0.1	0.0	0.1	8/2
9/1	845	845	-	-	-	0.6	0.0	-	0.6	2.5	3.3	0.0	3.3	9/1
9/2	899	899	-	-	-	0.6	0.0	-	0.6	2.3	3.0	0.0	3.0	9/2
10/1	899	899	-	-	-	0.1	0.8	-	0.9	3.6	1.1	0.8	1.9	10/1
10/2	941	941	-	-	-	0.1	0.9	-	1.0	3.8	0.9	0.9	1.8	10/2
11/1	306	306	-	-	-	0.5	0.0	-	0.5	6.0	1.6	0.0	1.6	11/1

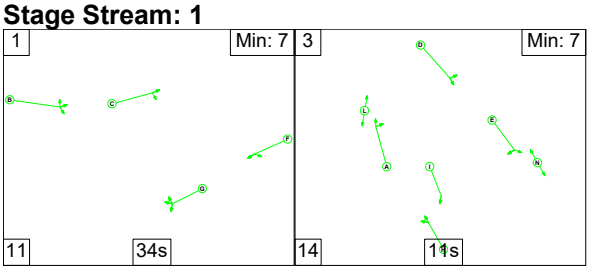
11/2	216	216	-	-	-	0.1	0.0	-	0.1	2.0	0.2	0.0	0.2	11/2
12/1	1031	1031	-	-	-	0.3	0.0	-	0.3	0.9	3.7	0.0	3.7	12/1
12/2	1050	1050	-	-	-	0.3	0.0	-	0.3	0.9	3.4	0.0	3.4	12/2
13/1	497	497	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	13/1
14/1	577	577	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/1
14/2	560	560	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/2
15/1	10	10	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	15/1

C1 - A52 / B6003 Bardills	Stream: 1 PRC for Signalled Lanes (%):	-0.5	Total Delay for Signalled Lanes (pcuHr):	48.58	Cycle Time (s):	70
C1 - A52 / B6003 Bardills	Stream: 2 PRC for Signalled Lanes (%):	25.6	Total Delay for Signalled Lanes (pcuHr):	0.52	Cycle Time (s):	70
C1 - A52 / B6003 Bardills	Stream: 3 PRC for Signalled Lanes (%):	40.2	Total Delay for Signalled Lanes (pcuHr):	1.91	Cycle Time (s):	70
	PRC Over All Lanes (%):	-0.5	Total Delay Over All Lanes(pcuHr):	51.03		

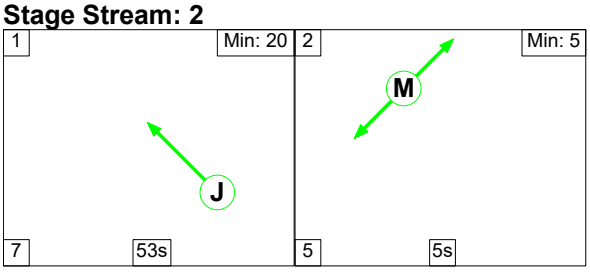
Scenario 2: 'Scenario 1' (FG2: '2026 Reference Case PM', Plan 2: 'Network Control Plan 2')

Stage Sequence Diagram

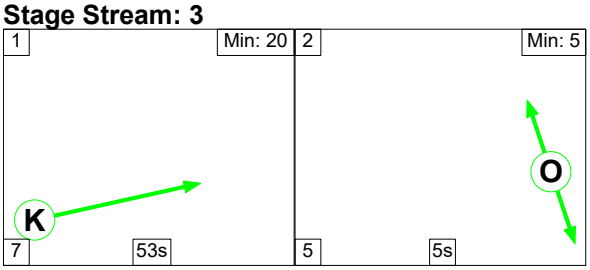
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	3
Duration	34	11
Change Point	62	37

Stage Stream: 2

Stage	1	2
Duration	53	5
Change Point	43	33

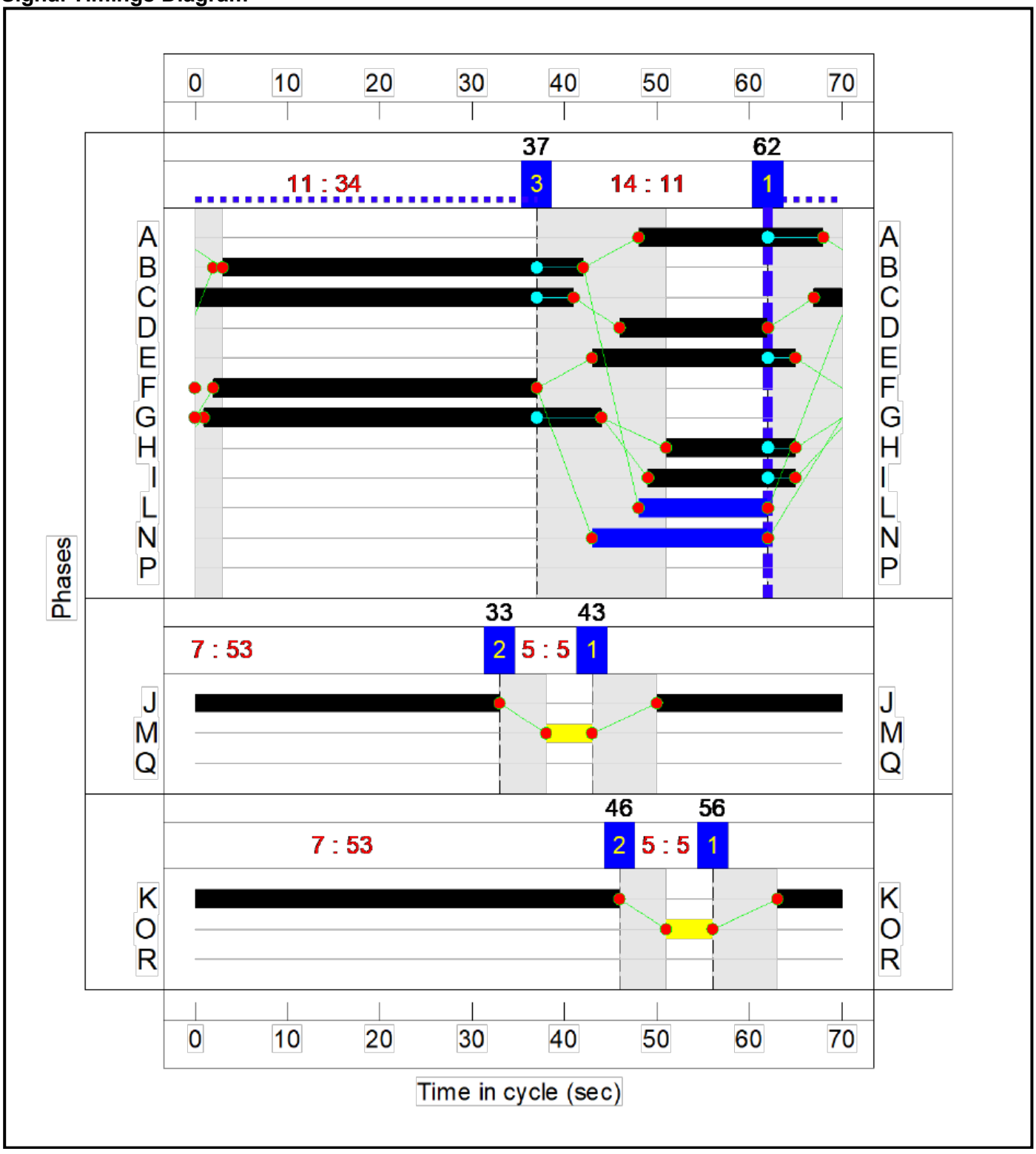
Stage Stream: 3

Stage	1	2
Duration	53	5
Change Point	56	46

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	W Circ Right Ahead	Traffic	1	20	48	68
B	A52 West Right Ahead Left	Traffic	1	39	3	42
C	N Circ Right Ahead	Traffic	1	44	67	41
D	B6003 Toton Lane North Ahead Left	Traffic	1	16	46	62
E	E Circ Right Ahead	Traffic	1	22	43	65
F	A52 East Ahead Left	Traffic	1	35	2	37
G	S Circ Right Ahead Left (25)	Traffic	1	43	1	44
H	B6003 Toton Lane South Ahead Left (21)	Traffic	1	14	51	65
I	Cut Thru Ahead (29)	Traffic	1	16	49	65
J	A52 West Exit Peds	Traffic	2	53	50	33
K	A52 E Exit peds	Traffic	3	53	63	46
L	Pedestrians across	Pedestrian	1	14	48	62
M	Pedestrians across	Pedestrian	2	5	38	43
N	Pedestrians across	Pedestrian	1	19	43	62
O	Pedestrians across	Pedestrian	3	5	51	56
P	Dummy	Dummy	1			
Q	Dummy	Dummy	2			
R	Dummy	Dummy	3			

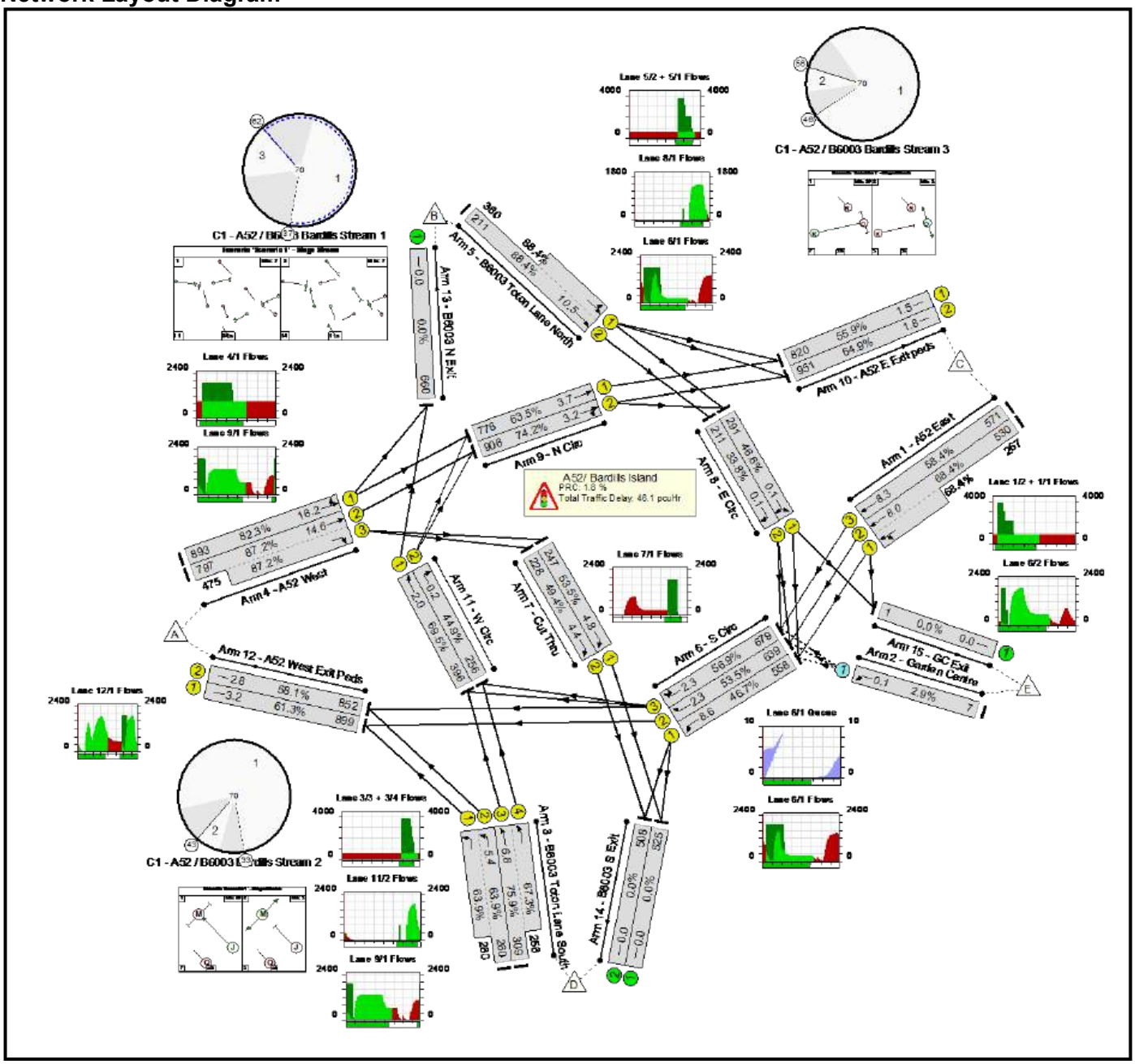
Signal Timings Diagram



Lane Green Times

Junction: A52/ Bardills Island					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	A52 East Ahead Left	U	F	2	37
1/2	A52 East Ahead	U	F	2	37
1/3	A52 East Ahead	U	F	2	37
3/1	B6003 Toton Lane South Left	U	H	51	65
3/2	B6003 Toton Lane South Left	U	H	51	65
3/3	B6003 Toton Lane South Ahead	U	H	51	65
3/4	B6003 Toton Lane South Ahead	U	H	51	65
4/1	A52 West Ahead Left	U	B	3	42
4/2	A52 West Ahead	U	B	3	42
4/3	A52 West Right	U	B	3	42
5/1	B6003 Toton Lane North Ahead Left	U	D	46	62
5/2	B6003 Toton Lane North Ahead	U	D	46	62
6/1	S Circ Left	U	G	1	44
6/2	S Circ Ahead	U	G	1	44
6/3	S Circ Right Ahead	U	G	1	44
7/1	Cut Thru Ahead	U	I	49	65
7/2	Cut Thru Ahead	U	I	49	65
8/1	E Circ Right Ahead	U	E	43	65
8/2	E Circ Right	U	E	43	65
9/1	N Circ Ahead	U	C	67	41
9/2	N Circ Right Ahead	U	C	67	41
10/1	A52 E Exit peds	U	K	63	46
10/2	A52 E Exit peds	U	K	63	46
11/1	W Circ Ahead	U	A	48	68
11/2	W Circ Right	U	A	48	68
12/1	A52 West Exit Peds	U	J	50	33
12/2	A52 West Exit Peds	U	J	50	33

Network Layout Diagram



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)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 / Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**88.4%**
A52/ Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**88.4%**
1/2+1/1	A52 East Ahead Left	U	1	N/A	F		1	35	-	-	797	1900:1900	775+390	68.4 : 68.4%
1/3	A52 East Ahead	U	1	N/A	F		1	35	-	-	571	1900	977	58.4%
2/1	Garden Centre Left	O	N/A	N/A	-		-	-	-	-	7	1800	245	2.9%
3/2+3/1	B6003 Toton Lane South Left	U	1	N/A	H		1	14	-	-	520	1900:1900	407+407	63.9 : 63.9%
3/3+3/4	B6003 Toton Lane South Ahead	U	1	N/A	H		1	14	-	-	565	1900:1900	407+380	75.9 : 67.3%
4/1	A52 West Ahead Left	U	1	N/A	B		1	39	-	-	893	1900	1086	82.3%
4/2+4/3	A52 West Right Ahead	U	1	N/A	B		1	39	-	-	1272	1900:1900	914+545	87.2 : 87.2%
5/2+5/1	B6003 Toton Lane North Ahead Left	U	1	N/A	D		1	16	-	-	591	1900:1900	239+430	88.4 : 88.4%
6/1	S Circ Left	U	1	N/A	G		1	43	-	-	558	1900	1194	46.7%
6/2	S Circ Ahead	U	1	N/A	G		1	43	-	-	639	1900	1194	53.5%
6/3	S Circ Right Ahead	U	1	N/A	G		1	43	-	-	679	1900	1194	56.9%
7/1	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	247	1900	461	53.5%
7/2	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	228	1900	461	49.4%

8/1	E Circ Right Ahead	U	1	N/A	E		1	22	-	-	291	1900	624	46.6%
8/2	E Circ Right	U	1	N/A	E		1	22	-	-	211	1900	624	33.8%
9/1	N Circ Ahead	U	1	N/A	C		1	44	-	-	776	1900	1221	63.5%
9/2	N Circ Right Ahead	U	1	N/A	C		1	44	-	-	906	1900	1221	74.2%
10/1	A52 E Exit peds	U	3	N/A	K		1	53	-	-	820	1900	1466	55.9%
10/2	A52 E Exit peds	U	3	N/A	K		1	53	-	-	951	1900	1466	64.9%
11/1	W Circ Ahead	U	1	N/A	A		1	20	-	-	396	1900	570	69.5%
11/2	W Circ Right	U	1	N/A	A		1	20	-	-	256	1900	570	44.9%
12/1	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	899	1900	1466	61.3%
12/2	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	852	1900	1466	58.1%
13/1	B6003 N Exit	U	N/A	N/A	-		-	-	-	-	660	Inf	Inf	0.0%
14/1	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	525	Inf	Inf	0.0%
14/2	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	508	Inf	Inf	0.0%
15/1	GC Exit	U	N/A	N/A	-		-	-	-	-	1	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	Item
Network: A52 / Bardills Island	**-**	**-**	**2**	**5**	**0**	**31.6**	**14.5**	**0.0**	**46.1**	**-**	**-**	**-**	**-**	**Network: A52 / Bardills Island**
A52/ Bardills Island	**-**	**-**	**2**	**5**	**0**	**31.6**	**14.5**	**0.0**	**46.1**	**-**	**-**	**-**	**-**	**A52/ Bardills Island**
1/2+1/1	797	797	-	-	-	2.4	1.1	-	3.5	15.7	6.9	1.1	8.0	1/2+1/1
1/3	571	571	-	-	-	1.9	0.7	-	2.6	16.2	7.6	0.7	8.3	1/3
2/1	7	7	2	5	0	0.0	0.0	-	0.0	18.6	0.1	0.0	0.1	2/1
3/2+3/1	520	520	-	-	-	3.6	0.9	-	4.5	31.1	4.5	0.9	5.4	3/2+3/1
3/3+3/4	565	565	-	-	-	4.0	1.3	-	5.2	33.4	5.6	1.3	6.8	3/3+3/4
4/1	893	893	-	-	-	3.0	2.3	-	5.3	21.3	13.9	2.3	16.2	4/1
4/2+4/3	1272	1272	-	-	-	3.6	3.3	-	6.9	19.4	11.3	3.3	14.6	4/2+4/3
5/2+5/1	591	591	-	-	-	4.0	3.5	-	7.5	45.5	7.0	3.5	10.5	5/2+5/1
6/1	558	558	-	-	-	1.2	0.0	-	1.2	7.7	8.6	0.0	8.6	6/1
6/2	639	639	-	-	-	0.4	0.0	-	0.4	2.5	2.3	0.0	2.3	6/2
6/3	679	679	-	-	-	0.5	0.0	-	0.5	2.4	2.3	0.0	2.3	6/3
7/1	247	247	-	-	-	2.0	0.0	-	2.0	28.9	4.8	0.0	4.8	7/1
7/2	228	228	-	-	-	1.9	0.0	-	1.9	29.9	4.4	0.0	4.4	7/2
8/1	291	291	-	-	-	0.1	0.0	-	0.1	1.1	0.1	0.0	0.1	8/1
8/2	211	211	-	-	-	0.0	0.0	-	0.0	0.7	0.1	0.0	0.1	8/2
9/1	776	776	-	-	-	0.6	0.0	-	0.6	2.7	3.7	0.0	3.7	9/1
9/2	906	906	-	-	-	0.6	0.0	-	0.6	2.3	3.2	0.0	3.2	9/2
10/1	820	820	-	-	-	0.1	0.6	-	0.7	3.2	0.9	0.6	1.5	10/1
10/2	951	951	-	-	-	0.1	0.9	-	1.0	3.9	0.9	0.9	1.8	10/2
11/1	396	396	-	-	-	0.8	0.0	-	0.8	6.8	2.0	0.0	2.0	11/1

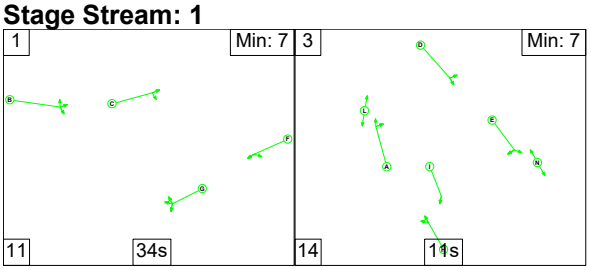
11/2	256	256	-	-	-	0.1	0.0	-	0.1	2.0	0.2	0.0	0.2	11/2
12/1	899	899	-	-	-	0.4	0.0	-	0.4	1.7	3.2	0.0	3.2	12/1
12/2	852	852	-	-	-	0.4	0.0	-	0.4	1.7	2.8	0.0	2.8	12/2
13/1	660	660	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	13/1
14/1	525	525	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/1
14/2	508	508	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/2
15/1	1	1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	15/1

C1 - A52 / B6003 Bardills	Stream: 1 PRC for Signalled Lanes (%):	1.8	Total Delay for Signalled Lanes (pcuHr):	43.53	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 2 PRC for Signalled Lanes (%):	46.7	Total Delay for Signalled Lanes (pcuHr):	0.82	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 3 PRC for Signalled Lanes (%):	38.7	Total Delay for Signalled Lanes (pcuHr):	1.75	Cycle Time (s): 70
	PRC Over All Lanes (%):	1.8	Total Delay Over All Lanes(pcuHr):	46.14	

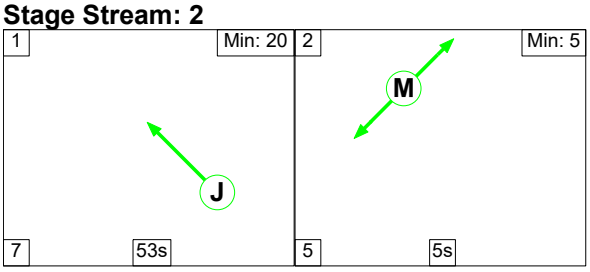
Scenario 3: 'Scenario 1' (FG5: '2041 Reference Case AM', Plan 2: 'Network Control Plan 2')

Stage Sequence Diagram

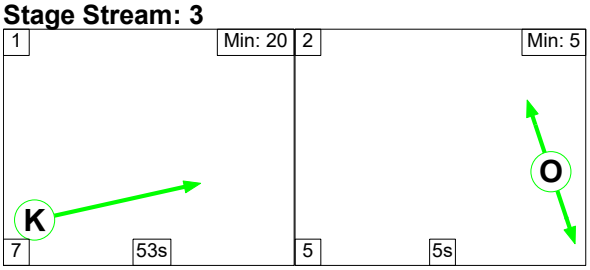
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	3
Duration	34	11
Change Point	62	37

Stage Stream: 2

Stage	1	2
Duration	53	5
Change Point	52	42

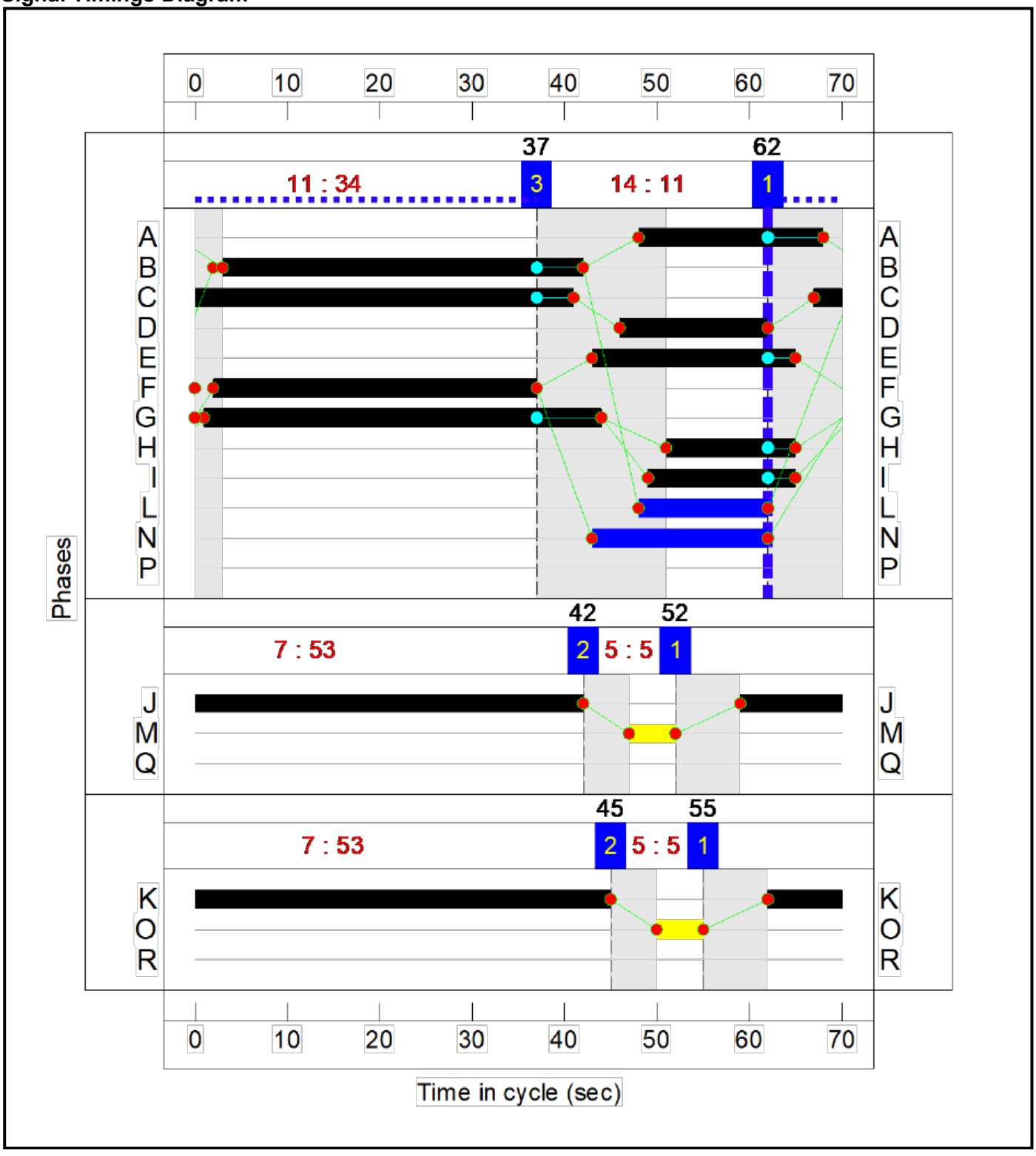
Stage Stream: 3

Stage	1	2
Duration	53	5
Change Point	55	45

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	W Circ Right Ahead	Traffic	1	20	48	68
B	A52 West Right Ahead Left	Traffic	1	39	3	42
C	N Circ Right Ahead	Traffic	1	44	67	41
D	B6003 Toton Lane North Ahead Left	Traffic	1	16	46	62
E	E Circ Right Ahead	Traffic	1	22	43	65
F	A52 East Ahead Left	Traffic	1	35	2	37
G	S Circ Right Ahead Left (25)	Traffic	1	43	1	44
H	B6003 Toton Lane South Ahead Left (21)	Traffic	1	14	51	65
I	Cut Thru Ahead (29)	Traffic	1	16	49	65
J	A52 West Exit Peds	Traffic	2	53	59	42
K	A52 E Exit peds	Traffic	3	53	62	45
L	Pedestrians across	Pedestrian	1	14	48	62
M	Pedestrians across	Pedestrian	2	5	47	52
N	Pedestrians across	Pedestrian	1	19	43	62
O	Pedestrians across	Pedestrian	3	5	50	55
P	Dummy	Dummy	1			
Q	Dummy	Dummy	2			
R	Dummy	Dummy	3			

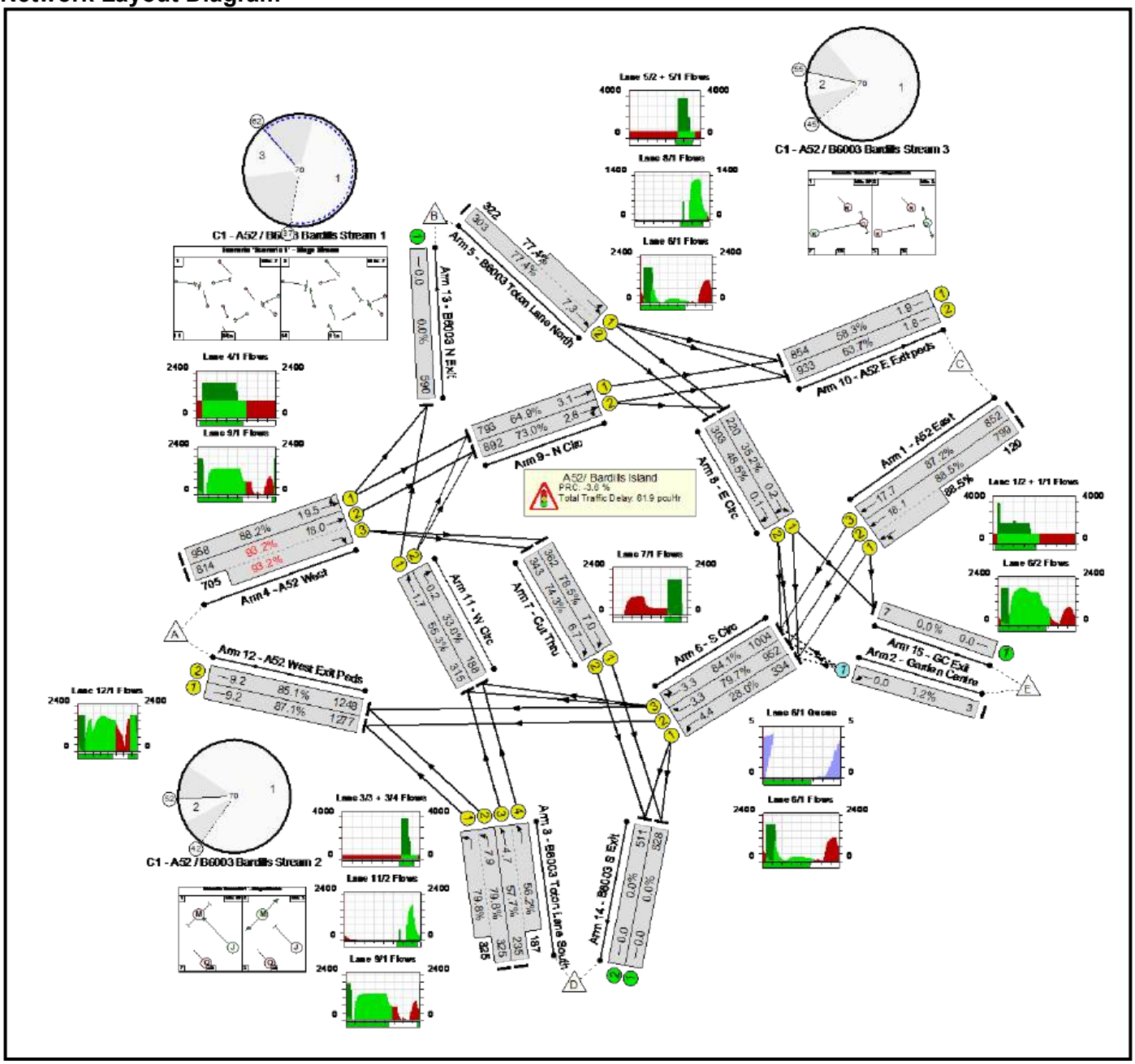
Signal Timings Diagram



Lane Green Times

Junction: A52/ Bardills Island					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	A52 East Ahead Left	U	F	2	37
1/2	A52 East Ahead	U	F	2	37
1/3	A52 East Ahead	U	F	2	37
3/1	B6003 Toton Lane South Left	U	H	51	65
3/2	B6003 Toton Lane South Left	U	H	51	65
3/3	B6003 Toton Lane South Ahead	U	H	51	65
3/4	B6003 Toton Lane South Ahead	U	H	51	65
4/1	A52 West Ahead Left	U	B	3	42
4/2	A52 West Ahead	U	B	3	42
4/3	A52 West Right	U	B	3	42
5/1	B6003 Toton Lane North Ahead Left	U	D	46	62
5/2	B6003 Toton Lane North Ahead	U	D	46	62
6/1	S Circ Left	U	G	1	44
6/2	S Circ Ahead	U	G	1	44
6/3	S Circ Right Ahead	U	G	1	44
7/1	Cut Thru Ahead	U	I	49	65
7/2	Cut Thru Ahead	U	I	49	65
8/1	E Circ Right Ahead	U	E	43	65
8/2	E Circ Right	U	E	43	65
9/1	N Circ Ahead	U	C	67	41
9/2	N Circ Right Ahead	U	C	67	41
10/1	A52 E Exit peds	U	K	62	45
10/2	A52 E Exit peds	U	K	62	45
11/1	W Circ Ahead	U	A	48	68
11/2	W Circ Right	U	A	48	68
12/1	A52 West Exit Peds	U	J	59	42
12/2	A52 West Exit Peds	U	J	59	42

Network Layout Diagram



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)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 / Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.2%**
A52/ Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.2%**
1/2+1/1	A52 East Ahead Left	U	1	N/A	F		1	35	-	-	919	1900:1900	903+136	88.5 : 88.5%
1/3	A52 East Ahead	U	1	N/A	F		1	35	-	-	852	1900	977	87.2%
2/1	Garden Centre Left	O	N/A	N/A	-		-	-	-	-	3	1800	255	1.2%
3/2+3/1	B6003 Toton Lane South Left	U	1	N/A	H		1	14	-	-	650	1900:1900	407+407	79.8 : 79.8%
3/3+3/4	B6003 Toton Lane South Ahead	U	1	N/A	H		1	14	-	-	422	1900:1900	407+333	57.7 : 56.2%
4/1	A52 West Ahead Left	U	1	N/A	B		1	39	-	-	958	1900	1086	88.2%
4/2+4/3	A52 West Right Ahead	U	1	N/A	B		1	39	-	-	1519	1900:1900	873+756	93.2 : 93.2%
5/2+5/1	B6003 Toton Lane North Ahead Left	U	1	N/A	D		1	16	-	-	625	1900:1900	391+416	77.4 : 77.4%
6/1	S Circ Left	U	1	N/A	G		1	43	-	-	334	1900	1194	28.0%
6/2	S Circ Ahead	U	1	N/A	G		1	43	-	-	952	1900	1194	79.7%
6/3	S Circ Right Ahead	U	1	N/A	G		1	43	-	-	1004	1900	1194	84.1%
7/1	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	362	1900	461	78.5%
7/2	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	343	1900	461	74.3%

8/1	E Circ Right Ahead	U	1	N/A	E		1	22	-	-	220	1900	624	35.2%
8/2	E Circ Right	U	1	N/A	E		1	22	-	-	303	1900	624	48.5%
9/1	N Circ Ahead	U	1	N/A	C		1	44	-	-	793	1900	1221	64.9%
9/2	N Circ Right Ahead	U	1	N/A	C		1	44	-	-	892	1900	1221	73.0%
10/1	A52 E Exit peds	U	3	N/A	K		1	53	-	-	854	1900	1466	58.3%
10/2	A52 E Exit peds	U	3	N/A	K		1	53	-	-	933	1900	1466	63.7%
11/1	W Circ Ahead	U	1	N/A	A		1	20	-	-	315	1900	570	55.3%
11/2	W Circ Right	U	1	N/A	A		1	20	-	-	188	1900	570	33.0%
12/1	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	1277	1900	1466	87.1%
12/2	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	1248	1900	1466	85.1%
13/1	B6003 N Exit	U	N/A	N/A	-		-	-	-	-	590	Inf	Inf	0.0%
14/1	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	528	Inf	Inf	0.0%
14/2	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	511	Inf	Inf	0.0%
15/1	GC Exit	U	N/A	N/A	-		-	-	-	-	7	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	Item
Network: A52 / Bardills Island	**-**	**-**	**1**	**2**	**0**	**39.5**	**22.5**	**0.0**	**61.9**	**-**	**-**	**-**	**-**	**Network: A52 / Bardills Island**
A52/ Bardills Island	**-**	**-**	**1**	**2**	**0**	**39.5**	**22.5**	**0.0**	**61.9**	**-**	**-**	**-**	**-**	**A52/ Bardills Island**
1/2+1/1	919	919	-	-	-	3.6	3.6	-	7.3	28.4	14.5	3.6	18.1	1/2+1/1
1/3	852	852	-	-	-	3.5	3.2	-	6.8	28.6	14.4	3.2	17.7	1/3
2/1	3	3	1	2	0	0.0	0.0	-	0.0	17.9	0.0	0.0	0.0	2/1
3/2+3/1	650	650	-	-	-	4.7	1.9	-	6.6	36.8	6.0	1.9	7.9	3/2+3/1
3/3+3/4	422	422	-	-	-	2.9	0.7	-	3.5	30.0	4.0	0.7	4.7	3/3+3/4
4/1	958	958	-	-	-	3.5	3.6	-	7.0	26.3	16.0	3.6	19.5	4/1
4/2+4/3	1519	1519	-	-	-	4.5	6.2	-	10.7	25.5	11.8	6.2	18.0	4/2+4/3
5/2+5/1	625	625	-	-	-	4.2	1.7	-	5.9	33.7	5.6	1.7	7.3	5/2+5/1
6/1	334	334	-	-	-	0.8	0.0	-	0.8	8.2	4.4	0.0	4.4	6/1
6/2	952	952	-	-	-	0.6	0.0	-	0.6	2.4	3.3	0.0	3.3	6/2
6/3	1004	1004	-	-	-	0.6	0.0	-	0.6	2.3	3.3	0.0	3.3	6/3
7/1	362	362	-	-	-	3.0	0.0	-	3.0	29.4	7.0	0.0	7.0	7/1
7/2	343	343	-	-	-	2.9	0.0	-	2.9	30.4	6.7	0.0	6.7	7/2
8/1	220	220	-	-	-	0.1	0.0	-	0.1	1.2	0.2	0.0	0.2	8/1
8/2	303	303	-	-	-	0.1	0.0	-	0.1	0.7	0.1	0.0	0.1	8/2
9/1	793	793	-	-	-	0.5	0.0	-	0.5	2.5	3.1	0.0	3.1	9/1
9/2	892	892	-	-	-	0.5	0.0	-	0.5	2.2	2.6	0.0	2.6	9/2
10/1	854	854	-	-	-	0.1	0.7	-	0.8	3.6	1.2	0.7	1.9	10/1
10/2	933	933	-	-	-	0.1	0.9	-	1.0	3.8	1.0	0.9	1.8	10/2
11/1	315	315	-	-	-	0.5	0.0	-	0.5	6.0	1.7	0.0	1.7	11/1

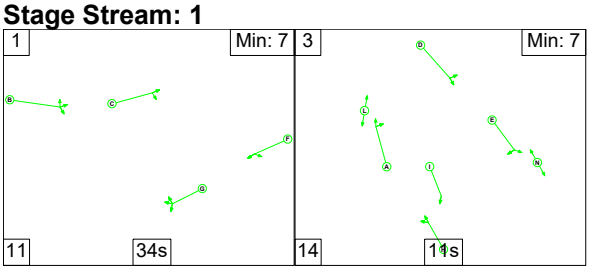
11/2	188	188	-	-	-	0.1	0.0	-	0.1	1.9	0.2	0.0	0.2	11/2
12/1	1277	1277	-	-	-	1.3	0.0	-	1.3	3.6	9.2	0.0	9.2	12/1
12/2	1248	1248	-	-	-	1.3	0.0	-	1.3	3.7	9.2	0.0	9.2	12/2
13/1	590	590	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	13/1
14/1	528	528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/1
14/2	511	511	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/2
15/1	7	7	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	15/1

C1 - A52 / B6003 Bardills	Stream: 1 PRC for Signalled Lanes (%):	-3.6	Total Delay for Signalled Lanes (pcuHr):	57.50	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 2 PRC for Signalled Lanes (%):	3.3	Total Delay for Signalled Lanes (pcuHr):	2.58	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 3 PRC for Signalled Lanes (%):	41.4	Total Delay for Signalled Lanes (pcuHr):	1.83	Cycle Time (s): 70
	PRC Over All Lanes (%):	-3.6	Total Delay Over All Lanes(pcuHr):	61.92	

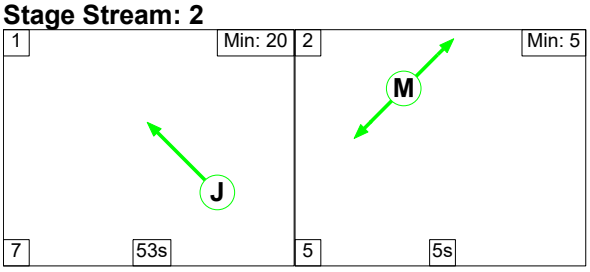
Scenario 4: 'Scenario 1' (FG6: '2041 Reference Case PM', Plan 2: 'Network Control Plan 2')

Stage Sequence Diagram

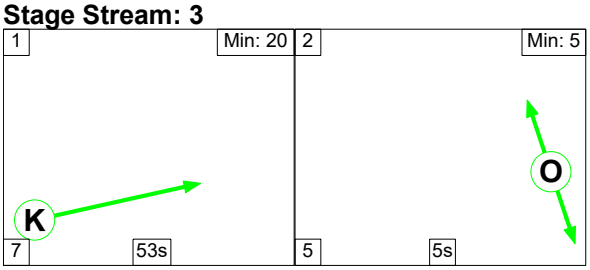
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	3
Duration	34	11
Change Point	62	37

Stage Stream: 2

Stage	1	2
Duration	53	5
Change Point	43	33

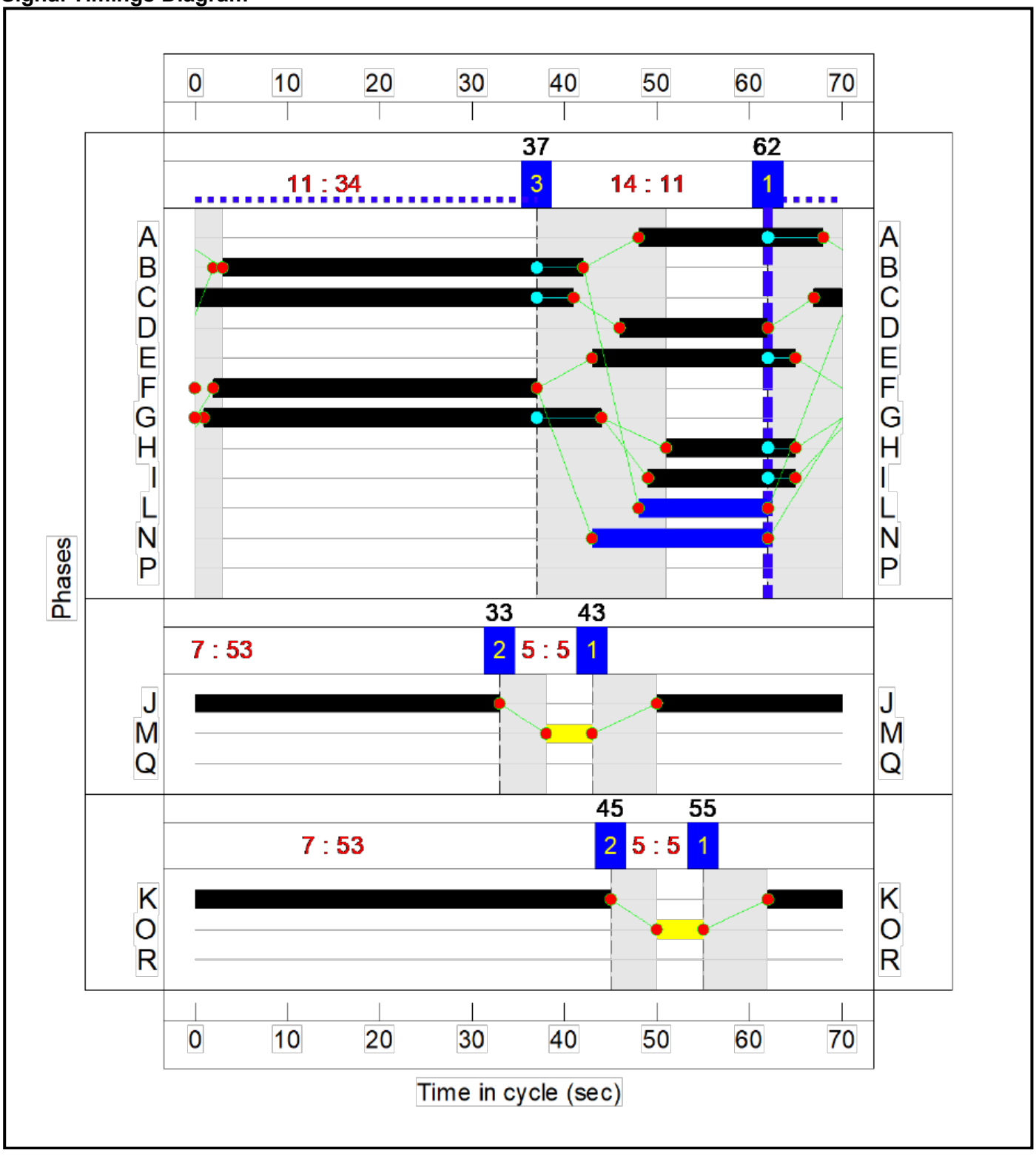
Stage Stream: 3

Stage	1	2
Duration	53	5
Change Point	55	45

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	W Circ Right Ahead	Traffic	1	20	48	68
B	A52 West Right Ahead Left	Traffic	1	39	3	42
C	N Circ Right Ahead	Traffic	1	44	67	41
D	B6003 Toton Lane North Ahead Left	Traffic	1	16	46	62
E	E Circ Right Ahead	Traffic	1	22	43	65
F	A52 East Ahead Left	Traffic	1	35	2	37
G	S Circ Right Ahead Left (25)	Traffic	1	43	1	44
H	B6003 Toton Lane South Ahead Left (21)	Traffic	1	14	51	65
I	Cut Thru Ahead (29)	Traffic	1	16	49	65
J	A52 West Exit Peds	Traffic	2	53	50	33
K	A52 E Exit peds	Traffic	3	53	62	45
L	Pedestrians across	Pedestrian	1	14	48	62
M	Pedestrians across	Pedestrian	2	5	38	43
N	Pedestrians across	Pedestrian	1	19	43	62
O	Pedestrians across	Pedestrian	3	5	50	55
P	Dummy	Dummy	1			
Q	Dummy	Dummy	2			
R	Dummy	Dummy	3			

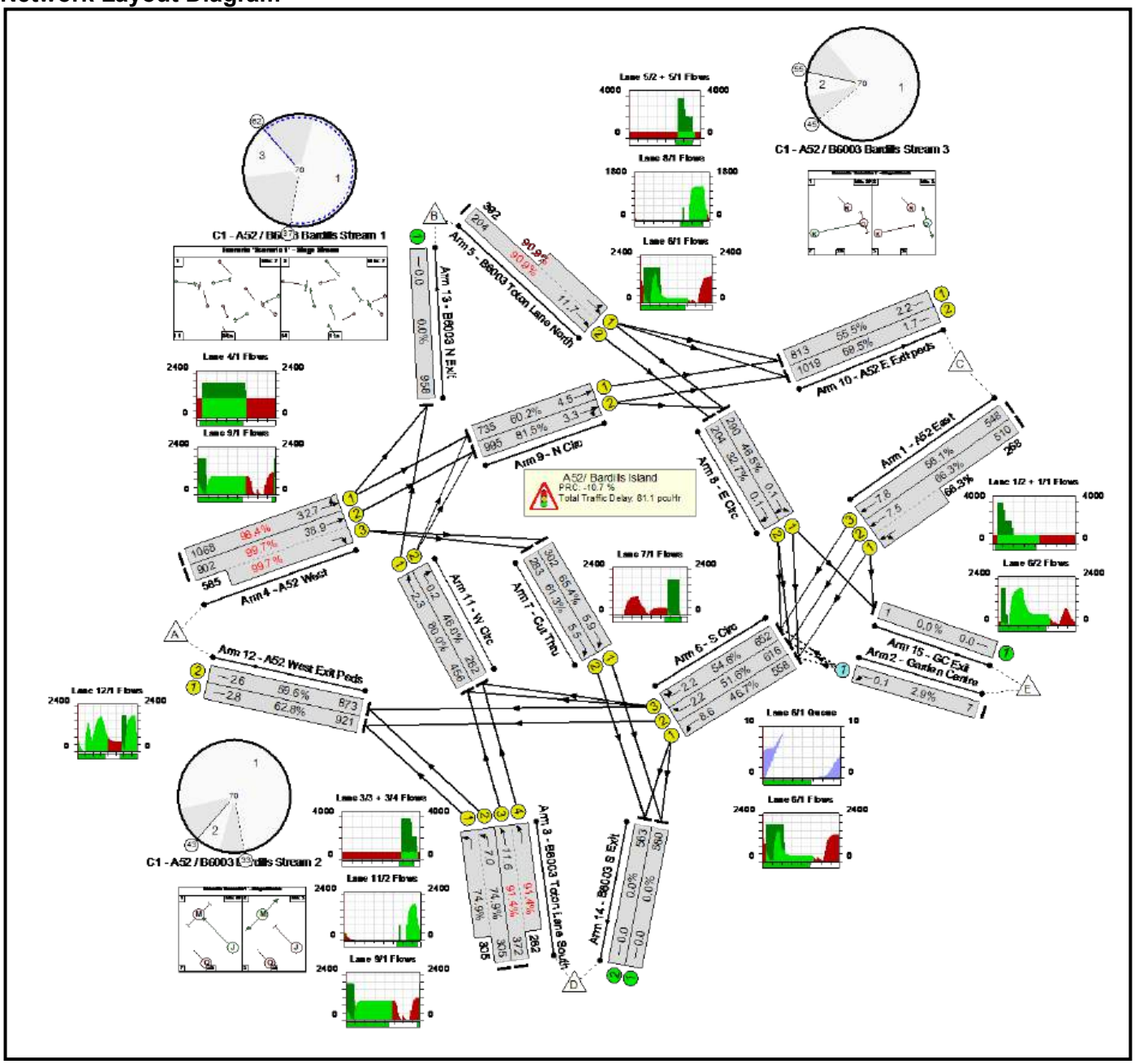
Signal Timings Diagram



Lane Green Times

Junction: A52/ Bardills Island					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	A52 East Ahead Left	U	F	2	37
1/2	A52 East Ahead	U	F	2	37
1/3	A52 East Ahead	U	F	2	37
3/1	B6003 Toton Lane South Left	U	H	51	65
3/2	B6003 Toton Lane South Left	U	H	51	65
3/3	B6003 Toton Lane South Ahead	U	H	51	65
3/4	B6003 Toton Lane South Ahead	U	H	51	65
4/1	A52 West Ahead Left	U	B	3	42
4/2	A52 West Ahead	U	B	3	42
4/3	A52 West Right	U	B	3	42
5/1	B6003 Toton Lane North Ahead Left	U	D	46	62
5/2	B6003 Toton Lane North Ahead	U	D	46	62
6/1	S Circ Left	U	G	1	44
6/2	S Circ Ahead	U	G	1	44
6/3	S Circ Right Ahead	U	G	1	44
7/1	Cut Thru Ahead	U	I	49	65
7/2	Cut Thru Ahead	U	I	49	65
8/1	E Circ Right Ahead	U	E	43	65
8/2	E Circ Right	U	E	43	65
9/1	N Circ Ahead	U	C	67	41
9/2	N Circ Right Ahead	U	C	67	41
10/1	A52 E Exit peds	U	K	62	45
10/2	A52 E Exit peds	U	K	62	45
11/1	W Circ Ahead	U	A	48	68
11/2	W Circ Right	U	A	48	68
12/1	A52 West Exit Peds	U	J	50	33
12/2	A52 West Exit Peds	U	J	50	33

Network Layout Diagram



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)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 / Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.7%**
A52/ Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.7%**
1/2+1/1	A52 East Ahead Left	U	1	N/A	F		1	35	-	-	778	1900:1900	769+404	66.3 : 66.3%
1/3	A52 East Ahead	U	1	N/A	F		1	35	-	-	548	1900	977	56.1%
2/1	Garden Centre Left	O	N/A	N/A	-		-	-	-	-	7	1800	241	2.9%
3/2+3/1	B6003 Toton Lane South Left	U	1	N/A	H		1	14	-	-	610	1900:1900	407+407	74.9 : 74.9%
3/3+3/4	B6003 Toton Lane South Ahead	U	1	N/A	H		1	14	-	-	634	1900:1900	407+287	91.4 : 91.4%
4/1	A52 West Ahead Left	U	1	N/A	B		1	39	-	-	1068	1900	1086	98.4%
4/2+4/3	A52 West Right Ahead	U	1	N/A	B		1	39	-	-	1487	1900:1900	905+587	99.7 : 99.7%
5/2+5/1	B6003 Toton Lane North Ahead Left	U	1	N/A	D		1	16	-	-	596	1900:1900	225+431	90.9 : 90.9%
6/1	S Circ Left	U	1	N/A	G		1	43	-	-	558	1900	1194	46.7%
6/2	S Circ Ahead	U	1	N/A	G		1	43	-	-	616	1900	1194	51.6%
6/3	S Circ Right Ahead	U	1	N/A	G		1	43	-	-	652	1900	1194	54.6%
7/1	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	302	1900	461	65.4%
7/2	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	283	1900	461	61.3%

8/1	E Circ Right Ahead	U	1	N/A	E		1	22	-	-	290	1900	624	46.5%
8/2	E Circ Right	U	1	N/A	E		1	22	-	-	204	1900	624	32.7%
9/1	N Circ Ahead	U	1	N/A	C		1	44	-	-	735	1900	1221	60.2%
9/2	N Circ Right Ahead	U	1	N/A	C		1	44	-	-	995	1900	1221	81.5%
10/1	A52 E Exit peds	U	3	N/A	K		1	53	-	-	813	1900	1466	55.5%
10/2	A52 E Exit peds	U	3	N/A	K		1	53	-	-	1019	1900	1466	69.5%
11/1	W Circ Ahead	U	1	N/A	A		1	20	-	-	456	1900	570	80.0%
11/2	W Circ Right	U	1	N/A	A		1	20	-	-	262	1900	570	46.0%
12/1	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	921	1900	1466	62.8%
12/2	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	873	1900	1466	59.6%
13/1	B6003 N Exit	U	N/A	N/A	-		-	-	-	-	958	Inf	Inf	0.0%
14/1	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	580	Inf	Inf	0.0%
14/2	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	563	Inf	Inf	0.0%
15/1	GC Exit	U	N/A	N/A	-		-	-	-	-	1	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	Item
Network: A52 / Bardills Island	**-**	**-**	**2**	**5**	**0**	**36.8**	**44.3**	**0.0**	**81.1**	**-**	**-**	**-**	**-**	**Network: A52 / Bardills Island**
A52/ Bardills Island	**-**	**-**	**2**	**5**	**0**	**36.8**	**44.3**	**0.0**	**81.1**	**-**	**-**	**-**	**-**	**A52/ Bardills Island**
1/2+1/1	778	778	-	-	-	2.3	1.0	-	3.3	15.2	6.5	1.0	7.5	1/2+1/1
1/3	548	548	-	-	-	1.8	0.6	-	2.4	15.8	7.2	0.6	7.8	1/3
2/1	7	7	2	5	0	0.0	0.0	-	0.0	18.9	0.1	0.0	0.1	2/1
3/2+3/1	610	610	-	-	-	4.4	1.5	-	5.8	34.4	5.5	1.5	7.0	3/2+3/1
3/3+3/4	634	634	-	-	-	4.6	4.6	-	9.2	52.2	7.0	4.6	11.6	3/3+3/4
4/1	1068	1068	-	-	-	4.4	12.5	-	16.9	56.8	20.2	12.5	32.7	4/1
4/2+4/3	1487	1487	-	-	-	4.8	18.0	-	22.8	55.2	20.9	18.0	38.9	4/2+4/3
5/2+5/1	596	596	-	-	-	4.0	4.3	-	8.4	50.6	7.3	4.3	11.7	5/2+5/1
6/1	558	558	-	-	-	1.2	0.0	-	1.2	7.6	8.6	0.0	8.6	6/1
6/2	616	616	-	-	-	0.4	0.0	-	0.4	2.6	2.2	0.0	2.2	6/2
6/3	652	652	-	-	-	0.4	0.0	-	0.4	2.4	2.2	0.0	2.2	6/3
7/1	302	302	-	-	-	2.4	0.0	-	2.4	28.5	5.9	0.0	5.9	7/1
7/2	283	283	-	-	-	2.3	0.0	-	2.3	29.5	5.5	0.0	5.5	7/2
8/1	290	290	-	-	-	0.1	0.0	-	0.1	1.1	0.1	0.0	0.1	8/1
8/2	204	204	-	-	-	0.0	0.0	-	0.0	0.7	0.1	0.0	0.1	8/2
9/1	735	735	-	-	-	0.8	0.0	-	0.8	3.8	4.5	0.0	4.5	9/1
9/2	995	995	-	-	-	0.7	0.0	-	0.7	2.6	3.3	0.0	3.3	9/2
10/1	813	813	-	-	-	0.2	0.6	-	0.8	3.5	1.6	0.6	2.2	10/1
10/2	1019	1019	-	-	-	0.1	1.1	-	1.2	4.3	0.6	1.1	1.7	10/2
11/1	456	456	-	-	-	1.0	0.0	-	1.0	8.0	2.3	0.0	2.3	11/1

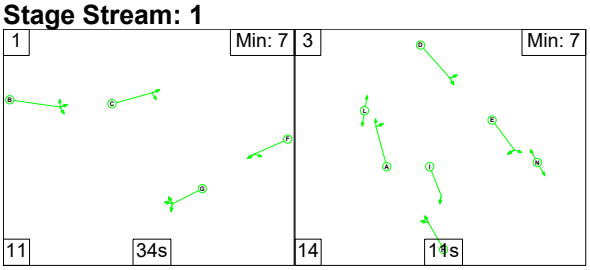
11/2	262	262	-	-	-	0.1	0.0	-	0.1	2.0	0.2	0.0	0.2	11/2
12/1	921	921	-	-	-	0.4	0.0	-	0.4	1.5	2.8	0.0	2.8	12/1
12/2	873	873	-	-	-	0.4	0.0	-	0.4	1.5	2.6	0.0	2.6	12/2
13/1	958	958	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	13/1
14/1	580	580	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/1
14/2	563	563	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/2
15/1	1	1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	15/1

C1 - A52 / B6003 Bardills	Stream: 1 PRC for Signalled Lanes (%):	-10.7	Total Delay for Signalled Lanes (pcuHr):	78.31	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 2 PRC for Signalled Lanes (%):	43.2	Total Delay for Signalled Lanes (pcuHr):	0.76	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 3 PRC for Signalled Lanes (%):	29.5	Total Delay for Signalled Lanes (pcuHr):	2.00	Cycle Time (s): 70
	PRC Over All Lanes (%):	-10.7	Total Delay Over All Lanes(pcuHr):	81.10	

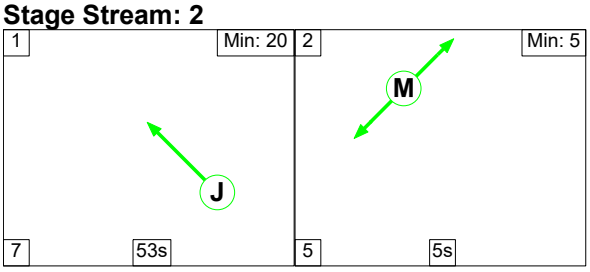
Scenario 5: 'Scenario 1' (FG3: '2026 Do Something', Plan 2: 'Network Control Plan 2')

Stage Sequence Diagram

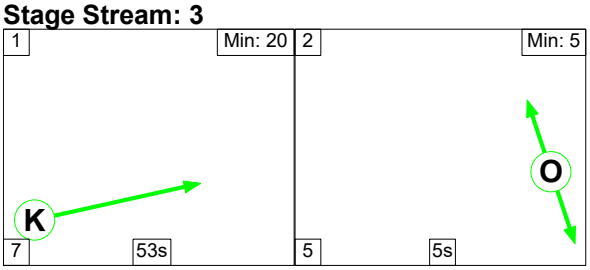
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	3
Duration	34	11
Change Point	62	37

Stage Stream: 2

Stage	1	2
Duration	53	5
Change Point	59	49

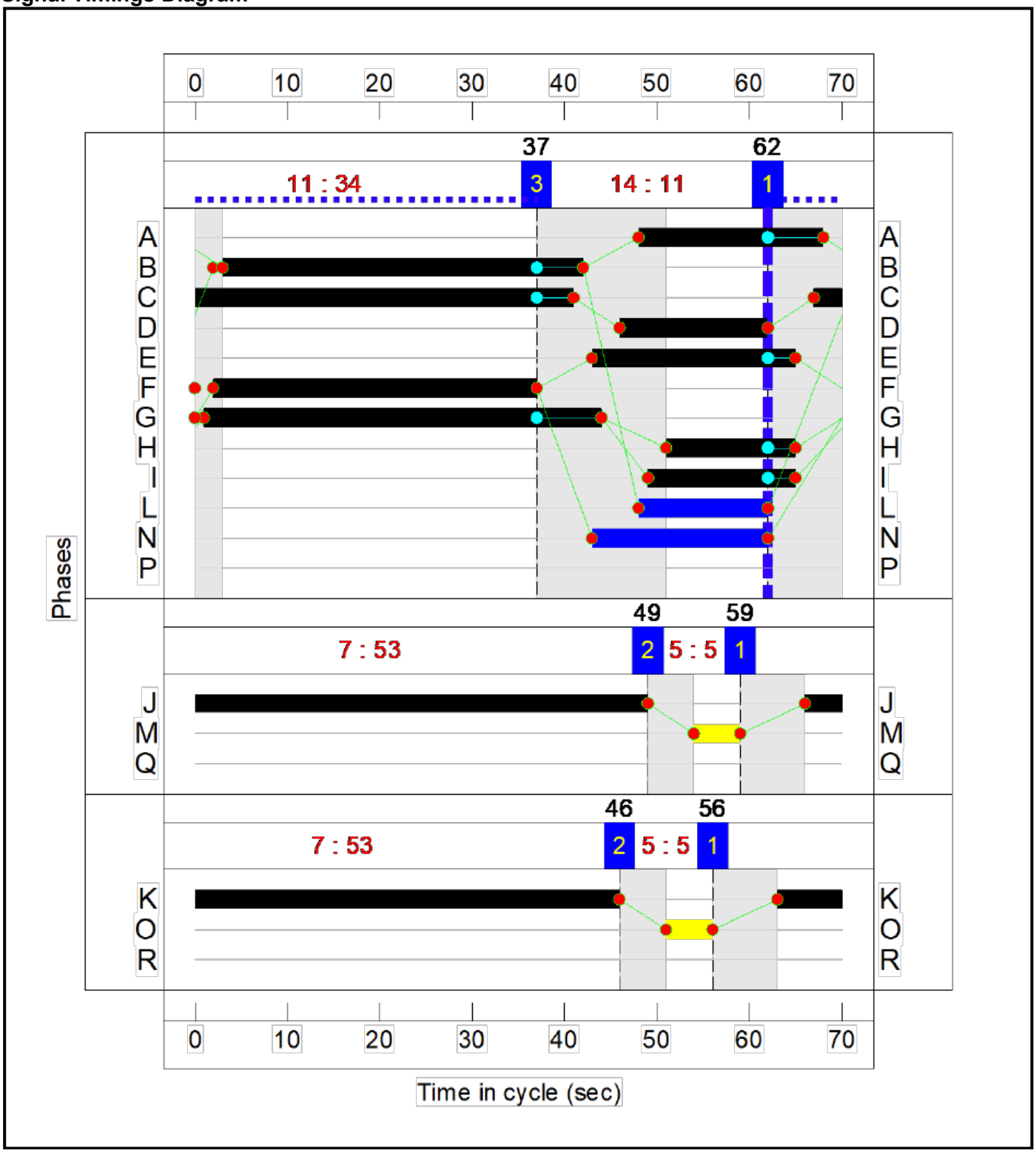
Stage Stream: 3

Stage	1	2
Duration	53	5
Change Point	56	46

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	W Circ Right Ahead	Traffic	1	20	48	68
B	A52 West Right Ahead Left	Traffic	1	39	3	42
C	N Circ Right Ahead	Traffic	1	44	67	41
D	B6003 Toton Lane North Ahead Left	Traffic	1	16	46	62
E	E Circ Right Ahead	Traffic	1	22	43	65
F	A52 East Ahead Left	Traffic	1	35	2	37
G	S Circ Right Ahead Left (25)	Traffic	1	43	1	44
H	B6003 Toton Lane South Ahead Left (21)	Traffic	1	14	51	65
I	Cut Thru Ahead (29)	Traffic	1	16	49	65
J	A52 West Exit Peds	Traffic	2	53	66	49
K	A52 E Exit peds	Traffic	3	53	63	46
L	Pedestrians across	Pedestrian	1	14	48	62
M	Pedestrians across	Pedestrian	2	5	54	59
N	Pedestrians across	Pedestrian	1	19	43	62
O	Pedestrians across	Pedestrian	3	5	51	56
P	Dummy	Dummy	1			
Q	Dummy	Dummy	2			
R	Dummy	Dummy	3			

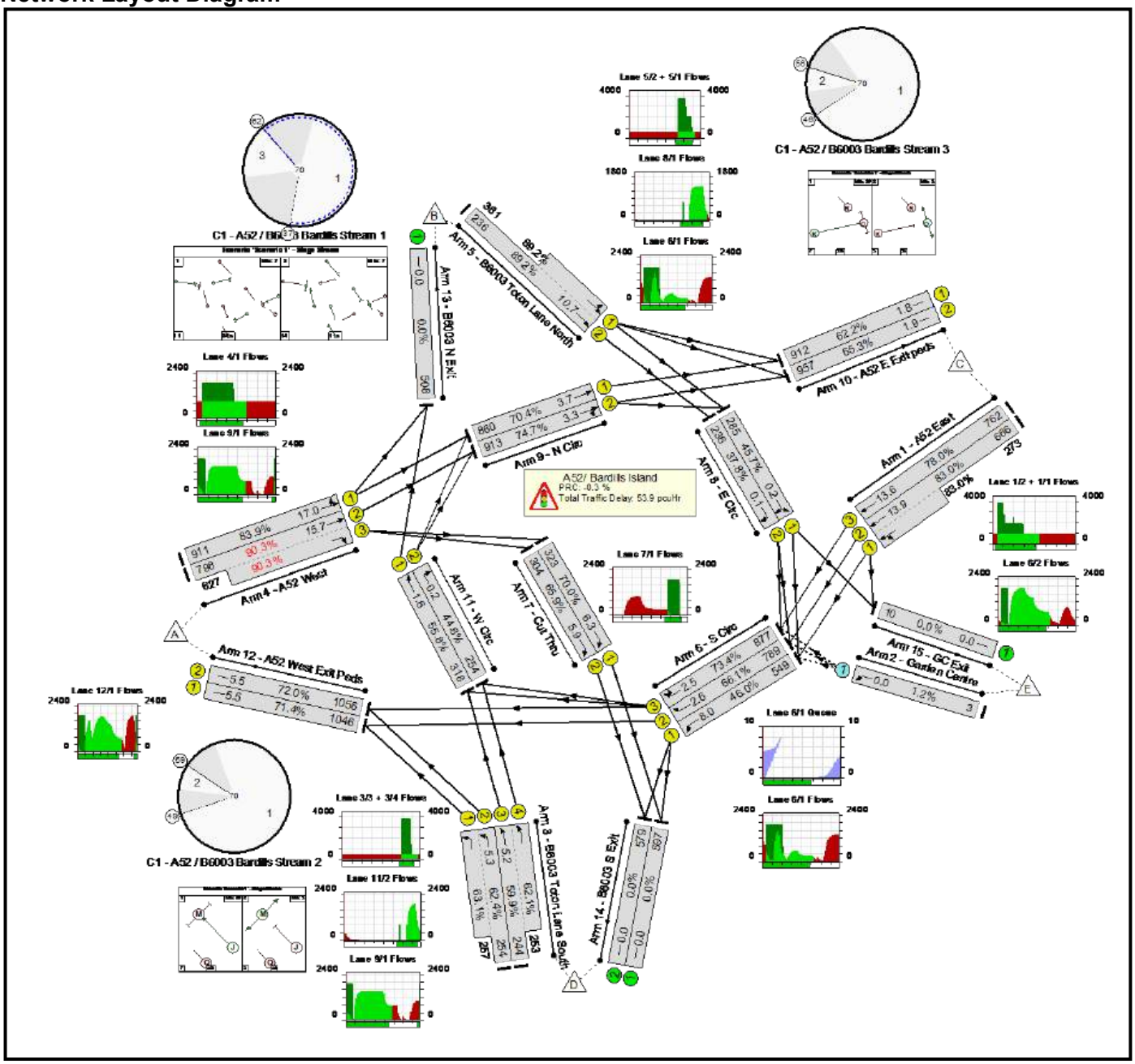
Signal Timings Diagram



Lane Green Times

Junction: A52/ Bardills Island					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	A52 East Ahead Left	U	F	2	37
1/2	A52 East Ahead	U	F	2	37
1/3	A52 East Ahead	U	F	2	37
3/1	B6003 Toton Lane South Left	U	H	51	65
3/2	B6003 Toton Lane South Left	U	H	51	65
3/3	B6003 Toton Lane South Ahead	U	H	51	65
3/4	B6003 Toton Lane South Ahead	U	H	51	65
4/1	A52 West Ahead Left	U	B	3	42
4/2	A52 West Ahead	U	B	3	42
4/3	A52 West Right	U	B	3	42
5/1	B6003 Toton Lane North Ahead Left	U	D	46	62
5/2	B6003 Toton Lane North Ahead	U	D	46	62
6/1	S Circ Left	U	G	1	44
6/2	S Circ Ahead	U	G	1	44
6/3	S Circ Right Ahead	U	G	1	44
7/1	Cut Thru Ahead	U	I	49	65
7/2	Cut Thru Ahead	U	I	49	65
8/1	E Circ Right Ahead	U	E	43	65
8/2	E Circ Right	U	E	43	65
9/1	N Circ Ahead	U	C	67	41
9/2	N Circ Right Ahead	U	C	67	41
10/1	A52 E Exit peds	U	K	63	46
10/2	A52 E Exit peds	U	K	63	46
11/1	W Circ Ahead	U	A	48	68
11/2	W Circ Right	U	A	48	68
12/1	A52 West Exit Peds	U	J	66	49
12/2	A52 West Exit Peds	U	J	66	49

Network Layout Diagram



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)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 / Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.3%**
A52/ Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.3%**
1/2+1/1	A52 East Ahead Left	U	1	N/A	F		1	35	-	-	939	1900:1900	803+329	83.0 : 83.0%
1/3	A52 East Ahead	U	1	N/A	F		1	35	-	-	762	1900	977	78.0%
2/1	Garden Centre Left	O	N/A	N/A	-		-	-	-	-	3	1800	242	1.2%
3/2+3/1	B6003 Toton Lane South Left	U	1	N/A	H		1	14	-	-	511	1900:1900	407+407	62.4 : 63.1%
3/3+3/4	B6003 Toton Lane South Ahead	U	1	N/A	H		1	14	-	-	497	1900:1900	407+407	59.9 : 62.1%
4/1	A52 West Ahead Left	U	1	N/A	B		1	39	-	-	911	1900	1086	83.9%
4/2+4/3	A52 West Right Ahead	U	1	N/A	B		1	39	-	-	1425	1900:1900	884+695	90.3 : 90.3%
5/2+5/1	B6003 Toton Lane North Ahead Left	U	1	N/A	D		1	16	-	-	617	1900:1900	265+427	89.2 : 89.2%
6/1	S Circ Left	U	1	N/A	G		1	43	-	-	549	1900	1194	46.0%
6/2	S Circ Ahead	U	1	N/A	G		1	43	-	-	789	1900	1194	66.1%
6/3	S Circ Right Ahead	U	1	N/A	G		1	43	-	-	877	1900	1194	73.4%
7/1	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	323	1900	461	70.0%
7/2	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	304	1900	461	65.9%

8/1	E Circ Right Ahead	U	1	N/A	E		1	22	-	-	285	1900	624	45.7%
8/2	E Circ Right	U	1	N/A	E		1	22	-	-	236	1900	624	37.8%
9/1	N Circ Ahead	U	1	N/A	C		1	44	-	-	860	1900	1221	70.4%
9/2	N Circ Right Ahead	U	1	N/A	C		1	44	-	-	913	1900	1221	74.7%
10/1	A52 E Exit peds	U	3	N/A	K		1	53	-	-	912	1900	1466	62.2%
10/2	A52 E Exit peds	U	3	N/A	K		1	53	-	-	957	1900	1466	65.3%
11/1	W Circ Ahead	U	1	N/A	A		1	20	-	-	318	1900	570	55.8%
11/2	W Circ Right	U	1	N/A	A		1	20	-	-	254	1900	570	44.6%
12/1	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	1046	1900	1466	71.4%
12/2	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	1056	1900	1466	72.0%
13/1	B6003 N Exit	U	N/A	N/A	-		-	-	-	-	508	Inf	Inf	0.0%
14/1	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	597	Inf	Inf	0.0%
14/2	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	579	Inf	Inf	0.0%
15/1	GC Exit	U	N/A	N/A	-		-	-	-	-	10	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	Item
Network: A52 / Bardills Island	**-**	**-**	**1**	**2**	**0**	**35.8**	**18.2**	**0.0**	**53.9**	**-**	**-**	**-**	**-**	**Network: A52 / Bardills Island**
A52/ Bardills Island	**-**	**-**	**1**	**2**	**0**	**35.8**	**18.2**	**0.0**	**53.9**	**-**	**-**	**-**	**-**	**A52/ Bardills Island**
1/2+1/1	939	939	-	-	-	3.2	2.4	-	5.6	21.4	11.5	2.4	13.9	1/2+1/1
1/3	762	762	-	-	-	2.9	1.7	-	4.7	22.0	11.9	1.7	13.6	1/3
2/1	3	3	1	2	0	0.0	0.0	-	0.0	18.6	0.0	0.0	0.0	2/1
3/2+3/1	511	511	-	-	-	3.5	0.8	-	4.4	30.9	4.5	0.8	5.3	3/2+3/1
3/3+3/4	497	497	-	-	-	3.4	0.8	-	4.2	30.5	4.4	0.8	5.2	3/3+3/4
4/1	911	911	-	-	-	3.1	2.5	-	5.7	22.4	14.4	2.5	17.0	4/1
4/2+4/3	1425	1425	-	-	-	4.1	4.4	-	8.5	21.5	11.3	4.4	15.7	4/2+4/3
5/2+5/1	617	617	-	-	-	4.2	3.8	-	7.9	46.2	7.0	3.8	10.7	5/2+5/1
6/1	549	549	-	-	-	1.1	0.0	-	1.1	7.2	8.0	0.0	8.0	6/1
6/2	789	789	-	-	-	0.5	0.0	-	0.5	2.3	2.6	0.0	2.6	6/2
6/3	877	877	-	-	-	0.5	0.0	-	0.5	2.0	2.5	0.0	2.5	6/3
7/1	323	323	-	-	-	2.6	0.0	-	2.6	29.3	6.3	0.0	6.3	7/1
7/2	304	304	-	-	-	2.6	0.0	-	2.6	30.3	5.9	0.0	5.9	7/2
8/1	285	285	-	-	-	0.1	0.0	-	0.1	1.3	0.2	0.0	0.2	8/1
8/2	236	236	-	-	-	0.0	0.0	-	0.0	0.7	0.1	0.0	0.1	8/2
9/1	860	860	-	-	-	0.6	0.0	-	0.6	2.5	3.7	0.0	3.7	9/1
9/2	913	913	-	-	-	0.6	0.0	-	0.6	2.3	3.3	0.0	3.3	9/2
10/1	912	912	-	-	-	0.1	0.8	-	0.9	3.7	1.0	0.8	1.8	10/1
10/2	957	957	-	-	-	0.1	0.9	-	1.0	3.9	1.0	0.9	1.9	10/2
11/1	318	318	-	-	-	0.5	0.0	-	0.5	5.9	1.6	0.0	1.6	11/1

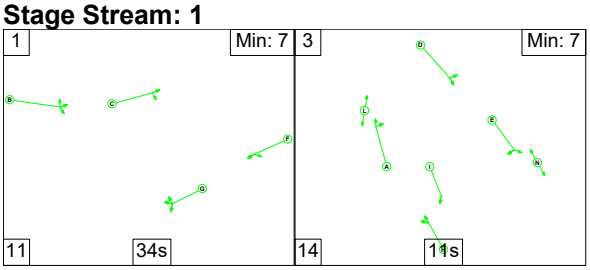
11/2	254	254	-	-	-	0.1	0.0	-	0.1	2.1	0.2	0.0	0.2	11/2
12/1	1046	1046	-	-	-	0.8	0.0	-	0.8	2.9	5.5	0.0	5.5	12/1
12/2	1056	1056	-	-	-	0.8	0.0	-	0.8	2.9	5.5	0.0	5.5	12/2
13/1	508	508	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	13/1
14/1	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/1
14/2	579	579	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/2
15/1	10	10	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	15/1

C1 - A52 / B6003 Bardills	Stream: 1 PRC for Signalled Lanes (%):	-0.3	Total Delay for Signalled Lanes (pcuHr):	50.25	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 2 PRC for Signalled Lanes (%):	24.9	Total Delay for Signalled Lanes (pcuHr):	1.68	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 3 PRC for Signalled Lanes (%):	37.8	Total Delay for Signalled Lanes (pcuHr):	1.98	Cycle Time (s): 70
	PRC Over All Lanes (%):	-0.3	Total Delay Over All Lanes(pcuHr):	53.93	

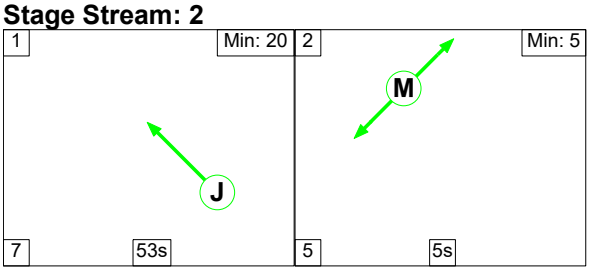
Scenario 6: 'Scenario 1' (FG4: '2026 Do Something', Plan 2: 'Network Control Plan 2')

Stage Sequence Diagram

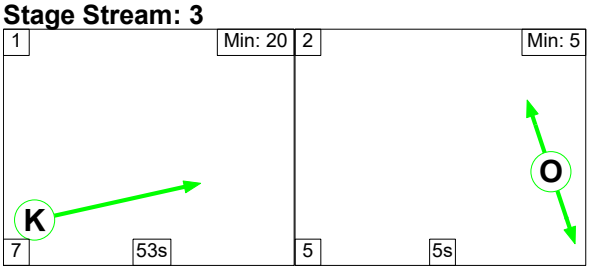
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	3
Duration	34	11
Change Point	62	37

Stage Stream: 2

Stage	1	2
Duration	53	5
Change Point	43	33

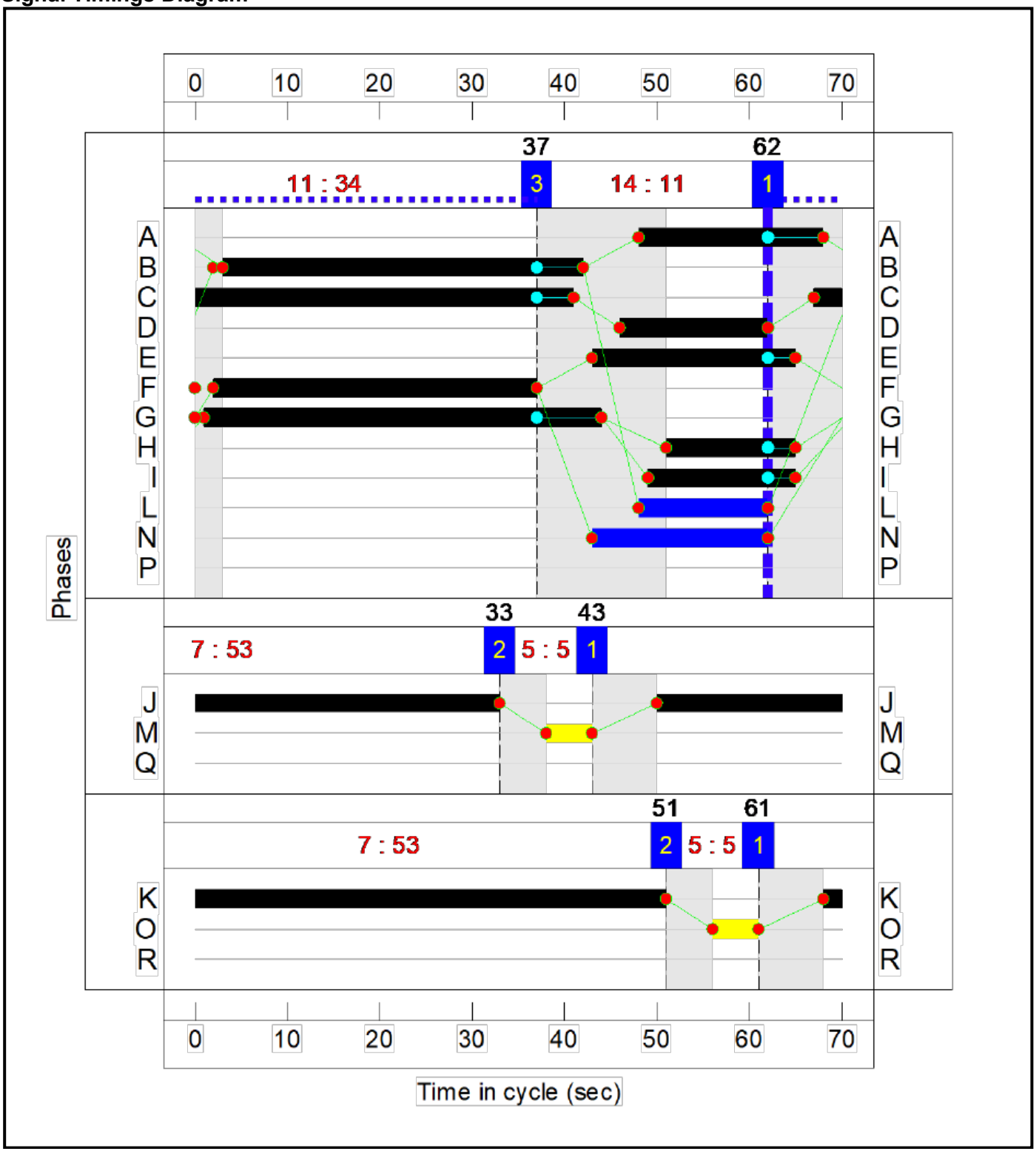
Stage Stream: 3

Stage	1	2
Duration	53	5
Change Point	61	51

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	W Circ Right Ahead	Traffic	1	20	48	68
B	A52 West Right Ahead Left	Traffic	1	39	3	42
C	N Circ Right Ahead	Traffic	1	44	67	41
D	B6003 Toton Lane North Ahead Left	Traffic	1	16	46	62
E	E Circ Right Ahead	Traffic	1	22	43	65
F	A52 East Ahead Left	Traffic	1	35	2	37
G	S Circ Right Ahead Left (25)	Traffic	1	43	1	44
H	B6003 Toton Lane South Ahead Left (21)	Traffic	1	14	51	65
I	Cut Thru Ahead (29)	Traffic	1	16	49	65
J	A52 West Exit Peds	Traffic	2	53	50	33
K	A52 E Exit peds	Traffic	3	53	68	51
L	Pedestrians across	Pedestrian	1	14	48	62
M	Pedestrians across	Pedestrian	2	5	38	43
N	Pedestrians across	Pedestrian	1	19	43	62
O	Pedestrians across	Pedestrian	3	5	56	61
P	Dummy	Dummy	1			
Q	Dummy	Dummy	2			
R	Dummy	Dummy	3			

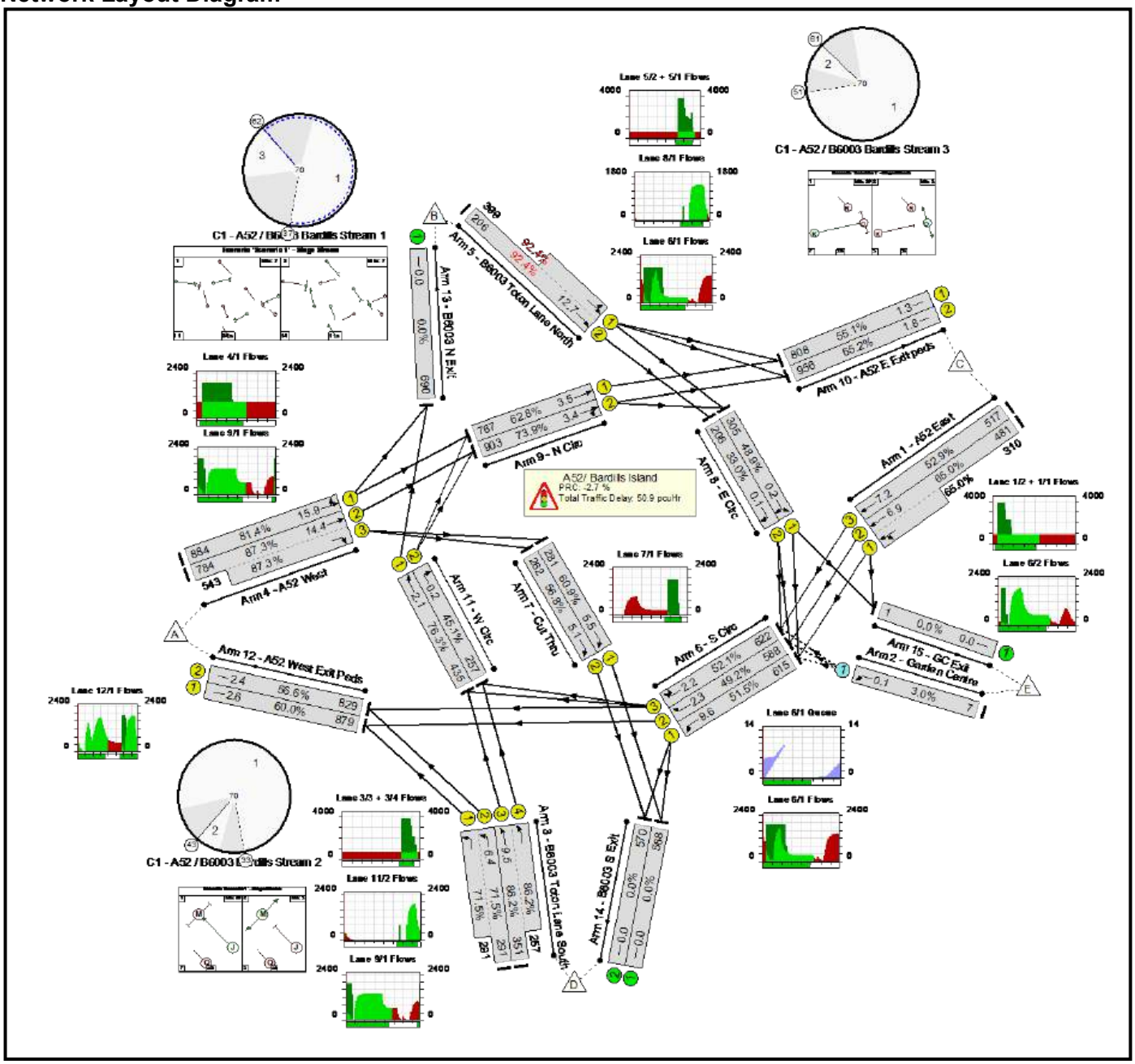
Signal Timings Diagram



Lane Green Times

Junction: A52/ Bardills Island					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	A52 East Ahead Left	U	F	2	37
1/2	A52 East Ahead	U	F	2	37
1/3	A52 East Ahead	U	F	2	37
3/1	B6003 Toton Lane South Left	U	H	51	65
3/2	B6003 Toton Lane South Left	U	H	51	65
3/3	B6003 Toton Lane South Ahead	U	H	51	65
3/4	B6003 Toton Lane South Ahead	U	H	51	65
4/1	A52 West Ahead Left	U	B	3	42
4/2	A52 West Ahead	U	B	3	42
4/3	A52 West Right	U	B	3	42
5/1	B6003 Toton Lane North Ahead Left	U	D	46	62
5/2	B6003 Toton Lane North Ahead	U	D	46	62
6/1	S Circ Left	U	G	1	44
6/2	S Circ Ahead	U	G	1	44
6/3	S Circ Right Ahead	U	G	1	44
7/1	Cut Thru Ahead	U	I	49	65
7/2	Cut Thru Ahead	U	I	49	65
8/1	E Circ Right Ahead	U	E	43	65
8/2	E Circ Right	U	E	43	65
9/1	N Circ Ahead	U	C	67	41
9/2	N Circ Right Ahead	U	C	67	41
10/1	A52 E Exit peds	U	K	68	51
10/2	A52 E Exit peds	U	K	68	51
11/1	W Circ Ahead	U	A	48	68
11/2	W Circ Right	U	A	48	68
12/1	A52 West Exit Peds	U	J	50	33
12/2	A52 West Exit Peds	U	J	50	33

Network Layout Diagram



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)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 / Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**92.4%**
A52/ Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**92.4%**
1/2+1/1	A52 East Ahead Left	U	1	N/A	F		1	35	-	-	791	1900:1900	740+477	65.0 : 65.0%
1/3	A52 East Ahead	U	1	N/A	F		1	35	-	-	517	1900	977	52.9%
2/1	Garden Centre Left	O	N/A	N/A	-		-	-	-	-	7	1800	237	3.0%
3/2+3/1	B6003 Toton Lane South Left	U	1	N/A	H		1	14	-	-	582	1900:1900	407+407	71.5 : 71.5%
3/3+3/4	B6003 Toton Lane South Ahead	U	1	N/A	H		1	14	-	-	608	1900:1900	407+298	86.2 : 86.2%
4/1	A52 West Ahead Left	U	1	N/A	B		1	39	-	-	884	1900	1086	81.4%
4/2+4/3	A52 West Right Ahead	U	1	N/A	B		1	39	-	-	1327	1900:1900	898+622	87.3 : 87.3%
5/2+5/1	B6003 Toton Lane North Ahead Left	U	1	N/A	D		1	16	-	-	605	1900:1900	223+432	92.4 : 92.4%
6/1	S Circ Left	U	1	N/A	G		1	43	-	-	615	1900	1194	51.5%
6/2	S Circ Ahead	U	1	N/A	G		1	43	-	-	588	1900	1194	49.2%
6/3	S Circ Right Ahead	U	1	N/A	G		1	43	-	-	622	1900	1194	52.1%
7/1	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	281	1900	461	60.9%
7/2	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	262	1900	461	56.8%

8/1	E Circ Right Ahead	U	1	N/A	E		1	22	-	-	305	1900	624	48.9%
8/2	E Circ Right	U	1	N/A	E		1	22	-	-	206	1900	624	33.0%
9/1	N Circ Ahead	U	1	N/A	C		1	44	-	-	767	1900	1221	62.8%
9/2	N Circ Right Ahead	U	1	N/A	C		1	44	-	-	903	1900	1221	73.9%
10/1	A52 E Exit peds	U	3	N/A	K		1	53	-	-	808	1900	1466	55.1%
10/2	A52 E Exit peds	U	3	N/A	K		1	53	-	-	956	1900	1466	65.2%
11/1	W Circ Ahead	U	1	N/A	A		1	20	-	-	435	1900	570	76.3%
11/2	W Circ Right	U	1	N/A	A		1	20	-	-	257	1900	570	45.1%
12/1	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	879	1900	1466	60.0%
12/2	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	829	1900	1466	56.6%
13/1	B6003 N Exit	U	N/A	N/A	-		-	-	-	-	690	Inf	Inf	0.0%
14/1	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	588	Inf	Inf	0.0%
14/2	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	570	Inf	Inf	0.0%
15/1	GC Exit	U	N/A	N/A	-		-	-	-	-	1	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	Item
Network: A52 / Bardills Island	**-**	**-**	**2**	**5**	**0**	**33.1**	**17.8**	**0.0**	**50.9**	**-**	**-**	**-**	**-**	**Network: A52 / Bardills Island**
A52/ Bardills Island	**-**	**-**	**2**	**5**	**0**	**33.1**	**17.8**	**0.0**	**50.9**	**-**	**-**	**-**	**-**	**A52/ Bardills Island**
1/2+1/1	791	791	-	-	-	2.3	0.9	-	3.3	14.8	6.0	0.9	6.9	1/2+1/1
1/3	517	517	-	-	-	1.6	0.6	-	2.2	15.3	6.6	0.6	7.2	1/3
2/1	7	7	2	5	0	0.0	0.0	-	0.0	19.1	0.1	0.0	0.1	2/1
3/2+3/1	582	582	-	-	-	4.1	1.2	-	5.4	33.2	5.2	1.2	6.4	3/2+3/1
3/3+3/4	608	608	-	-	-	4.4	2.9	-	7.3	43.3	6.5	2.9	9.5	3/3+3/4
4/1	884	884	-	-	-	3.0	2.1	-	5.1	20.8	13.8	2.1	15.9	4/1
4/2+4/3	1327	1327	-	-	-	3.7	3.3	-	7.1	19.2	11.1	3.3	14.4	4/2+4/3
5/2+5/1	605	605	-	-	-	4.1	5.1	-	9.2	54.7	7.7	5.1	12.7	5/2+5/1
6/1	615	615	-	-	-	1.3	0.0	-	1.3	7.6	9.6	0.0	9.6	6/1
6/2	588	588	-	-	-	0.4	0.0	-	0.4	2.7	2.3	0.0	2.3	6/2
6/3	622	622	-	-	-	0.4	0.0	-	0.4	2.5	2.2	0.0	2.2	6/3
7/1	281	281	-	-	-	2.3	0.0	-	2.3	29.1	5.5	0.0	5.5	7/1
7/2	262	262	-	-	-	2.2	0.0	-	2.2	30.1	5.1	0.0	5.1	7/2
8/1	305	305	-	-	-	0.1	0.0	-	0.1	1.2	0.2	0.0	0.2	8/1
8/2	206	206	-	-	-	0.0	0.0	-	0.0	0.8	0.1	0.0	0.1	8/2
9/1	767	767	-	-	-	0.5	0.0	-	0.5	2.6	3.5	0.0	3.5	9/1
9/2	903	903	-	-	-	0.6	0.0	-	0.6	2.4	3.4	0.0	3.4	9/2
10/1	808	808	-	-	-	0.1	0.6	-	0.7	3.2	0.7	0.6	1.3	10/1
10/2	956	956	-	-	-	0.1	0.9	-	1.1	4.0	0.9	0.9	1.8	10/2
11/1	435	435	-	-	-	0.9	0.0	-	0.9	7.3	2.1	0.0	2.1	11/1

11/2	257	257	-	-	-	0.1	0.0	-	0.1	2.0	0.2	0.0	0.2	11/2
12/1	879	879	-	-	-	0.4	0.0	-	0.4	1.5	2.6	0.0	2.6	12/1
12/2	829	829	-	-	-	0.3	0.0	-	0.3	1.4	2.4	0.0	2.4	12/2
13/1	690	690	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	13/1
14/1	588	588	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/1
14/2	570	570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/2
15/1	1	1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	15/1

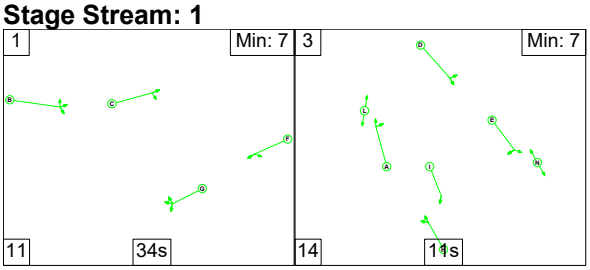
C1 - A52 / B6003 Bardills	Stream: 1 PRC for Signalled Lanes (%):	-2.7	Total Delay for Signalled Lanes (pcuHr):	48.41
C1 - A52 / B6003 Bardills	Stream: 2 PRC for Signalled Lanes (%):	50.1	Total Delay for Signalled Lanes (pcuHr):	0.68
C1 - A52 / B6003 Bardills	Stream: 3 PRC for Signalled Lanes (%):	38.0	Total Delay for Signalled Lanes (pcuHr):	1.78
	PRC Over All Lanes (%):	-2.7	Total Delay Over All Lanes(pcuHr):	50.91

Cycle Time (s):	70
Cycle Time (s):	70
Cycle Time (s):	70

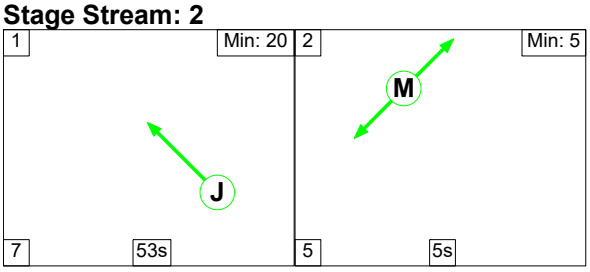
Scenario 7: 'Scenario 1' (FG7: '2041 So Something AM', Plan 2: 'Network Control Plan 2')

Stage Sequence Diagram

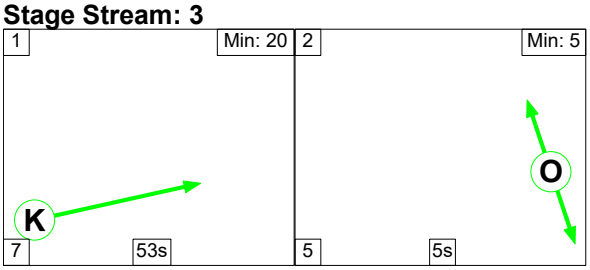
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	3
Duration	34	11
Change Point	62	37

Stage Stream: 2

Stage	1	2
Duration	53	5
Change Point	58	48

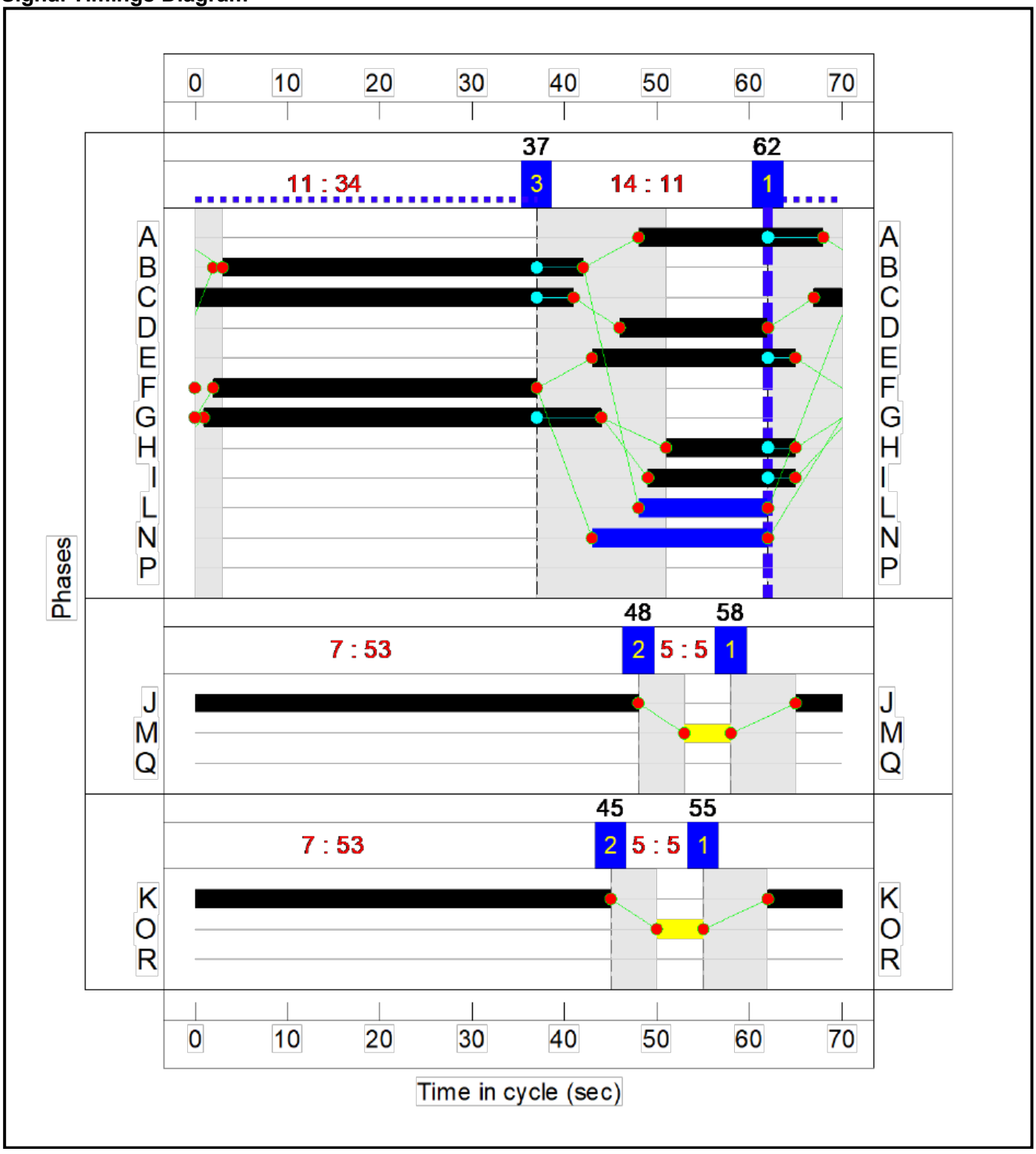
Stage Stream: 3

Stage	1	2
Duration	53	5
Change Point	55	45

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	W Circ Right Ahead	Traffic	1	20	48	68
B	A52 West Right Ahead Left	Traffic	1	39	3	42
C	N Circ Right Ahead	Traffic	1	44	67	41
D	B6003 Toton Lane North Ahead Left	Traffic	1	16	46	62
E	E Circ Right Ahead	Traffic	1	22	43	65
F	A52 East Ahead Left	Traffic	1	35	2	37
G	S Circ Right Ahead Left (25)	Traffic	1	43	1	44
H	B6003 Toton Lane South Ahead Left (21)	Traffic	1	14	51	65
I	Cut Thru Ahead (29)	Traffic	1	16	49	65
J	A52 West Exit Peds	Traffic	2	53	65	48
K	A52 E Exit peds	Traffic	3	53	62	45
L	Pedestrians across	Pedestrian	1	14	48	62
M	Pedestrians across	Pedestrian	2	5	53	58
N	Pedestrians across	Pedestrian	1	19	43	62
O	Pedestrians across	Pedestrian	3	5	50	55
P	Dummy	Dummy	1			
Q	Dummy	Dummy	2			
R	Dummy	Dummy	3			

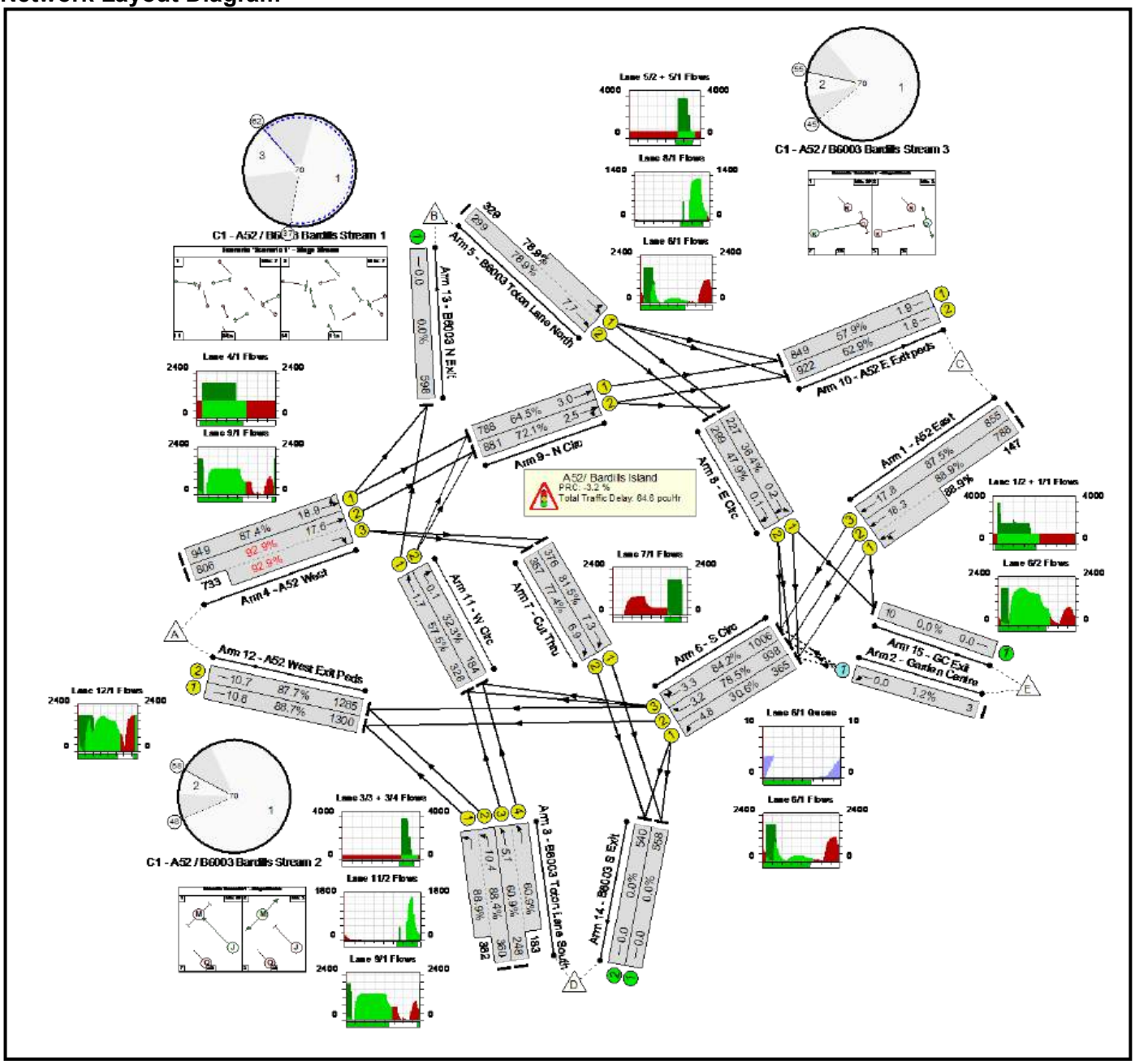
Signal Timings Diagram



Lane Green Times

Junction: A52/ Bardills Island					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	A52 East Ahead Left	U	F	2	37
1/2	A52 East Ahead	U	F	2	37
1/3	A52 East Ahead	U	F	2	37
3/1	B6003 Toton Lane South Left	U	H	51	65
3/2	B6003 Toton Lane South Left	U	H	51	65
3/3	B6003 Toton Lane South Ahead	U	H	51	65
3/4	B6003 Toton Lane South Ahead	U	H	51	65
4/1	A52 West Ahead Left	U	B	3	42
4/2	A52 West Ahead	U	B	3	42
4/3	A52 West Right	U	B	3	42
5/1	B6003 Toton Lane North Ahead Left	U	D	46	62
5/2	B6003 Toton Lane North Ahead	U	D	46	62
6/1	S Circ Left	U	G	1	44
6/2	S Circ Ahead	U	G	1	44
6/3	S Circ Right Ahead	U	G	1	44
7/1	Cut Thru Ahead	U	I	49	65
7/2	Cut Thru Ahead	U	I	49	65
8/1	E Circ Right Ahead	U	E	43	65
8/2	E Circ Right	U	E	43	65
9/1	N Circ Ahead	U	C	67	41
9/2	N Circ Right Ahead	U	C	67	41
10/1	A52 E Exit peds	U	K	62	45
10/2	A52 E Exit peds	U	K	62	45
11/1	W Circ Ahead	U	A	48	68
11/2	W Circ Right	U	A	48	68
12/1	A52 West Exit Peds	U	J	65	48
12/2	A52 West Exit Peds	U	J	65	48

Network Layout Diagram



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)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 / Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**92.9%**
A52/ Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**92.9%**
1/2+1/1	A52 East Ahead Left	U	1	N/A	F		1	35	-	-	935	1900:1900	886+165	88.9 : 88.9%
1/3	A52 East Ahead	U	1	N/A	F		1	35	-	-	855	1900	977	87.5%
2/1	Garden Centre Left	O	N/A	N/A	-		-	-	-	-	3	1800	254	1.2%
3/2+3/1	B6003 Toton Lane South Left	U	1	N/A	H		1	14	-	-	722	1900:1900	407+407	88.4 : 88.9%
3/3+3/4	B6003 Toton Lane South Ahead	U	1	N/A	H		1	14	-	-	431	1900:1900	407+300	60.9 : 60.9%
4/1	A52 West Ahead Left	U	1	N/A	B		1	39	-	-	949	1900	1086	87.4%
4/2+4/3	A52 West Right Ahead	U	1	N/A	B		1	39	-	-	1539	1900:1900	867+789	92.9 : 92.9%
5/2+5/1	B6003 Toton Lane North Ahead Left	U	1	N/A	D		1	16	-	-	628	1900:1900	379+417	78.9 : 78.9%
6/1	S Circ Left	U	1	N/A	G		1	43	-	-	365	1900	1194	30.6%
6/2	S Circ Ahead	U	1	N/A	G		1	43	-	-	938	1900	1194	78.5%
6/3	S Circ Right Ahead	U	1	N/A	G		1	43	-	-	1006	1900	1194	84.2%
7/1	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	376	1900	461	81.5%
7/2	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	357	1900	461	77.4%

8/1	E Circ Right Ahead	U	1	N/A	E		1	22	-	-	227	1900	624	36.4%
8/2	E Circ Right	U	1	N/A	E		1	22	-	-	299	1900	624	47.9%
9/1	N Circ Ahead	U	1	N/A	C		1	44	-	-	788	1900	1221	64.5%
9/2	N Circ Right Ahead	U	1	N/A	C		1	44	-	-	881	1900	1221	72.1%
10/1	A52 E Exit peds	U	3	N/A	K		1	53	-	-	849	1900	1466	57.9%
10/2	A52 E Exit peds	U	3	N/A	K		1	53	-	-	922	1900	1466	62.9%
11/1	W Circ Ahead	U	1	N/A	A		1	20	-	-	328	1900	570	57.5%
11/2	W Circ Right	U	1	N/A	A		1	20	-	-	184	1900	570	32.3%
12/1	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	1300	1900	1466	88.7%
12/2	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	1285	1900	1466	87.7%
13/1	B6003 N Exit	U	N/A	N/A	-		-	-	-	-	598	Inf	Inf	0.0%
14/1	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	558	Inf	Inf	0.0%
14/2	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	540	Inf	Inf	0.0%
15/1	GC Exit	U	N/A	N/A	-		-	-	-	-	10	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	Item
Network: A52 / Bardills Island	**-**	**-**	**1**	**2**	**0**	**40.5**	**24.1**	**0.0**	**64.6**	**-**	**-**	**-**	**-**	**Network: A52 / Bardills Island**
A52/ Bardills Island	**-**	**-**	**1**	**2**	**0**	**40.5**	**24.1**	**0.0**	**64.6**	**-**	**-**	**-**	**-**	**A52/ Bardills Island**
1/2+1/1	935	935	-	-	-	3.7	3.8	-	7.4	28.6	14.5	3.8	18.3	1/2+1/1
1/3	855	855	-	-	-	3.6	3.3	-	6.9	29.0	14.5	3.3	17.8	1/3
2/1	3	3	1	2	0	0.0	0.0	-	0.0	18.0	0.0	0.0	0.0	2/1
3/2+3/1	722	722	-	-	-	5.4	3.6	-	9.0	44.8	6.7	3.6	10.4	3/2+3/1
3/3+3/4	431	431	-	-	-	2.9	0.8	-	3.7	30.9	4.3	0.8	5.1	3/3+3/4
4/1	949	949	-	-	-	3.4	3.3	-	6.7	25.4	15.6	3.3	18.9	4/1
4/2+4/3	1539	1539	-	-	-	4.6	6.0	-	10.6	24.8	11.6	6.0	17.6	4/2+4/3
5/2+5/1	628	628	-	-	-	4.2	1.8	-	6.0	34.6	5.8	1.8	7.7	5/2+5/1
6/1	365	365	-	-	-	0.8	0.0	-	0.8	7.8	4.8	0.0	4.8	6/1
6/2	938	938	-	-	-	0.6	0.0	-	0.6	2.4	3.2	0.0	3.2	6/2
6/3	1006	1006	-	-	-	0.6	0.0	-	0.6	2.3	3.3	0.0	3.3	6/3
7/1	376	376	-	-	-	3.1	0.0	-	3.1	29.4	7.3	0.0	7.3	7/1
7/2	357	357	-	-	-	3.0	0.0	-	3.0	30.4	6.9	0.0	6.9	7/2
8/1	227	227	-	-	-	0.1	0.0	-	0.1	1.2	0.2	0.0	0.2	8/1
8/2	299	299	-	-	-	0.1	0.0	-	0.1	0.7	0.1	0.0	0.1	8/2
9/1	788	788	-	-	-	0.5	0.0	-	0.5	2.5	3.0	0.0	3.0	9/1
9/2	881	881	-	-	-	0.5	0.0	-	0.5	2.2	2.5	0.0	2.5	9/2
10/1	849	849	-	-	-	0.1	0.7	-	0.8	3.5	1.2	0.7	1.9	10/1
10/2	922	922	-	-	-	0.1	0.8	-	1.0	3.7	1.0	0.8	1.8	10/2
11/1	328	328	-	-	-	0.5	0.0	-	0.5	5.8	1.7	0.0	1.7	11/1

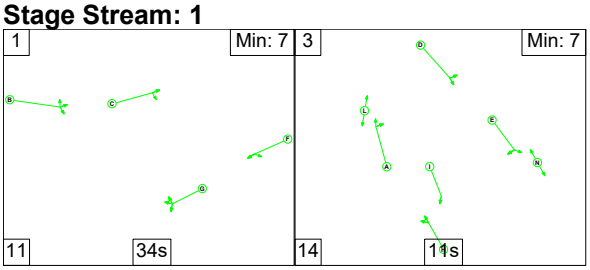
11/2	184	184	-	-	-	0.1	0.0	-	0.1	1.9	0.1	0.0	0.1	11/2
12/1	1300	1300	-	-	-	1.3	0.0	-	1.3	3.6	10.8	0.0	10.8	12/1
12/2	1285	1285	-	-	-	1.3	0.0	-	1.3	3.6	10.7	0.0	10.7	12/2
13/1	598	598	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	13/1
14/1	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/1
14/2	540	540	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/2
15/1	10	10	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	15/1

C1 - A52 / B6003 Bardills	Stream: 1 PRC for Signalled Lanes (%):	-3.2	Total Delay for Signalled Lanes (pcuHr):	60.25	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 2 PRC for Signalled Lanes (%):	1.5	Total Delay for Signalled Lanes (pcuHr):	2.57	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 3 PRC for Signalled Lanes (%):	43.1	Total Delay for Signalled Lanes (pcuHr):	1.79	Cycle Time (s): 70
	PRC Over All Lanes (%):	-3.2	Total Delay Over All Lanes(pcuHr):	64.62	

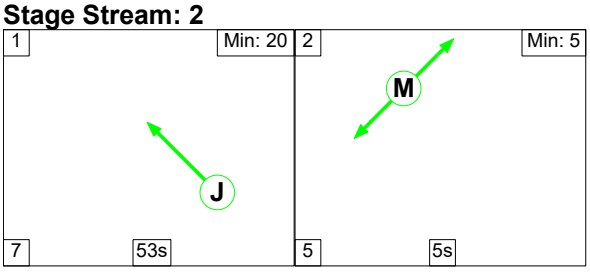
Scenario 8: 'Scenario 1' (FG8: '2041 Do Something PM', Plan 2: 'Network Control Plan 2')

Stage Sequence Diagram

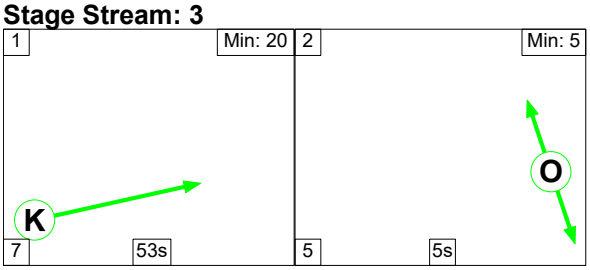
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	3
Duration	34	11
Change Point	62	37

Stage Stream: 2

Stage	1	2
Duration	53	5
Change Point	43	33

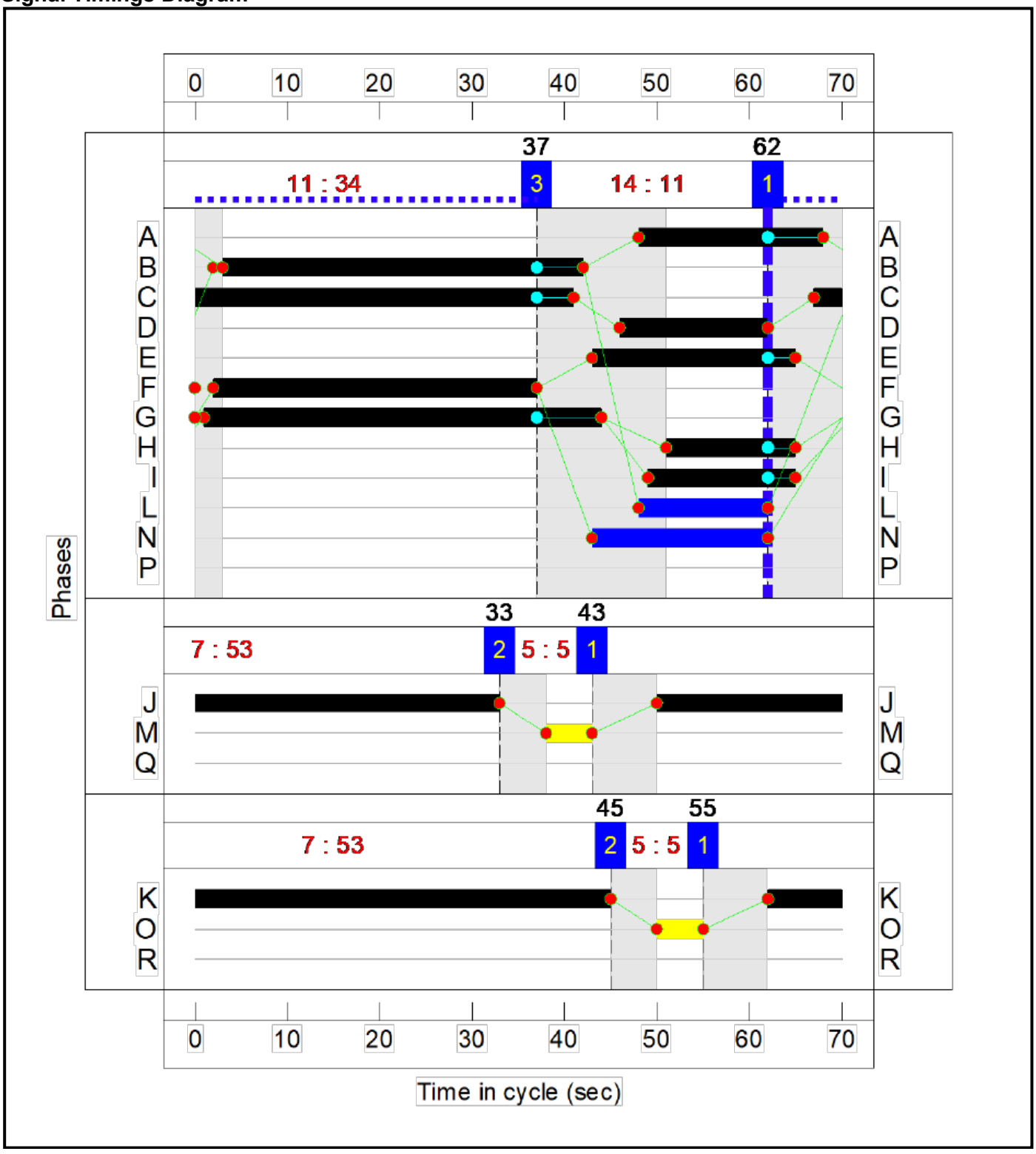
Stage Stream: 3

Stage	1	2
Duration	53	5
Change Point	55	45

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	W Circ Right Ahead	Traffic	1	20	48	68
B	A52 West Right Ahead Left	Traffic	1	39	3	42
C	N Circ Right Ahead	Traffic	1	44	67	41
D	B6003 Toton Lane North Ahead Left	Traffic	1	16	46	62
E	E Circ Right Ahead	Traffic	1	22	43	65
F	A52 East Ahead Left	Traffic	1	35	2	37
G	S Circ Right Ahead Left (25)	Traffic	1	43	1	44
H	B6003 Toton Lane South Ahead Left (21)	Traffic	1	14	51	65
I	Cut Thru Ahead (29)	Traffic	1	16	49	65
J	A52 West Exit Peds	Traffic	2	53	50	33
K	A52 E Exit peds	Traffic	3	53	62	45
L	Pedestrians across	Pedestrian	1	14	48	62
M	Pedestrians across	Pedestrian	2	5	38	43
N	Pedestrians across	Pedestrian	1	19	43	62
O	Pedestrians across	Pedestrian	3	5	50	55
P	Dummy	Dummy	1			
Q	Dummy	Dummy	2			
R	Dummy	Dummy	3			

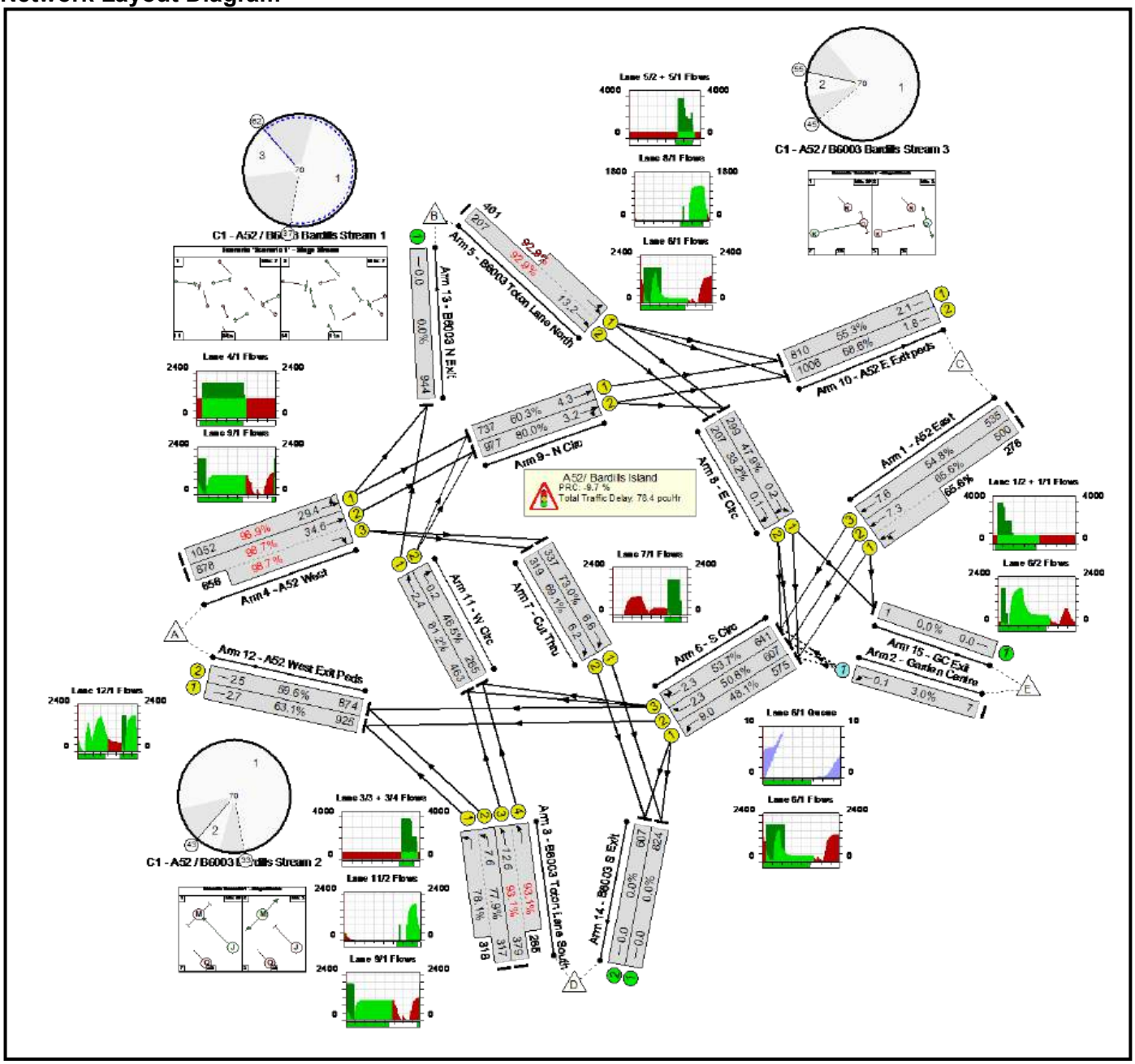
Signal Timings Diagram



Lane Green Times

Junction: A52/ Bardills Island					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	A52 East Ahead Left	U	F	2	37
1/2	A52 East Ahead	U	F	2	37
1/3	A52 East Ahead	U	F	2	37
3/1	B6003 Toton Lane South Left	U	H	51	65
3/2	B6003 Toton Lane South Left	U	H	51	65
3/3	B6003 Toton Lane South Ahead	U	H	51	65
3/4	B6003 Toton Lane South Ahead	U	H	51	65
4/1	A52 West Ahead Left	U	B	3	42
4/2	A52 West Ahead	U	B	3	42
4/3	A52 West Right	U	B	3	42
5/1	B6003 Toton Lane North Ahead Left	U	D	46	62
5/2	B6003 Toton Lane North Ahead	U	D	46	62
6/1	S Circ Left	U	G	1	44
6/2	S Circ Ahead	U	G	1	44
6/3	S Circ Right Ahead	U	G	1	44
7/1	Cut Thru Ahead	U	I	49	65
7/2	Cut Thru Ahead	U	I	49	65
8/1	E Circ Right Ahead	U	E	43	65
8/2	E Circ Right	U	E	43	65
9/1	N Circ Ahead	U	C	67	41
9/2	N Circ Right Ahead	U	C	67	41
10/1	A52 E Exit peds	U	K	62	45
10/2	A52 E Exit peds	U	K	62	45
11/1	W Circ Ahead	U	A	48	68
11/2	W Circ Right	U	A	48	68
12/1	A52 West Exit Peds	U	J	50	33
12/2	A52 West Exit Peds	U	J	50	33

Network Layout Diagram



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)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 / Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**98.7%**
A52/ Bardills Island	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**98.7%**
1/2+1/1	A52 East Ahead Left	U	1	N/A	F		1	35	-	-	776	1900:1900	762+421	65.6 : 65.6%
1/3	A52 East Ahead	U	1	N/A	F		1	35	-	-	535	1900	977	54.8%
2/1	Garden Centre Left	O	N/A	N/A	-		-	-	-	-	7	1800	236	3.0%
3/2+3/1	B6003 Toton Lane South Left	U	1	N/A	H		1	14	-	-	635	1900:1900	407+407	77.9 : 78.1%
3/3+3/4	B6003 Toton Lane South Ahead	U	1	N/A	H		1	14	-	-	644	1900:1900	407+285	93.1 : 93.1%
4/1	A52 West Ahead Left	U	1	N/A	B		1	39	-	-	1052	1900	1086	96.9%
4/2+4/3	A52 West Right Ahead	U	1	N/A	B		1	39	-	-	1534	1900:1900	890+665	98.7 : 98.7%
5/2+5/1	B6003 Toton Lane North Ahead Left	U	1	N/A	D		1	16	-	-	608	1900:1900	223+432	92.9 : 92.9%
6/1	S Circ Left	U	1	N/A	G		1	43	-	-	575	1900	1194	48.1%
6/2	S Circ Ahead	U	1	N/A	G		1	43	-	-	607	1900	1194	50.8%
6/3	S Circ Right Ahead	U	1	N/A	G		1	43	-	-	641	1900	1194	53.7%
7/1	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	337	1900	461	73.0%
7/2	Cut Thru Ahead	U	1	N/A	I		1	16	-	-	319	1900	461	69.1%

8/1	E Circ Right Ahead	U	1	N/A	E		1	22	-	-	299	1900	624	47.9%
8/2	E Circ Right	U	1	N/A	E		1	22	-	-	207	1900	624	33.2%
9/1	N Circ Ahead	U	1	N/A	C		1	44	-	-	737	1900	1221	60.3%
9/2	N Circ Right Ahead	U	1	N/A	C		1	44	-	-	977	1900	1221	80.0%
10/1	A52 E Exit peds	U	3	N/A	K		1	53	-	-	810	1900	1466	55.3%
10/2	A52 E Exit peds	U	3	N/A	K		1	53	-	-	1006	1900	1466	68.6%
11/1	W Circ Ahead	U	1	N/A	A		1	20	-	-	463	1900	570	81.2%
11/2	W Circ Right	U	1	N/A	A		1	20	-	-	265	1900	570	46.5%
12/1	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	925	1900	1466	63.1%
12/2	A52 West Exit Peds	U	2	N/A	J		1	53	-	-	874	1900	1466	59.6%
13/1	B6003 N Exit	U	N/A	N/A	-		-	-	-	-	944	Inf	Inf	0.0%
14/1	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	624	Inf	Inf	0.0%
14/2	B6003 S Exit	U	N/A	N/A	-		-	-	-	-	607	Inf	Inf	0.0%
15/1	GC Exit	U	N/A	N/A	-		-	-	-	-	1	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	Item
Network: A52 / Bardills Island	**-**	**-**	**2**	**5**	**0**	**37.6**	**40.8**	**0.0**	**78.4**	**-**	**-**	**-**	**-**	**Network: A52 / Bardills Island**
A52/ Bardills Island	**-**	**-**	**2**	**5**	**0**	**37.6**	**40.8**	**0.0**	**78.4**	**-**	**-**	**-**	**-**	**A52/ Bardills Island**
1/2+1/1	776	776	-	-	-	2.3	0.9	-	3.2	15.1	6.4	0.9	7.3	1/2+1/1
1/3	535	535	-	-	-	1.7	0.6	-	2.3	15.6	7.0	0.6	7.6	1/3
2/1	7	7	2	5	0	0.0	0.0	-	0.0	19.2	0.1	0.0	0.1	2/1
3/2+3/1	635	635	-	-	-	4.6	1.7	-	6.3	35.8	5.8	1.7	7.6	3/2+3/1
3/3+3/4	644	644	-	-	-	4.7	5.5	-	10.2	56.8	7.2	5.5	12.6	3/3+3/4
4/1	1052	1052	-	-	-	4.2	9.8	-	14.1	48.1	19.6	9.8	29.4	4/1
4/2+4/3	1534	1534	-	-	-	4.8	15.2	-	20.0	46.9	19.4	15.2	34.6	4/2+4/3
5/2+5/1	608	608	-	-	-	4.1	5.3	-	9.5	56.0	7.8	5.3	13.2	5/2+5/1
6/1	575	575	-	-	-	1.2	0.0	-	1.2	7.7	9.0	0.0	9.0	6/1
6/2	607	607	-	-	-	0.4	0.0	-	0.4	2.6	2.3	0.0	2.3	6/2
6/3	641	641	-	-	-	0.4	0.0	-	0.4	2.5	2.3	0.0	2.3	6/3
7/1	337	337	-	-	-	2.7	0.0	-	2.7	28.9	6.6	0.0	6.6	7/1
7/2	319	319	-	-	-	2.7	0.0	-	2.7	30.0	6.2	0.0	6.2	7/2
8/1	299	299	-	-	-	0.1	0.0	-	0.1	1.2	0.2	0.0	0.2	8/1
8/2	207	207	-	-	-	0.0	0.0	-	0.0	0.8	0.1	0.0	0.1	8/2
9/1	737	737	-	-	-	0.7	0.0	-	0.7	3.5	4.3	0.0	4.3	9/1
9/2	977	977	-	-	-	0.6	0.0	-	0.6	2.3	3.2	0.0	3.2	9/2
10/1	810	810	-	-	-	0.2	0.6	-	0.8	3.4	1.5	0.6	2.1	10/1
10/2	1006	1006	-	-	-	0.1	1.1	-	1.2	4.2	0.7	1.1	1.8	10/2
11/1	463	463	-	-	-	1.1	0.0	-	1.1	8.4	2.4	0.0	2.4	11/1

11/2	265	265	-	-	-	0.1	0.0	-	0.1	2.0	0.2	0.0	0.2	11/2
12/1	925	925	-	-	-	0.4	0.0	-	0.4	1.5	2.7	0.0	2.7	12/1
12/2	874	874	-	-	-	0.3	0.0	-	0.3	1.4	2.5	0.0	2.5	12/2
13/1	944	944	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	13/1
14/1	624	624	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/1
14/2	607	607	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	14/2
15/1	1	1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	15/1

C1 - A52 / B6003 Bardills	Stream: 1 PRC for Signalled Lanes (%):	-9.7	Total Delay for Signalled Lanes (pcuHr):	75.73	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 2 PRC for Signalled Lanes (%):	42.6	Total Delay for Signalled Lanes (pcuHr):	0.73	Cycle Time (s): 70
C1 - A52 / B6003 Bardills	Stream: 3 PRC for Signalled Lanes (%):	31.1	Total Delay for Signalled Lanes (pcuHr):	1.95	Cycle Time (s): 70
	PRC Over All Lanes (%):	-9.7	Total Delay Over All Lanes(pcuHr):	78.44	

Junctions 11

PICADY 11 - Priority Intersection Module

Version: 11.2.0.2510
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Filename: S1 B6464 Chilwell Road and Imperial Road.j11
Path: C:\Users\BirminghamShared\mode Dropbox\Project\Birmingham\2. Projects\J329690_Toton West, Broxtowe (Inquiry)\4. Data\Junction Modelling\Scenario 1 Local Models With Furnessed Flows
Report generation date: 11/08/2026 15:50:07

»D5 - 2041 | Reference Case | AM
»D6 - 2041 | Reference Case | PM
»D7 - 2041 | Do Something | AM
»D8 - 2041 | Do Something | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2041 - Reference Case									
Stream B-AC	D5	0.1	8.36	0.13	A	D6	0.2	8.14	0.16	A
Stream C-AB		0.2	6.06	0.10	A		0.3	4.41	0.13	A
	2041 - Do Something									
Stream B-AC	D7	0.1	8.45	0.12	A	D8	0.2	8.38	0.15	A
Stream C-AB		0.2	6.20	0.10	A		0.3	4.39	0.12	A

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

File summary

File Description

Title	
Location	
Site number	
Date	20/07/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\BirminghamShared
Description	

Units

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

Analysis Options

PICADY short flare model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 11.1			0.85	36.00	20.00

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Locked
D5	2041	Reference Case	AM	ONE HOUR	07:45	09:15	15	
D6	2041	Reference Case	PM	ONE HOUR	16:45	18:15	15	
D7	2041	Do Something	AM	ONE HOUR	07:45	09:15	15	
D8	2041	Do Something	PM	ONE HOUR	16:45	18:15	15	

Analysis Set Details

ID	Locked	Network flow scaling factor (%)
A1		100.000

D5 - 2041 | Reference Case | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way	0.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.91	A

Arms

Arms

Arm	Name	Arm type
A	B6464 Chilwell Road SW	Major
B	Imperial Road	Minor
C	B6464 Chilwell Road NE	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - B6464 Chilwell Road NE	7.30			246.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Imperial Road	One lane	5.00	16	23

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	593	0.101	0.256	0.161	0.366
B-C	766	0.111	0.281	-	-
C-B	716	0.262	0.262	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Locked
D5	2041	Reference Case	AM	ONE HOUR	07:45	09:15	15	

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B6464 Chilwell Road SW		✓	602	100.000
B - Imperial Road		✓	57	100.000
C - B6464 Chilwell Road NE		✓	236	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B6464 Chilwell Road SW	B - Imperial Road	C - B6464 Chilwell Road NE
From	A - B6464 Chilwell Road SW	0	32	570
	B - Imperial Road	12	0	45
	C - B6464 Chilwell Road NE	195	41	0

Vehicle Mix

Default Turning Proportions

Heavy Vehicle %

		To		
		A - B6464 Chilwell Road SW	B - Imperial Road	C - B6464 Chilwell Road NE
From	A - B6464 Chilwell Road SW	0	6	5
	B - Imperial Road	0	0	6
	C - B6464 Chilwell Road NE	9	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.13	8.36	0.1	A
C-AB	0.10	6.06	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	0.00	557	0.077	43	0.1	6.996	A
C-AB	40	0.00	665	0.060	39	0.1	5.748	A
C-A	138	0.00			138			
A-B	24	0.00			24			
A-C	429	0.00			429			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	0.00	530	0.097	51	0.1	7.511	A
C-AB	50	0.00	663	0.076	50	0.1	5.867	A
C-A	162	0.00			162			
A-B	29	0.00			29			
A-C	512	0.00			512			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	0.00	493	0.127	63	0.1	8.358	A
C-AB	67	0.00	662	0.101	67	0.2	6.049	A
C-A	193	0.00			193			
A-B	35	0.00			35			
A-C	628	0.00			628			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	0.00	493	0.127	63	0.1	8.364	A
C-AB	67	0.00	662	0.101	67	0.2	6.062	A
C-A	193	0.00			193			
A-B	35	0.00			35			
A-C	628	0.00			628			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	0.00	530	0.097	51	0.1	7.519	A
C-AB	50	0.00	663	0.076	50	0.1	5.892	A
C-A	162	0.00			162			
A-B	29	0.00			29			
A-C	512	0.00			512			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	0.00	557	0.077	43	0.1	7.007	A
C-AB	40	0.00	665	0.060	40	0.1	5.768	A
C-A	138	0.00			138			
A-B	24	0.00			24			
A-C	429	0.00			429			

D6 - 2041 | Reference Case | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way	1.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.08	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Locked
D6	2041	Reference Case	PM	ONE HOUR	16:45	18:15	15	

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B6464 Chilwell Road SW		✓	312	100.000
B - Imperial Road		✓	74	100.000
C - B6464 Chilwell Road NE		✓	546	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B6464 Chilwell Road SW	B - Imperial Road	C - B6464 Chilwell Road NE
From	A - B6464 Chilwell Road SW	0	9	303
	B - Imperial Road	28	0	46
	C - B6464 Chilwell Road NE	498	48	0

Vehicle Mix

Default Turning Proportions

Heavy Vehicle %

		To		
		A - B6464 Chilwell Road SW	B - Imperial Road	C - B6464 Chilwell Road NE
From	A - B6464 Chilwell Road SW	0	5	5
	B - Imperial Road	1	0	0
	C - B6464 Chilwell Road NE	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	8.14	0.2	A
C-AB	0.13	4.41	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	0.00	578	0.096	55	0.1	6.880	A
C-AB	63	0.00	882	0.071	62	0.1	4.393	A
C-A	348	0.00			348			
A-B	7	0.00			7			
A-C	228	0.00			228			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	0.00	556	0.120	66	0.1	7.357	A
C-AB	84	0.00	919	0.092	84	0.2	4.313	A
C-A	406	0.00			406			
A-B	8	0.00			8			
A-C	272	0.00			272			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	0.00	524	0.156	81	0.2	8.132	A
C-AB	122	0.00	971	0.126	121	0.3	4.237	A
C-A	479	0.00			479			
A-B	10	0.00			10			
A-C	334	0.00			334			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	0.00	524	0.156	81	0.2	8.140	A
C-AB	122	0.00	971	0.126	122	0.3	4.245	A
C-A	479	0.00			479			
A-B	10	0.00			10			
A-C	334	0.00			334			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	0.00	555	0.120	67	0.1	7.370	A
C-AB	85	0.00	919	0.092	85	0.2	4.327	A
C-A	406	0.00			406			
A-B	8	0.00			8			
A-C	272	0.00			272			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	0.00	578	0.096	56	0.1	6.899	A
C-AB	63	0.00	882	0.072	63	0.1	4.405	A
C-A	348	0.00			348			
A-B	7	0.00			7			
A-C	228	0.00			228			

D7 - 2041 | Do Something | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way	0.88	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.88	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Locked
D7	2041	Do Something	AM	ONE HOUR	07:45	09:15	15	

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B6464 Chilwell Road SW		✓	609	100.000
B - Imperial Road		✓	52	100.000
C - B6464 Chilwell Road NE		✓	228	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B6464 Chilwell Road SW	B - Imperial Road	C - B6464 Chilwell Road NE
From	A - B6464 Chilwell Road SW	0	29	580
	B - Imperial Road	12	0	40
	C - B6464 Chilwell Road NE	188	40	0

Vehicle Mix

Default Turning Proportions

Heavy Vehicle %

		To		
		A - B6464 Chilwell Road SW	B - Imperial Road	C - B6464 Chilwell Road NE
From	A - B6464 Chilwell Road SW	0	5	5
	B - Imperial Road	0	0	7
	C - B6464 Chilwell Road NE	9	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.12	8.45	0.1	A
C-AB	0.10	6.20	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	0.00	548	0.071	39	0.1	7.068	A
C-AB	38	0.00	651	0.059	38	0.1	5.874	A
C-A	133	0.00			133			
A-B	22	0.00			22			
A-C	437	0.00			437			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	0.00	521	0.090	47	0.1	7.590	A
C-AB	49	0.00	648	0.075	49	0.1	6.001	A
C-A	156	0.00			156			
A-B	26	0.00			26			
A-C	521	0.00			521			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	0.00	484	0.118	57	0.1	8.440	A
C-AB	65	0.00	646	0.101	65	0.2	6.192	A
C-A	186	0.00			186			
A-B	32	0.00			32			
A-C	639	0.00			639			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	0.00	483	0.118	57	0.1	8.445	A
C-AB	65	0.00	646	0.101	65	0.2	6.199	A
C-A	186	0.00			186			
A-B	32	0.00			32			
A-C	639	0.00			639			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	0.00	521	0.090	47	0.1	7.595	A
C-AB	49	0.00	648	0.075	49	0.1	6.019	A
C-A	156	0.00			156			
A-B	26	0.00			26			
A-C	521	0.00			521			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	0.00	548	0.071	39	0.1	7.082	A
C-AB	39	0.00	651	0.059	39	0.1	5.890	A
C-A	133	0.00			133			
A-B	22	0.00			22			
A-C	437	0.00			437			

D8 - 2041 | Do Something | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way	1.04	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.04	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Locked
D8	2041	Do Something	PM	ONE HOUR	16:45	18:15	15	

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B6464 Chilwell Road SW		✓	324	100.000
B - Imperial Road		✓	71	100.000
C - B6464 Chilwell Road NE		✓	543	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B6464 Chilwell Road SW	B - Imperial Road	C - B6464 Chilwell Road NE
From	A - B6464 Chilwell Road SW	0	8	316
	B - Imperial Road	30	0	41
	C - B6464 Chilwell Road NE	498	45	0

Vehicle Mix

Default Turning Proportions

Heavy Vehicle %

		To		
		A - B6464 Chilwell Road SW	B - Imperial Road	C - B6464 Chilwell Road NE
From	A - B6464 Chilwell Road SW	0	6	5
	B - Imperial Road	1	0	0
	C - B6464 Chilwell Road NE	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.15	8.38	0.2	A
C-AB	0.12	4.39	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	53	0.00	564	0.095	53	0.1	7.033	A
C-AB	59	0.00	880	0.067	59	0.1	4.383	A
C-A	350	0.00			350			
A-B	6	0.00			6			
A-C	238	0.00			238			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	64	0.00	541	0.118	64	0.1	7.540	A
C-AB	79	0.00	916	0.087	79	0.2	4.300	A
C-A	409	0.00			409			
A-B	7	0.00			7			
A-C	284	0.00			284			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	0.00	508	0.154	78	0.2	8.373	A
C-AB	115	0.00	969	0.118	114	0.3	4.215	A
C-A	483	0.00			483			
A-B	9	0.00			9			
A-C	348	0.00			348			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	0.00	508	0.154	78	0.2	8.381	A
C-AB	115	0.00	969	0.119	115	0.3	4.220	A
C-A	483	0.00			483			
A-B	9	0.00			9			
A-C	348	0.00			348			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	64	0.00	541	0.118	64	0.1	7.554	A
C-AB	80	0.00	917	0.087	80	0.2	4.313	A
C-A	409	0.00			409			
A-B	7	0.00			7			
A-C	284	0.00			284			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	53	0.00	564	0.095	54	0.1	7.049	A
C-AB	59	0.00	880	0.067	60	0.1	4.394	A
C-A	350	0.00			350			
A-B	6	0.00			6			
A-C	238	0.00			238			

Junctions 11

PICADY 11 - Priority Intersection Module

Version: 11.2.0.2510
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Filename: S1 Nottingham Road and Barratt Lane.j11
Path: C:\Users\BirminghamShared\mode Dropbox\Project\Birmingham\2. Projects\J329690_Toton West, Broxtowe (Inquiry)\4. Data\Junction Modelling\Scenario 1 Local Models With Furnessed Flows
Report generation date: 11/08/2026 15:51:53

»D5 - 2041 | Reference Case | AM
»D6 - 2041 | Reference Case | PM
»D7 - 2041 | Do Something | AM
»D8 - 2041 | Do Something | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2041 - Reference Case									
Stream B-AC	D5	0.3	11.40	0.21	B	D6	0.2	10.78	0.16	B
Stream C-AB		0.2	8.96	0.14	A		0.2	10.84	0.20	B
	2041 - Do Something									
Stream B-AC	D7	0.2	11.31	0.18	B	D8	0.2	10.96	0.15	B
Stream C-AB		0.2	9.37	0.17	A		0.2	10.94	0.19	B

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

File summary

File Description

Title	
Location	
Site number	
Date	20/07/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\BirminghamShared
Description	

Units

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

Analysis Options

PICADY short flare model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 11.1			0.85	36.00	20.00

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Locked
D5	2041	Reference Case	AM	ONE HOUR	07:45	09:15	15	
D6	2041	Reference Case	PM	ONE HOUR	16:45	18:15	15	
D7	2041	Do Something	AM	ONE HOUR	07:45	09:15	15	
D8	2041	Do Something	PM	ONE HOUR	16:45	18:15	15	

Analysis Set Details

ID	Locked	Network flow scaling factor (%)
A1		100.000

D5 - 2041 | Reference Case | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way	0.67	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.67	A

Arms

Arms

Arm	Name	Arm type
A	A6005 Nottingham Road NE	Major
B	Barratt Lane	Minor
C	A6005 Nottingham Road SW	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A6005 Nottingham Road SW	11.55		✓	2.40	154.2	✓	5.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Barratt Lane	One lane	3.56	130	23

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	561	0.075	0.190	0.119	0.271
B-C	674	0.081	0.204	-	-
C-B	678	0.199	0.199	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Locked
D5	2041	Reference Case	AM	ONE HOUR	07:45	09:15	15	

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A6005 Nottingham Road NE		✓	822	100.000
B - Barratt Lane		✓	74	100.000
C - A6005 Nottingham Road SW		✓	1164	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A6005 Nottingham Road NE	B - Barratt Lane	C - A6005 Nottingham Road SW
From	A - A6005 Nottingham Road NE	0	21	801
	B - Barratt Lane	10	0	64
	C - A6005 Nottingham Road SW	1107	57	0

Vehicle Mix

Default Turning Proportions

Heavy Vehicle %

		To		
		A - A6005 Nottingham Road NE	B - Barratt Lane	C - A6005 Nottingham Road SW
From	A - A6005 Nottingham Road NE	0	0	3
	B - Barratt Lane	14	0	2
	C - A6005 Nottingham Road SW	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.21	11.40	0.3	B
C-AB	0.14	8.96	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	0.00	479	0.116	55	0.1	8.482	A
C-AB	43	0.00	520	0.083	43	0.1	7.541	A
C-A	833	0.00			833			
A-B	16	0.00			16			
A-C	603	0.00			603			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	0.00	446	0.149	66	0.2	9.470	A
C-AB	51	0.00	496	0.103	51	0.1	8.082	A
C-A	995	0.00			995			
A-B	19	0.00			19			
A-C	720	0.00			720			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	0.00	397	0.205	81	0.3	11.376	B
C-AB	63	0.00	464	0.135	63	0.2	8.955	A
C-A	1219	0.00			1219			
A-B	23	0.00			23			
A-C	882	0.00			882			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	0.00	397	0.205	81	0.3	11.399	B
C-AB	63	0.00	464	0.135	63	0.2	8.962	A
C-A	1219	0.00			1219			
A-B	23	0.00			23			
A-C	882	0.00			882			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	0.00	446	0.149	67	0.2	9.494	A
C-AB	51	0.00	496	0.103	51	0.1	8.091	A
C-A	995	0.00			995			
A-B	19	0.00			19			
A-C	720	0.00			720			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	0.00	479	0.116	56	0.1	8.511	A
C-AB	43	0.00	520	0.083	43	0.1	7.553	A
C-A	833	0.00			833			
A-B	16	0.00			16			
A-C	603	0.00			603			

D6 - 2041 | Reference Case | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way	0.57	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.57	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Locked
D6	2041	Reference Case	PM	ONE HOUR	16:45	18:15	15	

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A6005 Nottingham Road NE		✓	1182	100.000
B - Barratt Lane		✓	56	100.000
C - A6005 Nottingham Road SW		✓	1216	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A6005 Nottingham Road NE	B - Barratt Lane	C - A6005 Nottingham Road SW
From	A - A6005 Nottingham Road NE	0	4	1178
	B - Barratt Lane	0	0	56
	C - A6005 Nottingham Road SW	1142	74	0

Vehicle Mix

Default Turning Proportions

Heavy Vehicle %

		To		
		A - A6005 Nottingham Road NE	B - Barratt Lane	C - A6005 Nottingham Road SW
From	A - A6005 Nottingham Road NE	0	0	2
	B - Barratt Lane	0	0	2
	C - A6005 Nottingham Road SW	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	10.78	0.2	B
C-AB	0.20	10.84	0.2	B
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	0.00	479	0.088	42	0.1	8.219	A
C-AB	56	0.00	497	0.112	55	0.1	8.141	A
C-A	860	0.00			860			
A-B	3	0.00			3			
A-C	887	0.00			887			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	0.00	444	0.113	50	0.1	9.134	A
C-AB	67	0.00	462	0.144	66	0.2	9.097	A
C-A	1027	0.00			1027			
A-B	4	0.00			4			
A-C	1059	0.00			1059			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	62	0.00	395	0.156	61	0.2	10.770	B
C-AB	82	0.00	414	0.197	81	0.2	10.818	B
C-A	1257	0.00			1257			
A-B	4	0.00			4			
A-C	1297	0.00			1297			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	62	0.00	395	0.156	62	0.2	10.783	B
C-AB	82	0.00	414	0.197	82	0.2	10.837	B
C-A	1257	0.00			1257			
A-B	4	0.00			4			
A-C	1297	0.00			1297			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	0.00	444	0.113	51	0.1	9.151	A
C-AB	67	0.00	462	0.144	67	0.2	9.118	A
C-A	1027	0.00			1027			
A-B	4	0.00			4			
A-C	1059	0.00			1059			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	0.00	479	0.088	42	0.1	8.239	A
C-AB	56	0.00	497	0.112	56	0.1	8.166	A
C-A	860	0.00			860			
A-B	3	0.00			3			
A-C	887	0.00			887			

D7 - 2041 | Do Something | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way	0.64	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.64	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Locked
D7	2041	Do Something	AM	ONE HOUR	07:45	09:15	15	

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A6005 Nottingham Road NE		✓	858	100.000
B - Barratt Lane		✓	65	100.000
C - A6005 Nottingham Road SW		✓	1264	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A6005 Nottingham Road NE	B - Barratt Lane	C - A6005 Nottingham Road SW
From	A - A6005 Nottingham Road NE	0	3	855
	B - Barratt Lane	7	0	58
	C - A6005 Nottingham Road SW	1194	70	0

Vehicle Mix

Default Turning Proportions

Heavy Vehicle %

		To		
		A - A6005 Nottingham Road NE	B - Barratt Lane	C - A6005 Nottingham Road SW
From	A - A6005 Nottingham Road NE	0	0	3
	B - Barratt Lane	20	0	1
	C - A6005 Nottingham Road SW	3	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.18	11.31	0.2	B
C-AB	0.17	9.37	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	0.00	478	0.102	48	0.1	8.371	A
C-AB	53	0.00	519	0.101	52	0.1	7.702	A
C-A	899	0.00			899			
A-B	2	0.00			2			
A-C	644	0.00			644			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	0.00	443	0.132	58	0.2	9.344	A
C-AB	63	0.00	495	0.127	63	0.1	8.330	A
C-A	1073	0.00			1073			
A-B	3	0.00			3			
A-C	769	0.00			769			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	72	0.00	390	0.184	71	0.2	11.286	B
C-AB	77	0.00	461	0.167	77	0.2	9.364	A
C-A	1315	0.00			1315			
A-B	3	0.00			3			
A-C	941	0.00			941			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	72	0.00	390	0.184	72	0.2	11.307	B
C-AB	77	0.00	461	0.167	77	0.2	9.374	A
C-A	1315	0.00			1315			
A-B	3	0.00			3			
A-C	941	0.00			941			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	0.00	443	0.132	59	0.2	9.369	A
C-AB	63	0.00	495	0.127	63	0.1	8.343	A
C-A	1073	0.00			1073			
A-B	3	0.00			3			
A-C	769	0.00			769			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	0.00	478	0.102	49	0.1	8.394	A
C-AB	53	0.00	519	0.102	53	0.1	7.720	A
C-A	899	0.00			899			
A-B	2	0.00			2			
A-C	644	0.00			644			

D8 - 2041 | Do Something | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way	0.54	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.54	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Locked
D8	2041	Do Something	PM	ONE HOUR	16:45	18:15	15	

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A6005 Nottingham Road NE		✓	1216	100.000
B - Barratt Lane		✓	54	100.000
C - A6005 Nottingham Road SW		✓	1233	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A6005 Nottingham Road NE	B - Barratt Lane	C - A6005 Nottingham Road SW
From	A - A6005 Nottingham Road NE	0	4	1212
	B - Barratt Lane	0	0	54
	C - A6005 Nottingham Road SW	1163	70	0

Vehicle Mix

Default Turning Proportions

Heavy Vehicle %

		To		
		A - A6005 Nottingham Road NE	B - Barratt Lane	C - A6005 Nottingham Road SW
From	A - A6005 Nottingham Road NE	0	0	2
	B - Barratt Lane	0	0	2
	C - A6005 Nottingham Road SW	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.15	10.96	0.2	B
C-AB	0.19	10.94	0.2	B
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	0.00	474	0.086	40	0.1	8.290	A
C-AB	53	0.00	492	0.107	52	0.1	8.183	A
C-A	876	0.00			876			
A-B	3	0.00			3			
A-C	912	0.00			912			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	0.00	438	0.111	48	0.1	9.238	A
C-AB	63	0.00	456	0.138	63	0.2	9.158	A
C-A	1046	0.00			1046			
A-B	4	0.00			4			
A-C	1090	0.00			1090			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	0.00	388	0.153	59	0.2	10.947	B
C-AB	77	0.00	406	0.190	77	0.2	10.925	B
C-A	1280	0.00			1280			
A-B	4	0.00			4			
A-C	1334	0.00			1334			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	0.00	388	0.153	59	0.2	10.962	B
C-AB	77	0.00	406	0.190	77	0.2	10.944	B
C-A	1280	0.00			1280			
A-B	4	0.00			4			
A-C	1334	0.00			1334			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	0.00	438	0.111	49	0.1	9.256	A
C-AB	63	0.00	456	0.138	63	0.2	9.179	A
C-A	1046	0.00			1046			
A-B	4	0.00			4			
A-C	1090	0.00			1090			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	0.00	474	0.086	41	0.1	8.309	A
C-AB	53	0.00	492	0.107	53	0.1	8.207	A
C-A	876	0.00			876			
A-B	3	0.00			3			
A-C	912	0.00			912			

Full Input Data And Results

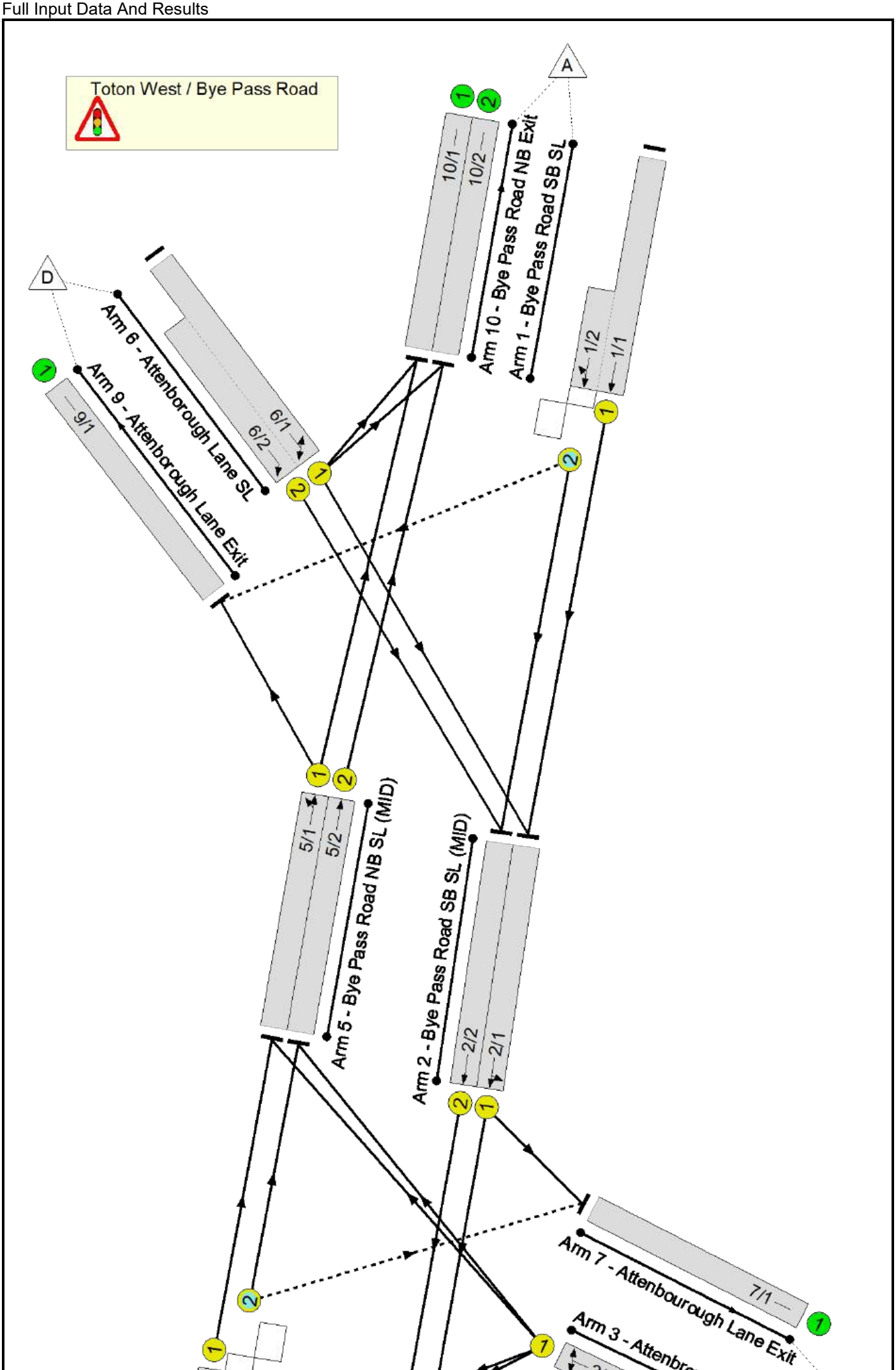
User and Project Details

Project:	**Toton - West**
Title:	**Bye Pass Road / Attenbrough Lane**
Location:	
Date Started:	27.07.26
Model Purpose:	Existing Model
Additional detail:	
File name:	S1 Bye Pass Road Attenborough Road.lsg3x
Author:	
Company:	
Address:	

Full Input Data And Results

Network Layout Diagram

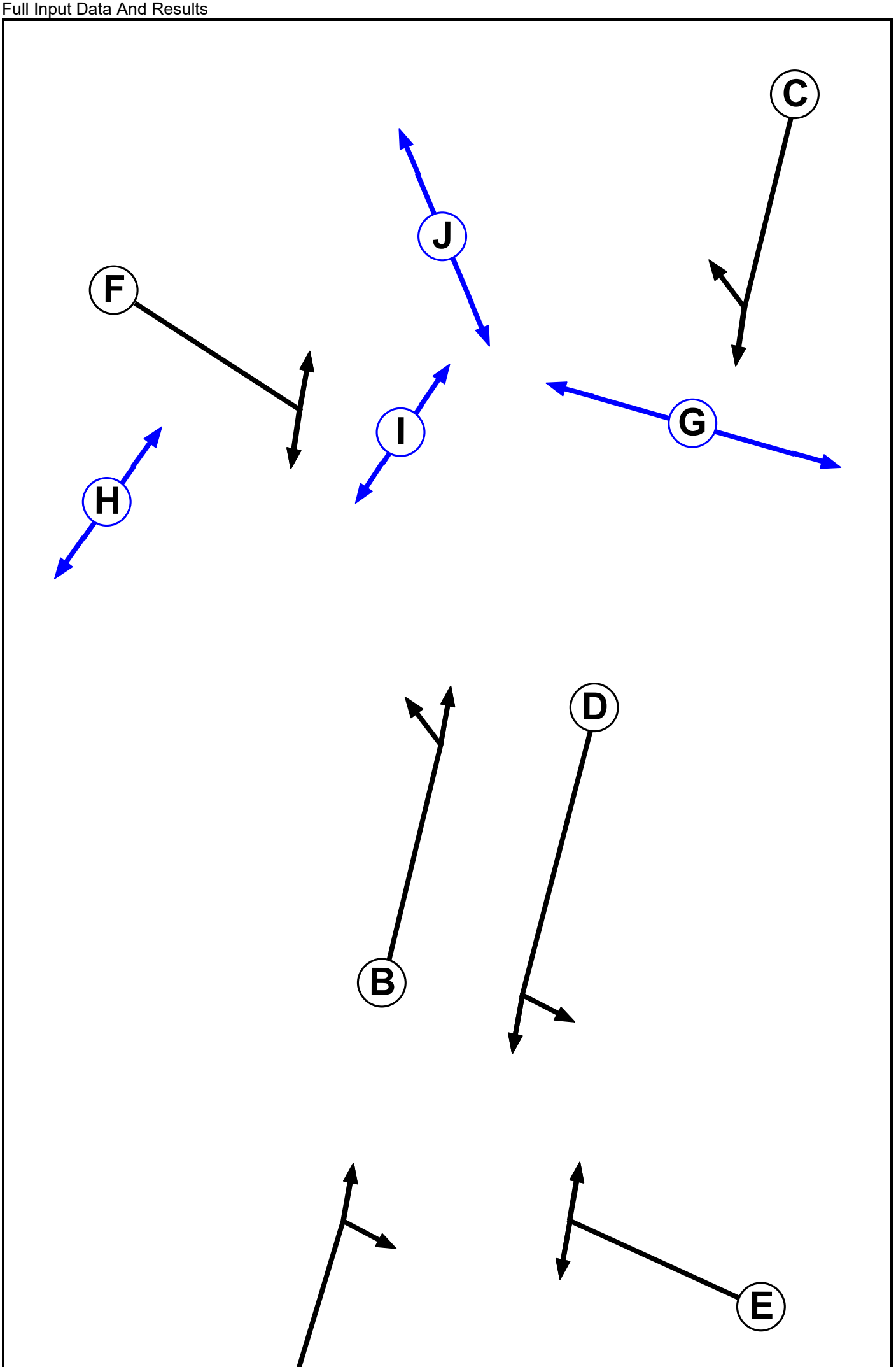
Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Phase Diagram


C
J
F
I
G
H
D
B
E

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	1
C	Traffic		7	7
D	Traffic		7	1
E	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		5	5
H	Pedestrian		5	5
I	Pedestrian		5	0
J	Pedestrian		5	0

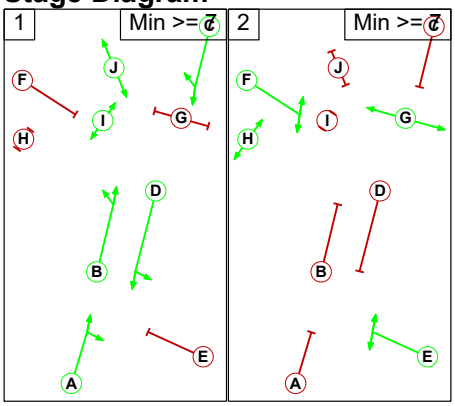
Phase Intergreens Matrix

		Starting Phase									
		A	B	C	D	E	F	G	H	I	J
Terminating Phase	A		-	-	-	13	-	14	14	-	-
	B	-		-	-	-	8	8	8	-	-
	C	-	-		-	-	14	14	14	-	-
	D	-	-	-		7	-	8	8	-	-
	E	5	-	-	5		-	-	-	-	-
	F	-	5	5	-	-		-	-	5	5
	G	15	15	15	15	-	-		-	-	-
	H	7	7	7	7	-	-	-		-	-
	I	-	-	-	-	-	7	-	-		-
	J	-	-	-	-	-	8	-	-	-	

Phases in Stage

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

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	B	Losing	6	6
1	2	D	Losing	6	6
1	2	I	Losing	6	6
1	2	J	Losing	6	6

Prohibited Stage Change

		To Stage	
		1	2
From Stage	1		14
	2	15	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Toton West / Bye Pass Road											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
1/2 (Bye Pass Road SB SL)	9/1 (Right)	1439	0	5/1	1.09	All	3.00	2.00	0.50	3	3.00
				5/2	1.09	All					
4/2 (Nottingham Road NB SL)	7/1 (Right)	1439	0	2/1	1.09	All	3.00	2.00	0.50	3	3.00
				2/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: Toton West / Bye Pass Road

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Bye Pass Road SB SL)	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 2 Ahead	Inf
1/2 (Bye Pass Road SB SL)	O	C	2	3	5.6	Geom	-	3.25	0.00	N	Arm 2 Ahead	Inf
											Arm 9 Right	10.00
2/1 (Bye Pass Road SB SL (MID))	U	D	2	3	9.9	Geom	-	3.20	0.00	Y	Arm 7 Left	12.00
											Arm 8 Ahead	Inf
2/2 (Bye Pass Road SB SL (MID))	U	D	2	3	9.9	Geom	-	3.10	0.00	N	Arm 8 Ahead	Inf
3/1 (Attenbrough Lane SL)	U	E	2	3	60.0	Geom	-	4.40	0.00	Y	Arm 5 Right	13.00
											Arm 8 Left	11.00
4/1 (Nottingham Road NB SL)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
4/2 (Nottingham Road NB SL)	O	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm 5 Ahead	Inf
											Arm 7 Right	9.00
5/1 (Bye Pass Road NB SL (MID))	U	B	2	3	9.9	Geom	-	3.55	0.00	Y	Arm 9 Left	15.00
											Arm 10 Ahead	Inf
5/2 (Bye Pass Road NB SL (MID))	U	B	2	3	9.9	Geom	-	3.55	0.00	N	Arm 10 Ahead	Inf
6/1 (Attenborough Lane SL)	U	F	2	3	60.0	Geom	-	3.15	0.00	Y	Arm 2 Right	22.00
											Arm 10 Left	11.00
6/2 (Attenborough Lane SL)	U	F	2	3	10.4	Geom	-	3.15	0.00	N	Arm 2 Right	22.00
7/1 (Attenbourough Lane Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Nottingham Road SB Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/2 (Nottingham Road SB Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

9/1 (Attenborough Lane Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1 (Bye Pass Road NB Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2 (Bye Pass Road NB Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Reference Case AM'	08:00	09:00	01:00	
2: '2041 Reference Case PM'	17:00	18:00	01:00	
3: '2041 Do Something AM'	08:00	09:00	01:00	
4: '2041 Do Something PM'	17:00	18:00	01:00	

Scenario 1: 'Scenario 1' (FG1: '2041 Reference Case AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	15	415	29	459
	B	91	0	29	6	126
	C	916	29	0	196	1141
	D	33	48	399	0	480
	Tot.	1040	92	843	231	2206

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: Scenario 1
Junction: Toton West / Bye Pass Road	
1/1 (with short)	459(In) 176(Out)
1/2 (short)	283
2/1	392
2/2	485
3/1	126
4/1	556
4/2	585
5/1	607
5/2	602
6/1 (with short)	480(In) 249(Out)
6/2 (short)	231
7/1	92
8/1	344
8/2	499
9/1	231
10/1	421
10/2	619

Full Input Data And Results

Lane Saturation Flows

Junction: Toton West / Bye Pass Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Bye Pass Road SB SL)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940
1/2 (Bye Pass Road SB SL)	3.25	0.00	N	Arm 2 Ahead	Inf	89.8 %	2049	2049
				Arm 9 Right	10.00	10.2 %		
2/1 (Bye Pass Road SB SL (MID))	3.20	0.00	Y	Arm 7 Left	12.00	16.1 %	1897	1897
				Arm 8 Ahead	Inf	83.9 %		
2/2 (Bye Pass Road SB SL (MID))	3.10	0.00	N	Arm 8 Ahead	Inf	100.0 %	2065	2065
3/1 (Attenbrough Lane SL)	4.40	0.00	Y	Arm 5 Right	13.00	77.0 %	1834	1834
				Arm 8 Left	11.00	23.0 %		
4/1 (Nottingham Road NB SL)	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
4/2 (Nottingham Road NB SL)	3.00	0.00	N	Arm 5 Ahead	Inf	95.0 %	2038	2038
				Arm 7 Right	9.00	5.0 %		
5/1 (Bye Pass Road NB SL (MID))	3.55	0.00	Y	Arm 9 Left	15.00	33.3 %	1907	1907
				Arm 10 Ahead	Inf	66.7 %		
5/2 (Bye Pass Road NB SL (MID))	3.55	0.00	N	Arm 10 Ahead	Inf	100.0 %	2110	2110
6/1 (Attenborough Lane SL)	3.15	0.00	Y	Arm 2 Right	22.00	86.7 %	1792	1792
				Arm 10 Left	11.00	13.3 %		
6/2 (Attenborough Lane SL)	3.15	0.00	N	Arm 2 Right	22.00	100.0 %	1938	1938
7/1 (Attenbourough Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Nottingham Road SB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Nottingham Road SB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Attenborough Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Bye Pass Road NB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Bye Pass Road NB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: 'Scenario 1' (FG2: '2041 Reference Case PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	20	846	32	898
	B	29	0	34	50	113
	C	795	33	0	301	1129
	D	28	53	323	0	404
	Tot.	852	106	1203	383	2544

Traffic Lane Flows

Lane	Scenario 2: Scenario 1
Junction: Toton West / Bye Pass Road	
1/1 (with short)	898(In) 367(Out)
1/2 (short)	531
2/1	552
2/2	690
3/1	113
4/1	555
4/2	574
5/1	606
5/2	569
6/1 (with short)	404(In) 213(Out)
6/2 (short)	191
7/1	106
8/1	496
8/2	707
9/1	383
10/1	269
10/2	583

Full Input Data And Results

Lane Saturation Flows

Junction: Toton West / Bye Pass Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Bye Pass Road SB SL)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940
1/2 (Bye Pass Road SB SL)	3.25	0.00	N	Arm 2 Ahead	Inf	94.0 %	2061	2061
				Arm 9 Right	10.00	6.0 %		
2/1 (Bye Pass Road SB SL (MID))	3.20	0.00	Y	Arm 7 Left	12.00	13.2 %	1904	1904
				Arm 8 Ahead	Inf	86.8 %		
2/2 (Bye Pass Road SB SL (MID))	3.10	0.00	N	Arm 8 Ahead	Inf	100.0 %	2065	2065
3/1 (Attenbrough Lane SL)	4.40	0.00	Y	Arm 5 Right	13.00	69.9 %	1832	1832
				Arm 8 Left	11.00	30.1 %		
4/1 (Nottingham Road NB SL)	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
4/2 (Nottingham Road NB SL)	3.00	0.00	N	Arm 5 Ahead	Inf	94.3 %	2035	2035
				Arm 7 Right	9.00	5.7 %		
5/1 (Bye Pass Road NB SL (MID))	3.55	0.00	Y	Arm 9 Left	15.00	57.9 %	1862	1862
				Arm 10 Ahead	Inf	42.1 %		
5/2 (Bye Pass Road NB SL (MID))	3.55	0.00	N	Arm 10 Ahead	Inf	100.0 %	2110	2110
6/1 (Attenborough Lane SL)	3.15	0.00	Y	Arm 2 Right	22.00	86.9 %	1792	1792
				Arm 10 Left	11.00	13.1 %		
6/2 (Attenborough Lane SL)	3.15	0.00	N	Arm 2 Right	22.00	100.0 %	1938	1938
7/1 (Attenbourough Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Nottingham Road SB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Nottingham Road SB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Attenborough Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Bye Pass Road NB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Bye Pass Road NB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: 'Scenario 1' (FG3: '2041 Do Something AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	15	449	29	493
	B	88	0	35	12	135
	C	988	29	0	211	1228
	D	33	57	396	0	486
	Tot.	1109	101	880	252	2342

Traffic Lane Flows

Lane	Scenario 3: Scenario 1
Junction: Toton West / Bye Pass Road	
1/1 (with short)	493(In) 190(Out)
1/2 (short)	303
2/1	409
2/2	508
3/1	135
4/1	595
4/2	633
5/1	648
5/2	651
6/1 (with short)	486(In) 252(Out)
6/2 (short)	234
7/1	101
8/1	355
8/2	525
9/1	252
10/1	441
10/2	668

Full Input Data And Results

Lane Saturation Flows

Junction: Toton West / Bye Pass Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Bye Pass Road SB SL)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940
1/2 (Bye Pass Road SB SL)	3.25	0.00	N	Arm 2 Ahead	Inf	90.4 %	2051	2051
				Arm 9 Right	10.00	9.6 %		
2/1 (Bye Pass Road SB SL (MID))	3.20	0.00	Y	Arm 7 Left	12.00	17.6 %	1893	1893
				Arm 8 Ahead	Inf	82.4 %		
2/2 (Bye Pass Road SB SL (MID))	3.10	0.00	N	Arm 8 Ahead	Inf	100.0 %	2065	2065
3/1 (Attenbrough Lane SL)	4.40	0.00	Y	Arm 5 Right	13.00	74.1 %	1833	1833
				Arm 8 Left	11.00	25.9 %		
4/1 (Nottingham Road NB SL)	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
4/2 (Nottingham Road NB SL)	3.00	0.00	N	Arm 5 Ahead	Inf	95.4 %	2039	2039
				Arm 7 Right	9.00	4.6 %		
5/1 (Bye Pass Road NB SL (MID))	3.55	0.00	Y	Arm 9 Left	15.00	34.4 %	1904	1904
				Arm 10 Ahead	Inf	65.6 %		
5/2 (Bye Pass Road NB SL (MID))	3.55	0.00	N	Arm 10 Ahead	Inf	100.0 %	2110	2110
6/1 (Attenborough Lane SL)	3.15	0.00	Y	Arm 2 Right	22.00	86.9 %	1792	1792
				Arm 10 Left	11.00	13.1 %		
6/2 (Attenborough Lane SL)	3.15	0.00	N	Arm 2 Right	22.00	100.0 %	1938	1938
7/1 (Attenbourough Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Nottingham Road SB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Nottingham Road SB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Attenborough Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Bye Pass Road NB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Bye Pass Road NB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: 'Scenario 1' (FG4: '2041 Do Something PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	20	879	31	930
	B	29	0	34	50	113
	C	814	34	0	303	1151
	D	28	64	319	0	411
	Tot.	871	118	1232	384	2605

Traffic Lane Flows

Lane	Scenario 4: Scenario 1
Junction: Toton West / Bye Pass Road	
1/1 (with short)	930(In) 386(Out)
1/2 (short)	544
2/1	574
2/2	708
3/1	113
4/1	567
4/2	584
5/1	618
5/2	578
6/1 (with short)	411(In) 216(Out)
6/2 (short)	195
7/1	118
8/1	507
8/2	725
9/1	384
10/1	279
10/2	592

Full Input Data And Results

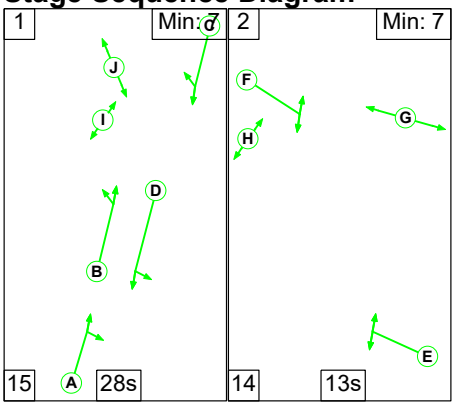
Lane Saturation Flows

Junction: Toton West / Bye Pass Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Bye Pass Road SB SL)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940
1/2 (Bye Pass Road SB SL)	3.25	0.00	N	Arm 2 Ahead	Inf	94.3 %	2062	2062
				Arm 9 Right	10.00	5.7 %		
2/1 (Bye Pass Road SB SL (MID))	3.20	0.00	Y	Arm 7 Left	12.00	14.6 %	1900	1900
				Arm 8 Ahead	Inf	85.4 %		
2/2 (Bye Pass Road SB SL (MID))	3.10	0.00	N	Arm 8 Ahead	Inf	100.0 %	2065	2065
3/1 (Attenbrough Lane SL)	4.40	0.00	Y	Arm 5 Right	13.00	69.9 %	1832	1832
				Arm 8 Left	11.00	30.1 %		
4/1 (Nottingham Road NB SL)	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
4/2 (Nottingham Road NB SL)	3.00	0.00	N	Arm 5 Ahead	Inf	94.2 %	2035	2035
				Arm 7 Right	9.00	5.8 %		
5/1 (Bye Pass Road NB SL (MID))	3.55	0.00	Y	Arm 9 Left	15.00	57.1 %	1864	1864
				Arm 10 Ahead	Inf	42.9 %		
5/2 (Bye Pass Road NB SL (MID))	3.55	0.00	N	Arm 10 Ahead	Inf	100.0 %	2110	2110
6/1 (Attenborough Lane SL)	3.15	0.00	Y	Arm 2 Right	22.00	87.0 %	1792	1792
				Arm 10 Left	11.00	13.0 %		
6/2 (Attenborough Lane SL)	3.15	0.00	N	Arm 2 Right	22.00	100.0 %	1938	1938
7/1 (Attenbourough Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Nottingham Road SB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Nottingham Road SB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Attenborough Lane Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Bye Pass Road NB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Bye Pass Road NB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: 'Scenario 1' (FG1: '2041 Reference Case AM', Plan 1: 'Network Control Plan 1')

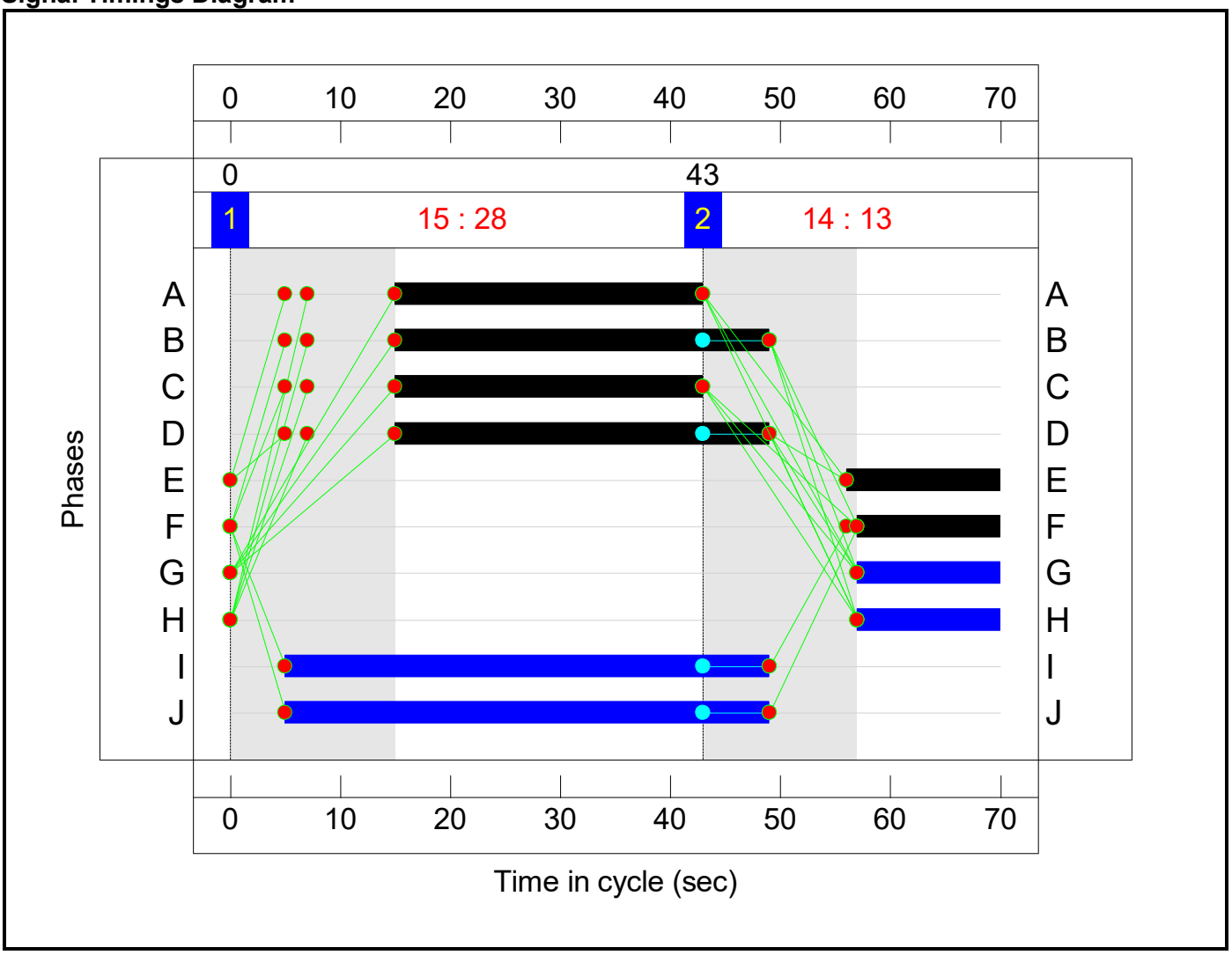
Stage Sequence Diagram



Stage Timings

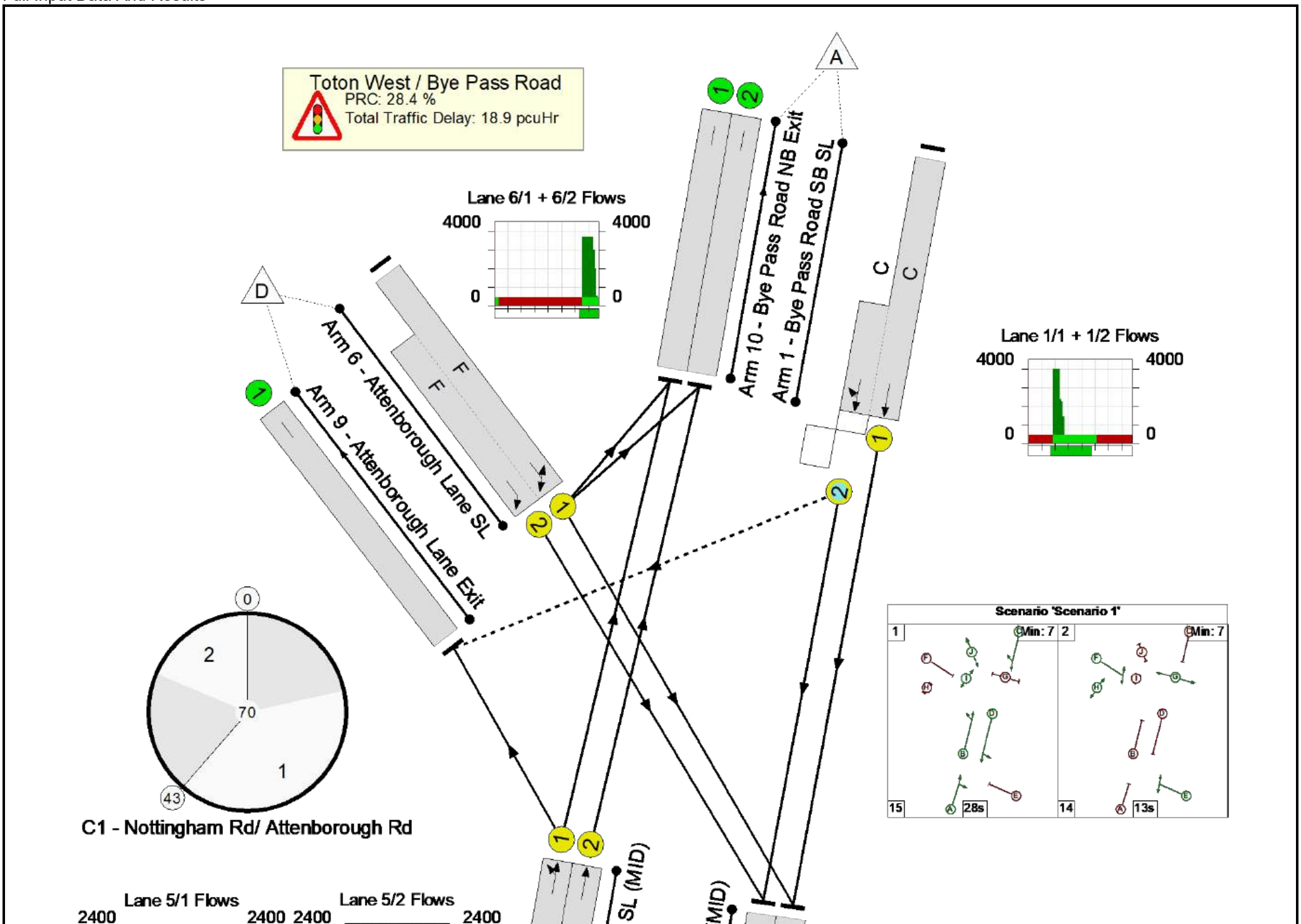
Stage	1	2
Duration	28	13
Change Point	0	43

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram


Toton West / Bye Pass Road
PRC: 28.4 %
Total Traffic Delay: 18.9 pcuHr
Lane 6/1 + 6/2 Flows
4000
0
4000
0
Lane 1/1 + 1/2 Flows
4000
0
4000
0
A
C
C
D
F
F
Arm 10 - Bye Pass Road NB Exit
Arm 1 - Bye Pass Road SB SL
Arm 6 - Attenborough Lane SL
Arm 9 - Attenborough Lane Exit
0
2
70
1
43
C1 - Nottingham Rd/ Attenborough Rd
Scenario 'Scenario 1'
1
Min: 7
2
Min: 7
15
28s
14
13s
Lane 5/1 Flows
2400
2400
2400
Lane 5/2 Flows
2400
SL (MID)
(MID)

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: Bye Pass Road / Attenbrough Lane	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.1%**
Toton West / Bye Pass Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.1%**
1/1+1/2	Bye Pass Road SB SL Ahead Right	U+O	N/A	N/A	C		1	28	-	459	1940:2049	394+633	44.7 : 44.7%
2/1	Bye Pass Road SB SL (MID) Left Ahead	U	N/A	N/A	D		1	34	-	392	1897	948	41.3%
2/2	Bye Pass Road SB SL (MID) Ahead	U	N/A	N/A	D		1	34	-	485	2065	1032	47.0%
3/1	Attenbrough Lane SL Right Left	U	N/A	N/A	E		1	14	-	126	1834	393	32.1%
4/1	Nottingham Road NB SL Ahead	U	N/A	N/A	A		1	28	-	556	1915	793	70.1%
4/2	Nottingham Road NB SL Ahead Right	O	N/A	N/A	A		1	28	-	585	2038	844	69.3%
5/1	Bye Pass Road NB SL (MID) Left Ahead	U	N/A	N/A	B		1	34	-	607	1907	953	63.7%
5/2	Bye Pass Road NB SL (MID) Ahead	U	N/A	N/A	B		1	34	-	602	2110	1055	57.1%
6/1+6/2	Attenborough Lane SL Right Left	U	N/A	N/A	F		1	13	-	480	1792:1938	358+388	69.5 : 59.6%
7/1	Attenbourough Lane Exit	U	N/A	N/A	-		-	-	-	92	Inf	Inf	0.0%
8/1	Nottingham Road SB Exit	U	N/A	N/A	-		-	-	-	344	Inf	Inf	0.0%
8/2	Nottingham Road SB Exit	U	N/A	N/A	-		-	-	-	499	Inf	Inf	0.0%

Full Input Data And Results

9/1	Attenborough Lane Exit	U	N/A	N/A	-		-	-	-	231	Inf	Inf	0.0%
10/1	Bye Pass Road NB Exit	U	N/A	N/A	-		-	-	-	421	Inf	Inf	0.0%
10/2	Bye Pass Road NB Exit	U	N/A	N/A	-		-	-	-	619	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Bye Pass Road / Attenbrough Lane	**-**	**-**	**57**	**0**	**1**	**15.0**	**3.8**	**0.1**	**18.9**	**-**	**-**	**-**	**-**
Toton West / Bye Pass Road	**-**	**-**	**57**	**0**	**1**	**15.0**	**3.8**	**0.1**	**18.9**	**-**	**-**	**-**	**-**
1/1+1/2	459	459	29	0	0	1.7	0.4	0.1	2.2	17.5	3.7	0.4	4.1
2/1	392	392	-	-	-	1.4	0.0	-	1.4	12.8	6.5	0.0	6.5
2/2	485	485	-	-	-	1.5	0.0	-	1.5	11.3	7.5	0.0	7.5
3/1	126	126	-	-	-	0.8	0.2	-	1.0	29.9	2.1	0.2	2.3
4/1	556	556	-	-	-	2.6	1.2	-	3.8	24.4	8.8	1.2	10.0
4/2	585	585	29	0	0	2.8	1.1	0.0	3.9	24.1	9.3	1.1	10.4
5/1	607	607	-	-	-	0.3	0.0	-	0.3	2.0	3.2	0.0	3.2
5/2	602	602	-	-	-	0.4	0.0	-	0.4	2.2	1.1	0.0	1.1
6/1+6/2	480	480	-	-	-	3.4	0.9	-	4.3	32.5	4.5	0.9	5.4
7/1	92	92	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	344	344	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	231	231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	421	421	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	619	619	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 - Nottingham Rd/ Attenborough Rd

PRC for Signalled Lanes (%): 28.4
PRC Over All Lanes (%): 28.4

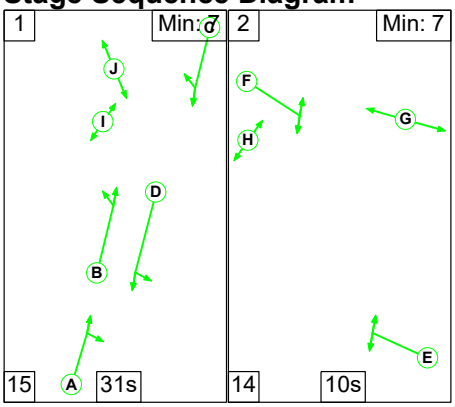
Total Delay for Signalled Lanes (pcuHr): 18.93
Total Delay Over All Lanes(pcuHr): 18.93

Cycle Time (s): 70

Full Input Data And Results

Scenario 2: 'Scenario 1' (FG2: '2041 Reference Case PM', Plan 1: 'Network Control Plan 1')

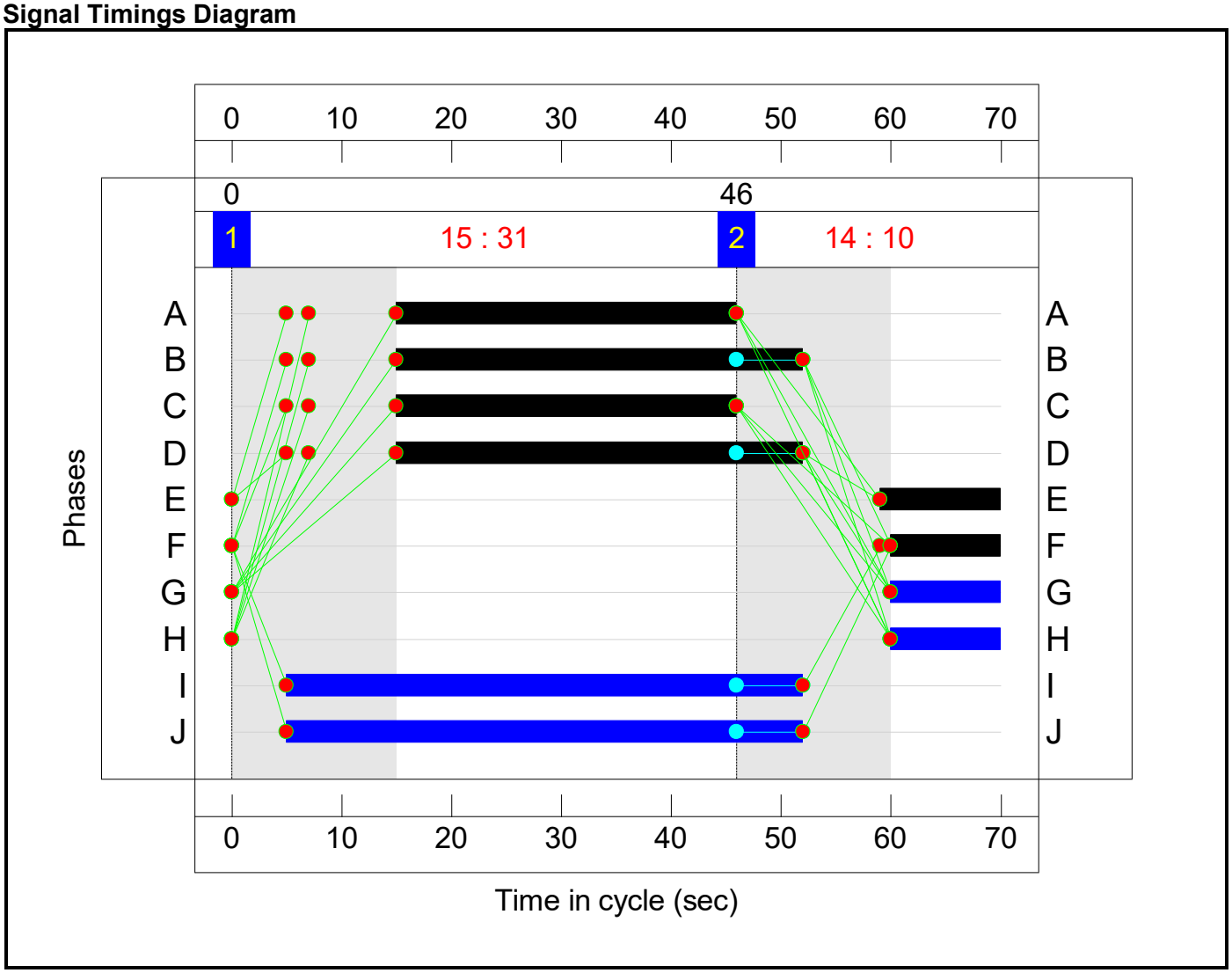
Stage Sequence Diagram



Stage Timings

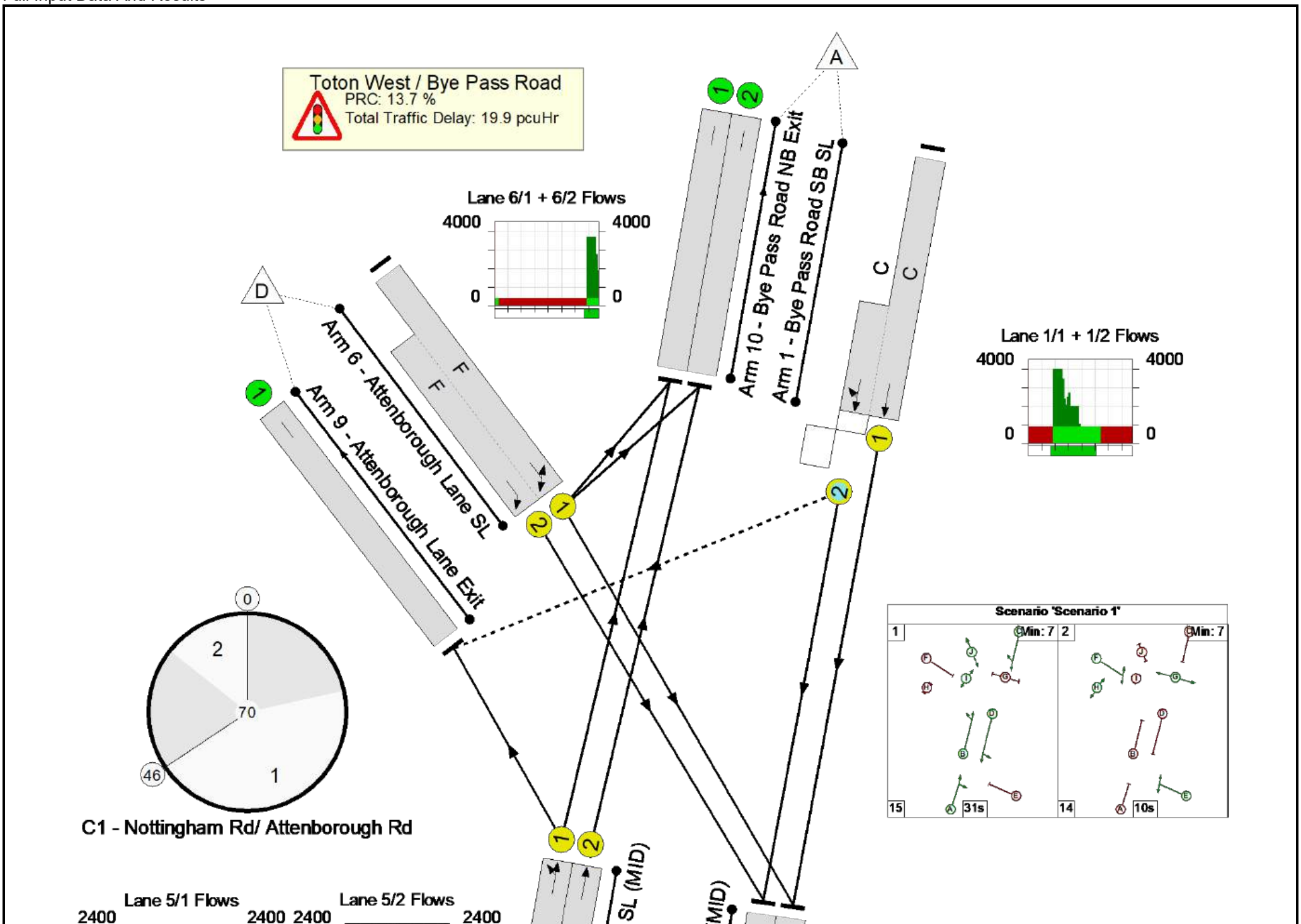
Stage	1	2
Duration	31	10
Change Point	0	46

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram


Toton West / Bye Pass Road
PRC: 13.7 %
Total Traffic Delay: 19.9 pcuHr
A
C
C
D
F
F
Arm 10 - Bye Pass Road NB Exit
Arm 1 - Bye Pass Road SB SL
Arm 6 - Attenborough Lane SL
Arm 9 - Attenborough Lane Exit
Lane 6/1 + 6/2 Flows
4000
0
4000
0
Lane 1/1 + 1/2 Flows
4000
0
4000
0
Scenario 'Scenario 1'
1
Min: 7
2
Min: 7
15
31s
14
10s
0
2
70
1
46
C1 - Nottingham Rd/ Attenborough Rd
Lane 5/1 Flows
2400
2400
2400
Lane 5/2 Flows
2400
SL (MID)
(MID)

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: Bye Pass Road / Attenbrough Lane	-	-	**N/A**	-	-		-	-	-	-	-	-	**79.2%**
Toton West / Bye Pass Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**79.2%**
1/1+1/2	Bye Pass Road SB SL Ahead Right	U+O	N/A	N/A	C		1	31	-	898	1940:2061	463+671	79.2 : 79.2%
2/1	Bye Pass Road SB SL (MID) Left Ahead	U	N/A	N/A	D		1	37	-	552	1904	1034	53.4%
2/2	Bye Pass Road SB SL (MID) Ahead	U	N/A	N/A	D		1	37	-	690	2065	1121	61.6%
3/1	Attenbrough Lane SL Right Left	U	N/A	N/A	E		1	11	-	113	1832	314	36.0%
4/1	Nottingham Road NB SL Ahead	U	N/A	N/A	A		1	31	-	555	1915	875	63.4%
4/2	Nottingham Road NB SL Ahead Right	O	N/A	N/A	A		1	31	-	574	2035	909	63.1%
5/1	Bye Pass Road NB SL (MID) Left Ahead	U	N/A	N/A	B		1	37	-	606	1862	1011	60.0%
5/2	Bye Pass Road NB SL (MID) Ahead	U	N/A	N/A	B		1	37	-	569	2110	1145	49.7%
6/1+6/2	Attenborough Lane SL Right Left	U	N/A	N/A	F		1	10	-	404	1792:1938	282+305	75.6 : 62.7%
7/1	Attenbourough Lane Exit	U	N/A	N/A	-		-	-	-	106	Inf	Inf	0.0%
8/1	Nottingham Road SB Exit	U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
8/2	Nottingham Road SB Exit	U	N/A	N/A	-		-	-	-	707	Inf	Inf	0.0%

Full Input Data And Results

9/1	Attenborough Lane Exit	U	N/A	N/A	-		-	-	-	383	Inf	Inf	0.0%
10/1	Bye Pass Road NB Exit	U	N/A	N/A	-		-	-	-	269	Inf	Inf	0.0%
10/2	Bye Pass Road NB Exit	U	N/A	N/A	-		-	-	-	583	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Bye Pass Road / Attenbrough Lane	**-**	**-**	**64**	**0**	**1**	**14.7**	**5.0**	**0.2**	**19.9**	**-**	**-**	**-**	**-**
Toton West / Bye Pass Road	**-**	**-**	**64**	**0**	**1**	**14.7**	**5.0**	**0.2**	**19.9**	**-**	**-**	**-**	**-**
1/1+1/2	898	898	32	0	0	3.5	1.9	0.1	5.4	21.8	9.8	1.9	11.7
2/1	552	552	-	-	-	1.1	0.0	-	1.1	7.1	7.2	0.0	7.2
2/2	690	690	-	-	-	1.1	0.0	-	1.1	5.9	5.8	0.0	5.8
3/1	113	113	-	-	-	0.8	0.3	-	1.1	34.6	1.9	0.3	2.2
4/1	555	555	-	-	-	2.2	0.9	-	3.1	20.1	8.2	0.9	9.0
4/2	574	574	33	0	0	2.3	0.9	0.1	3.3	20.6	8.5	0.9	9.3
5/1	606	606	-	-	-	0.3	0.0	-	0.3	1.8	5.2	0.0	5.2
5/2	569	569	-	-	-	0.2	0.0	-	0.2	1.5	0.8	0.0	0.8
6/1+6/2	404	404	-	-	-	3.1	1.1	-	4.2	37.7	3.9	1.1	5.0
7/1	106	106	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	707	707	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	383	383	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	269	269	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	583	583	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 - Nottingham Rd/ Attenborough Rd

PRC for Signalled Lanes (%): 13.7
PRC Over All Lanes (%): 13.7

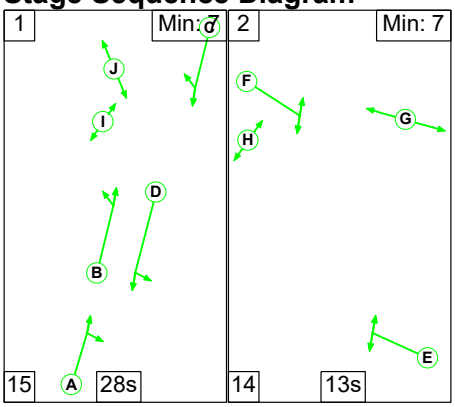
Total Delay for Signalled Lanes (pcuHr): 19.90
Total Delay Over All Lanes(pcuHr): 19.90

Cycle Time (s): 70

Full Input Data And Results

Scenario 3: 'Scenario 1' (FG3: '2041 Do Something AM', Plan 1: 'Network Control Plan 1')

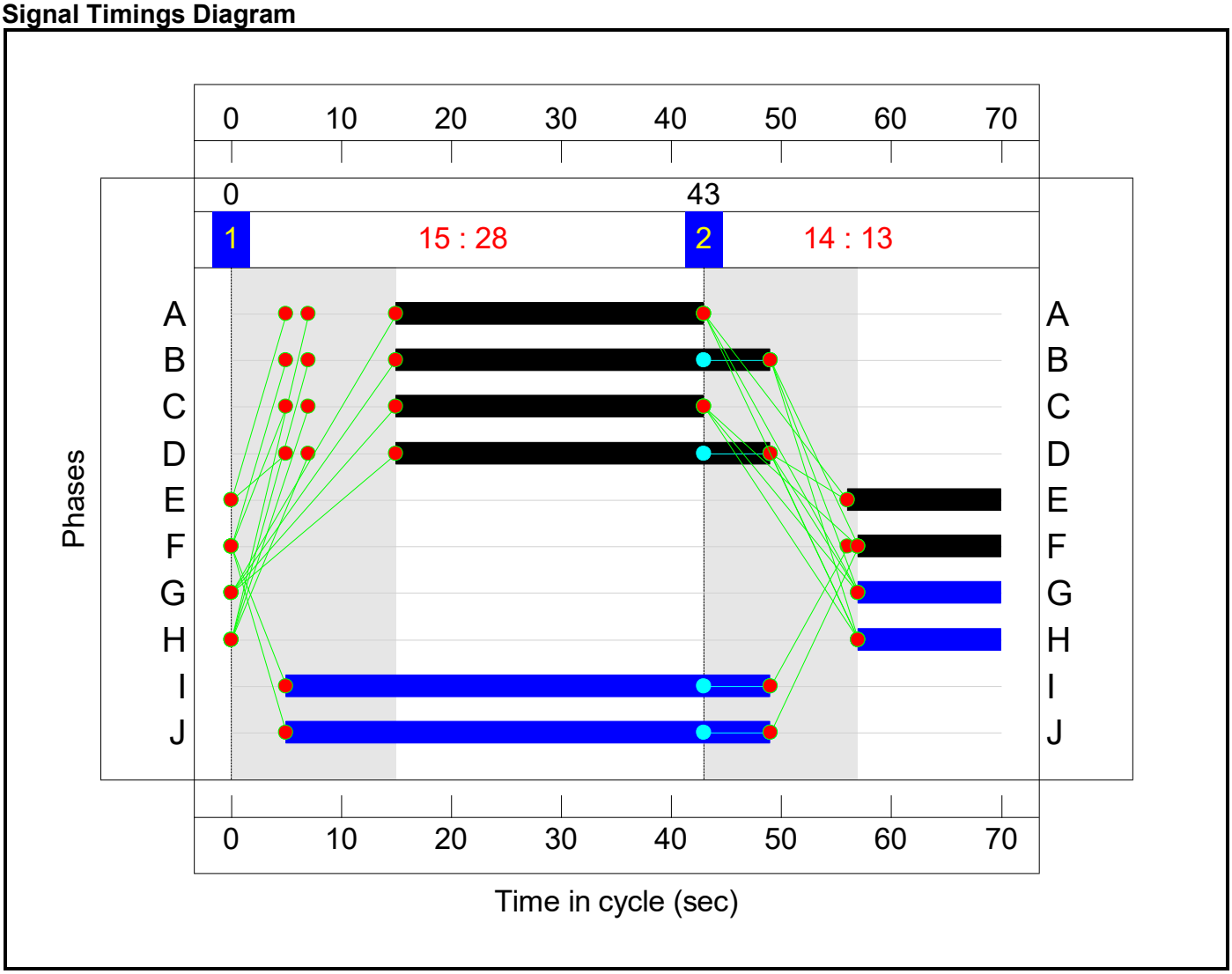
Stage Sequence Diagram



Stage Timings

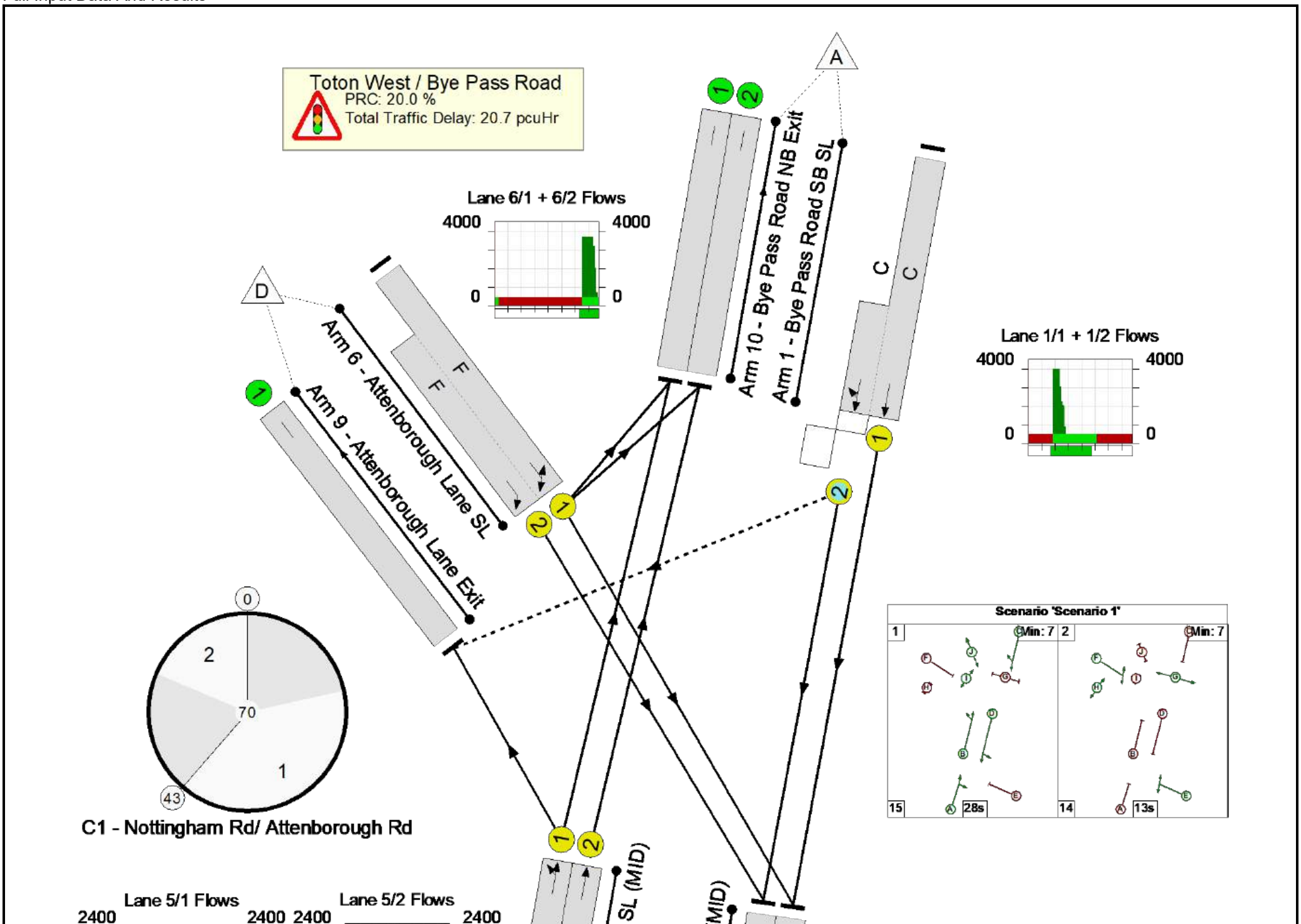
Stage	1	2
Duration	28	13
Change Point	0	43

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram


Toton West / Bye Pass Road
PRC: 20.0 %
Total Traffic Delay: 20.7 pcuHr
Lane 6/1 + 6/2 Flows
4000
0
4000
0
Lane 1/1 + 1/2 Flows
4000
0
4000
0
A
C
C
D
F
F
Arm 10 - Bye Pass Road NB Exit
Arm 1 - Bye Pass Road SB SL
Arm 6 - Attenborough Lane SL
Arm 9 - Attenborough Lane Exit
0
2
70
1
43
C1 - Nottingham Rd/ Attenborough Rd
Scenario 'Scenario 1'
1
Min: 7
2
Min: 7
15
28s
14
13s
Lane 5/1 Flows
2400
Lane 5/2 Flows
2400
2400
2400
SL (MID)
(MID)

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: Bye Pass Road / Attenbrough Lane	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.0%**
Toton West / Bye Pass Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.0%**
1/1+1/2	Bye Pass Road SB SL Ahead Right	U+O	N/A	N/A	C		1	28	-	493	1940:2051	396+632	47.9 : 47.9%
2/1	Bye Pass Road SB SL (MID) Left Ahead	U	N/A	N/A	D		1	34	-	409	1893	946	43.2%
2/2	Bye Pass Road SB SL (MID) Ahead	U	N/A	N/A	D		1	34	-	508	2065	1032	49.2%
3/1	Attenbrough Lane SL Right Left	U	N/A	N/A	E		1	14	-	135	1833	393	34.4%
4/1	Nottingham Road NB SL Ahead	U	N/A	N/A	A		1	28	-	595	1915	793	75.0%
4/2	Nottingham Road NB SL Ahead Right	O	N/A	N/A	A		1	28	-	633	2039	845	74.9%
5/1	Bye Pass Road NB SL (MID) Left Ahead	U	N/A	N/A	B		1	34	-	648	1904	952	68.1%
5/2	Bye Pass Road NB SL (MID) Ahead	U	N/A	N/A	B		1	34	-	651	2110	1055	61.7%
6/1+6/2	Attenborough Lane SL Right Left	U	N/A	N/A	F		1	13	-	486	1792:1938	358+388	70.3 : 60.4%
7/1	Attenbourough Lane Exit	U	N/A	N/A	-		-	-	-	101	Inf	Inf	0.0%
8/1	Nottingham Road SB Exit	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
8/2	Nottingham Road SB Exit	U	N/A	N/A	-		-	-	-	525	Inf	Inf	0.0%

Full Input Data And Results

9/1	Attenborough Lane Exit	U	N/A	N/A	-		-	-	-	252	Inf	Inf	0.0%
10/1	Bye Pass Road NB Exit	U	N/A	N/A	-		-	-	-	441	Inf	Inf	0.0%
10/2	Bye Pass Road NB Exit	U	N/A	N/A	-		-	-	-	668	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Bye Pass Road / Attenbrough Lane	**-**	**-**	**57**	**0**	**1**	**15.9**	**4.6**	**0.1**	**20.7**	**-**	**-**	**-**	**-**
Toton West / Bye Pass Road	**-**	**-**	**57**	**0**	**1**	**15.9**	**4.6**	**0.1**	**20.7**	**-**	**-**	**-**	**-**
1/1+1/2	493	493	29	0	0	1.9	0.5	0.1	2.5	17.9	4.0	0.5	4.5
2/1	409	409	-	-	-	1.4	0.0	-	1.4	12.6	6.7	0.0	6.7
2/2	508	508	-	-	-	1.6	0.0	-	1.6	11.0	7.7	0.0	7.7
3/1	135	135	-	-	-	0.9	0.3	-	1.1	30.3	2.2	0.3	2.5
4/1	595	595	-	-	-	2.9	1.5	-	4.4	26.4	9.8	1.5	11.2
4/2	633	633	29	0	0	3.1	1.5	0.0	4.6	26.0	10.4	1.5	11.8
5/1	648	648	-	-	-	0.4	0.0	-	0.4	2.0	4.8	0.0	4.8
5/2	651	651	-	-	-	0.4	0.0	-	0.4	2.1	1.2	0.0	1.2
6/1+6/2	486	486	-	-	-	3.5	0.9	-	4.4	32.7	4.6	0.9	5.5
7/1	101	101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	525	525	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	252	252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	668	668	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 - Nottingham Rd/ Attenborough Rd

PRC for Signalled Lanes (%): 20.0
PRC Over All Lanes (%): 20.0

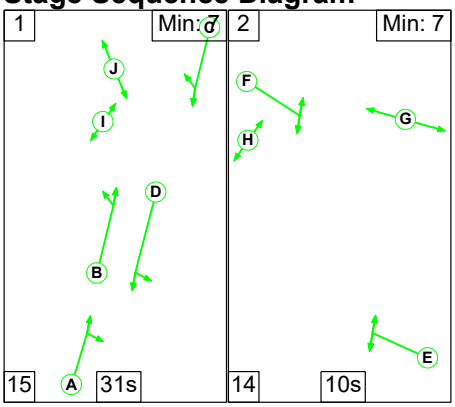
Total Delay for Signalled Lanes (pcuHr): 20.66
Total Delay Over All Lanes(pcuHr): 20.66

Cycle Time (s): 70

Full Input Data And Results

Scenario 4: 'Scenario 1' (FG4: '2041 Do Something PM', Plan 1: 'Network Control Plan 1')

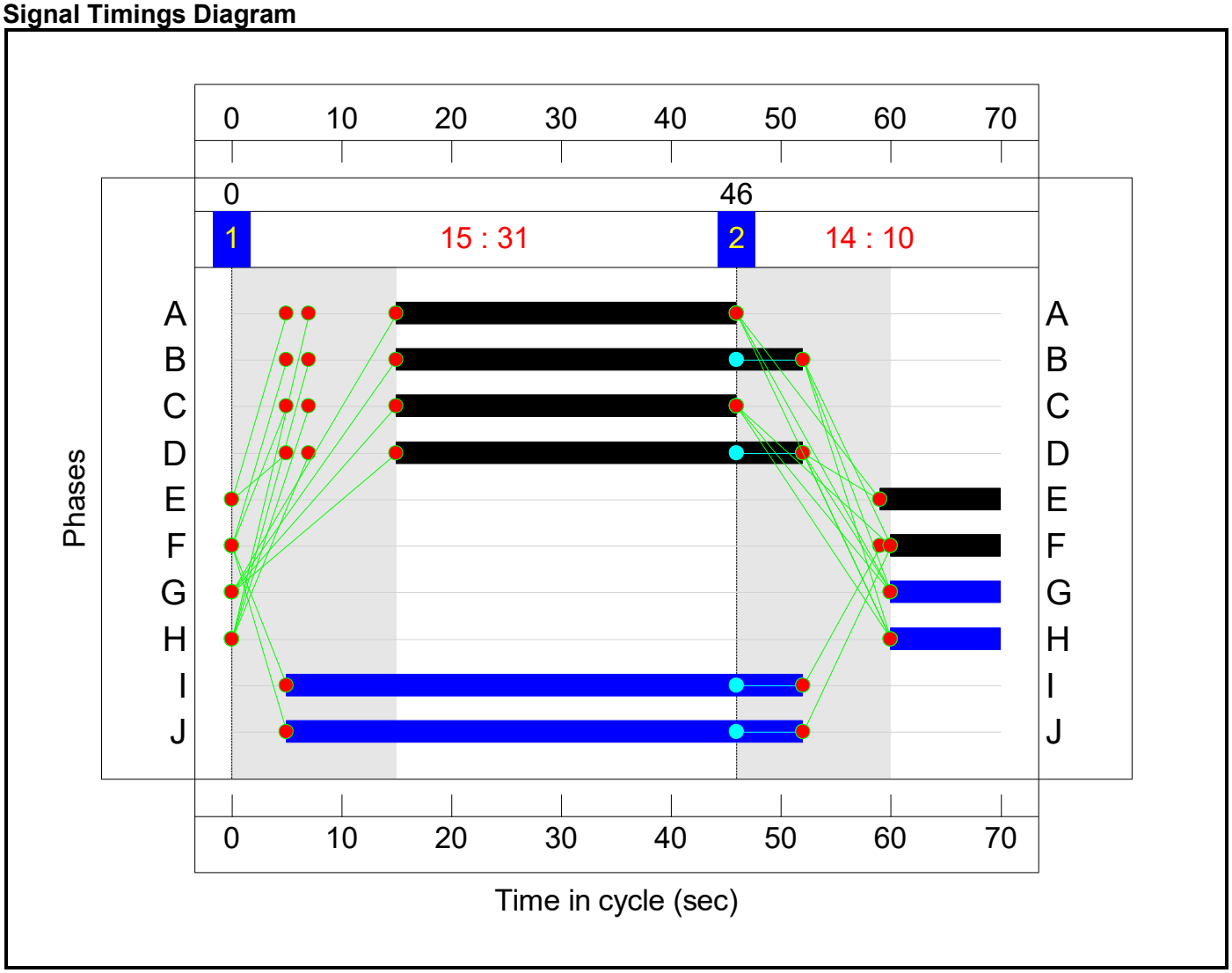
Stage Sequence Diagram



Stage Timings

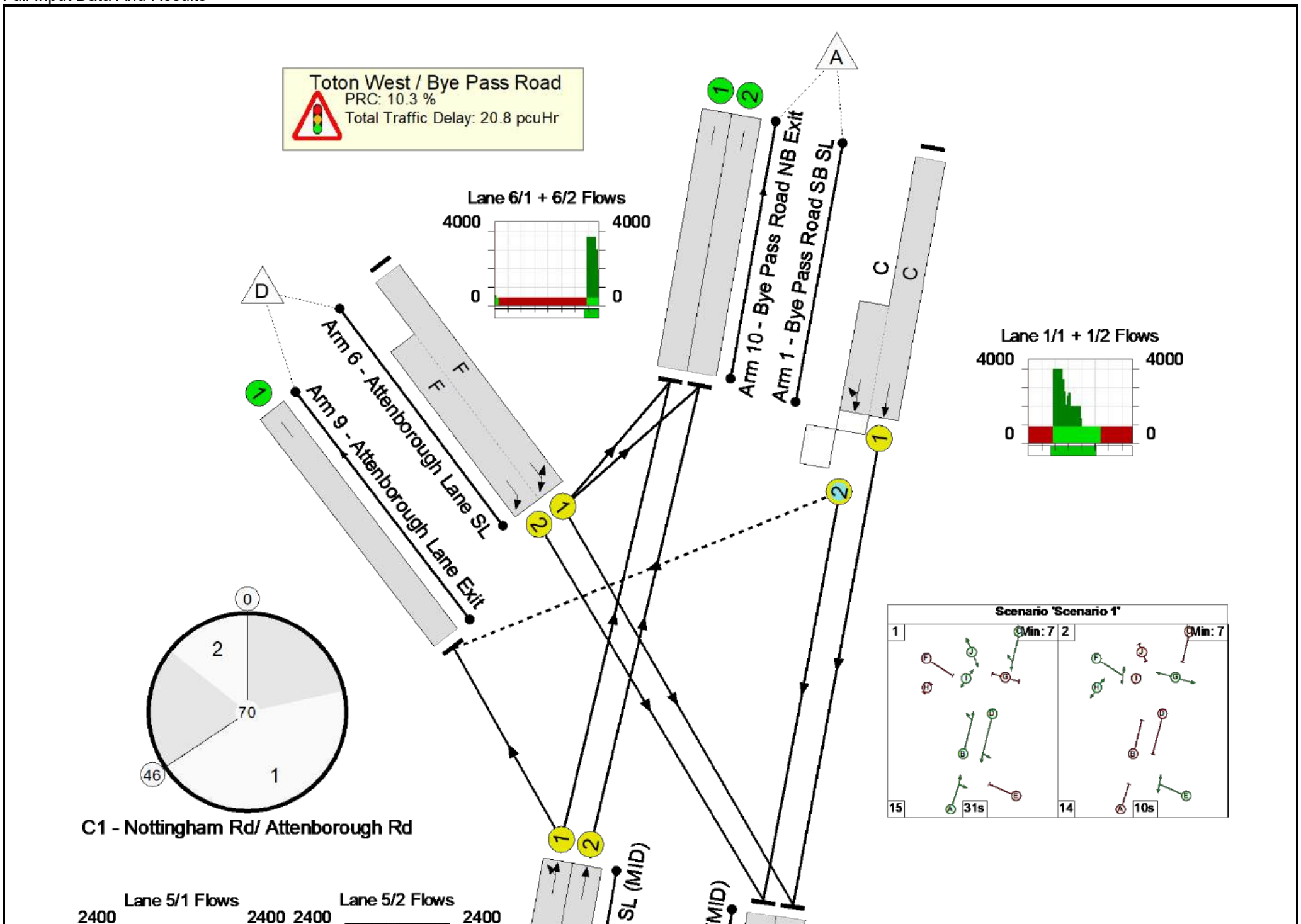
Stage	1	2
Duration	31	10
Change Point	0	46

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram


Toton West / Bye Pass Road
PRC: 10.3 %
Total Traffic Delay: 20.8 pcuHr
Lane 6/1 + 6/2 Flows
4000
4000
0
0
Lane 1/1 + 1/2 Flows
4000
4000
0
0
A
C
C
D
F
F
Arm 10 - Bye Pass Road NB Exit
Arm 1 - Bye Pass Road SB SL
Arm 6 - Attenborough Lane SL
Arm 9 - Attenborough Lane Exit
0
2
70
1
46
C1 - Nottingham Rd/ Attenborough Rd
Scenario 'Scenario 1'
1
Min: 7
2
Min: 7
15
31s
14
10s
Lane 5/1 Flows
2400
2400
2400
Lane 5/2 Flows
2400
SL (MID)
(MID)

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: Bye Pass Road / Attenbrough Lane	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.6%**
Toton West / Bye Pass Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.6%**
1/1+1/2	Bye Pass Road SB SL Ahead Right	U+O	N/A	N/A	C		1	31	-	930	1940:2062	473+666	81.6 : 81.6%
2/1	Bye Pass Road SB SL (MID) Left Ahead	U	N/A	N/A	D		1	37	-	574	1900	1031	55.7%
2/2	Bye Pass Road SB SL (MID) Ahead	U	N/A	N/A	D		1	37	-	708	2065	1121	63.2%
3/1	Attenbrough Lane SL Right Left	U	N/A	N/A	E		1	11	-	113	1832	314	36.0%
4/1	Nottingham Road NB SL Ahead	U	N/A	N/A	A		1	31	-	567	1915	875	64.8%
4/2	Nottingham Road NB SL Ahead Right	O	N/A	N/A	A		1	31	-	584	2035	910	64.2%
5/1	Bye Pass Road NB SL (MID) Left Ahead	U	N/A	N/A	B		1	37	-	618	1864	1012	61.1%
5/2	Bye Pass Road NB SL (MID) Ahead	U	N/A	N/A	B		1	37	-	578	2110	1145	50.5%
6/1+6/2	Attenborough Lane SL Right Left	U	N/A	N/A	F		1	10	-	411	1792:1938	282+305	76.7 : 64.0%
7/1	Attenbourough Lane Exit	U	N/A	N/A	-		-	-	-	118	Inf	Inf	0.0%
8/1	Nottingham Road SB Exit	U	N/A	N/A	-		-	-	-	507	Inf	Inf	0.0%
8/2	Nottingham Road SB Exit	U	N/A	N/A	-		-	-	-	725	Inf	Inf	0.0%

Full Input Data And Results

9/1	Attenborough Lane Exit	U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%
10/1	Bye Pass Road NB Exit	U	N/A	N/A	-		-	-	-	279	Inf	Inf	0.0%
10/2	Bye Pass Road NB Exit	U	N/A	N/A	-		-	-	-	592	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Bye Pass Road / Attenbrough Lane	**-**	**-**	**64**	**0**	**1**	**15.1**	**5.4**	**0.3**	**20.8**	**-**	**-**	**-**	**-**
Toton West / Bye Pass Road	**-**	**-**	**64**	**0**	**1**	**15.1**	**5.4**	**0.3**	**20.8**	**-**	**-**	**-**	**-**
1/1+1/2	930	930	31	0	0	3.6	2.2	0.1	5.9	23.0	10.5	2.2	12.7
2/1	574	574	-	-	-	1.1	0.0	-	1.1	7.0	7.5	0.0	7.5
2/2	708	708	-	-	-	1.2	0.0	-	1.2	5.9	5.9	0.0	5.9
3/1	113	113	-	-	-	0.8	0.3	-	1.1	34.6	1.9	0.3	2.2
4/1	567	567	-	-	-	2.3	0.9	-	3.2	20.5	8.3	0.9	9.3
4/2	584	584	34	0	0	2.4	0.9	0.2	3.4	21.0	8.6	0.9	9.5
5/1	618	618	-	-	-	0.3	0.0	-	0.3	1.8	5.3	0.0	5.3
5/2	578	578	-	-	-	0.2	0.0	-	0.2	1.4	0.8	0.0	0.8
6/1+6/2	411	411	-	-	-	3.2	1.2	-	4.4	38.1	4.0	1.2	5.2
7/1	118	118	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	725	725	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	279	279	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	592	592	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 - Nottingham Rd/ Attenborough Rd

PRC for Signalled Lanes (%): 10.3
PRC Over All Lanes (%): 10.3

Total Delay for Signalled Lanes (pcuHr): 20.81
Total Delay Over All Lanes(pcuHr): 20.81

Cycle Time (s): 70

mode

transport planning

keep up with mode:

Birmingham
0121 794 8390

London
020 7293 0217

Manchester
0161 464 9495

Reading
0118 211 8180

info@modetransport.co.uk modetransport.co.uk @mode_transport